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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2024–2415; Project Identifier MCAI–2024–00545–T; Amendment 39–22874; AD 2024–22–03]

RIN 2120–AA64

Airworthiness Directives; Airbus Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2024–04–11, which applied to certain Airbus Canada Limited Partnership Model BD–500–1A10 and BD–500–1A11 airplanes. AD 2024–04–11 required modifying the variable frequency generator (VFG) power-feeder harness routing. Since the FAA issued AD 2024–04–11, the FAA received a report of damage to a VFG power-feeder harness, resulting in the loss of the associated VFG and the posting of the L GEN FAIL (Caution) message. This AD continues to require modifying the VFG power-feeder harness routing, and also requires inspecting the VFG power-feeder harnesses for damage and clearance, repairing or replacing the VFG power-feeder harnesses if necessary, modifying and adjusting the VFG power-feeder harnesses if necessary, and prohibiting dispatch of certain airplanes under certain master minimum equipment list (MMEL) items; as specified in a Transport Canada emergency AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective November 14, 2024.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of November 14, 2024.

The FAA must receive comments on this AD by December 16, 2024.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- *Federal eRulemaking Portal:* Go to *regulations.gov*. Follow the instructions for submitting comments.

- *Fax:* 202–493–2251.

- *Mail:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at *regulations.gov* under Docket No. FAA–2024–2415; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For Transport Canada material identified in this AD, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5, Canada; telephone 888–663–3639; email *TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca*; website at *tc.canada.ca/en/aviation*.

- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206–231–3195. It is also available at *regulations.gov* under Docket No. FAA–2024–2415.

FOR FURTHER INFORMATION CONTACT: William Reisenauer, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516–228–7300; email *9-avs-nyaco-cos@faa.gov*.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written data, views, or arguments about

this final rule. Send your comments to an address listed under the **ADDRESSES** section. Include “Docket No. FAA–2024–2415; Project Identifier MCAI–2024–00545–T” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to *regulations.gov*, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to William Reisenauer, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516–228–7300; email *9-avs-nyaco-cos@faa.gov*. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA issued AD 2024–04–11, Amendment 39–22690 (89 FR 21179, March 27, 2024) (AD 2024–04–11), for certain Airbus Canada Limited Partnership Model BD–500–1A10 and BD–500–1A11 airplanes. AD 2024–04–11 was prompted by an MCAI originated

by Transport Canada, which is the aviation authority for Canada. Transport Canada issued AD CF-2023-24, dated April 6, 2023 (Transport Canada AD CF-2023-24), to correct an unsafe condition.

AD 2024-04-11 required modifying the VFG power-feeder harness routing. The FAA issued AD 2024-04-11 to prevent damage to VFG power-feeder harnesses from chafing due to vibration. The unsafe condition, if not addressed, could lead to a loss of generated power from both VFGs, or to a fire in the case of flammable fluid contact with arcing wires.

Actions Since AD 2024-04-11 Was Issued

Since the FAA issued AD 2024-04-11, Transport Canada superseded Transport Canada AD CF-2023-24 and issued Transport Canada Emergency AD CF-2024-34, dated September 19, 2024 (Transport Canada Emergency AD CF-2024-34) to correct an unsafe condition for certain Airbus Canada Limited Partnership (ACLP) Model BD-500-1A10 and BD-500-1A11 airplanes. The MCAI states damage to a VFG harness has been reported, which resulted in the loss of the associated VFG and the posting of the L GEN FAIL (Caution) message. An investigation determined that the in-service event occurred after the incorporation of Part C of ACLP Service Bulletin BD500-534101, Issue 007, dated October 2, 2020, which introduced a new bracket on both sides of the airplane to move the VFG power-feeder harness away from the wheel bins to prevent chafing. Transport Canada required the actions in that service bulletin in Transport Canada AD CF-2023-24 (which corresponds with FAA AD 2024-04-11) to mitigate the risks associated with VFG power-feeder harness/wheel bin chafing. It has been discovered that implementation of Part C of ACLP SB BD500-534101 (Issues 005 through 008) could potentially cause an unsupported VFG power-feeder harness length in a different location on both sides of the airplane. In addition, dispatching the airplane with certain items inoperative under the MMEL might exacerbate this risk. Transport Canada Emergency AD CF-2024-34 prohibits dispatch of airplanes under certain MMEL items to mitigate the exacerbated risk due to dispatching airplanes with certain items inoperative. Transport Canada subsequently superseded Transport Canada Emergency AD CF-2023-34 and issued Transport Canada Emergency AD CF-2024-34R1, dated October 15, 2024 (Transport Canada Emergency AD CF-2024-34R1) to clarify the requirements

of Part II of Transport Canada Emergency AD CF-2024-34. Transport Canada Emergency AD CF-2024-34R1 does not change the requirements or applicability of Transport Canada Emergency AD CF-2024-34.

The FAA is issuing this AD to address damage to VFG power-feeder harnesses caused by unsupported VFG power-feeder harness length. The unsafe condition, if not addressed, could lead to a loss of generated power from both VFGs and loss of critical aircraft systems if alternate generators are also lost. You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2415.

Explanation of Retained Requirements

Although this AD does not explicitly restate the requirements of AD 2024-04-11, this AD retains all of the requirements of AD 2024-04-11. Those requirements are referenced in Transport Canada Emergency AD CF-2024-34 and AD CF-2024-34R1, which, in turn, are referenced in paragraph (g) of this AD.

Material Incorporated by Reference Under 1 CFR Part 51

Transport Canada Emergency AD CF-2024-34 and AD CF-2024-34R1 specify procedures for modifying the VFG power-feeder harness routing, including a general visual inspection (GVI) for damage at the intersection of the VFG power-feeder harnesses and the surface of the wheel bins, and corrective actions including obtaining and following repair instructions; performing a GVI of the VFG power-feeder harnesses for damage (including chafing and kinks) and clearance between the VFG power-feeder harnesses and main landing gear in the retracted position; repairing or replacing the VFG power-feeder harnesses (includes repairing wiring or the sleeve); modifying and adjusting the VFG power-feeder harnesses; and prohibiting dispatch of certain airplanes under certain MMEL items. These documents are distinct because Transport Canada Emergency AD CF-2024-34R1 clarifies the requirements of Transport Canada Emergency AD CF-2024-34. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the

FAA of the unsafe condition described in the MCAI referenced above. The FAA is issuing this AD after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Requirements of This AD

This AD requires accomplishing the actions specified in Transport Canada Emergency AD CF-2024-34 and AD CF-2024-34R1 described previously, except for any differences identified as exceptions in the regulatory text of this AD.

Clarification of Airplane Group Definition

Transport Canada defines Group B airplanes as Model BD-500-1A10 airplanes, having serial numbers 50001 through 50047, and Model BD-500-1A11 airplanes, having serial numbers 55001 through 55070. This AD clarifies Group B airplanes as only those airplanes on which Part C of the Accomplishment Instructions of ACLP SB BD500-534101, Issue 005, dated June 12, 2020, Issue 006, dated August 14, 2020, Issue 007, dated October 2, 2020, or Issue 008, dated March 13, 2024, has not been done.

Explanation of Required Compliance Information

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has been coordinating this process with manufacturers and CAAs. As a result, AD 2024-04-11 is retained and Transport Canada Emergency AD CF-2024-34 and AD CF-2024-34R1 are incorporated by reference in this AD. This AD requires compliance with Transport Canada Emergency AD CF-2024-34 or AD CF-2024-34R1 in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this AD. Material required by Transport Canada Emergency AD CF-2024-34 and AD CF-2024-34R1 for compliance will be available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2415 after this AD is published.

FAA's Justification and Determination of the Effective Date

Section 553(b) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures

for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies forgoing notice and comment prior to adoption of this rule because Transport Canada issued an emergency AD indicating that damage to a VFG harness resulted in the loss of the associated VFG and the

posting of the L GEN FAIL (Caution) message. Implementation of Part C of ACLP SB BD500–534101 (Issues 005 through 008) could potentially cause an unsupported VFG power-feeder harness length in a different location on both sides of the airplane, which could lead to VFG power-feeder harness damage in these locations, which could lead to a loss of generated power from both VFGs and loss of critical aircraft systems if alternate generators are also lost. Additionally, the compliance time in this AD is shorter than the time necessary for the public to comment and for publication of the final rule. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b).

In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d)

for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forgo notice and comment.

Regulatory Flexibility Act (RFA)

The requirements of the RFA do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 17 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

ESTIMATED COSTS FOR REQUIRED ACTIONS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained actions from AD 2024–04–11 ...	Up to 51 work-hours × \$85 per hour = \$4,335.	Up to \$3,538	Up to \$7,873	Up to \$133,841.
New GVI	1 work-hour × \$85 per hour = \$85	\$0	\$85	\$1,445.

The FAA estimates the following costs to do any necessary on-condition actions that would be required based on

the results of any required actions. The FAA has no way of determining the

number of aircraft that might need these on-condition actions:

ESTIMATED COSTS OF ON-CONDITION ACTIONS

Labor cost	Parts cost	Cost per product
Up to 60 work-hours × \$85 per hour = Up to \$5,100 per side	\$9,940 per harness	Up to \$15,040 per side.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by:
- a. Removing Airworthiness Directive (AD) 2024–04–11, Amendment 39–22690 (89 FR 21179, March 27, 2024); and
 - b. Adding the following new AD:
- 2024–22–03 Airbus Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.): Amendment 39–22874; Docket No.**

FAA–2024–2415; Project Identifier
MCAI–2024–00545–T.

(a) Effective Date

This airworthiness directive (AD) is effective November 14, 2024.

(b) Affected ADs

This AD replaces AD 2024–04–11, Amendment 39–22690 (89 FR 21179, March 27, 2024) (AD 2024–04–11).

(c) Applicability

This AD applies to Airbus Canada Limited Partnership (Type Certificate previously held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.) Model BD–500–1A10 and BD–500–1A11 airplanes, certificated in any category, as identified in Transport Canada Emergency AD CF–2024–34, dated September 19, 2024 (Transport Canada Emergency AD CF–2024–34), or Transport Canada Emergency AD CF–2024–34R1, dated October 15, 2024 (Transport Canada Emergency AD CF–2024–34R1).

(d) Subject

Air Transport Association (ATA) of America Code 24, Electrical Power.

(e) Unsafe Condition

This AD was prompted by a report of damage to a variable frequency generator (VFG) power-feeder harness, resulting in the loss of the associated VFG and the posting of

the L GEN FAIL (Caution) message. An investigation determined that the damage occurred after incorporation of Part C of Airbus Canada Limited Partnership (ACLP) Service Bulletin (SB) BD500–534101 (ACLP SB BD500–534101) at Issue 005 through 008, which introduced a new bracket to move the VFG power-feeder harness. The FAA is issuing this AD to address damage to VFG power-feeder harnesses caused by unsupported VFG power-feeder harness length. The unsafe condition, if not addressed, could lead to a loss of generated power from both VFGs and loss of critical aircraft systems if alternate generators are also lost.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, Transport Canada Emergency AD CF–2024–34 or Transport Canada Emergency AD CF–2024–34R1.

(h) Exceptions to Transport Canada Emergency AD CF–2024–34 and AD CF–2024–34R1

(1) Where Transport Canada Emergency AD CF–2024–34 refers to its effective date,

this AD requires using the effective date of this AD.

(2) Where Transport Canada Emergency AD CF–2024–34R1 refers to the effective date of AD CF–2024–34 (22 September 2024), this AD requires using the effective date of this AD.

(3) Where Transport Canada Emergency AD CF–2024–34 and AD CF–2024–34R1 refer to “hours air time,” this AD requires replacing those words with “flight hours.”

(4) Where Transport Canada Emergency AD CF–2024–34 and AD CF–2024–34R1 define “Group B aeroplanes,” replace that definition with “Model BD–500–1A10 airplanes, having serial numbers 50001 through 50047, and Model BD–500–1A11 airplanes, having serial numbers 55001 through 55070, which have not incorporated Part C of the Accomplishment Instructions of ACLP SB BD500–534101, Issue 005, dated June 12, 2020, Issue 006, dated August 14, 2020, Issue 007, dated October 2, 2020, or Issue 008, dated March 13, 2024.”

(5) Where Transport Canada Emergency AD CF–2024–34 and AD CF–2024–34R1 define “Applicable MMEL Items,” replace that definition with figure 1 to paragraph (h)(5) of this AD.

BILLING CODE 4910–13–P

Figure 1 to paragraph (h)(5) – Applicable Master Minimum Equipment**List (MMEL) items**

MMEL Item Number	MMEL Item Title
24-21-01-1	Variable Frequency Generator (VFG) Systems [each system includes Variable Frequency Generator (VFG), Generator Control Unit (GCU), Overvoltage Protection Unit (OPU), Generator Line Contactor (GLC), Line Current Transformer (LCT), Generator Control Switch (BPA)]
24-21-01-2	CFG Coating
24-22-01	Auxiliary Power Unit Generator (AGEN)
49-00-03	Auxiliary Power Unit (APU) System
49-14-19 (APU inoperative items)	Auxiliary Power Unit (APU) Inlet Door Actuator
49-62-05-1 (APU inoperative items)	External Service Panel
49-62-05-2 (APU inoperative items)	APU Compartment
49-91-12-2	APU OIL LO QTY (Advisory)

BILLING CODE 4910-13-C

(6) Paragraph A. of Part I of Transport Canada Emergency AD CF-2024-34 and AD CF-2024-34R1 refer to airplanes with less than 6 flight cycles since “ACLP SB BD500-534101 Part C incorporation,” for this AD, that paragraph applies to airplanes with less than 6 flight cycles as of the effective date of this AD since “ACLP SB BD500-534101 Part C incorporation.”

(7) Paragraph B. of Part I of Transport Canada Emergency AD CF-2024-34 and AD CF-2024-34R1 refer to airplanes with 6 flight cycles or more since “ACLP SB BD500-534101 Part C incorporation,” for this AD, that paragraph applies to airplanes with 6 flight cycles or more as of the effective date of this AD since “ACLP SB BD500-534101 Part C incorporation.”

(i) No Reporting Requirement

Although the note in Part I of Transport Canada AD CF-2024-34 and AD CF-2024-34R1 specify to submit certain information to Transport Canada or the manufacturer, this AD does not include that requirement.

(j) Additional AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (k) of this AD and email to: AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Validation Branch, FAA; or Transport Canada; or Airbus Canada Limited Partnership's Transport Canada Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(3) *Required for Compliance (RC)*: Except as required by paragraph (j)(2) of this AD, if

any material contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(k) Additional Information

For more information about this AD, contact William Reisenauer, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7300; email: 9-avs-nyaco-cos@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Transport Canada Emergency AD CF–2024–34, dated September 19, 2024.

(ii) Transport Canada Emergency AD CF–2024–34R1, dated October 15, 2024.

(3) For Transport Canada material identified in this AD, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5, Canada; telephone 888–663–3639; email TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca; website tc.canada.ca/en/aviation.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206–231–3195.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locationsoremailfr.inspection@nara.gov.

Issued on October 24, 2024.

Peter A. White,

Deputy Director, Integrated Certificate Management Division, Aircraft Certification Service.

[FR Doc. 2024–25247 Filed 10–28–24; 11:15 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. 31572; Amdt. No. 4136]

Standard Instrument Approach Procedures, and Takeoff Minimums and Obstacle Departure Procedures; Miscellaneous Amendments

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This rule amends, suspends, or removes Standard Instrument Approach Procedures (SIAPs) and associated Takeoff Minimums and Obstacle Departure Procedures for operations at certain airports. These regulatory actions are needed because of the adoption of new or revised criteria, or because of changes occurring in the National Airspace System, such as the commissioning of new navigational facilities, adding new obstacles, or changing air traffic requirements. These changes are designed to provide for the safe and efficient use of the navigable airspace and to promote safe flight operations under instrument flight rules at the affected airports.

DATES: This rule is effective October 30, 2024. The compliance date for each

SIAP, associated Takeoff Minimums, and ODP is specified in the amendatory provisions.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of October 30, 2024.

ADDRESSES: Availability of matter incorporated by reference in the amendment is as follows:

For Examination

1. U.S. Department of Transportation, Docket Ops-M30, 1200 New Jersey Avenue SE, West Bldg., Ground Floor, Washington, DC, 20590–0001;

2. The FAA Air Traffic Organization Service Area in which the affected airport is located;

3. The office of Aeronautical Information Services, 6500 South MacArthur Blvd., Oklahoma City, OK 73169 or,

4. The National Archives and Records Administration (NARA).

For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Availability

All SIAPs and Takeoff Minimums and ODPs are available online free of charge. Visit the National Flight Data Center online at nfdc.faa.gov to register. Additionally, individual SIAP and Takeoff Minimums and ODP copies may be obtained from the FAA Air Traffic Organization Service Area in which the affected airport is located.

FOR FURTHER INFORMATION CONTACT:

Thomas J. Nichols, Standards Section Manager, Flight Procedures and Airspace Group, Flight Technologies and Procedures Division, Office of Safety Standards, Flight Standards Service, Aviation Safety, Federal Aviation Administration. Mailing Address: FAA Mike Monroney Aeronautical Center, Flight Procedures and Airspace Group, 6500 South MacArthur Blvd., STB Annex, Bldg 26, Room 217, Oklahoma City, OK 73099. Telephone: (405) 954–1139.

SUPPLEMENTARY INFORMATION: This rule amends 14 CFR part 97 by amending the referenced SIAPs. The complete regulatory description of each SIAP is listed on the appropriate FAA Form 8260, as modified by the National Flight Data Center (NFDC)/Permanent Notice to Air Missions (P–NOTAM), and is incorporated by reference under 5 U.S.C. 552(a), 1 CFR part 51, and 14 CFR 97.20. The large number of SIAPs, their complex nature, and the need for

a special format make their verbatim publication in the **Federal Register** expensive and impractical. Further, pilots do not use the regulatory text of the SIAPs, but refer to their graphic depiction on charts printed by publishers of aeronautical materials. Thus, the advantages of incorporation by reference are realized and publication of the complete description of each SIAP contained on FAA form documents is unnecessary. This amendment provides the affected CFR sections, and specifies the SIAPs and Takeoff Minimums and ODPs with their applicable effective dates. This amendment also identifies the airport and its location, the procedure and the amendment number.

Availability and Summary of Material Incorporated by Reference

The material incorporated by reference is publicly available as listed in the **ADDRESSES** section.

The material incorporated by reference describes SIAPs, Takeoff Minimums and ODPs as identified in the amendatory language for part 97 of this final rule.

The Rule

This amendment to 14 CFR part 97 is effective upon publication of each separate SIAP and Takeoff Minimums and ODP as amended in the transmittal. For safety and timeliness of change considerations, this amendment incorporates only specific changes contained for each SIAP and Takeoff Minimums and ODP as modified by FDC permanent NOTAMs.

The SIAPs and Takeoff Minimums and ODPs, as modified by FDC permanent NOTAM, and contained in this amendment are based on criteria contained in the U.S. Standard for Terminal Instrument Procedures (TERPS). In developing these changes to SIAPs and Takeoff Minimums and ODPs, the TERPS criteria were applied only to specific conditions existing at the affected airports. All SIAP amendments in this rule have been previously issued by the FAA in a FDC NOTAM as an emergency action of immediate flight safety relating directly to published aeronautical charts.

The circumstances that created the need for these SIAP and Takeoff Minimums and ODP amendments require making them effective in less than 30 days.

Because of the close and immediate relationship between these SIAPs, Takeoff Minimums and ODPs, and safety in air commerce, I find that notice and public procedure under 5 U.S.C. 553(b) are impracticable and contrary to

the public interest and, where applicable, under 5 U.S.C. 553(d), good cause exists for making these SIAPs effective in less than 30 days.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a “significant regulatory action” under Executive Order 12866; (2) is not a “significant rule” under DOT regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. For the same reason, the FAA certifies that this amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 97

Air Traffic Control, Airports, Incorporation by reference, Navigation (Air).

Issued in Washington, DC, on October 11, 2024.

Thomas J. Nichols,

Standards Section Manager, Flight Procedures and Airspace Group, Flight Technologies and Procedures Division, Office of Safety Standards, Flight Standards Service, Aviation Safety, Federal Aviation Administration.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me, 14 CFR part 97 is amended by amending Standard Instrument Approach Procedures and Takeoff Minimums and ODPs, effective at 0901 UTC on the dates specified, as follows:

PART 97—STANDARD INSTRUMENT APPROACH PROCEDURES

■ 1. The authority citation for part 97 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40103, 40106, 40113, 40114, 40120, 44502, 44514, 44701, 44719, 44721–44722.

■ 2. Part 97 is amended to read as follows:

By amending: § 97.23 VOR, VOR/DME, VOR or TACAN, and VOR/DME or TACAN; § 97.25 LOC, LOC/DME, LDA, LDA/DME, SDF, SDF/DME; § 97.27 NDB, NDB/DME; § 97.29 ILS, ILS/DME, MLS, MLS/DME, MLS/RNAV; § 97.31 RADAR SIAPs; § 97.33 RNAV SIAPs; and § 97.35 COPTER SIAPs, Identified as follows:

* * * Effective Upon Publication

AIRAC date	State	City	Airport	FDC No.	FDC date	Procedure name
28–Nov–24 ..	TX	Corpus Christi ...	Corpus Christi Intl	4/9147	8/21/2024	RNAV (RNP) Z RWY 36, Amdt 1A.
28–Nov–24 ..	TX	Corpus Christi ...	Corpus Christi Intl	4/9148	8/21/2024	RNAV (RNP) Z RWY 31, Amdt 1.
28–Nov–24 ..	TX	Corpus Christi ...	Corpus Christi Intl	4/9153	8/21/2024	RNAV (RNP) Z RWY 13, Amdt 1.

[FR Doc. 2024–25211 Filed 10–29–24; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. 31571; Amdt. No. 4135]

Standard Instrument Approach Procedures, and Takeoff Minimums and Obstacle Departure Procedures; Miscellaneous Amendments

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This rule establishes, amends, suspends, or removes Standard Instrument Approach Procedures (SIAPs) and associated Takeoff Minimums and Obstacle Departure Procedures (ODPs) for operations at certain airports. These regulatory actions are needed because of the adoption of new or revised criteria, or because of changes occurring in the National Airspace System, such as the commissioning of new navigational facilities, adding new obstacles, or changing air traffic requirements. These changes are designed to provide safe and efficient use of the navigable airspace and to promote safe flight

operations under instrument flight rules at the affected airports.

DATES: This rule is effective October 30, 2024. The compliance date for each SIAP, associated Takeoff Minimums, and ODP is specified in the amendatory provisions.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of October 30, 2024.

ADDRESSES: Availability of matters incorporated by reference in the amendment is as follows:

For Examination

1. U.S. Department of Transportation, Docket Ops-M30. 1200 New Jersey Avenue SE, West Bldg., Ground Floor, Washington, DC, 20590–0001.

2. The FAA Air Traffic Organization Service Area in which the affected airport is located;

3. The office of Aeronautical Information Services, 6500 South MacArthur Blvd., Oklahoma City, OK 73169 or,

4. The National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Availability

All SIAPs and Takeoff Minimums and ODPs are available online free of charge.

Visit the National Flight Data Center at nfdc.faa.gov to register. Additionally, individual SIAP and Takeoff Minimums and ODP copies may be obtained from the FAA Air Traffic Organization Service Area in which the affected airport is located.

FOR FURTHER INFORMATION CONTACT:

Thomas J. Nichols, Standards Section Manager, Flight Procedures and Airspace Group, Flight Technologies and Procedures Division, Office of Safety Standards, Flight Standards Service, Aviation Safety, Federal Aviation Administration. Mailing Address: FAA Mike Monroney Aeronautical Center, Flight Procedures and Airspace Group, 6500 South MacArthur Blvd., STB Annex, Bldg 26, Room 217, Oklahoma City, OK 73099. Telephone (405) 954–1139.

SUPPLEMENTARY INFORMATION: This rule amends 14 CFR part 97 by establishing, amending, suspending, or removes SIAPs, Takeoff Minimums and/or ODPs. The complete regulatory description of each SIAP and its associated Takeoff Minimums or ODP for an identified airport is listed on FAA form documents which are incorporated by reference in this amendment under 5 U.S.C. 552(a), 1 CFR part 51, and 14 CFR 97.20. The applicable FAA Forms are 8260–3, 8260–4, 8260–5, 8260–15A, 8260–15B, when required by an entry on 8260–15A, and 8260–15C.

The large number of SIAPs, Takeoff Minimums and ODPs, their complex nature, and the need for a special format make publication in the **Federal Register** expensive and impractical. Further, pilots do not use the regulatory text of the SIAPs, Takeoff Minimums or ODPs, but instead refer to their graphic depiction on charts printed by publishers or aeronautical materials. Thus, the advantages of incorporation by reference are realized and publication of the complete description of each SIAP, Takeoff Minimums and ODP listed on FAA form documents is unnecessary. This amendment provides the affected CFR sections and specifies the types of SIAPs, Takeoff Minimums and ODPs with their applicable effective dates. This amendment also identifies the airport and its location, the procedure, and the amendment number.

Availability and Summary of Material Incorporated by Reference

The material incorporated by reference is publicly available as listed in the **ADDRESSES** section.

The material incorporated by reference describes SIAPs, Takeoff Minimums and/or ODPs as identified in the amendatory language for part 97 of this final rule.

The Rule

This amendment to 14 CFR part 97 is effective upon publication of each separate SIAP, Takeoff Minimums and ODP as amended in the transmittal. Some SIAP and Takeoff Minimums and textual ODP amendments may have been issued previously by the FAA in a Flight Data Center (FDC) Notice to Air Missions (NOTAM) as an emergency action of immediate flights safety relating directly to published aeronautical charts.

The circumstances that created the need for some SIAP and Takeoff Minimums and ODP amendments may require making them effective in less than 30 days. For the remaining SIAPs and Takeoff Minimums and ODPs, an effective date at least 30 days after publication is provided.

Further, the SIAPs and Takeoff Minimums and ODPs contained in this amendment are based on the criteria contained in the U.S. Standard for Terminal Instrument Procedures (TERPS). In developing these SIAPs and Takeoff Minimums and ODPs, the TERPS criteria were applied to the conditions existing or anticipated at the affected airports. Because of the close and immediate relationship between these SIAPs, Takeoff Minimums and ODPs, and safety in air commerce, I find that notice and public procedure under

5 U.S.C. 553(b) are impracticable and contrary to the public interest and, where applicable, under 5 U.S.C. 553(d), good cause exists for making some SIAPs effective in less than 30 days.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a “significant regulatory action” under Executive Order 12866; (2) is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. For the same reason, the FAA certifies that this amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Lists of Subjects in 14 CFR Part 97

Air Traffic Control, Airports, Incorporation by reference, Navigation (Air).

Issued in Washington, DC, on October 11, 2024.

Thomas J. Nichols,

Standards Section Manager, Flight Procedures and Airspace Group, Flight Technologies and Procedures Division, Office of Safety Standards, Flight Standards Service, Aviation Safety, Federal Aviation Administration.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me, 14 CFR part 97 is amended by establishing, amending, suspending, or removing Standard Instrument Approach Procedures and/or Takeoff Minimums and Obstacle Departure Procedures effective at 0901 UTC on the dates specified, as follows:

PART 97—STANDARD INSTRUMENT APPROACH PROCEDURES

■ 1. The authority citation for part 97 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40103, 40106, 40113, 40114, 40120, 44502, 44514, 44701, 44719, 44721–44722.

■ 2. Part 97 is amended to read as follows:

Effective 28 November 2024

Madison, WI, MSN, VOR RWY 14, Amdt 1

Effective 26 December 2024

Gustavus, AK, GST/PAGS, VOR RWY 29, Amdt 3

Sitka, AK, SIT/PASI, LDA RWY 11, Amdt 16A

Crossett, AR, CRT, Takeoff Minimums and Obstacle DP, Orig-A
King City, CA, KIC, RNAV (GPS) RWY 11, Orig
King City, CA, KIC, RNAV (GPS) RWY 29, Orig
King City, CA, KKIC, Takeoff Minimums and Obstacle DP, Orig
Mariposa, CA, MPI, RNAV (GPS)-A, Orig-C
Santa Ana, CA, SNA, RNAV (RNP) Z RWY 2L, Orig-A
Cross City, FL, CTY, VOR RWY 31, Amdt 19B, CANCELED
Fort Pierce, FL, FPR, VOR/DME RWY 14, Amdt 9D, CANCELED
Melbourne, FL, MLB, ILS OR LOC RWY 9R, Amdt 13
Melbourne, FL, MLB, LOC BC RWY 27L, Amdt 11
Melbourne, FL, MLB, RNAV (GPS) RWY 9L, Amdt 2
Melbourne, FL, MLB, RNAV (GPS) RWY 9R, Amdt 2
Melbourne, FL, MLB, RNAV (GPS) RWY 27L, Amdt 2
Melbourne, FL, MLB, RNAV (GPS) RWY 27R, Amdt 2
Valkaria, FL, X59, RNAV (GPS)-A, Orig
Valkaria, FL, X59, RNAV (GPS)-B, Orig
Valkaria, FL, X59, Takeoff Minimums and Obstacle DP, Orig
Vero Beach, FL, VRB, VOR RWY 12R, Amdt 14E, CANCELED
Vero Beach, FL, VRB, VOR RWY 30L, Amdt 4D, CANCELED
Pohnpei Island, FM, PTPN, RNAV (RNP) Y RWY 9, Amdt 2A, CANCELED
Kamuela, HI, MUE/PHMU, VOR-A, Amdt 1
Knoxville, IA, OXV, RNAV (GPS) RWY 15, Orig-A
Kankakee, IL, IKK, ILS OR LOC RWY 4, Amdt 9
Kankakee, IL, IKK, RNAV (GPS) RWY 4, Amdt 3
Pontiac, IL, PNT, RNAV (GPS) RWY 24, Orig-B
Quincy, IL, UIN, ILS OR LOC RWY 4, Amdt 19
Quincy, IL, UIN, NDB RWY 4, Amdt 19
Quincy, IL, UIN, RNAV (GPS) RWY 4, Amdt 1
Quincy, IL, KUIN, Takeoff Minimums and Obstacle DP, Orig-B
Evansville, IN, EVV, Takeoff Minimums and Obstacle DP, Amdt 9B
Belleville, KS, RPB, VOR-A, Amdt 3F, CANCELED
Beloit, KS, K61, VOR RWY 17, Amdt 5, CANCELED
Coffeyville, KS, CFV, RNAV (GPS) RWY 35, Amdt 1A
Olathe, KS, IXD, RNAV (GPS) RWY 4, Orig-A
Olathe, KS, IXD, RNAV (GPS) RWY 22, Orig-A
Pittsburg, KS, KPTS, Takeoff Minimums and Obstacle DP, Amdt 2A
Smith Center, KS, K82, VOR-A, Amdt 3A, CANCELED
Louisville, KY, LOU, Takeoff Minimums and Obstacle DP, Amdt 4A
Princeton, KY, 2M0, RNAV (GPS) RWY 23, Orig-B
Eunice, LA, 4R7, Takeoff Minimums and Obstacle DP, Amdt 2A
Mansfield, LA, 3F3, Takeoff Minimums and Obstacle DP, Orig-A

Opelousas, LA, KOPL, Takeoff Minimums and Obstacle DP, Amdt 1A
 Leonardtown, MD, 2W6, RNAV (GPS) RWY 11, Amdt 3
 Leonardtown, MD, 2W6, Takeoff Minimums and Obstacle DP, Amdt 1
 Bellaire, MI, ACB, RNAV (GPS) RWY 2, Amdt 1
 Boyne City, MI, N98, RNAV (GPS) RWY 9, Orig-C
 Charlevoix, MI, CVX, RNAV (GPS) RWY 27, Orig-D
 Gaylord, MI, GLR, RNAV (GPS) RWY 9, Amdt 1
 Gaylord, MI, GLR, RNAV (GPS) RWY 27, Amdt 1
 Gaylord, MI, KGLR, Takeoff Minimums and Obstacle DP, Orig-A
 Ontonagon, MI, OGM, RNAV (GPS) RWY 35, Orig-A
 Blue Earth, MN, SBU, RNAV (GPS) RWY 34, Orig-A
 Hattiesburg-Laurel, MS, PIB, VOR-A, Orig-B, CANCELED
 Laurel, MS, LUL, VOR-A, Amdt 6, CANCELED
 Kinston, NC, ISO, RNAV (GPS) RWY 5, Amdt 3C
 Falls City, NE, FNB, RNAV (GPS) RWY 33, Amdt 2A
 Dansville, NY, DSV, RNAV (GPS)-A, Orig-B
 Sand Springs, OK, OWP, RNAV (GPS) RWY 17, Amdt 1
 Sand Springs, OK, OWP, RNAV (GPS) RWY 35, Amdt 1
 Watonga, OK, KJWG, Takeoff Minimums and Obstacle DP, Amdt 1A
 Bradford, PA, KBFD, Takeoff Minimums and Obstacle DP, Orig-A
 Lancaster, PA, KLNS, Takeoff Minimums and Obstacle DP, Amdt 2
 Savannah, TN, KSNH, Takeoff Minimums and Obstacle DP, Amdt 3A
 Sevierville, TN, GKT, Takeoff Minimums and Obstacle DP, Amdt 4B
 Dallas, TX, DAL, ILS OR LOC RWY 13L, ILS RWY 13L (SA CAT I), ILS RWY 13L (SA CAT II), Amdt 34A
 Dallas, TX, DAL, ILS OR LOC RWY 13R, Amdt 6C
 Madisonville, TX, 51R, RNAV (GPS) RWY 1, Amdt 1
 Madisonville, TX, 51R, RNAV (GPS) RWY 19, Amdt 1
 Madisonville, TX, 51R, Takeoff Minimums and Obstacle DP, Amdt 1
 Madisonville, TX, 51R, VOR RWY 19, Amdt 3
 Manti, UT, 41U, RNAV (GPS) RWY 3, Orig-C
 Quinton, VA, W96, RNAV (GPS) RWY 11, Amdt 3
 Quinton, VA, W96, RNAV (GPS) RWY 29, Amdt 3
 Saluda, VA, W75, RNAV (GPS) RWY 1, Amdt 1
 Saluda, VA, W75, Takeoff Minimums and Obstacle DP, Amdt 3
 Port Angeles, WA, KCLM, WATTR NINE, Graphic DP
 Boscobel, WI, OVS, RNAV (GPS) RWY 7, Orig-C
 Boscobel, WI, OVS, RNAV (GPS) RWY 25, Amdt 2A
 Eau Claire, WI, EAU, Takeoff Minimums and Obstacle DP, Amdt 2B

Racine, WI, RAC, Takeoff Minimums and Obstacle DP, Amdt 5B
 Pineville, WV, I16, RNAV (GPS) RWY 26, Orig-E

[FR Doc. 2024-25210 Filed 10-29-24; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Parts 175, 176, 177, and 178

[Docket No. FDA-2018-F-3757]

Indirect Food Additives: Adhesives and Components of Coatings; Paper and Paperboard Components; Polymers; Adjuvants, Production Aids, and Sanitizers

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule; response to objection; confirmation of effective date.

SUMMARY: The Food and Drug Administration (FDA or we) is responding to the objection that we received from the Environmental Defense Fund, Breast Cancer Prevention Partners, Environmental Protection Network, Environmental Working Group, and Healthy Babies Bright Futures on the final rule that amended the food additive regulations to no longer provide for the use of 25 plasticizers that the petition identified as *ortho*-phthalates because these food additive uses have been permanently abandoned. After reviewing the objection, FDA has concluded that the objection does not provide a basis for modifying FDA's final rule amending the food additive regulations.

DATES: The effective date of May 20, 2022, for the final rule published on May 20, 2022 (87 FR 31080), is confirmed.

ADDRESSES: For access to the docket to read background documents or comments received, go to <https://www.regulations.gov> and insert the docket number found in brackets in the heading of this final rule into the "Search" box and follow the prompts, and/or go to the Dockets Management Staff, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852, 240-402-7500.

FOR FURTHER INFORMATION CONTACT: Stephen DiFranco, Office of Food Chemical Safety, Dietary Supplements, and Innovation (HFS-275), Human Foods Program, Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740-3835, 240-402-2710; or Lauren Kleinman, Human

Foods Program, Office of Policy, Regulations and Information (HFS-024), Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740, 240-402-2378.

SUPPLEMENTARY INFORMATION:

I. Background

In the **Federal Register** of November 14, 2018 (83 FR 56750), we announced that we filed a food additive petition (FAP 8B4820) (Petition) submitted by The Flexible Vinyl Alliance (FVA or Petitioner), c/o Keller and Heckman, LLP, 1001 G St. NW, Suite 500 West, Washington, DC 20001. The Petition requested that we amend our food additive regulations in parts 175, 176, 177, and 178 (21 CFR parts 175, 176, 177, and 178) to no longer provide for the use of 26 plasticizer substances that the Petition identified as *ortho*-phthalates. (FAP 8B4820 submitted by FVA claimed that the food additive uses of di(2-ethylhexyl) hexahydrophthalate and diphenylguanidine phthalate are abandoned. We note that these substances are not chemically classified as *ortho*-phthalates and that characterization as such is incorrect.) The Petition requested that we revoke the approvals on the basis that the food additive uses have been permanently abandoned.

One of the 26 plasticizers identified in the Petition was diallyl phthalate (Chemical Abstract Services number (CAS Reg No.) 131-17-9). The filing document indicated that this substance may be used as a food additive under §§ 175.105, 176.180, 176.300, and 177.1210 (21 CFR 175.105, 176.180, 176.300, and 177.1210) (see 83 FR 56750). However, upon further review, we determined that the use of diallyl phthalate is only authorized for use in these regulations as a monomer to produce polymers and not as a plasticizer. FVA made no claims in their Petition that the use of polymers produced with diallyl phthalate for food contact applications have been abandoned. Thus, after FDA followed up with the Petitioner, diallyl phthalate was no longer subject to this Petition (87 FR 31080). In the **Federal Register** of May 20, 2022 (87 FR 31080), FDA issued a final rule amending the food additive regulations in parts 175, 176, 177, and 178 to no longer provide for the use of 25 plasticizers in various food contact applications (final rule). We gave interested persons until June 21, 2022, to file objections and requests for a hearing on the final rule.

II. Objection and Comments

Section 409(f)(1) of the Federal Food, Drug, and Cosmetic Act (FD&C Act) (21

U.S.C. 348(f)(1)) provides that, within 30 days after publication of an order relating to a food additive regulation, any person adversely affected by such order may file objections, specifying with particularity, the provisions of the order deemed objectionable, stating reasonable grounds therefor and requesting a public hearing upon such objections.

Under 21 CFR 171.110, objections and requests for a hearing relating to food additive regulations are governed by 21 CFR part 12. Under § 12.22(a) (21 CFR 12.22(a)), each objection must: (1) be submitted on or before the 30th day after the date of publication of the final rule; (2) be separately numbered; (3) specify with particularity the provision of the regulation or proposed order objected to; (4) specifically state each objection on which a hearing is requested; failure to request a hearing on an objection constitutes a waiver of the right to a hearing on that objection; and (5) include a detailed description and analysis of the factual information to be presented in support of the objection if a hearing is requested; failure to include a description and analysis for an objection constitutes a waiver of the right to a hearing on that objection.

Following the publication of the final rule in which we granted the Petition asserting abandonment of the 25 plasticizers in various food contact uses, we received a submission from the Environmental Defense Fund, Breast Cancer Prevention Partners, Environmental Protection Network, Environmental Working Group, and Healthy Babies Bright Futures (Objectors) containing one objection and two comments (see submission from Tom Neltner, Senior Director for Safer Chemicals, Environmental Defense Fund, et al., submitted to the Dockets Management Staff, Food and Drug Administration, dated June 19, 2022 (Submission) (Ref. 1). The Submission does not contain a request for a hearing.

III. Analysis of Objections and Comments

The Submission contains one numbered objection and two numbered comments. We address each objection and comment below.

A. Objection 1

The Submission states that “The agency [improperly] denied FVA’s request to remove approval of diallyl phthalate because it was used as a monomer to produce polymers and not as a plasticizer” (Ref. 1 at page 1). The Submission states that the FVA survey that FVA submitted to provide evidence

of abandonment asked survey recipients about food contact applications for the listed substances, not about use of the listed substances as plasticizers. According to this objection, FVA “clearly considered diallyl phthalate as abandoned,” and therefore FDA should have removed diallyl phthalate from its food additive regulations on the basis that its use has been abandoned. The Submission also states the Objectors are not requesting a hearing on this Objection. Therefore, the Objectors have waived any right to a hearing on their Objection (see § 12.22(a)(4)). The only remaining question under § 12.24(a) is whether the Objection establishes that the final rule should be modified or revoked with respect to diallyl phthalate. As described below, we conclude that the Objectors have not established a basis for modifying or revoking the final rule.

As FDA stated in the **Federal Register** document announcing the final rule, after following up with the Petitioner, diallyl phthalate was no longer subject to the Petition. In an email correspondence dated July 20, 2018, between FDA and FVA’s agent, FVA confirmed that diallyl phthalate is not within the scope of the abandonment request (see also 87 FR 31080 at 31080 through 31081; Ref. 2). Thus, diallyl phthalate was removed from the Petition. Because diallyl phthalate was removed from the scope of the Petition, when FDA issued the final rule granting the Petition, the final rule did not cover diallyl phthalate. Thus, the final rule did not impact the regulatory authorizations for diallyl phthalate. Accordingly, FDA’s actions regarding diallyl phthalate were reasonable, and there is no need for FDA to modify or revoke the final rule in response to Objection 1.

B. Comment 1

The Submission asserts that FDA should remove the existing prior sanctioned uses of diethyl phthalate (CAS Reg. No. 84–66–2), diisooctyl phthalate (CAS Reg. No. 27554–26–3), ethylphthalyl ethyl glycolate (CAS Reg. No. 84–72–0), and butylphthalyl butyl glycolate (CAS Reg. No. 85–70–1) as a plasticizer at § 181.27 (Ref. 1 at page 3). The Submission states that the survey that FVA used to support the request to remove food additive approvals for these substances did not differentiate between food additive and prior-sanctioned uses of these substances, and so therefore the prior-sanctioned uses should also be considered abandoned. The comment states that based on this evidence, FDA should have either removed the prior-sanction approvals as

part of the final rule “or initiated rulemaking to do so.”

Prior-sanctioned uses are beyond the scope of food additive petitions, which apply only to substances that meet the definition of “food additive” in section 201(s) of the FD&C Act (21 U.S.C. 321(s)). Consequently, prior-sanctioned uses are not the subject of the final rule (87 FR 31080 at 31081). Furthermore, section 409(f)(1) of the FD&C Act permits objections and requests for a hearing only to orders made under section 409(c) and (d) of the FD&C Act. Because FDA has not issued any orders under section 409(c) or (d) of the FD&C Act taking action on the specified prior-sanctioned-uses, the Submission’s request regarding prior-sanctioned uses is not an objection to an order under section 409(c)(1)(B) of the FD&C Act and is not subject to the objections and hearing procedure in section 409(f) of the FD&C Act. Therefore, we will not address requests related to prior-sanctioned uses as part of this objections procedure under section 409(f) of the FD&C Act. The appropriate procedure for requesting rulemaking with respect to prior-sanctioned uses is to submit a citizen petition in accordance with 21 CFR 10.30.

C. Comment 2

The Submission states that “we do not object” to the FVA abandonment claim, but states that some of the abandoned substances “may be present in food, food packaging and food handling equipment.” According to the Submission, there is a need for FDA to “clearly communicate to food manufacturers and food packaging and handling equipment manufacturers that they are not permitted to use [the abandoned substances] in food uses that may migrate into food without a specific food additive use approval or a specific authorization[.]”

With respect to the suggestion that FDA needs to further communicate about the final rule, we disagree. We have already adequately communicated the nature and the scope of this action, in accordance with our standard procedures when granting a food additive petition. Specifically, we published the final rule in the **Federal Register**, which is the standard way for Agencies to communicate with regulated parties about substantive matters. We also posted a constituent update on FDA’s website on the date the final rule went on display, informing industry and the public of the changes to the food additive regulations that resulted from the May 20, 2022, final rule and the circumstances around the action (Ref. 3). The constituent update

remains available on FDA's website. Furthermore, in the **Federal Register** of May 20, 2022 (87 FR 31090), we issued a notice requesting information on the use of some *ortho*-phthalates still authorized for food contact uses. The notice also discusses FAP 8B4820 and provides a citation to the final rule (see 87 FR 31090 at 31091).

IV. Summary and Conclusions

After evaluating the Submission, for the reasons above, we conclude that the objection does not provide any basis for us to modify our regulations.

V. References

The following references are on display at the Dockets Management Staff (see **ADDRESSES**) and are available for viewing by interested persons between 9 a.m. and 4 p.m., Monday through Friday; they are also available electronically at <https://www.regulations.gov>. Although FDA verified the website addresses in this document, please note that websites are subject to change over time.

1. Neltner, T., Environmental Defense Fund et. al., to the Dockets Management Staff, Food and Drug Administration, dated June 19, 2022.
2. Email from D.W. Hill, Keller and Heckman LLP to S. DiFranco, DPR, OFAS, CFSAN, FDA July 20, 2018.
3. "Phthalates in Food Packaging and Food Contact Applications." Available at: <https://www.fda.gov/food/food-ingredients-packaging/phthalates-food-packaging-and-food-contact-applications>.

Dated: October 22, 2024.

Kimberlee Trzeciak,

Deputy Commissioner for Policy, Legislation, and International Affairs.

[FR Doc. 2024-25122 Filed 10-29-24; 8:45 am]

BILLING CODE 4164-01-P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[Docket No. USCG-2024-0392]

RIN 1625-AA09

Drawbridge Operation Regulation; Dutch Kills, Queens County, NY

AGENCY: Coast Guard, DHS.

ACTION: Temporary interim rule and request for comments.

SUMMARY: The Coast Guard is temporarily modifying the operating schedule that governs the Hunters Point Ave Bridge across Dutch Kills, mile 1.4,

at Queens County, NY. NYCDOT installed a temporary work platform at Hunters Point Ave Bridge on May 6, 2024 to perform blasting and painting operations. The work platform prevents the bridge from opening to marine traffic. Until the bridge operations are complete the bridge must remain in the closed position.

DATES: This temporary interim rule is effective October 30, 2024 through 12:01 a.m. on July 1, 2025. Comments and related material must reach the Coast Guard on or before November 29, 2024.

ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to <https://www.regulations.gov>. Type the docket number (USCG-2024-0392) in the "SEARCH" box and click "SEARCH". In the Document Type column, select "Supporting & Related Material."

FOR FURTHER INFORMATION CONTACT: If you have questions on this temporary interim rule, call or email, Stephanie E. Lopez, Coast Guard; telephone 212-514-4335, email Stephanie.E.Lopez@uscg.mil.

SUPPLEMENTARY INFORMATION:

I. Table of Abbreviations

CFR Code of Federal Regulations
DHS Department of Homeland Security
FR Federal Register
NPRM Notice of proposed rulemaking
Pub. L. Public Law
§ Section
U.S.C. United States Code
NYCDOT New York City Department of Transportation
TIR Temporary Interim Rule

II. Background Information and Regulatory History

The Coast Guard is issuing this temporary interim rule without prior notice and opportunity to comment pursuant to authority under section 4(a) of the Administrative Procedure Act (APA) (5 U.S.C. 553(b)). This provision authorizes an agency to issue a rule without prior notice and opportunity to comment when the agency for good cause finds that those procedures are "impracticable, unnecessary, or contrary to the public interest." Under 5 U.S.C. 553(b), the Coast Guard finds that good cause exists for not publishing a notice of proposed rulemaking (NPRM) with respect to this rule because it is impracticable. This bridge has a work platform installed which keeps the bridge in the closed to navigation position.

On May 6, 2024, the Coast Guard issued a general deviation which allowed the bridge owner, NYCDOT, to deviate from the current operating schedule in 33 CFR 117.801(d) to

conduct bridge blasting and painting operations. Due to additional work that has been discovered, the bridge owner has requested an extension of closure that will take the project past the allowable 180 days for a deviation. Since the bridge cannot be brought back to operating condition until the completion of the mechanical rehabilitation there is insufficient time to provide a reasonable comment period and then consider those comments before issuing the modification.

However, we will be soliciting comments on this rulemaking during the first 30 days while this rule is in effect. If the Coast Guard determines that changes to the temporary interim rule are necessary, we will publish a temporary final rule or other appropriate document.

Under 5 U.S.C. 553(d)(3), the Coast Guard finds that good cause exists for making it effective in less than 30 days after publication in the **Federal Register**. For reasons presented above, delaying the effective date of this rule would be impracticable and contrary to the public interest because the bridge is currently incapable of normal operations and will not be back into full operation until the rehabilitation work can be completed.

III. Legal Authority and Need for Rule

The Coast Guard is issuing this rule under authority in 33 U.S.C. 499. Hunters Point Ave Bridge across Dutch Kills is a bascule bridge with a vertical clearance of 5.3 feet mean high water in the closed position and unlimited vertical clearance in the open position.

The existing drawbridge regulation, 33 CFR 117.801(d), states that the draw of the Hunters Point Ave Bridge, mile 1.4, shall open on signal if at least two-hour advance notice is given. NYCDOT, the bridge owner, has requested to keep the bridge in the closed position during the remainder of the work.

IV. Discussion of the Rule

The Coast Guard is issuing this rule to allow the bridge owner of the Hunters Point Ave Bridge across Dutch Kills, mile 1.4, Queens, New York, to keep the bridge in the closed to navigation position until July 1, 2025. The rule is necessary to accommodate the completion of the blasting and painting operations.

V. Regulatory Analyses

We developed this rule after considering numerous statutes and Executive Orders related to rulemaking. Below we summarize our analyses based on a number of these statutes and Executive Orders.

A. Regulatory Planning and Review

Executive Orders 12866 and 13563 direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits. This rule has not been designated a “significant regulatory action,” under section 3(f) of Executive Order 12866, as amended by Executive Order 14094 (Modernizing Regulatory Review). Accordingly, it has not been reviewed by the Office of Management and Budget (OMB).

This regulatory action determination is based on the ability that vessels can still transit the bridge given 3 hours advanced notice.

B. Impact on Small Entities

The Regulatory Flexibility Act of 1980 (RFA), 5 U.S.C. 601–612, as amended, requires federal agencies to consider the potential impact of regulations on small entities during rulemaking. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. The Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities.

While some owners or operators of vessels intending to transit the bridge may be small entities, for the reasons stated in section V.A above, this rule will not have a significant economic impact on any vessel owner or operator.

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this rule. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency’s responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247). The

Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

C. Collection of Information

This rule calls for no new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

D. Federalism and Indian Tribal Government

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under that Order and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132.

Also, this rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

E. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Though this rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

F. Environment

We have analyzed this rule under Department of Homeland Security Management Directive 023–01, Rev. 1, associated implementing instructions, and Environmental Planning Policy COMDTINST 5090.1 (series) which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA)(42 U.S.C. 4321–4370f). The Coast Guard has determined that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. This rule promulgates the operating regulations or

procedures for drawbridges and is categorically excluded from further review, under paragraph L49, of appendix A, table 1 of DHS Instruction Manual 023–01–001–01, Rev. 1.

Neither a Record of Environmental Consideration nor a Memorandum for the Record are required for this rule.

List of Subjects in 33 CFR Part 117

Bridges.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 117 as follows:

PART 117—DRAWBRIDGE OPERATION REGULATIONS

■ 1. The authority citation for part 117 continues to read as follows:

Authority: 33 U.S.C. 499; 33 CFR 1.05–1; DHS Delegation No. 00170.1. Revision No. 01.3

■ 2. In § 117.801:

■ a. Paragraph (d) is stayed; and
■ b. Paragraph (h) is added. The addition reads as follows:

§ 117.801 Newtown Creek, Dutch Kills, English Kills, and their tributaries.

* * * * *

(h) The draw of the Hunters Point Avenue Bridge, mile 1.4, across Dutch Kills at Queens, may be maintained in the closed to navigation position until July 1, 2025.

M.E. Platt,

Rear Admiral, U.S. Coast Guard, Commander, First Coast Guard District.

[FR Doc. 2024–24970 Filed 10–29–24; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket Number USCG–2024–0970]

RIN 1625–AA87

Security Zone; Corpus Christi Ship Channel, Corpus Christi, TX

AGENCY: Coast Guard, DHS.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing a temporary moving security zone for navigable waters within a 500-yard radius of a certain vessel carrying cargo requiring an elevated level of security in the Corpus Christi Ship Channel and the La Quinta Channel. The temporary security zone is needed to protect the vessel, the cargo, and the surrounding waterway from

terrorist acts, sabotage, or other subversive acts, accidents, or events of a similar nature. Entry of vessels or persons into this zone is prohibited unless specifically authorized by the Captain of the Port, Sector Corpus Christi or a designated representative.

DATES: For the purposes of enforcement, actual notice will be used from October 24, 2024, until October 30, 2024. This rule is effective without actual notice from October 30, 2024 until November 1, 2024.

ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to <https://www.regulations.gov>, type USCG–2024–0970 in the search box and click “Search.” Next, in the Document Type column, select “Supporting & Related Material.”

FOR FURTHER INFORMATION CONTACT: If you have questions about this rule, call or email Lieutenant Tim Cardenas, Sector Corpus Christi Waterways Management Division, U.S. Coast Guard; telephone 361–939–5130, email Tim.J.Cardenas@uscg.mil.

SUPPLEMENTARY INFORMATION:

I. Table of Abbreviations

CFR Code of Federal Regulations
COTP Captain of the Port, Sector Corpus Christi
DHS Department of Homeland Security
FR Federal Register
NPRM Notice of proposed rulemaking
§ Section
U.S.C. United States Code

II. Background Information and Regulatory History

The Coast Guard is issuing this temporary rule under the authority in 5 U.S.C. 553(b)(B). This provision authorizes an agency to issue a rule without prior notice and opportunity to comment when the agency for good cause finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under 5 U.S.C. 553(b)(B), the Coast Guard finds that good cause exists for not publishing a notice of proposed rulemaking (NPRM) with respect to this rule because it is impracticable. The Coast Guard must establish this security zone by October 24, 2024, to ensure security of this vessel and the surrounding area and lacks sufficient time to provide a reasonable comment period and to consider those comments before issuing the rule.

Under 5 U.S.C. 553(d)(3), the Coast Guard also finds that good cause exists for making this rule effective less than 30 days after publication in the **Federal Register**. Delaying the effective date of this rule would be contrary to the public

interest because quick action is needed to provide for the security of this vessel and its surroundings while it is in transit.

III. Legal Authority and Need for Rule

The Coast Guard is issuing this security zone regulation under the authority in 46 U.S.C. 70051 and 70124. The Captain of the Port, Sector Corpus Christi (COTP) has determined that potential hazards are associated with the transit of the Motor Vessel (M/V) KITHNOS. There is a security concern within a 500-yard radius of the vessel when it is loaded and when it is transiting while loaded. This rule is needed to provide for the safety and security of the vessel, its cargo, and the surrounding waterway from terrorist acts, sabotage, or other subversive acts, accidents, or other events of a similar nature while the vessel is transiting within Corpus Christi, TX.

IV. Discussion of the Rule

The Coast Guard is establishing a 500-yard radius, temporary, moving security zone around M/V KITHNOS. Other mariners and vessels will be able to identify the security zone because of the M/V KITHNOS’s name, clearly marked on its stern, and port and starboard sides. The zone for the vessel will be effective and enforced from October 24, 2024, through November 1, 2024, when the vessel is loaded with cargo and transiting the Corpus Christi Ship Channel and La Quinta Ship Channel to protect the vessel, its cargo, and the surrounding waterways from terrorist acts, sabotage, or other subversive acts, accidents, or other events of a similar nature while the vessel is traveling within the Corpus Christi Ship Channel and La Quinta Ship Channel.

No vessel or person will be permitted to enter the security zone without obtaining permission from the COTP or a designated representative. As used in this section, “designated representative” means a Coast Guard Patrol Commander, including a Coast Guard coxswain, petty officer, or other officer operating a Coast Guard vessel and a Federal, State, and local officer designated by or assisting the Captain of the Port, USCG Sector Corpus Christi (COTP) in the enforcement of the security zone. Persons or vessels desiring to enter or pass through each zone must request permission from the COTP or a designated representative on VHF–FM channel 16 or by telephone at 361–939–0450. If permission is granted, all persons and vessels must comply with the instructions of the COTP or designated representative. The COTP or a designated representative will inform

the public through Broadcast Notices to Mariners (BNMs), Local Notices to Mariners (LNMs), and/or Marine Safety Information Bulletins (MSIBs) as appropriate for the enforcement times and dates for the security zone.

V. Regulatory Analyses

We developed this rule after considering numerous statutes and Executive Orders related to rulemaking. Below we summarize our analyses based on a number of these statutes and Executive Orders, and we discuss First Amendment rights of protestors.

A. Regulatory Planning and Review

Executive Orders 12866 and 13563 direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits. This rule has not been designated a “significant regulatory action,” under Executive Order 12866, as amended by Executive Order 14094 (Modernizing Regulatory Review). Accordingly, this rule is not subject to review by the Office of Management and Budget (OMB).

This regulatory action determination is based on the size, duration, and location of the security zone. This rule will impact a small, designated area of 500-yards around the moving vessel in the Corpus Christi Ship Channel and La Quinta Ship Channel as the vessel transits these channels over a nine-day period. Most vessels will be able to move around the security zone and therefore the impediment to the movement of other vessels will be minimal. Moreover, the rule allows other vessels to seek permission to enter the zone.

B. Impact on Small Entities

The Regulatory Flexibility Act of 1980, 5 U.S.C. 601–612, as amended, requires Federal agencies to consider the potential impact of regulations on small entities during rulemaking. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. The Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities.

While some owners or operators of vessels intending to transit the temporary security zone may be small entities, for the reasons stated in section V.A above, this rule will not have a

significant economic impact on any vessel owner or operator.

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this rule. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247). The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

C. Collection of Information

This rule will not call for a new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

D. Federalism and Indian Tribal Governments

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under that Order and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132.

Also, this rule does not have Tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it does not have a substantial direct effect on one or more Indian Tribes, on the relationship between the Federal Government and Indian Tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes. If you believe this rule has implications for federalism or Indian Tribes, please contact the person listed in the **FOR**

FURTHER INFORMATION CONTACT section above.

E. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Though this rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

F. Environment

We have analyzed this rule under Department of Homeland Security Directive 023–01 and Environmental Planning COMDTINST 5090.1 (series), which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4370f) and have determined that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. This rule involves a moving security zone lasting for the duration of time that the M/V KITHNOS is within the Corpus Christi Ship Channel and La Quinta Channel while loaded with cargo. It will prohibit entry within a 500-yard radius of the M/V KITHNOS while the vessel is transiting loaded within Corpus Christi Ship Channel and La Quinta Ship Channel. It is categorically excluded from further review under L60(a) in Appendix A, Table 1 of DHS Instruction Manual 023–01–001–01, Rev. 1. A record of Environmental Consideration supporting this determination is available in the docket. For instructions on locating the docket, see the **ADDRESSES** section of this preamble.

G. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places, or vessels.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

■ 1. The authority citation for part 165 continues to read as follows:

Authority: 46 U.S.C. 70034, 70051; 70124; 33 CFR 1.05–1, 6.04–1, 6.04–6, and 160.5; Department of Homeland Security Delegation No. 00170.1, Revision No. 01.3.

■ 2. Add § 165.T08–0970 to read as follows:

§ 165.T08–0970 Security Zones; Corpus Christi Ship Channel. Corpus Christi, TX.

(a) *Location.* The following area is a moving security zone: All navigable waters encompassing a 500-yard radius around the M/V KITHNOS while the vessel is in the Corpus Christi Ship Channel and the La Quinta Ship Channel.

(b) *Enforcement period.* This section will be enforced during the time the ship is loaded and docked, and while loaded and underway.

(c) *Regulations.* (1) The general security zone regulations in subpart D of this part, you may not enter the security zone described in paragraph (a) of this section unless authorized by the COTP or the COTP's designated representative. A designated representative is a commissioned, warrant, or petty officer of the U.S. Coast Guard assigned to units under the operational control of USCG Sector Corpus Christi.

(2) Persons or vessels desiring to enter or pass through the zones must request permission from the COTP Sector Corpus Christi on VHF–FM channel 16 or by telephone at 361–939–0450.

(3) If permission is granted, all persons and vessels must comply with all lawful orders and directions of the COTP or the COTP's designated representative.

(d) *Information broadcasts.* The COTP or a designated representative will inform the public through Broadcast Notices to Mariners (BNMs), Local Notices to Mariners (LNMs), and/or Marine Safety Information Bulletins (MSIBs) as appropriate of the enforcement times and dates for this security zone.

Dated: October 23, 2024.

T.H. Bertheau,

Captain, U.S. Coast Guard, Captain of the Port, Sector Corpus Christi.

[FR Doc. 2024–25199 Filed 10–29–24; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF VETERANS AFFAIRS**38 CFR Parts 17 and 51**

RIN 2900-AR61

Determining Eligibility for Domiciliary Care**AGENCY:** Department of Veterans Affairs.**ACTION:** Final rule.

SUMMARY: The Department of Veterans Affairs (VA) adopts as final, with minor changes, a proposed rule amending its medical and State Veterans Home (State home) regulations to update the criteria used by VA in determining eligibility for domiciliary care and to implement VA's authority to waive certain eligibility requirements for receipt of State home domiciliary care per diem.

DATES: This rule is effective November 29, 2024.

FOR FURTHER INFORMATION CONTACT:

Lauren Crotts, Chief, State Veterans Homes, Geriatrics and Extended Care (12GEC), Veterans Health Administration, Department of Veterans Affairs, 810 Vermont Avenue NW, Washington, DC 20420; (202) 461-6750 (This is not a toll-free number.)

SUPPLEMENTARY INFORMATION: In a document published in the **Federal Register** (FR) on September 1, 2023, VA proposed to amend its medical and State home regulations in parts 17 and 51 of title 38, Code of Federal Regulations (CFR). VA proposed to amend part 17 to update the criteria VA uses to determine eligibility for domiciliary care. In particular, VA proposed to amend the criteria that establishes whether a veteran has no adequate means of support by shifting the focus of the regulatory language from the veterans' ability to pursue substantially gainful employment to a broader consideration of available support systems and medical conditions or disabilities that might impact the veteran's ability to live independently. 88 FR 60417. VA also proposed to amend 38 CFR part 51 to implement VA's authority to waive certain requirements for State homes to receive per diem payments for a veteran receiving domiciliary care. Id.

VA provided a 60-day comment period, which ended on October 31, 2023. Four comments were received. These comments are summarized and addressed by topic in the discussion below. VA makes two changes to the rule based on the comments received, which are discussed in more detail below. To the extent commenters raised concerns with their individual situation

or circumstances and provided their personal information, VA reached out to them directly to address their concerns.

Public Comments*I. Length of Time for State Homes To Submit Requests for Retroactive Payments*

As mentioned above, in the proposed rule, VA proposed establishing a waiver for certain eligibility requirements that otherwise would have to be met for VA to pay a per diem payment to a State home for a veteran receiving domiciliary care at that State home pursuant to the new authority granted to VA in Public Law (Pub. L.) 116-315, Section 3007(a). VA proposed a framework in 38 CFR 51.42(c) for State homes to request retroactive per diem payments under this authority, which included a 30-day deadline after the effective date of the rule for State homes to submit a written list of veterans' names for whom the State homes request VA to consider for waiver under the new waiver authority detailed in § 51.51(b)(2).

Two commenters recommended VA extend the time allowed under proposed § 51.42(c)(1) for State homes to submit required documentation to request retroactive per diem payments for domiciliary care from 30 days to either 60 or 90 days. These commenters suggested that the proposed time period of 30 calendar days is insufficient, and more time is necessary. One commenter also noted that the time allowed to submit completed VA Form 10-5588 under § 51.42(c)(4) was unclear in the proposed regulatory text and requested that State homes have 90 days to submit the requisite forms in addition to the list of names.

VA agrees with these commenters' recommendations to extend the time period under proposed § 51.42(c)(1) and (c)(4) and to provide clarity as to how long the State homes have to submit the necessary form. To ensure State homes have sufficient time to compile and submit required documentation to request retroactive per diem payments for domiciliary care, VA is revising the time period in proposed § 51.42(c)(1) to 90 calendar days. Thus, as revised, § 51.42(c)(1) will state that within 90 calendar days of [effective date of final rule] the State home provides VA a written list of veterans' names for whom completed forms were received by VA on or after January 5, 2021, and the State home requests that VA consider them for a waiver under § 51.51(b)(2). VA is also revising § 51.42(c)(4) to include language clarifying that within 90 calendar days of [effective date of final rule] the State home submits to VA a

completed VA Form 10-5588, State Home Report and Statement of Federal Aid Claimed, for each month that the State home provided domiciliary care to a veteran for whom the home is requesting a waiver. The form would only cover the veterans not originally included on the form when submitted previously for that month. VA makes no other changes based on these comments.

II. Process for Waiver Under Proposed § 51.51

One commenter expressed concern that the Chief of Staff of the VA medical center of jurisdiction (VAMC), or designee, would approve waiver requests under § 51.51(b)(1) even though VA would not be providing any care to the veteran in the State home, and another commenter asked for clarification on the waiver process. While VA does not make any changes based on these comments, clarification of the waiver process is provided below.

Although when veterans are admitted into a State home, the State home is responsible for all primary care medical needs under § 51.340, which means VA primary care teams no longer provide primary care to veterans in State homes, VA will have sufficient information to determine whether a waiver should be granted. The physician responsible for providing primary care to veterans in State homes will evaluate the veteran's physical condition on pages one and two of VA Form 10-10SH and will then submit it to the VAMC. The VAMC will review the form and determine whether the veteran is able to perform the seven activities of daily living (ADL) based on the information provided. If the veteran can perform not fewer than four ADL, the VA Chief of Staff or designee (e.g., a VA clinician) may waive the requirements on VA Form 10-10SH and approve domiciliary level of care if it is in the best interest of the veteran, pursuant to the proposed amendments to § 51.51.

One of the same commenters expressed a similar concern regarding how the Chief of Staff of the VA medical center of jurisdiction, or designee, would have sufficient information to make a finding that a State home has the capability to provide the domiciliary care that the veteran needs under proposed § 51.51(b)(2) without the ability to observe the facility. VA does not make any changes based on this comment.

In subpart B of part 51, VA regulates the recognition and certification process for State homes to obtain per diem payments from VA. In order to be recognized for purposes of receiving per diem from VA States must follow the

steps outlined in § 51.20. State homes may receive per diem payments for veterans only after requesting recognition and certification by VA. Through the recognition and certification process and the submission of the VA Form 10–10SH and 10–10EZ, in accordance with § 51.41(e) and § 51.42, the Chief of Staff of the VA medical center of jurisdiction, or designee, would have sufficient information with which to make a finding that the State home has the capability to provide domiciliary care for purposes of § 51.51(b)(2) without ever having observed the State home facility.

III. Definition, Purpose and Scope, and Duration of Domiciliary Care

Another commenter requested VA amend the rule to provide a more detailed description of domiciliary care and how it differs from other types of residential care. In particular, the commenter requested specificity on what factors are considered to determine eligibility for domiciliary care, how long a veteran can stay in domiciliary care, what factors are considered to determine discharge, and what follow-up services are available after discharge. VA does not make any changes to the rule based on this comment.

As to the definition of domiciliary care, the commenter expressed confusion as to whether domiciliary care is a residential rehabilitation and treatment program that provides a temporary home-like environment or whether domiciliary care is the furnishing of a home to a veteran, including shelter, food, clothing, and necessary medical services. The commenter further suggested that VA either use the term “home” or “residential program” throughout.

The term domiciliary care in § 17.30(b) provides that it is the furnishing of: (i) a temporary home to a veteran, embracing the furnishing of shelter, food, clothing and other comforts of home, including necessary medical services; or a day hospital program consisting of intensive supervised rehabilitation and treatment provided in a therapeutic residential setting for residents with mental health or substance use disorders, and co-occurring medical or psycho social needs such as homelessness and unemployment. This definition encompasses the two models of domiciliary care VA is authorized to provide to eligible veterans. The first model of care focuses on the needs of eligible veterans who cannot live independently but do not require

admission to a nursing home, and the second model focuses on the needs of eligible veterans who are receiving care through VA’s Mental Health Residential Rehabilitation Treatment Program (MH RRTP), as referenced in § 17.46 and § 17.47. Therefore, the definition provides for the two distinct models of domiciliary care that can be provided to veterans. Thus, VA cannot exclusively use either the term “home” or the term “residential program” throughout the regulations because VA must be able to describe both models of domiciliary care. VA believes that this definition is clear, consistently applied throughout the regulations, and demonstrates how this type of care would differ from other types of residential care.

The commenter further suggested VA explain what the terms “assistance” and “independently” mean in the context of domiciliary care. As to the term “independence,” VA proposed revising § 17.47(b)(2) to explain how VA would determine eligibility for domiciliary care based on a veteran having no adequate means of support. This involves assessing a veteran’s ability to achieve or sustain “independence” in the community. As stated in the rule, being able to achieve or sustain “independence” includes consideration of the following non-exhaustive factors: (i) the impact of the severity of the veteran’s medical condition, disabilities, and symptoms on the veteran’s safety in the community; (ii) the impact of the severity of the veteran’s medical condition, disabilities, and symptoms on the veteran’s ability to provide self-care; (iii) the availability of community or family support systems; (iv) the impact of the severity of the veteran’s medical condition, disabilities, and symptoms on the veteran’s ability to access and utilize community support systems; (v) the risk of loss of housing in the community; (vi) the risk of loss of the veteran’s income; (vii) access to outpatient mental health and substance use disorder care; and (viii) the current effectiveness of any outpatient mental health and substance use disorder care provided to the veteran. VA believes the list should be sufficiently clear for veterans and other stakeholders to understand what independence means and therefore does not believe any additional explanation or clarification is required in the regulation.

As to the term “assistance,” VA proposed revising § 51.51(b) to explain what a veteran must be able to perform to be eligible for domiciliary care in a State home, which includes several functions that require little to no “assistance,” such as (i) daily ablutions, such as brushing teeth, bathing,

combing hair, and body eliminations, without assistance; (ii) dressing themselves with a minimum of assistance; (iii) proceeding to and return from the dining hall without aid; and (iv) feeding themselves. VA intends the word assistance to have the ordinary meaning of the word, such as the act of helping or assisting someone. www.merriam-webster.com. Therefore, VA does not believe any further clarification is necessary in the regulation.

The commenter further suggested that the regulation be amended to provide additional information about eligibility and duration in domiciliary care, to include factors that are used to determine eligibility and discharge such as medical condition, functional status, or housing situation. Eligibility criteria for domiciliary care is provided in §§ 17.46(b), 17.47(b)(2), 17.47(c), and 51.51. Eligibility criteria found in §§ 17.46 and 17.47 are applicable to domiciliary care provided by VA in residential rehabilitation treatment venues. The same eligibility criteria generally are reflected in current § 51.51 and are applicable to State home domiciliary veterans for purposes of per diem payment eligibility. As explained in the proposed rule, VA proposed revising the eligibility criteria in current § 17.46(b)(2) to be more consistent with the purpose of domiciliary care, which is to provide treatment and rehabilitation to veterans who VA determines have no adequate means of support. VA refers the commenter to its discussion and the proposed regulatory text beginning at 88 FR 60417. These regulations provide sufficient guidance as to when domiciliary care would be appropriate and provided to a veteran.

VA does not regulate more specific factors to qualify for domiciliary care or how long veterans may stay in domiciliary care because duration and level of care are clinical determinations to be made by medical professionals on a case-by-case basis. Therefore, there is not uniform criteria that could be included into a regulation; VA needs to ensure that clinical providers have the flexibility to make a decision based on clinical indications. Similarly, the decision to discharge a veteran is also part of clinical decision-making process and VA clinicians require the flexibility to assess the veteran and make a clinical decision as to when discharge is appropriate. VA notes that discharge typically occurs when a veteran has either completed aspects of residential care, or when a veteran is no longer able to engage in treatment. It is vital that VA providers have flexibility in practice to move veterans between different levels

of care depending on the individual needs of each veteran, including decisions to discharge a veteran.

The commenter further suggested that VA describe the follow-up services available after discharge. Once a veteran is discharged from domiciliary care, the veteran will have follow-up services available to them, as appropriate, which may include those identified by the commenter. However, the follow-up services available to a veteran discharged from domiciliary care will vary based on the veteran's clinical needs and their eligibility for such services. Therefore, VA does not believe it is appropriate to include the types of services that may or may not be available based on the individual veteran's needs in the regulation.

IV. Supporting Data or Evidence

The same commenter opined that VA did not provide any data or evidence, including studies or reports, to support the changes in the proposed rule. VA does not make any changes based on this comment.

VA has provided sufficient rationale to support the changes it made in the rule. Pursuant to section 1710(b)(2) of title 38, United States Code (U.S.C.), VA proposed to expand eligibility for domiciliary care by updating the criteria used to determine whether a veteran has no adequate means of support, shifting the focus in the regulatory language from the veterans' ability to pursue substantially gainful employment to a broader consideration of the availability of a family and/or community support system. 88 FR 60418. Like all other areas of medical and psychosocial care that have evolved over the past several decades, VA's approach to domiciliary care has also evolved to meet the changing needs of veterans, including expanding eligibility to domiciliary care. VA determined that basing eligibility for domiciliary care on metrics like annual income or incapacity to earn a living did not lead to patient-centered care. VA proposed these changes to modernize the regulatory approach to eligibility for domiciliary care to reflect the more patient-centered model veterans have grown to expect from VA. In patient-centered care, an individual's specific health needs and desired health outcomes are the driving force behind all health care decisions. In the proposed rule, VA also proposed allowing for the waiver of certain eligibility requirements for eligibility for State home domiciliary care per diem and permitting waivers of such requirements retroactive to January 5, 2021. *Id.* Section 3007 of Public Law

116–315 required VA to modify 38 CFR 51.51(b) to provide VA the authority to waive certain requirements for domiciliary care. 88 FR 60418–21. VA's full rationale for the changes can be found in the proposed rule. See 88 FR 60417–60421.

This commenter also asserted that VA did not provide any estimates or projections of how many veterans would be eligible for domiciliary care under the proposed rule or how much it would cost VA to implement the proposed rule. For detailed information regarding the projected number of veterans in domiciliary care programs and costs associated with such projections, please refer to the regulatory impact analysis that accompanies both the proposed and final rules. VA makes no changes to the rule based on this comment.

V. Comment Beyond the Scope of Rulemaking

A commenter was concerned that the proposed rule did not address the potential challenges or limitations of providing domiciliary care to homeless veterans or those at risk for homelessness and that the rule did not consider the potential impact of the rule on other VA programs that serve homeless veterans. Additionally, the commenter requested clarification as to the goals domiciliary care programs may have for veterans who are homeless or at risk of homelessness. This commenter provided suggestions on potential modifications to program operations, such as ensuring domiciliary care is integrated with other VA programs and services, establishing guidelines and standards for quality and safety, and enhancing socialization and community integration. Specifically, the commenter suggested that the rule should consider the impact of the proposed rule on other VA programs and include the coordination and collaboration of these programs in the rule. VA does not make any changes based on this comment. While VA appreciates the commenter's concern, these suggestions are beyond the scope of the rulemaking which was limited to amending discrete eligibility requirements and implementing an authority to waive certain eligibility criteria.

The commenter also expressed concern that an implementation plan or timeline were not included in the proposed rule, including when the rule would take effect and how long it would be in effect. VA does not make any changes to the rule based on this comment. This concern is better addressed in sub-regulatory and administrative guidance. VA notes that

the changes made to parts 17 and 51 of 38 CFR by this final rule will become effective 30 days after the final rule's publication in the **Federal Register**. It will remain in effect indefinitely.

This commenter also asserted that the proposed rule did not describe how VA would monitor or evaluate the outcomes or impacts of the rule on veterans. VA does not make any changes based on this comment. This concern similarly is better addressed in sub-regulatory and administrative guidance. However, VA conducts monitoring and evaluation of its domiciliary care programs and will continue to do so after this rule is final and effective.

Executive Orders 12866, 13563 and 14094

Executive Order 12866 (Regulatory Planning and Review) directs agencies to assess the costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, and other advantages; distributive impacts; and equity). Executive Order 13563 (Improving Regulation and Regulatory Review) emphasizes the importance of quantifying both costs and benefits, reducing costs, harmonizing rules, and promoting flexibility. Executive Order 14094 (Executive Order on Modernizing Regulatory Review) supplements and reaffirms the principles, structures, and definitions governing contemporary regulatory review established in Executive Order 12866 of September 30, 1993 (Regulatory Planning and Review), and Executive Order 13563 of January 18, 2011 (Improving Regulation and Regulatory Review). The Office of Information and Regulatory Affairs has determined that this rulemaking is not a significant regulatory action under Executive Order 12866, as amended by Executive Order 14094. The Regulatory Impact Analysis associated with this rulemaking can be found as a supporting document at www.regulations.gov.

Regulatory Flexibility Act (RFA)

The Secretary hereby certifies that this final rule will not have a significant economic impact on a substantial number of small entities as they are defined in the Regulatory Flexibility Act (5 U.S.C. 601–612). The factual basis for this certification is that this rule would directly affect only individuals who are veterans applying for domiciliary care as well as States operating State homes and would not directly affect small entities. Therefore, pursuant to 5 U.S.C.

605(b), the initial and final regulatory flexibility analysis requirements of 5 U.S.C. 603 and 604 do not apply.

Unfunded Mandates

The Unfunded Mandates Reform Act of 1995 requires, at 2 U.S.C. 1532, that agencies prepare an assessment of anticipated costs and benefits before issuing any rule that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more (adjusted annually for inflation) in any one year. This final rule will have no such effect on State, local, and tribal governments, or on the private sector.

Paperwork Reduction Act (PRA)

This final rule includes a provision constituting a revision to a current/valid collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3521). The revision also requires approval by the Office of Management and Budget (OMB). Accordingly, under 44 U.S.C. 3507(d), VA has submitted a copy of this rulemaking action to OMB for review and approval. VA received no comments on the revised collection of information.

OMB has received the revised collection of information. OMB's receipt of the revised collection of information is not an approval to conduct or sponsor an information collection under the Paperwork Reduction Act of 1995. In accordance with 5 CFR 1320, the revised collection of information associated with this rulemaking is not approved by OMB at this time. OMB's approval of the revised collection of information will occur within 30 days after the Final rulemaking publishes. If OMB does not approve the new collection of information as requested, VA will immediately remove the provision containing a new collection of information or take such other action as is directed by OMB.

The revised collection of information contained in 38 CFR 51.42(c) is described immediately following this paragraph, under its respective title.

Title: List of Veteran Names for Claim Reconsideration.

OMB Control No: 2900–0160.

CFR Provision: 38 CFR 51.42(c).

• *Summary of collection of information:* The collection of information in 38 CFR 51.42(c) would allow State homes to submit a list of veteran names whose completed forms were received by VA on or after January 5, 2021, but VA subsequently denied the State home's request for payment for the care of these veterans pursuant to current § 51.51(b), to VA for

consideration of a waiver under § 51.51(b)(2). This is a time limited opportunity—the list of names must be received within 90 days of the effective date of the rule.

• *Description of need for information and proposed use of information:* The information will be used by VA to conduct retrospective reviews of denied applications and allow VA to process applicable retroactive payments in a timely manner.

• *Description of likely respondents:* State home administrators and State homes that have admitted veterans in reliance on the authority granted by Public Law 116–315, section 3007(a) and that want these veterans considered for a waiver under § 51.51(b)(2).

• *Estimated number of respondents:* Two.

• *Estimated frequency of responses:* Once.

• *Estimated average burden per response:* 90 minutes.

• *Estimated total annual reporting and recordkeeping burden:* VA estimates the total annual reporting and recordkeeping burden to be 3 burden hours. Using the annual number of respondents 2, VA estimates a total annual reporting and recordkeeping burden of 3 hours for respondents.

• *Estimated cost to respondents per year:* VA estimates the annual cost to respondents to be \$177.21. Using VA's average annual number of respondents, VA estimates the total information collection burden cost to be \$177.21 per year *. (3 burden hours for respondents × \$59.07 per hour).

* To estimate the total information collection burden cost, VA used the Bureau of Labor Statistics (BLS) mean hourly wage for hourly wage for “General and Operations Managers” of \$59.07 per hour. This information is available at https://www.bls.gov/oes/current/oes_nat.htm#13-0000.

Congressional Review Act

Pursuant to Subtitle E of the Small Business Regulatory Enforcement Fairness Act of 1996 (known as the Congressional Review Act) (5 U.S.C. 801 *et seq.*), the Office of Information and Regulatory Affairs designated this rule as not satisfying the criteria under 5 U.S.C. 804(2).

List of Subjects

38 CFR Part 17

Administrative practice and procedure, Claims, Domiciliary care, Government contracts, Health care, Health facilities, Mental health programs, Reporting and recordkeeping requirements, Veterans.

38 CFR Part 51

Administrative practice and procedure, Claims, Domiciliary care, Government contracts, Health care, Health facilities, Mental health programs, Reporting and recordkeeping requirements, Veterans.

Signing Authority

Denis McDonough, Secretary of Veterans Affairs, approved and signed this document on October 21, 2024, and authorized the undersigned to sign and submit the document to the Office of the Federal Register for publication electronically as an official document of the Department of Veterans Affairs.

Consuela Benjamin,

Regulation Development Coordinator, Office of Regulation Policy & Management, Office of General Counsel, Department of Veterans Affairs.

For the reasons stated in the preamble, the Department of Veterans Affairs amends 38 CFR parts 17 and 51 as set forth below:

PART 17—MEDICAL

■ 1. The authority citation for part 17 is amended by adding an entry in numerical order for § 17.47 to read as follows:

Authority: 38 U.S.C. 501, and as noted in specific sections.

* * * * *

Section 17.47 is also issued under 38 U.S.C. 1701, 1710, 1721, 1722, 1729, 3104(a)(9), 7333, Pub. L. 99–272; 42 U.S.C. 1396 *et seq.*

* * * * *

§ 17.43 [Amended]

■ 2. Amend § 17.43 by removing the words “or domiciliary” in the section heading and introductory text.

§ 17.46 [Amended]

■ 3. Amend § 17.46 by removing paragraph (b)(2)(vii), and redesignating paragraph (b)(2)(viii) as paragraph (b)(2)(vii).

■ 4. Amend § 17.47 by:

■ a. Removing the authority citations immediately following paragraphs (b)(1), (d)(1)(i), (d)(1)(iii), (d)(2), (d)(3), (d)(4), (d)(5), (e)(1), (e)(2), (f), (g)(1)(ii), (g)(2)(iv), (i)(2)(vii), (j), and (k);

■ b. Revising paragraph (b)(2); and

■ c. Removing and reserving paragraph (c). The revisions read as follows:

§ 17.47 Considerations applicable in determining eligibility for hospital care, medical services, nursing home care, or domiciliary care.

* * * * *

(b) * * *

(2) For purposes of determining eligibility for domiciliary care under § 17.46(b)(2) of this part, the phrase no adequate means of support refers to an applicant for or recipient of domiciliary care whose annual income exceeds the maximum annual rate of pension for a veteran in receipt of regular aid and attendance, as defined in 38 U.S.C. 1503, whose deficits in health and/or functional status may render the veteran incapable of achieving or sustaining independence in the community as determined by the Chief of Staff of the VA medical center, or designee. In assessing a veteran's ability to achieve or sustain independence in the community, the Chief of Staff or designee will make a determination of eligibility for domiciliary care based on objective evidence, considering factors including, but not limited to:

(i) The impact of the severity of the veteran's medical condition, disabilities, and symptoms on the veteran's safety in the community;

(ii) The impact of the severity of the veteran's medical condition, disabilities, and symptoms on the veteran's ability to provide self-care;

(iii) The availability of community or family support systems;

(iv) The impact of the severity of the veteran's medical condition, disabilities, and symptoms on the veteran's ability to access and utilize community support systems;

(v) The risk of loss of housing in the community;

(vi) The risk of loss of the veteran's income;

(vii) Access to outpatient mental health and substance use disorder care; and

(viii) The current effectiveness of any outpatient mental health and substance use disorder care provided to the veteran.

(c) [Reserved]

* * * * *

PART 51—PER DIEM FOR NURSING HOME, DOMICILIARY, OR ADULT DAY HEALTH CARE OF VETERANS IN STATE HOMES

■ 5. The authority citation for part 51 is amended by revising § 51.42, and adding an entry in numerical order for § 51.51 to read as follows:

Authority: 38 U.S.C. 101, 501, 1710, 1720, 1741–1743, 1745, and as follows.

* * * * *

Section 51.42 also issued under 38 U.S.C. 510, 1744, and Pub. L. 116–315 section 3007.

* * * * *

Section 51.51 also issued under Pub. L. 116–315 section 3007.

* * * * *

■ 6. Amend § 51.42 by adding paragraph (c) to read as follows:

§ 51.42 Payment procedures.

* * * * *

(c) *Retroactive payments.* VA will make per diem payments under this part retroactive to the date specified by paragraph (b)(3) of this section, or January 5, 2021, whichever date is later, if all the following are met:

(1) Within 90 calendar days of [EFFECTIVE DATE OF FINAL RULE] the State home provides VA a written list of veterans' names for whom completed forms were received by VA on or after January 5, 2021, and the State home requests that VA consider them for a waiver under § 51.51(b)(2);

(2) With respect to the veterans on the written list under paragraph (c)(1) of this section, VA denied the State's request for per diem for the veterans when their forms were originally submitted and the denial was solely because the veteran did not meet the requirements under 38 CFR 51.51(b) (2021);

(3) Upon VA review, the veteran would have received a waiver under § 51.51(b)(2) if that paragraph had been in effect when the request for per diem was originally submitted; and

(4) Within 90 calendar days of [EFFECTIVE DATE OF FINAL RULE] the State home submits to VA a completed VA Form 10–5588, State Home Report and Statement of Federal Aid Claimed, for each month that the State home provided domiciliary care to a veteran for whom the home is requesting a waiver. The form would only cover the veterans not originally included on the form when submitted previously for that month.

■ 7. Amend § 51.51 by revising paragraphs (a)(2) and (b) to read as follows:

§ 51.51 Eligible veterans—domiciliary care.

(a) * * *

* * * * *

(2) A veteran who VA determines has no adequate means of support. When an applicant's annual income exceeds the rate of pension described in paragraph (a)(1) of this section, VA will determine if the applicant has no adequate means of support. This determination will be made through an assessment of the veteran's deficits in health or functional status that may render the veteran incapable of achieving or sustaining independence in the community as determined by the Chief of Staff of the VA medical center of jurisdiction, or designee. Assessment of whether the veteran has no adequate means of

support will be based on objective evidence that considers factors that are inclusive of but not limited to:

(i) The impact of the severity of the veteran's medical condition, disabilities, and symptoms on the veteran's safety in the community;

(ii) The impact of the severity of the veteran's medical condition, disabilities, and symptoms on the veteran's ability to provide self-care;

(iii) The availability of community or family support systems;

(iv) The impact of the severity of the veteran's medical condition, disabilities, and symptoms on the veteran's ability to access and utilize community support systems;

(v) The risk of loss of housing in the community;

(vi) The risk of loss of the veteran's income;

(vii) Access to outpatient mental health and substance use disorder care; and

(viii) The current effectiveness of any outpatient mental health and substance use disorder care provided to the veteran.

(b)(1) For purposes of this section, the eligible veteran must be able to perform the following:

(i) Daily ablutions, such as brushing teeth, bathing, combing hair, and body eliminations, without assistance.

(ii) Dress himself or herself with a minimum of assistance.

(iii) Proceed to and return from the dining hall without aid.

(iv) Feed himself or herself.

(v) Secure medical attention on an ambulatory basis or by use of a personally propelled wheelchair.

(vi) Have voluntary control over body eliminations or have control by use of an appropriate prosthesis.

(vii) Make rational and competent decisions as to the veteran's desire to remain in or leave the State home; or, if the veteran lacks the general capacity to make this residential care placement decision, as defined by State law, then the veteran's legal representative designated in accordance with State law, is authorized to make this decision on behalf of the veteran.

(2) The Chief of Staff of the VA medical center of jurisdiction, or designee, may waive the requirements in paragraph (b)(1) of this section for purposes of payment of per diem for domiciliary care in a State home on or after January 5, 2021, if the veteran is able to perform not fewer than four of the requirements set forth in such paragraph; or such waiver would be, based on a clinical determination, in the best interest of the veteran because receipt of domiciliary care in the

particular State home would likely be beneficial to the veteran. This clinical determination must consider whether receiving domiciliary care in the State home would significantly enhance the veteran's ability to live safely, would support the veteran's potential progress in rehabilitation, if such potential exists, and would create an environment that supports the health and well-being of the veteran. In granting a waiver of paragraph (b)(1) of this section, the Chief of Staff of the VA medical center of jurisdiction, or designee, must make a finding that the State home has the capability to provide the domiciliary care that the veteran needs.

§ 51.300 [Amended]

■ 8. Amend § 51.300 by removing and reserving paragraph (b).

[FR Doc. 2024–24912 Filed 10–29–24; 8:45 am]

BILLING CODE 8320–01–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 55

[EPA–R02–OAR–2024–0277; FRL 12035–02–R2]

Outer Continental Shelf Air Regulations Update To Include New Jersey State Requirements

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is finalizing an update of a portion of the Outer Continental Shelf (OCS) air regulations proposed in the **Federal Register** on July 16, 2024. Requirements applying to OCS sources located within 25 miles of States' seaward boundaries must be updated periodically to remain consistent with the requirements of the corresponding onshore area (COA), as mandated by the Clean Air Act (CAA). The portion of the OCS air regulations that is being updated here pertains to the requirements for OCS sources for which the State of New Jersey is the COA. The intended effect of approving the OCS requirements for the State of New Jersey is to regulate emissions from OCS sources in accordance with the requirements onshore. The requirements discussed below are proposed to be incorporated by reference into the Code of Federal Regulations and listed in the appendix to the OCS air regulations.

DATES: This final rule is effective on November 29, 2024. The incorporation by reference of a certain publication

listed in this rule is approved by the Director of the Federal Register as of November 29, 2024.

ADDRESSES: EPA has established a docket for this action under Docket ID Number EPA–R02–OAR–2024–0277. All documents in the docket are available at www.regulations.gov.

FOR FURTHER INFORMATION CONTACT:

Viorica Petriman, Air Programs Branch, Permitting Section, U.S. Environmental Protection Agency, Region 2, 290 Broadway, New York, New York 10007, (212) 637–4021, petriman.viorica@epa.gov.

SUPPLEMENTARY INFORMATION:

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- III. What action is EPA taking?
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I. What is the background for this action?

On July 16, 2024, EPA proposed to incorporate by reference into the OCS air regulations at 40 CFR part 55 (“Part 55”) ¹ updated requirements pertaining to the State of New Jersey. *See* 89 FR 57828. The action that EPA is taking today in this rule is to finalize those proposed updates.

Section 328(a) of the CAA requires that for such OCS sources located within 25 miles of a State's seaward boundary, the requirements shall be the same as would be applicable if the sources were located in the corresponding onshore area (COA). Because the OCS requirements are based on onshore requirements, and onshore requirements may change, CAA section 328(a)(1) requires that EPA update the OCS requirements as necessary to maintain consistency with onshore requirements. To comply with this statutory mandate, EPA must incorporate by reference into part 55 all relevant State rules in effect for onshore sources, so they can be applied to OCS sources located offshore. This limits EPA's flexibility in deciding which requirements will be incorporated into 40 CFR part 55 and prevents EPA from making substantive changes to the requirements it incorporates. As a result, EPA may be incorporating rules into 40 CFR part 55 that do not conform to all of EPA's State implementation plan (SIP) guidance or certain

¹ For more information and background on the OCS regulations generally, the reader may refer to the Proposed Rulemaking, December 5, 1991 (56 FR 63774), and the final rule promulgated September 4, 1992 (57 FR 40792).

requirements of the CAA. Inclusion in the OCS rule does not imply that a rule meets the requirements of the CAA for SIP approval, nor does it imply that the rule will be approved by EPA for inclusion in the SIP. 40 CFR 55.12 specifies certain times at which part 55's incorporation by reference of a State's rules must be updated. One time such a “consistency update” must occur is when any OCS source applicant submits a Notice of Intent (NOI) under 40 CFR 55.4 for a new or a modified OCS source. 40 CFR 55.4(a) requires that any OCS source applicant must submit to EPA an NOI before performing any physical change or change in method of operation that results in an increase in emissions if the OCS source is located within 25 miles of a State's seaward boundaries. EPA must conduct any necessary consistency update when it receives an NOI, and prior to receiving any application for a preconstruction permit from the OCS source applicant. 40 CFR 55.6(b)(2) and 55.12(f). On May 10, 2024, EPA received a NOI from Atlantic Shores Offshore Wind Project 3, LLC to submit an OCS permit application for the construction of a new OCS source (a wind energy project) about 7.3 nautical miles offshore New Jersey.

EPA reviewed the New Jersey State Department of Environmental Protection (“NJDEP”) air rules currently in effect, to ensure that they are rationally related to the attainment or maintenance of Federal and State ambient air quality standards (AAQS) or part C of title I of the CAA, that they are not designed expressly to prevent exploration and development of the OCS, and that they are applicable to OCS sources. *See* 40 CFR 55.1. EPA has also evaluated the rules to ensure they are not arbitrary and capricious. *See* 40 CFR 55.12(e). EPA has excluded New Jersey's administrative or procedural rules,² and requirements that regulate toxics which are not related to the attainment and maintenance of Federal and State AAQS.

II. What comments were received in response to EPA's proposed action?

EPA's proposed action provided a 30-day public comment period, which closed on August 15, 2024. During this

² Each COA which has been delegated the authority to implement and enforce part 55 will use its administrative and procedural rules as onshore. However, in those instances where EPA has not delegated authority to implement and enforce part 55, as is the case in New Jersey, EPA will use its own administrative and procedural requirements to implement the substantive requirements. *See* 40 CFR 55.14(c)(4).

period, we received one comment³ that supports and acknowledges the importance of EPA's proposed action to update a portion of part 55 that pertains to the requirements for OCS sources for which the State of New Jersey is the COA, so that those requirements could then be applied to the respective OCS sources.

III. What action is EPA taking?

EPA is taking final action to incorporate by reference relevant New Jersey air pollution control rules that are currently in effect into 40 CFR 55.14 and to update the "New Jersey" section of appendix A to 40 CFR part 55, which lists those rules. EPA is approving this action under section 328(a) of the CAA, 42 U.S.C. 7627(a). Section 328(a) of the CAA requires that EPA establish requirements to control air pollution from OCS sources located within 25 miles of a States' seaward boundaries that are the same as onshore requirements. To comply with this statutory mandate, EPA must incorporate applicable onshore rules into 40 CFR part 55 as they exist onshore.

IV. Incorporation by Reference

In this rule, EPA is finalizing regulatory text that includes incorporation by reference as described in sections I and II of this preamble. In accordance with the requirements of 1 CFR 51.5, EPA is finalizing the incorporation by reference of "State of New Jersey Requirements Applicable to OCS Sources", which provides the New Jersey air rules in effect as of June 6, 2024, that would apply to OCS sources. EPA has made, and will continue to make, this material available through www.regulations.gov and at EPA Region 2 Office (please contact the person

identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

V. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to establish requirements to control air pollution from OCS sources located within 25 miles of States' seaward boundaries that are the same as onshore air control requirements. To comply with this statutory mandate, EPA must incorporate applicable onshore rules into part 55 as they exist onshore. 42 U.S.C. 7627(a)(1); 40 CFR 55.12. Thus, in promulgating OCS consistency updates, EPA's role is to maintain consistency between OCS regulations and the regulations of onshore areas, provided that they meet the criteria of the Clean Air Act. Accordingly, this action simply updates the existing OCS requirements to make them consistent with requirements onshore, without the exercise of any policy discretion by EPA.

a. Executive Order 12866, Regulatory Planning and Review

This action is not a "significant regulatory action" under the terms of Executive Orders (E.O.) 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011) and is therefore not subject to review under the E.O.

b. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under PRA because this action only updates the State rules that are incorporated by reference into 40 CFR part 55, appendix A. OMB has previously approved the information collection activities contained in the existing regulations at 40 CFR part 55 and, by extension, this update to 40 CFR part 55, and has assigned OMB control number 2060-0249. This action does not impose a new information burden under PRA because this action only updates the State rules that are incorporated by reference into 40 CFR part 55, appendix A.

c. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant impact on a substantial number of small entities under the RFA. This proposed rule does not impose any requirements or create impacts on small entities. This proposed consistency update under CAA section 328 will not create any new requirements but simply proposes to update the State requirements incorporated by reference

into 40 CFR part 55 to match the current State requirements.

d. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate or significantly or uniquely affect small governments as described in UMRA, 2 U.S.C. 1531-1538. The action imposes no enforceable duty on any State, local or Tribal governments.

e. Executive Order 13132, Federalism

This action does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

f. Executive Order 13175, Coordination With Indian Tribal Governments

This action does not have Tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000), because it does not have a substantial direct effect on one or more Indian Tribes, on the relationship between the Federal government and Indian Tribes, or on the distribution of power and responsibilities between the Federal government and Indian Tribes, nor does it impose substantial direct costs on Tribal governments, nor preempt Tribal law. It merely proposes to update the State law incorporated by reference into 40 CFR part 55 to match current State requirements.

g. Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern health or safety risks that EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 and simply proposes to update the State requirements incorporated by reference into 40 CFR part 55 to match the current State requirements.

h. Executive Order 13211, Actions That Significantly Affect Energy Supply, Distribution, or Use

This proposed rule is not subject to Executive Order 13211 because it is not

³ The comment received reads as follows: "This is in regard to Docket number: EPA_FR DOC_0001, regarding the outer continental shelf air regulations update, to include New Jersey State requirements. A part of the Outer Continental Shelf (OCS) Air Regulations needs to be updated, in accordance to the proposal made by the Environment Protection Agency (EPA). The Clean Air Act (CAA) mandates that requirements for OCS sources located within 25 miles of a State's seaward boundary be updated on a regular basis to ensure compliance with the standards of the corresponding onshore region (COA). Emissions from OCS sources will be regulated in line with onshore regulations as a result of the State of New Jersey's OCS requirements being approved. Air pollution has been an increasing problem in recent times. The atmosphere has been massively impacted by air pollution, leading to changes in the climate. This proposed rule would allow more control over air pollution from OCS sources, maintaining Federal and State ambient air quality standards (AAQS). As we look to find solutions for air pollution in our environment, we need to work with OCS to make sure their regulations are up to standards with the Federal program."

a significant regulatory action under Executive Order 12866.

i. National Technology Transfer and Advancement Act

This rulemaking is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act.

j. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Population

EPA believes that this action is not subject to Executive Order 12898 (59 FR 7629, February 16, 1994) because it does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health, or environmental effects, using practicable and legally permissible methods.

k. Congressional Review Act (CRA)

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

VI. Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by December 30, 2024. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. *See* CAA section 307(b)(2).

List of Subjects in 40 CFR Part 55

Environmental protection, Administrative practice and procedures, Air pollution control, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Nitrogen oxides, Outer Continental Shelf, Ozone, Particulate matter, Permits, Reporting and recordkeeping requirements, Sulfur oxides.

Lisa Garcia,

Regional Administrator, Region 2.

For the reasons set out in the preamble, amend title 40 of the Code of Federal Regulations, part 55, as follows.

PART 55—OUTER CONTINENTAL SHELF AIR REGULATIONS

■ 1. The authority citation for 40 CFR part 55 continues to read as follows:

Authority: Section 328 of the Clean Air Act (42 U.S.C. 7401, *et seq.*) as amended by Public Law 101–549.

■ 2. Section 55.14 is amended by revising paragraph (e)(15)(i)(A) to read as follows:

§ 55.14 Requirements that apply to OCS sources located within 25 miles of States’ seaward boundaries, by State.

* * * * *

(e) * * *
(15) * * *
(i) * * *

(A) State of New Jersey Requirements Applicable to OCS Sources, June 6, 2024.

* * * * *

■ 3. Appendix A to 40 CFR part 55 is amended by revising the entry for “New Jersey” to read as follows:

Appendix A to Part 55—Listing of State and Local Requirements Incorporated by Reference Into Part 55, by State

* * * * *

New Jersey

(a) State requirements.

(1) The following State of New Jersey requirements are applicable to OCS Sources, as of June 6, 2024. New Jersey Department of Environmental Protection-New Jersey Administrative Code. The following sections of Title 7:

Chapter 27 Subchapter 2—Control and Prohibition of Open Burning (Effective 6/20/1994)

N.J.A.C. 7:27–2.1. Definitions

N.J.A.C. 7:27–2.2. Open burning for salvage operations

N.J.A.C. 7:27–2.3. Open burning of refuse

N.J.A.C. 7:27–2.4. General provisions

N.J.A.C. 7:27–2.6. Prescribed burning

N.J.A.C. 7:27–2.7. Emergencies

N.J.A.C. 7:27–2.8. Dangerous material

N.J.A.C. 7:27–2.12. Special permit

N.J.A.C. 7:27–2.13. Fees

Chapter 27 Subchapter 3—Control and Prohibition of Smoke From Combustion of Fuel (Effective 2/4/2002)

N.J.A.C. 7:27–3.1. Definitions

N.J.A.C. 7:27–3.2. Smoke emissions from stationary indirect heat exchangers

N.J.A.C. 7:27–3.3. Smoke emissions from marine installations

N.J.A.C. 7:27–3.4. Smoke emissions from the combustion of fuel in mobile sources

N.J.A.C. 7:27–3.5. Smoke emissions from stationary internal combustion engines and stationary turbine engines

N.J.A.C. 7:27–3.6. Stack test

N.J.A.C. 7:27–3.7. Exceptions

Chapter 27 Subchapter 4—Control and Prohibition of Particles From Combustion of Fuel (Effective 4/20/2009)

N.J.A.C. 7:27–4.1. Definitions

N.J.A.C. 7:27–4.2. Standards for the emission of particles

N.J.A.C. 7:27–4.3. Performance test principle

N.J.A.C. 7:27–4.4. Emissions tests

N.J.A.C. 7:27–4.6. Exceptions

Chapter 27 Subchapter 5—Prohibition of Air Pollution (Effective 10/12/1977)

N.J.A.C. 7:27–5.1. Definitions

N.J.A.C. 7:27–5.2. General provisions

Chapter 27 Subchapter 6—Control and Prohibition of Particles From Manufacturing Processes (Effective 5/4/1998)

N.J.A.C. 7:27–6.1. Definitions

N.J.A.C. 7:27–6.2. Standards for the emission of particles

N.J.A.C. 7:27–6.3. Performance test principles

N.J.A.C. 7:27–6.4. Emissions tests

N.J.A.C. 7:27–6.5. Variances

N.J.A.C. 7:27–6.7. Exceptions

Chapter 27 Subchapter 7—Sulfur (Effective 11/6/2017)

N.J.A.C. 7:27–7.1. Definitions

N.J.A.C. 7:27–7.2. Control and prohibition of air pollution from sulfur compounds

Chapter 27 Subchapter 8—Permits and Certificates for Minor Facilities (and Major Facilities Without an Operating Permit) (Effective 11/20/2023)

N.J.A.C. 7:27–8.1. Definitions

N.J.A.C. 7:27–8.2. Applicability

N.J.A.C. 7:27–8.3. General provisions

N.J.A.C. 7:27–8.4. How to apply, register, submit a notice, or renew

N.J.A.C. 7:27–8.5. Air quality impact analysis

N.J.A.C. 7:27–8.6. Service fees

N.J.A.C. 7:27–8.7. Operating certificates

N.J.A.C. 7:27–8.8. General permits

N.J.A.C. 7:27–8.9. Environmental improvement pilot tests

N.J.A.C. 7:27–8.11. Standards for issuing a permit

N.J.A.C. 7:27–8.12. State of the art

N.J.A.C. 7:27–8.13. Conditions of approval

N.J.A.C. 7:27–8.14. Denials

N.J.A.C. 7:27–8.15. Reporting requirements

N.J.A.C. 7:27–8.16. Revocation

N.J.A.C. 7:27–8.17. Changes to existing permits and certificates

N.J.A.C. 7:27–8.18. Permit revisions

N.J.A.C. 7:27–8.19. Compliance plan changes

N.J.A.C. 7:27–8.20. Seven-day notice changes

N.J.A.C. 7:27–8.21. Amendments
N.J.A.C. 7:27–8.23. Reconstruction
N.J.A.C. 7:27–8.24. Special provisions for construction but not operation
N.J.A.C. 7:27–8.25. Special provisions for pollution control equipment or pollution prevention process modifications
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Chapter 27 Subchapter 9—Sulfur in Fuels (Effective 9/20/2010)

N.J.A.C. 7:27–9.1. Definitions
N.J.A.C. 7:27–9.2. Sulfur content standards
N.J.A.C. 7:27–9.3. Exemptions
N.J.A.C. 7:27–9.4. Waiver of air quality modeling

Chapter 27 Subchapter 10—Sulfur in Solid Fuels (Effective 9/6/2011)

N.J.A.C. 7:27–10.1. Definitions
N.J.A.C. 7:27–10.2. Sulfur contents standards
N.J.A.C. 7:27–10.3. Expansion, reconstruction, or construction of solid fuel burning units
N.J.A.C. 7:27–10.4. Exemptions
N.J.A.C. 7:27–10.5. SO₂ emission rate determinations

Chapter 27 Subchapter 11—Incinerators (Effective 5/4/1998)

N.J.A.C. 7:27–11.1. Definitions
N.J.A.C. 7:27–11.2. Construction standards
N.J.A.C. 7:27–11.3. Emission standards
N.J.A.C. 7:27–11.4. Permit to construct; certificate to operate
N.J.A.C. 7:27–11.5. Operation
N.J.A.C. 7:27–11.6. Exceptions

Chapter 27 Subchapter 12—Prevention and Control of Air Pollution Emergencies (Effective 5/20/1974)

N.J.A.C. 7:27–12.1. Definitions
N.J.A.C. 7:27–12.2. Emergency criteria
N.J.A.C. 7:27–12.3. Criteria for emergency termination
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Chapter 27 Subchapter 16—Control and Prohibition of Air Pollution by Volatile Organic Compounds (Effective 4/4/2022)

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[FR Doc. 2024–25141 Filed 10–29–24; 8:45 am]

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GENERAL SERVICES ADMINISTRATION

41 CFR Chapter 302

[Notice-MA–2025–02; Docket No. 2024–0002; Sequence No. 51]

Federal Travel Regulation (FTR); Relocation Allowances—Waiver of Certain Provisions for Official Relocation Travel to Locations in Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Virginia Impacted by Hurricane/Tropical Storm/Post-Tropical Cyclone Helene, Hurricane Milton, or Both

AGENCY: Office of Government-wide Policy (OGP), General Services Administration (GSA).

ACTION: Notification of GSA Bulletin FTR 25–02.

SUMMARY: GSA Bulletin FTR 25–02 informs Federal agencies that certain provisions of the FTR governing official relocation travel are temporarily waived for Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Virginia locations impacted by Hurricane/Tropical Storm/Post-tropical Cyclone Helene, Hurricane Milton, or both. As a result of the storm damage caused by Hurricane/Tropical Storm/Post-tropical Cyclone Helene and Hurricane Milton, agencies should consider delaying all non-essential relocations to the affected areas for a period of at least 30 days because the ability to secure lodgings may have been compromised due to the storm. In addition, the statutory 120-day maximum for payment of temporary quarters subsistence expenses (TQSE) remains in effect. Due to the lasting effects of the storm damage to these affected areas, finding a permanent residence may be difficult, which might also affect household goods temporary storage time requirements, along with the completion of all aspects of relocation within one year of reporting to the new duty station.

DATES: The waivers in the FTR Bulletin are retroactively effective for official relocation travel that is/was performed in designated areas on or after the respective incident period start dates for the declarations listed in the Bulletin, and will expire 180 days from the respective disaster declaration dates. The Bulletin will expire upon the expiration of the last 180 day period, unless extended or rescinded by OGP.

FOR FURTHER INFORMATION CONTACT: Mr. Rick Miller, Senior Policy Analyst, Office of Government-wide Policy, Office of Asset and Transportation

Management, at 202–501–3822 or by email at travelpolicy@gsa.gov. Please cite Notice of GSA Bulletin FTR 25–02.

SUPPLEMENTARY INFORMATION:

Background

Federal agencies authorize relocation entitlements to those individuals listed at FTR § 302–1.1 and those assigned under the Government Employees Training Act (GETA) (5 U.S.C. chapter 41) which must be used within one year. Some agencies will authorize a househunting trip (HHT) to assist employees to seek permanent housing, while some employees are occupying temporary housing and have household goods in storage beyond the authorized timeframe of 150 to 180 days depending on the type of relocation. The FTR limits the timeframe to complete the relocation, household goods temporary storage, and the type of per diem for HHT. Hurricane/Tropical Storm/Post-tropical Cyclone Helene and Hurricane Milton have affected locations in Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Virginia, which has resulted in various travel-related disruptions to relocating employees. Accordingly, FTR Bulletin 25–02, Waiver of certain provisions of FTR Chapter 302 for official relocation travel to locations in Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee, and Virginia, impacted by Hurricane/Tropical Storm/Post-tropical Cyclone Helene, Hurricane Milton, or both, allows agencies to determine whether to implement waivers of time limits established by the FTR for completion of all aspects of relocation and temporary storage of HHGs, as well as the limitation for HHTs to be reimbursed at the standard CONUS rate.

GSA Bulletin FTR 25–02 can be viewed at <https://www.gsa.gov/ftrbulletins>.

Mehul Parekh,

Acting Associate Administrator, Office of Government-wide Policy.

[FR Doc. 2024–25361 Filed 10–29–24; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. NHTSA–2024–0061]

RIN 2127–AL36

Federal Motor Vehicle Safety Standards; Anti-Ejection Glazing for Bus Portals; Bus Emergency Exits and Window Retention and Release

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: This final rule establishes Federal Motor Vehicle Safety Standard (FMVSS) No. 217a, “Anti-ejection glazing for bus portals; Mandatory applicability beginning October 30, 2027,” to drive the installation of advanced glazing in over-the-road buses (motorcoaches) and other large buses to reduce passenger and driver ejections. This final rule, issued pursuant to the Moving Ahead for Progress in the 21st Century Act (MAP–21), specifies impactor tests of the glazing material of side and roof windows. The impactor and impact speed simulate the loading from an average size unrestrained adult male impacting a window on the opposite side of a large bus in a rollover.

DATES:

Effective date: December 30, 2024.

Compliance date: The compliance date for FMVSS No. 217a and the amendments to FMVSS No. 217 is October 30, 2027. Optional early compliance with the standards is permitted.

Reconsideration date: If you wish to petition for reconsideration of this rule, your petition must be received by December 16, 2024.

ADDRESSES: Petitions for reconsideration of this final rule must refer to the docket and notice number set forth above and be submitted to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590. Note that all petitions received will be posted without change to <https://www.regulations.gov>, including any personal information provided.

Docket: For access to the docket to read background documents or comments received, go to <https://www.regulations.gov> at any time or to 1200 New Jersey Avenue SE, West Building, Room W12–140, Washington, DC 20590, between 9 a.m. and 5 p.m.,

Monday through Friday, except Federal holidays. Telephone: (202) 366–9826.

Privacy Act: The petition will be placed in the docket. Anyone is able to search the electronic form of all documents received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT’s complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78) or you may visit <https://www.transportation.gov/individuals/privacy/privacy-act-system-records-notice>.

Confidential Business Information: If you wish to submit any information under a claim of confidentiality, you should submit three copies of your complete submission, including the information you claim to be confidential business information, to the Chief Counsel, NHTSA, at the address given under **FOR FURTHER INFORMATION CONTACT**. In addition, you should submit two copies, from which you have deleted the claimed confidential business information, to Docket Management at the address given above. When you send a submission containing information claimed to be confidential business information, you should include a cover letter setting forth the information specified in our confidential business information regulation (49 CFR part 512).

FOR FURTHER INFORMATION CONTACT: For technical issues, you may contact Mr. Dow Shelnutt, Office of Crashworthiness Standards, Telephone: (202) 366–8779, Facsimile: (202) 493–2739. For legal issues, you may contact Mr. Matthew Filpi, Office of the Chief Counsel, Telephone: (202) 366–2992, Facsimile: (202) 366–3820. The mailing address of these officials is: The National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590.

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I. Executive Summary

In 2007, NHTSA published a comprehensive plan on possible improvements in motorcoach safety.¹ NHTSA's motorcoach safety plan identified four specific areas to most expeditiously achieve our goals: requiring seat belts (minimizing passenger and driver ejection from the motorcoach), improved roof strength, emergency evacuation, and fire safety. This final rule is another step in the agency's efforts to improve over-the-road bus (OTRB²) and large bus³ safety. This final rule establishes a new FMVSS, FMVSS No. 217a, "Anti-Ejection Glazing for Bus Portals; Mandatory applicability beginning October 30, 2027," to mitigate partial and complete ejection of passengers from windows on the side and roof of motorcoaches and large buses and to ensure that emergency exits remain operable after a rollover crash.

This final rule fulfills a statutory mandate in the Motorcoach Enhanced Safety Act of 2012 (Motorcoach Enhanced Safety Act), which was incorporated and passed as part of MAP-21. The Motorcoach Enhanced Safety Act required the DOT to prescribe regulations that address passenger ejection in motorcoaches.⁴ Additionally, MAP-21 required DOT to

consider requiring advanced glazing standards for motorcoach portals.

The Motorcoach Enhanced Safety Act emphasizes anti-ejection safety countermeasures, particularly advanced glazing. Section 32703(b)(2) of MAP-21 directs the Secretary to consider requiring advanced glazing standards for each motorcoach portal and to consider other portal improvements to prevent partial and complete ejection of motorcoach passengers, including children. Section 32703(b)(2) also states that in prescribing such standards, the Secretary shall consider the impact of such standards on the use of motorcoach portals as a means of emergency egress. MAP-21 requires NHTSA to adopt a final rule if NHTSA determines that such standards meet the requirements and considerations in subsections (a) and (b) of section 30111 of the National Traffic and Motor Vehicle Safety Act.⁵ As discussed in this final rule, NHTSA has made such a determination regarding an FMVSS for motorcoaches and certain large buses.

The May 6, 2016, Notice of Proposed Rulemaking (NPRM)⁶ was among the rulemakings issued pursuant to NHTSA's 2007 Approach to Motorcoach Safety and DOT's Departmental Motorcoach Safety Action Plan.⁷ Both of these agency documents recognized that there was work to be done in protecting the public from death and serious injury in OTRB and large bus crashes. Although there are relatively few OTRB and large bus crashes when compared to other vehicle types, OTRB and large bus crashes tend to be serious when they do occur because they generally carry large numbers of passengers. Since producing these safety plans, NHTSA has promulgated several final rules targeted at protecting OTRB and large bus passengers. These final rules include a requirement that all seats on OTRBs and large buses be equipped with seat belts, a requirement that all OTRBs and large buses be equipped with electronic stability control, and requirements for improved structural integrity of OTRBs and large buses. This final rule is designed to work in tandem with these other requirements to further improve OTRB and large bus occupant safety.

While the agency's previous rulemakings in this area are expected to improve OTRB and large bus safety,

passenger ejection in OTRB and large bus crashes remains a concern. Although seat belts are now required on OTRBs and large buses, not all states require that passengers wear seat belts on OTRBs and the agency believes seat belt use is generally low among large bus passengers. Additionally, while the structural integrity requirements enhance occupant safety by providing a "survival space" in a rollover, they do not mitigate glazing breakage during the crash, which would create ejection portals. This final rule is designed to ensure window glazing remains intact during a crash and windows do not open, even if a passenger is thrown against the glazing during the crash.

To accomplish this safety objective, the new FMVSS No. 217a specifies certain benchmarks that OTRB and large bus window glazing must meet when it is contacted by an impactor projected at the window at a specified speed. In the adopted test, a 26 kilogram (kg) (57 pound (lb)) impactor is propelled from inside a test vehicle toward the window glazing at 21.6 kilometers per hour (km/h) (13.4 miles per hour (mph)). Each side window and glass panel/window on the roof would be subject to any one of three impacts, as selected by NHTSA in a compliance test: (a) an impact near a latching mechanism, discrete attachment point, or (for windows without latches) the center of the lower window edge of an intact window; (b) an impact at the center of the daylight opening⁸ of an intact window; and (c) an impact at the center of the daylight opening of a pre-broken glazing. The windows would have to prevent passage of a 102-millimeter (mm) (4 inch) diameter sphere both during and after the impact. Additionally, emergency exits are required to remain operable after each impactor test. The impactor and impact speed simulate the loading from an average size unrestrained adult male thrown from one side of a large bus and impacting a window on the opposite side of the bus in a rollover.

These requirements would ensure that glazing is securely bonded to window frames, no potential ejection portals are created due to breaking of the glass, the windows remain closed when impacted, and emergency exits remain operable after the crash. The test with the pre-broken glazing would encourage the installation of advanced glazing. The requirement would also help ensure the advanced glazing reasonably retains occupants within the structural sidewall of the bus in a crash.

¹ Docket No. NHTSA-2007-28793, NHTSA's Approach to Motorcoach Safety.

² An over-the-road bus is characterized by an elevated passenger deck located over a baggage compartment.

³ Generally, certain buses with a gross vehicle weight rating (GVWR) greater than 26,000 pounds (lb) (11,793.4 kilograms (kg)).

⁴ In section 32702(6) of MAP-21, a motorcoach is defined as an over-the-road bus, not including transit buses or school buses.

⁵ MAP-21, section 32703(b) and (b)(1).

⁶ 81 FR 27904.

⁷ In 2009, DOT also issued a Motorcoach Safety Action Plan that addressed additional factors, such as driver fatigue and operator maintenance schedules. An update to the Departmental plan was issued in December 2012 <https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/Motorcoach-Safety-Action-Plan-2012.pdf>.

⁸ Center of daylight opening is the center of the total unobstructed window opening that would result from the removal of the glazing.

The requirements in FMVSS No. 217a apply to OTRBs and all new large buses, with limited exceptions. The standard does not apply to school buses, prison buses, buses with perimeter seating, or transit buses that are not OTRBs. The FMVSS No. 217a requirements generally apply to those buses that are also required to meet the rollover structural integrity requirements of FMVSS No. 227, “Bus rollover structural integrity.” School bus derivative buses that meet the school bus roof crush requirements of FMVSS No. 220, “School bus rollover protection,” instead of FMVSS No. 227, would also need to meet FMVSS No. 217a.

This final rule adds a new requirement to FMVSS No. 217, “Bus emergency exits and window retention and release,” that emergency exit window latches may not protrude more than 1 inch into the window opening when the window is open to minimize the potential for the latch protrusions to hinder the emergency egress of

passengers. This requirement applies to all new buses that are currently subject to FMVSS No. 217, including new school buses.

NHTSA has decided not to require existing large buses to meet the requirements adopted today for new buses. Most of the commenters did not support a retrofitting requirement. Upgraded window glazing on older buses without the requisite improved structural integrity in accordance with FMVSS No. 227 may not mitigate occupant ejections because the advanced glazing could simply pop out of the portal due to excessive structural deformation in a crash. The agency has also decided not to require retrofitting of buses with improved latch designs and window glazing materials. NHTSA believes it is not practical to retrofit improved latch systems on windows of existing buses because of the unique condition (including pre-existing damage or deformation) of each existing

window structure and latching mechanism.

NHTSA estimates that this rulemaking will be cost beneficial. The agency estimates the annual cost of this rule to be \$0.96 million and annual undiscounted equivalent lives saved⁹ to be between 0.37 and 1.91. The main contributor to the cost of this rule is estimated as the material costs for manufacturers to upgrade their window units from a tempered/tempered double-glazed window unit to, at minimum, a laminated/tempered double-glazed window unit. This improvement in window unit construction would not result in a considerable weight change. As outlined in the Final Regulatory Evaluation (FRE), NHTSA projects that the rule would cost between \$0.50 million to \$4.30 million per equivalent life saved (Table 1). The net benefit/cost impact ranges from a net benefit of \$1.92 million to \$18.44 million (Table 2).

TABLE 1—NET COST TO SOCIETY PER EQUIVALENT LIFE SAVED

[In millions of 2022 dollars]

	15% belt use rate			90% belt use rate		
	Undiscounted	3%	7%	Undiscounted	3%	7%
Material Costs	\$0.96	\$0.96	\$0.96	\$0.96	\$0.96	\$0.96
Equivalent Lives Saved ^{A B}	1.9191	1.5064	1.1491	0.374	0.2936	0.2240
Cost per Equivalent Life Saved	\$0.50	\$0.64	\$0.84	\$2.58	\$3.28	\$4.30

Notes:

A—These values from the FRE account for serious injuries (MAIS 3–5) by utilizing a relative injury factor.

B—MAIS = Maximum AIS, AIS = Abbreviated Injury Scale, MAIS 0 = No Injury, MAIS 1 = Minor, MAIS 2 = Moderate, MAIS 3 = Serious, MAIS 4 = Severe, MAIS 5 = Critical, MAIS 6 = Maximum (untreatable)

TABLE 2—ANNUALIZED NET BENEFITS

[In millions of 2022 dollars]

	15% belt use rate			90% belt use rate		
	Undiscounted	3%	7%	Undiscounted	3%	7%
Benefits from comprehensive costs avoided	\$24.72	\$19.40	\$14.80	\$4.82	\$3.78	\$2.88
Material costs	0.96	0.96	0.96	0.96	0.96	0.96
Net benefits	23.75	18.44	13.84	3.85	2.82	1.92

II. Background

Since the early 2000s, NHTSA has made a concerted effort to improve OTRB safety. These types of buses often carry children and the elderly, which are two of the most vulnerable groups in motor vehicle crashes. Although transportation via OTRBs is generally a safe form of travel, the agency decided to better protect the public against unreasonable risk of death or injury in high-occupancy vehicles through a

series of rulemakings. In many cases, crashes involving OTRBs result in rollovers, which can significantly damage the vehicle and create ejection portals that allow part or all of an occupant's body to be ejected from the vehicle during a crash.

The agency has promulgated regulations that significantly reduce the risk that passengers will be ejected from OTRBs in the event of a rollover crash.¹⁰ This final rule represents yet another

effort to significantly mitigate the risk of serious injury or death resulting from occupant ejection in OTRB crashes. It is the third rule targeted at minimizing the risk of ejection from OTRBs during a crash that the agency has promulgated over the past fifteen years. With this final rule, the agency will have taken yet another large stride in improving the safety of OTRBs, which means safer transportation for a significant number of children, the elderly, and lower

⁹ For details concerning equivalent lives saved, reference the FRE docketed with this final rule.

¹⁰ 78 FR 70415 (Nov. 25, 2013); 80 FR 36049 (Jun 23, 2015); 86 FR 74270 (Dec 29, 2021).

income individuals. What follows in this background section is a brief summary of NHTSA's efforts in the recent past to improve OTRB safety, as well as a discussion about how the proposal and this final rule were developed.

a. NHTSA's Approach to Motorcoach Safety

In 2007, NHTSA undertook a comprehensive review of motorcoach safety issues and the course of action that the agency could pursue to address them. The agency considered various prevention, mitigation, and evacuation approaches in developing the plan. The agency considered issues such as: cost and duration of testing, development, and data analysis; likelihood that the effort would lead to the desired and successful conclusion; target population and possible benefits that might be realized; and anticipated cost of implementing the ensuing requirements into the bus fleet. The results were published as "NHTSA's Approach to Motorcoach Safety." This document outlined four critical areas that the agency believed significantly contributed to fatalities and serious injuries associated with motorcoaches: (1) passenger ejection, (2) rollover structural integrity, (3) emergency egress, and (4) fire safety. This was the first of two documents that the Department produced on motorcoach safety.

b. U.S. DOT Motorcoach Safety Action Plan

In 2009, DOT issued a Departmental Motorcoach Safety Action Plan, which outlined a department-wide strategy to enhance motorcoach safety. In addition to the four priority action items specified in NHTSA's 2007 "NHTSA's Approach to Motorcoach Safety," the DOT plan identified other strategies the Department would pursue to enhance motorcoach safety, such as issuing rules regarding electronic stability control systems, event data recorders, and programs addressing driver fatigue and operator maintenance.

c. Congressional Action: MAP-21 and the Motorcoach Enhanced Safety Act

On July 6, 2012, President Obama signed MAP-21, which incorporated the Motorcoach Enhanced Safety Act in Subtitle G. The Motorcoach Enhanced Safety Act included a number of mandates, including requirements that DOT issue the following regulations, among others: a requirement that seat belts be installed in motorcoaches, a requirement mandating improved roof strength and crush resistance standards,

and requirements that mitigate the likelihood of occupant ejection from motorcoaches in the event of a crash.

As described in more detail below, NHTSA has issued several regulations over the past fifteen years that have improved motorcoach safety and satisfied Congress's statutory mandates in the Motorcoach Enhanced Safety Act. This final rule contributes to the agency's effort to further satisfy Congress's mandate to create anti-ejection safety countermeasures and fits with NHTSA's other motorcoach related rulemakings described below.

d. NHTSA's 2013 Motorcoach Seat Belt Final Rule

On November 25, 2013, NHTSA published a final rule ("seat belt final rule") that amended FMVSS No. 208, "Occupant crash protection," to require that all new OTRBs as well as new buses with a gross vehicle weight rating (GVWR) greater than 11,793 kg (26,000 lb) have lap/shoulder seat belts for each passenger seating position. This rule fulfilled the mandated rulemaking in the Motorcoach Enhanced Safety Act, which directed DOT to "prescribe regulations requiring safety belts to be installed in motorcoaches at each designated seating position." In addition to satisfying the seat belt mandate in the Motorcoach Enhanced Safety Act, this rule was also the agency's first step toward satisfying another mandate in the Motorcoach Enhanced Safety Act, which directed the Secretary to issue regulations that mitigate the risk of ejection from motorcoaches. At the time, NHTSA estimated that seat belts, when used, would be 77 percent effective in preventing fatal injuries in motorcoach rollover crashes, primarily by preventing ejection.

The agency remains confident that the seat belt requirement is effective in mitigating ejection risk in crashes involving OTRBs and other large buses. However, seat belt usage rates by motorcoach occupants are uncertain. As an agency, NHTSA has the authority to mandate that OTRBs and other large buses have seat belts installed at each passenger designated seating position, but the agency does not have the authority to mandate usage of seat belts by passengers.¹¹ The agency recognized at the time that the seat belt rule would not completely mitigate the risk of ejection, and the agency also recognized that there would be additional risks to belted passengers in OTRB and other large bus rollover crashes due to the

lack of structural integrity requirements for those vehicles.

e. NHTSA's 2021 Motorcoach Structural Integrity Final Rule

On December 29, 2021, NHTSA promulgated a final rule ("structural integrity final rule") that established FMVSS No. 227, "Bus rollover structural integrity."¹² This new standard requires that buses provide a "survival space" in a rollover test to protect occupants from significant collapse of the bus structure around them. Additionally, the new standard requires that emergency exits remain closed during the rollover test. FMVSS No. 227 provides two significant safety benefits: (1) it protects occupants—belted and unbelted—from being harmed due to significant deformation of the bus structure or large falling objects such as luggage racks; and (2) it protects belted and unbelted occupants by minimizing the risk that emergency exits become ejection portals that passengers could be partially or completely ejected through.

The structural integrity final rule satisfies the mandate in the Motorcoach Enhanced Safety Act that required the Secretary of Transportation to issue a regulation improving roof strength and crush resistance standards. Additionally, like the seat belt rule, the structural integrity final rule also contributes to satisfying the ejection mitigation mandate in the Motorcoach Enhanced Safety Act.

Although the promulgation of FMVSS No. 227 is expected to improve safety outcomes in large bus rollover crashes when it goes into effect, the agency understands that occupants will still be at risk of ejection due to potential breakage of window glazing on large buses. Without a requirement that window glazing and latches on buses meet certain performance criteria, occupants could still be thrown against the window, break the window in the process, and be ejected through the broken window. This type of ejection is what spurred the agency to initiate this advanced glazing rulemaking.

NHTSA's strategy has been first to seek improvements to the rollover structural integrity of motorcoaches (roof strength and crush resistance) and then to pursue measures that would drive use of advanced glazing. This ordered approach is based on findings from a NHTSA funded study¹³ that

¹² 86 FR 74270 (Dec. 29, 2021); Partial grant of petitions for reconsideration, 88 FR 77523 (Nov. 13, 2023).

¹³ Motor Coach Glazing Retention Test Development for Occupant Impact During a

¹¹ Laws requiring the use of seat belts in passenger vehicles are set by states.

found the integrity of the bus structure has a profound impact on the effectiveness of glazing as an anti-ejection safety countermeasure. Without a threshold standard for bus structural integrity, a twisting motion of a bus in a rollover could simply pop out any advanced glazing used in the windows and negate the potential benefits of the glazing in mitigating occupant ejection.

f. Data and Safety Need for Strengthening Motorcoach Window Glazing

Overview of Window Glazing

In the context of motor vehicles, “glazing” is a general term used to describe the material used in vehicle windows. The glazing in motor vehicles typically consists of either glass, which can be tempered or laminated, or transparent plastics, such as acrylic or polycarbonate.

The agency expects that manufacturers will often use laminated glass to meet the new requirements adopted in this final rule. A single pane of laminated glass contains two glass layers held together by an interlayer, typically made of polyvinyl butyral (PVB). The PVB interlayer retains a strong bond with the outer layers of glass so that in the event the glass breaks or cracks, large shards of sharp glass do not become free and risk cutting or seriously injuring people. Laminated glass may crack or splinter upon impact with the ground, but it can still provide a barrier to retain passengers within the bus if the glazing is retained within the window frame, the PVB interlayer is not excessively torn or punctured, and the window latch remains closed.

Tempered glass is also often used for windows on vehicles and buses. Several OTRB manufacturers currently use tempered glass as their glazing of choice

for windows. Tempered glass is processed with controlled thermal or chemical treatments. These treatments strengthen the glass and create balanced internal stresses so that when the glass does break, it breaks or crumbles into smaller granular chunks instead of large, jagged shards. Tempered glass is stronger than laminated glass, but an occupant impacting the window during a rollover event and the bus impact with the ground can potentially shatter tempered glass, causing the glazing to vacate the window frame and creating an ejection portal.

In most passenger cars, a single layer of glazing is used for the windows or windshield. However, multiple layers of glazing are often used in the side windows of buses.¹⁴ For example, a bus may have a double-glazed tempered/tempered side window, which means within one window frame, there is an interior-side pane of tempered glass and an exterior-side pane of tempered glass with an air gap in between the two. This setup is a type of “double-glazed” window because there are two layers of glazing in the window frame. Based on NHTSA’s research and industry feedback from the NPRM, the most common type of glazing used in motorcoach side windows is a double-glazed tempered/tempered window unit.

Under section 32702 of MAP–21, “advanced glazing” means glazing installed in a portal on the side or the roof of a motorcoach that is designed to be highly resistant to partial or complete occupant ejection in all types of motor vehicle crashes. This rulemaking puts in place a series of performance tests to prevent partial and complete ejection of bus occupants. These tests, described below in this preamble, include striking the unbroken and broken glazing with an impactor and measuring both the excursion distance of the impactor

during impact and any resulting openings in the glazing after the impact.

Data and Safety Need

There were 73 OTRB and 38 large bus fatal crashes in the 14-year period from 2006 through 2019. Among these 111 OTRB and large bus crashes, 52 were rollovers, 53 were frontal crashes, and 6 were side crashes. The anti-ejection glazing requirements in this final rule are expected to reduce ejections in all of these crash types. Of the 73 OTRBs involved in fatal crashes, 88 percent had a GVWR greater than 11,793 kg (26,000 lb).

NHTSA analyzed data from the agency’s Fatality Analysis Reporting System (FARS) from 2006 through 2019 to analyze fatal bus crashes within the United States. During this period there were 111 fatal crashes involving all OTRBs regardless of GVWR and other applicable non-OTRBs with a GVWR greater than 11,793 kg (26,000 lb), resulting in a total of 284 occupant fatalities (an average of 20.3 total occupant fatalities per year). Tables 3 and 4 show the breakdown of the number of crashes and fatalities by bus body type, GVWR, and crash type, respectively. Fatalities resulting from other events such as fires or occupants jumping from a bus were not included.

The OTRB and large bus fatalities were further categorized into two groups representing drivers and passengers. Passenger fatalities were significantly higher than driver fatalities, accounting for 84 percent of the total fatalities, and were particularly prevalent in the OTRB category. Rollover events accounted for 66 percent of all passenger fatalities (compared to 20 percent of driver fatalities). Rollover events are also the deadliest crash type, with 166 total fatalities in 52 crashes, resulting in 3.2 fatalities per crash.

TABLE 3—OTRB & LARGE BUS FATAL CRASHES
[FARS 2006–2019]

	Rollover	Front	Side	Total
Over-the-road Bus	40	30	3	73
Large Bus GVWR >11,793 kg	12	23	3	38
Total	52	53	6	111

Rollover (Martec Study), Final Report published on August 2006, Docket No. NHTSA–2002–11876–15.

¹⁴ OTRB manufacturers generally use this type of window for thermal and sound insulation purposes. Having an “air gap” between the window panes acts as a thermal barrier, making it easier to keep

the bus a comfortable temperature. The air gap also prevents vibrations from passing through as easily, resulting in a quieter ride for occupants.

TABLE 4—OTRB & LARGE BUS OCCUPANT FATALITIES IN CRASHES
[FARS 2006–2019]

Crash type	OTRB		Large Bus GVWR >11,793 kg		Total		
	Driver	Passenger	Driver	Passenger	Driver	Passenger	All
Rollover	7	134	2	23	9	157	166
Front	23	39	13	26	36	65	101
Side	1	9	0	7	1	16	17
Total	31	182	15	56	46	238	284

Occupant fatalities were further broken down based on ejection (Table 5) and ejection path. Occupant ejection is highly correlated with fatality. For all OTRB and large bus occupant fatalities, 39 percent were associated with ejection.¹⁵ Additionally, 71 percent of ejected occupant fatalities occurred in rollover crashes, highlighting the importance of ejection mitigation in rollover crashes. Rollovers remain the

largest cause of occupant fatalities, for both ejected and non-ejected passengers, in OTRB and large bus crashes. However, anti-ejection glazing will help prevent occupant ejection in all crash types. During frontal impacts and side impacts, occupants are still at risk of ejection, as shown in Table 5. Any impact where the side windows break presents a risk of at least partial ejection for passengers. Partial ejection from a

vehicle carries the additional risk of entrapment, as the partially ejected body part can be pinned under the bus, which can cause serious injury and prevent the immediate extraction of the passenger from the crash scene. Bus side windows can shatter upon impact even from frontal crashes, as evidenced during NHTSA’s 35 mph frontal crash test of a 2000 Motor Coach Industries motorcoach in 2009.¹⁶

TABLE 5—OTRB & LARGE BUS OCCUPANT FATALITIES BY EJECTION STATUS
[FARS 2006–2019]

Crash type	OTRB		Large Bus GVWR > 11,793 kg		Total	
	Eject	No Eject	Eject	No Eject	Eject	No Eject
Rollover	70	71	9	16	79	87
Front	21	41	6	33	27	74
Side	5	5	1	6	6	11
Total	96	117	16	55	112	172

The aforementioned data show that crashes involving ejections present a high risk of death to the occupants of these buses. The majority of fatalities occur in rollovers, and approximately 48 percent of rollover occupant fatalities are associated with ejection.

In nearly all the OTRB and large bus fatal rollover events discussed above, there was a significant amount of structural damage to the roof and side structure of the vehicles, as well as open window portals.¹⁷ This is a prime example of why this final rule works in tandem with the structural integrity final rule. The structural integrity final rule will ensure that the structure of the bus does not cause harm to occupants or create ejection portals via emergency exits, and this final rule will take the final step of increasing use of advanced glazing that prevents partial or complete ejection of motorcoach passengers and

further ensures the integrity of glazing mounting.

g. The 2016 NPRM
NPRM Proposals

On May 6, 2016, NHTSA published an NPRM that proposed the establishment of FMVSS No. 217a, with the goal of reducing the potential for occupant ejection in a crash. The NPRM proposed a new dynamic impact test that would be used to drive the installation of advanced glazing in high-occupancy buses. In this test, a 26 kg (57 lb) impactor would be propelled from inside a test vehicle toward a window glazing at 21.6 km/h (13.4 mph). The impactor and impact speed were chosen because they represent what the impact force would be from an average-sized unrestrained adult male striking the window on the opposite side of a large bus in a rollover. Each side window,

rear window, and glazing panel/window on the roof would be subject to one of three impacts, as selected by NHTSA in a compliance test: (a) an impact near a latching mechanism of an intact window; (b) an impact at the center of the daylight opening of an intact window; and (c) an impact at the center of the daylight opening of a pre-broken window. The window would need to prevent passage of a 102 mm (4 inch) diameter sphere both during and after the impact to pass the test. In the proposed tests, the agency would assess the window during the impact by determining whether any part of the window passes a reference plane defined during a pre-test set up procedure. Furthermore, in the proposed test for the pre-broken glazing, the maximum displacement of the impactor at the center of the daylight opening of subject windows would be limited to 175 mm (6.9 inches).

¹⁵ Ejection data include both complete and partial ejections.

¹⁶ See <https://www.nhtsa.gov/research-data/research-testing-databases#/vehicle/6934>.

¹⁷ See NTSB report HAB–16/01 for September 21, 2014, OTRB rollover crash near Red Lion Delaware; see also NTSB report HAR–18/03 for May 14, 2016, OTRB rollover crash near Laredo Texas.

In the NPRM, NHTSA also proposed to limit the protrusions of emergency exit latches into the openings of windows to ensure they do not unduly hinder emergency egress. This proposal was supported by a recommendation from the National Transportation Safety Board (NTSB), which had submitted a letter to NHTSA describing a crash (“Gray Summit crash”)¹⁸ where occupants’ clothing was caught on a window latch as they were trying to egress the vehicle. A detailed description of the Gray Summit crash can be found in the NPRM for this final rule. The NPRM proposed a limit that would set the maximum protrusion of a window latch into emergency exit openings of windows at 1 inch when the emergency exit window is open.

The NPRM proposed to apply the advanced glazing requirements to: (a) all new OTRBs (regardless of GVWR); and (b) all new buses other than OTRBs with a GVWR greater than 11,793 kg (26,000 lb), with the exception of school buses, prison buses, transit buses, and perimeter seating buses. For the applicable bus types, the proposed applicable windows included bus side and rear windows, and windows/glazing panels on the roof of the vehicle with a minimum dimension measured through the center of its area of 279 mm (11 inches) or greater. The NPRM proposed a different applicability for the emergency exit window latch protrusion requirement—the NPRM proposed that this requirement would apply to buses covered by the new FMVSS No. 217a as well as all buses subject to FMVSS No. 217, “Bus emergency exits and window retention and release.”¹⁹

Martec Study

As discussed in the NPRM, in 2003, NHTSA and Transport Canada entered into a joint program that focused on improving glazing and window retention on OTRBs to prevent occupant ejection.²⁰ This program is referenced in the NPRM and the sections below as the “Martec study,” and the data gathered from the study is the basis for many of the proposals being adopted as part of this final rule. For the purposes of the

NPRM, the agency used this study to develop a test procedure that realistically represented the impact loads from an unrestrained occupant onto motorcoach glazing during a rollover event.

III. NHTSA’s Statutory Authority

NHTSA is issuing this final rule pursuant to and in accordance with its authority under the National Traffic and Motor Vehicle Safety Act and the relevant provisions of MAP–21.

a. National Traffic and Motor Vehicle Safety Act (Safety Act)

Under 49 United States Code (U.S.C.) Chapter 301, Motor Vehicle Safety (49 U.S.C. 30101 *et seq.*), the Secretary of Transportation is responsible for prescribing motor vehicle safety standards that are practicable, meet the need for motor vehicle safety, and are stated in objective terms (section 30111(a)). “Motor vehicle safety” is defined in the Safety Act (section 30102(a)(8)) as “the performance of a motor vehicle or motor vehicle equipment in a way that protects the public against unreasonable risk of accidents occurring because of the design, construction, or performance of a motor vehicle, and against unreasonable risk of death or injury in an accident, and includes nonoperational safety of a motor vehicle.” “Motor vehicle safety standard” means a minimum standard for motor vehicle or motor vehicle equipment performance (section 30102(a)(9)). When prescribing such standards, the Secretary must consider all relevant available motor vehicle safety information (section 30111(b)(1)). The Secretary must also consider whether a proposed standard is reasonable, practicable, and appropriate for the particular type of motor vehicle or motor vehicle equipment for which it is prescribed (section 30111(b)(3)) and the extent to which the standard will further the statutory purpose of reducing traffic accidents and associated deaths and injuries (section 30111(b)(4)). The responsibility for promulgation of FMVSSs is delegated to NHTSA (49 CFR 1.95).

b. MAP–21 (Incorporating the Motorcoach Enhanced Safety Act of 2012)

NHTSA is issuing this final rule in accordance with MAP–21, which incorporates the Motorcoach Enhanced Safety Act of 2012 into Subtitle G.²¹

²¹ The Motorcoach Enhanced Safety Act of 2012 is incorporated into the Moving Ahead for Progress in the 21st Century Act, Public Law 112–141 (Jul. 6, 2012).

Section 32703(b) of MAP–21 requires the Secretary (NHTSA by delegation) to prescribe regulations that would address certain aspects of motorcoach crash performance within 2 years if the agency determines that the standards would meet the requirements and considerations of section 30111(a) and (b) of the National Traffic and Motor Vehicle Safety Act.²²

Two subsections of section 32703(b) are particularly relevant to this final rule. Subsection (b)(1) specifies that the Secretary is to establish improved roof and roof support standards that “substantially improve the resistance of motorcoach roofs to deformation and intrusion to prevent serious occupant injury in rollover crashes involving motorcoaches.” Subsection (b)(2) directs the Secretary to “consider advanced glazing standards for each motorcoach portal and [to] consider other portal improvements to prevent partial and complete ejection of motorcoach passengers, including children.”²³

MAP–21 contains other provisions pertaining to this rulemaking. Section 32702 states that “motorcoach” has the meaning given to the term “over-the-road bus” in section 3038(a)(3) of the Transportation Equity Act for the 21st Century (TEA–21).²⁴ Section 3038(a)(3) of TEA–21 (*see* 49 U.S.C. 5310 note) defines “over-the-road bus” as “a bus characterized by an elevated passenger deck located over a baggage compartment.” However, section 32702 of MAP–21 excludes transit buses and school buses from the “motorcoach” definition.²⁵

Under § 32702, “portal” means any opening on the front, side, rear, or roof of a motorcoach that could, in the event of a crash involving the motorcoach, permit the partial or complete ejection of any occupant from the motorcoach, including a young child. Section 32703(b)(2) also states that in prescribing such standards, the Secretary shall consider the impact of such standards on the use of motorcoach portals as a means of emergency egress.

²² *Id.* § 32703(b).

²³ While this final rule is mainly aimed at addressing the rollover structural integrity of specific large bus types, the reduced deformation of the bus structure would ensure that any advanced glazing installed on portals would be retained on their mounting and reduce the risk of occupant ejection in rollover crashes. Further, the requirement that emergency exits should not open during the rollover test would also ensure that the exits do not become ejection portals. Thus, both subsection (b)(1) and subsection (b)(2) are relevant to this rule.

²⁴ Moving Ahead for Progress in the 21st Century Act, Public Law 112–141, 32702(6).

²⁵ *Id.* § 32702(6)(A)–(B).

¹⁸ NTSB/HAR–11/03 PB2011–916203; Multivehicle Collision Interstate 44 Eastbound Gray Summit, Missouri, August 5, 2010; December 2011.

¹⁹ FMVSS No. 217 S3 says the standard “applies to buses, except buses manufactured for the purpose of transporting persons under physical restraint.” Accordingly, the NPRM proposed that the latch requirement apply to all buses except buses used for transporting persons under physical restraint.

²⁰ Motor Coach Glazing Retention Test Development for Occupant Impact During a Rollover (Martec Study), Final Report published on August 2006, Docket No. NHTSA–2002–11876–15.

MAP-21 further directs the Secretary to apply any regulation prescribed in accordance with section 32703(b) to all motorcoaches manufactured more than 3 years after the date on which the regulation is published.²⁶ In addition, the Secretary may assess the feasibility, benefits, and costs of applying any requirement established under section 32703(b)(2) to “motorcoaches manufactured before the date on which the requirement applies to new motorcoaches” (retrofit).²⁷ Finally, MAP-21 also authorizes the Secretary to combine the required rulemaking actions as the Secretary deems appropriate.²⁸

IV. The Final Rule and Response to Comments

a. Establishing FMVSS No. 217a and New Requirements

This final rule adopts most of the proposals from the 2016 NPRM (the differences between the NPRM and this final rule are highlighted in the section below). As discussed in the NPRM, this final rule establishes a new standard within 49 CFR part 571 that will now be referred to as FMVSS No. 217a. This new standard will set out requirements that windows in certain types of buses must meet when evaluated by the dynamic test procedure described in the 2016 NPRM. Additionally, the new requirements will allow for only a 1-inch maximum protrusion for emergency exit window latches when the emergency exit window is open. Although there are some differences between the final rule and the NPRM, after reviewing the public comments to the NPRM, the agency has decided to adopt many of the proposals from the 2016 NPRM.

b. Differences Between the NPRM and the Final Rule

This final rule makes amendments to several of the proposals in the 2016 NPRM based on the comments the agency received. The most notable change between the 2016 NPRM and this final rule is in the applicability of FMVSS No. 217a. This final rule excludes all perimeter seating buses, even if those buses are also OTRBs, from the requirements in FMVSS No. 217a since these buses are also excluded from the structural integrity requirements in FMVSS No. 227 and therefore could lack the requisite integrity to retain advanced glazing within the window frame. Additionally, the final rule

excludes all rear windows from FMVSS No. 217a requirements because the field data does not indicate an ejection risk from rear windows. Other differences between the 2016 NPRM and the final rule are minor updates to the regulatory text which include: (1) an adjustment to the location within FMVSS No. 217 for the new regulatory text that adds the emergency exit latch protrusion requirement; (2) new figures to the FMVSS No. 217a regulatory text to clarify the window pre-breakage procedure and the emergency exit opening space; and (3) adjustments to the FMVSS No. 217a regulatory text regarding the window pre-breakage procedure to specify steps to take if the electric staple gun used to pierce the glazing does not produce holes or perceivable damage to the glazing.

V. Summary of Comments and Agency Responses

a. Overview of Comments

NHTSA received 11 unique comments on the NPRM. Comments were submitted by large bus manufacturers, including IC Bus (ICB), Van Hool N.V. (Van Hool), Prevost and Nova Bus divisions (Prevost), and Blue Bird Body Company (BBBC); a motorcoach operator, Greyhound Lines, Inc. (Greyhound); industry groups, including Enhanced Protective Glass Automotive Association (EPGAA), and School Bus Manufacturers Technical Council (SBMTC); a U.S. government agency, the NTSB; glazing manufacturers, including SABIC Innovative Plastics US LLP (SABIC) and Exatec, LLC (Exatec); and a consumer advocacy group, The Advocates for Highway and Auto Safety (Advocates).

Most commenters expressed support for an FMVSS on advanced anti-ejection glazing and emergency exit latches that do not hinder passenger egress, but views differed on how these concepts should be implemented. For example, Greyhound, Prevost, and Van Hool expressed concern that advanced glazing, specifically laminated glass, may increase the potential for head and neck injuries of belted passengers. Additionally, several commenters stated that the NPRM did not account for all costs associated with the proposed rule.

Most commenting bus manufacturers and SBMTC requested that certain bus types or window types be excluded from applicability under this rulemaking, including entertainer buses, school buses, school bus-derivative buses, driver's windows, windows in doors, rear windows, and windows that are partially blocked by equipment or seating. Conversely, NTSB requested

more bus types be included in the rulemaking, such as medium-sized buses with a GVWR of 11,793 kg (26,000 lb) or less, not including school buses.

Exatec, ICB, and SABIC all expressed concerns that the proposed glass pre-breakage procedure did not properly account for advanced glazing that may not break upon application of a line load by the electric staple gun.

No commenters supported mandating a retrofit for the glazing requirements, but NTSB did support a retrofit requirement for the minimum latch protrusion. A detailed discussion of comments and the agency's responses can be found below.

b. Applicability

Bus Types

NHTSA proposed to apply the FMVSS No. 217a window glazing dynamic impact test requirements to generally the same group of vehicles covered by the bus rollover structural integrity NPRM published in August 2014.²⁹ NHTSA noted that both requirements should apply to high occupancy vehicles associated with an unreasonable risk of fatal rollover involvement. According to the data, these vehicles are generally OTRBs regardless of GVWR, and other buses with a GVWR greater than 11,793 kg (26,000 lb). Accordingly, the NPRM proposed that buses subject to FMVSS No. 217a would be (a) new OTRBs (regardless of GVWR), pursuant to the Motorcoach Enhanced Safety Act of 2012, and (b) all new buses other than OTRBs with a GVWR greater than 11,793 kg (26,000 lb). Similar to the bus rollover structural integrity proposal, school buses, transit buses, and perimeter seat buses (as defined in the August 2014 NPRM)³⁰ were excluded from the FMVSS No. 217a proposed requirements. Prison buses were also excluded from FMVSS No. 217a proposed requirements because prison buses have bars over the windows that would impede the impactor for the glazing dynamic impact tests.

The December 29, 2022 final rule establishing FMVSS No. 227, “Bus rollover structural integrity,” excluded perimeter seating buses that are non-OTRBs as well as those that are OTRBs

²⁹ 79 FR 46090 (Aug. 6, 2014).

³⁰ Per the August 2014 NPRM: Transit bus means a bus that is equipped with a stop-request system sold for public transportation provided by, or on behalf of, a State or local government and that is not an over-the-road bus; Perimeter-seating bus means a bus with 7 or fewer designated seating positions rearward of the driver's seating position that are forward-facing or can convert to forward-facing without the use of tools and is not an over-the-road bus.

²⁶ *Id.* § 32703(e)(1).

²⁷ *Id.* § 32703(e)(2), “Retrofit Assessment for Existing Motorcoaches.”

²⁸ *Id.* § 32706.

from the requirements in FMVSS No. 227. The November 2023 final rule³¹ responding to petitions for reconsideration of the December 2022 final rule expanded the definition of transit buses to include buses with a stop-request system sold for public transportation provided by, or on behalf of, the federal government. As detailed later in this section, this final rule adopts the 2015 NPRM proposals for applicability of FMVSS No. 217a but extends the exclusions to include perimeter seating buses that are OTRBs and the expanded definition of transit buses. These buses excluded from FMVSS No. 217a requirements are also excluded from FMVSS No. 227 and so may lack the requisite structural integrity to ensure any advanced glazing in windows does not pop out of its frame in a crash and thereby negate the potential benefits of the advanced glazing.

Additionally, in the NPRM the agency proposed applying the emergency exit window latch protrusion requirement to

the same buses covered by FMVSS No. 227 and all buses governed under FMVSS No. 217, which includes all school buses. The agency is adopting the window latch applicability proposal as part of this final rule.

Medium-Sized Buses

NTSB commented that the final rule should include medium-sized non-school buses with GVWRs in the range of 4,536–17,793 kg (10,001–26,000 lb). It noted that these buses are typically built as body-on-chassis vehicles without an elevated passenger deck over a baggage compartment, so they do not fall within the “over-the-road bus” definition. NTSB cited the 2009 bus crash near Dolan Springs, Arizona,³² and a 2014 bus crash in Davis, Oklahoma³³ where passengers were ejected from medium-sized buses and died as a result. The NTSB’s Davis, Oklahoma accident report stated that a lack of appropriate crashworthiness standards contributed to the severity of passenger injuries.

Agency Response

As proposed in the NPRM, the agency has decided that the requirements for FMVSS No. 217a will not be applicable to medium-sized non-OTRBs.³⁴ NHTSA bases this decision on a review of data for medium-sized buses from 2006–2019 as shown below in Table 6. During this period there were 37 fatalities with some degree of ejection from crashes involving medium-sized buses. During the same period there were 112 fatal ejections in OTRBs and large buses, even though the population of OTRBs and large buses is much smaller than the population of medium-sized buses. Specifically, approximately 2,200 large buses (including OTRBs) are produced annually, compared to approximately 16,000 medium-sized buses.³⁵ Although there may be certain risks of occupant ejection from medium-sized bus crashes, the agency has concluded that medium-sized buses do not pose a sufficient safety need to warrant application of FMVSS No. 217a to those buses.

TABLE 6—FATAL CRASHES AND EJECTED FATALITIES FOR LARGE BUSES AND MEDIUM-SIZED BUSES
[FARS 2006–2019]

Bus size	Avg. annual fatal crashes	Avg. annual ejection fatalities	Avg. annual fleet sales ³⁶
Large Bus (greater than 26,000 lb GVWR) and all OTRBs	7.9	8.0	2,200
Medium-Size Bus (GVWR of 10,000–26,000 lb)	5.9	2.6	16,000

Data show a considerable disparity between the rate of fatal ejections for large buses (OTRBs and other buses covered by this final rule) versus medium-sized buses. Not only are large buses involved in 34 percent more fatal crashes on average annually, but they also have 3 times as many ejected occupant fatalities annually compared to medium-sized buses.

School buses and transit buses in the medium-sized bus range have a very low rate of fatal ejections in rollover events. The bus rollover structural integrity requirements for FMVSS No. 227 only apply to OTRBs and buses other than OTRBs with a GVWR greater than 26,000 lb, meaning that if the agency were to apply this final rule to medium-sized buses, occupants in those buses would not receive the protections

afforded by FMVSS No. 227.³⁷ One of the reasons the agency promulgated FMVSS No. 227 was because windows were popping out of place during rollover events, creating ejection portals. Since medium-sized buses do not have to comply with FMVSS No. 227, requiring medium-sized buses to utilize enhanced glazing may not be effective in mitigating ejection because the advanced glazing may pop out of the window due to excessive structural deformation during a crash and thereby create an ejection portal. Accordingly, it would be illogical from a safety standpoint to make medium-sized buses subject to FMVSS No. 217a, but not to FMVSS No. 227. Thus, the agency has decided not to make medium-sized buses applicable under this final rule.

Entertainer Buses

The NPRM proposed to exclude perimeter seating buses from the final rule with the exception of, however, if perimeter seating buses that met the definition of an OTRB. Prevost commented that entertainer buses should be completely exempt under the final rule, regardless of whether they fit the definition of an OTRB. Buses referred to as entertainer buses are generally built from an OTRB shell and can contain interior features such as kitchens, bathrooms, bedrooms, lounge areas, dining areas, generators, and slide out portions of the structure. The window configuration may or may not be the same as those of other OTRBs built as typical passenger vehicles.

³¹ 88 FR 77523.

³² Bus Loss of Control and Rollover, Dolan Springs, Arizona, January 30, 2009. Highway Accident Report NTSB/HAR–10/01 (Washington, DC: NTSB 2010).

³³ Truck-Tractor Semitrailer Median Crossover Collision with Medium-Size Bus on Interstate 35, Davis, Oklahoma, September 26, 2014. Highway

Accident Report NTSB/HAR–15/03 (Washington, DC: NTSB 2015).

³⁴ Medium-sized buses have a GVWR greater than 4,536 kg (10,000 lb) and less than or equal to 11,793 kg (26,000 lb).

³⁵ Medium-Size Bus Production and Sales Supplemental Information Report. Docket Item #30 from NTSB HWY17MH011 Highway Investigation. <https://data.nts.gov/Docket?ProjectID=94934>.

³⁶ Medium-Size Bus Roadway Departure, Return, and Rollover Bryce Canyon City, Utah September 20, 2019. Accident Report NTSB/HAR–21/01 PB2021–100917.

³⁷ FMVSS No. 227 has several express exemptions; the standard does not apply to school buses, school bus derivative buses, transit buses, prison buses, and perimeter-seating buses.

Prevost commented that reducing the number of ejection-related fatalities is an important aspect of motorcoach safety and must be inherent to the design. Prevost further agreed with the intent of the proposed regulation to mitigate the creation of ejection portals, and to create uniformity throughout the industry products. However, Prevost requested special consideration for an exemption from the proposed requirements for entertainer buses. Prevost stated that an “entertainer coach is very different from the passenger motorcoach both in design and application. From a design perspective, they have fewer and smaller passenger windows, offering relatively less chance of a potential, partial, or full ejection.”

Agency Response

The agency believes that the term “entertainer bus” is not a term of art to be used in the standard. The buses that Prevost described in its comment are likely considered perimeter-seating buses, a bus type that NHTSA defined in the NPRM³⁸ and excluded from compliance in the proposal, unless the perimeter seating bus in question fits the definition of an OTRB. After reviewing Prevost’s comment, NHTSA has decided to maintain that under this final rule the new standard will not be applicable to perimeter-seating buses. Further, to align the application of FMVSS No. 217a with FMVSS No. 227, perimeter-seating buses that also meet the definition of an OTRB will also be excluded from FMVSS No. 217a.

As stated in the FMVSS No. 227 motorcoach structural integrity final rule, the agency does not find a reason to distinguish between OTRBs with perimeter seating and non-OTRBs with perimeter seating.³⁹ The safety data indicate no relevant differences between these vehicles based on safety need. In other words, OTRBs with perimeter seating do not present a greater risk of injury compared to non-OTRBs with perimeter seating.

Furthermore, as discussed above, the advanced glazing requirements are most effective when paired with the improved structural integrity required by FMVSS No. 227. Therefore, the agency is excluding OTRBs with perimeter seating to mirror the decision made in the final rule for FMVSS No. 227. Many of the safety benefits gained from advanced glazing are dependent on

sufficiently strong vehicle structural elements, meaning it would not make sense to apply advanced glazing requirements to a set of vehicles that do not have to comply with the more stringent structural integrity requirements of FMVSS No. 227.

Lastly, to synthesize the definition with this decision in this final rule, the agency has decided to amend the definition of a perimeter seating bus in the regulatory text by deleting the phrase “and is not an over the road bus” from the end of the proposed definition.

School Bus Derivative Buses

ICB recommended that commercial buses built from school bus designs should not have to meet the ejection mitigation requirements of the proposed rule. ICB noted that its commercial buses are “much different” from a traditional motorcoach, meaning the data and studies NHTSA used for the NPRM potentially would not apply to their buses. ICB stated that the operating environment of its commercial buses derived from school buses is more closely related to that of school buses than the operating environment and conditions of OTRBs, meaning that the routes ICB commercial buses are used on are generally routes involving lower speeds and frequent stops. ICB wrote “[t]he commercial variants of school buses are typically used in applications such as church buses, college campus buses, local shuttles and tours, emergency responders, and parks and recreation departments.”

Agency Response

The agency disagrees with ICB’s generalization of school bus derivative bus designs and their operating environments. NHTSA is therefore not excluding school bus derivative buses from FMVSS No. 217a as part of this final rule. The agency is basing this decision on the fact that school bus derivative buses are available for use in intercity travel and are offered for sale with motorcoach-style features, such as larger windows than school buses. While these buses are not required to comply with FMVSS No. 227, “Bus rollover structural integrity,” these buses are required to comply with FMVSS No. 220, “School bus rollover protection,” and FMVSS No. 221, “School bus body joint strength.” When the agency defined the term “school bus derivative bus” in FMVSS No. 227, the agency defined these buses as “a bus that meets Federal motor vehicle safety standards for school buses regarding emergency exits (§ 571.217), rollover protection (§ 571.220), bus body joint strength (§ 571.221), and fuel system

integrity (§ 571.301).” To meet the regulatory definition of a school bus derivative bus, the bus must comply with specific school bus requirements—including the structural integrity requirements of FMVSS Nos. 220 and 221—even if the bus is not used for school-related purposes.

One of the agency’s concerns when it promulgated the structural integrity final rule was the possibility of window glazing popping out of place and creating ejection portals. The school bus structural integrity standards, FMVSS No. 220 and FMVSS No. 221, ensure the windows in school bus derivative buses are less likely to “pop out,” similar to FMVSS No. 227 for OTRBs and other large buses. Thus, the agency believes it is reasonable for school bus derivative buses to be subject to the new FMVSS No. 217a but not to FMVSS No. 227.

ICB requested that commercial buses built from school bus designs should not have to meet the ejection mitigation requirements of the proposed rule. Although some of the commercial buses derived from school bus designs are similar to school bus vehicles not subject to the proposed rule, it is the use patterns of the buses that makes them distinct from school buses. School buses are typically used for local transportation of students from home to school and from school back home. Like transit buses, school buses are typically operated at lower rates of speed with frequent starts and stops. The commercial buses derived from school bus designs are sold to groups that use the buses for both intracity and intercity travel. Some of these buses utilize larger windows and coach-style seating, making them even more like OTRBs.

A school bus is defined in 49 CFR 571.3 as “a bus that is sold, or introduced in interstate commerce, for purposes that include carrying students to and from school or related events, but does not include a bus designed and sold for operation as a common carrier in urban transportation.” In other words, the definition of a “school bus” is use-based—if it looks like a school bus and operates for school bus purposes, it is a school bus and must comply with school bus requirements. If it looks like a school bus, but is not used for school bus purposes, it is not a school bus and does not have to comply with all school bus requirements. This distinction in the FMVSS is a critical reason why the agency believes school bus derivative buses should be covered under FMVSS No. 217a. Forcing manufacturers to comply with two separate structural integrity requirements would be illogical. However, unlike structural integrity,

³⁸ According to the NPRM, perimeter-seating bus means a bus with 7 or fewer designated seating positions rearward of the driver’s seating position that are forward-facing or that can convert to forward-facing without the use of tools and is not an over-the-road bus.

³⁹ 86 FR 74284–74285.

there is not an existing vehicle-level school bus-specific advanced glazing standard. Therefore, NHTSA has decided not to exclude school bus derivative buses from the dynamic impact test requirements of FMVSS No. 217a. If a school bus derivative bus weighs greater than 11,793 kg (26,000 lb), it will have to comply with FMVSS No. 217a.

Transit Buses

As part of this final rule, NHTSA is adopting a slightly altered definition of the term “transit bus.” The definition proposed in the NPRM read: “a bus that is equipped with a stop-request system sold for public transportation provided by, or on behalf of, a State or local government and that is not an over-the-road bus.”

In considering how to define the term for this final rule, the agency considered its response to petitions for reconsideration of the final rule for FMVSS No. 227, “Bus rollover structural integrity,” concerning the definition of a transit bus. To ensure consistency among standards, NHTSA has decided to adopt the definition adopted in the agency’s response to petitions for reconsideration of FMVSS No. 227. This definition of “transit bus” differs from the definition proposed in the NPRM.

In the petitions for reconsideration for the structural integrity final rule, petitioners argued that buses that are manufactured as transit buses but sold to entities that are not state or local governments (or operated on behalf of state or local governments) are not considered transit buses. The entities that the petitioners described are either private operators or the federal government. The petitioners stated that these transit-type buses are operated in a similar manner as transit buses operated by state or local governments and should therefore be included in the definition of “transit bus.”

In NHTSA’s responses to petitions for reconsideration of FMVSS No. 227,⁴⁰ the agency partially granted the petitioners’ request for adjusting the transit bus definition. NHTSA amended the transit bus definition by including transit-type buses operated by the federal government, but not including transit-type buses operated by private entities. NHTSA determined the federal government utilizes transit-type buses in a similar manner as other public transit agencies, but private operators may utilize these buses in higher-risk driving patterns. This amended definition is also being adopted as part

of this final rule establishing FMVSS No. 217a. The amended definition of transit bus is now:

“Transit bus means a bus that is equipped with a stop-request system sold for public transportation provided by, or on behalf of, a Federal, State, or local government and that is not an over-the-road bus.”

Emergency Exit Latch Protrusion Limit Requirements Applicability

Two commenters requested clarification on the applicability of the emergency exit latch protrusion limit requirement proposed in the NPRM. ICB commented that it understands the protrusion limits are applicable to all buses, including school buses. SBMTC stated that the protrusion limit requirements should apply to all school buses, regardless of GVWR. To support its request, SBMTC also noted that the NTSB-requested latch protrusion limits are from a crash involving a school bus.

Agency Response

To clarify, in the NPRM, NHTSA proposed that the emergency exit latch protrusion requirement be applicable to the buses to which the dynamic impactor test would apply (OTRBs regardless of GVWR and other large buses, except transit buses, prison buses, school buses, and perimeter-seating buses, and school buses). NHTSA also requested comment on the merits of requiring all buses subject to FMVSS No. 217 to meet the requirement. After reviewing the comments, the agency has decided to adopt this proposal as part of this final rule. To avoid confusion over the applicability of this emergency exit window latch protrusion requirement, NHTSA is creating a new paragraph in FMVSS No. 217 as part of this final rule.

The NPRM proposed adding the protrusion limits into FMVSS No. 217 S5.4.1 and S5.4.2.2. The first section, S5.4.1, applies to emergency exits on all buses except certain emergency exits on certain school buses outlined in S5.2.3. The other amended section, S5.4.2.2, applies only to school buses with a GVWR of 10,000 lb or less. The preamble of the NPRM states “the maximum latch plate protrusion requirement would be applicable to the buses to which the impactor tests would apply. . . . However, NHTSA is also proposing to extend the maximum latch plate protrusion requirement to other buses as well. . . . NHTSA is proposing to extend the proposed requirement to school buses also.”⁴¹ The proposed amendment did not

clearly indicate which bus types would need to comply with the protrusion limits. As stated in the NPRM, NHTSA’s intent was for the protrusion limits to apply to all school buses, regardless of GVWR. Therefore, the changes proposed in the NPRM for FMVSS No. 217 S5.4.1 and S5.4.2.2 will not be implemented. Instead, the requirement will be adopted in a different location in FMVSS No. 217, which is reflected in the amended regulatory text at the end of this final rule.

The content of the changes is the same as what was proposed in the NPRM, but the location has changed to be in its own section that applies to all bus types within FMVSS No. 217. This change should alleviate any confusion concerning the applicability of the emergency latch protrusion requirement.

Applicable Window Types

In the NPRM, NHTSA proposed applying the dynamic impact test requirements to all side windows, rear windows, and glazing panels/windows on the roof of applicable buses that met the minimum size requirements. The Motorcoach Enhanced Safety Act directs the agency to consider requiring advanced glazing standards for “each motorcoach portal” (section 32703(b)(2)). The Act defines “portal” as “any opening on the front, side, rear, or roof of a motorcoach that could, in the event of a crash involving the motorcoach, permit the partial or complete ejection of any occupant from the motorcoach, including a young child” (section 32702(9)). NHTSA applied the proposed advanced glazing requirements to the portals the agency believed pose a valid risk of ejection. The agency estimates that side bus windows account for about 80 percent of portals (potential ejection routes) on buses.

The NPRM proposed not applying the dynamic impact test requirements to the front windshield, roof hatches, or any doors that do not contain glazing of at least the minimum size. Accident data from real-world rollover crashes indicate that passenger ejections generally do not occur from the front windshield, emergency doors, or service doors. As proposed in the NPRM, the dynamic impact test procedure applies to windows that have a minimum dimension measured through the center of their area of 279 mm (11 in) or greater.

The NPRM proposed to amend FMVSS No. 217 to specify in S5.4.1 of the standard that emergency exit latches and other related release mechanisms not protrude more than 25 mm (1 inch)

⁴⁰ 88 FR 7523.

⁴¹ 81 FR at 27921–27922.

into the opening of an emergency exit when the window is opened to the minimum emergency egress opening (allowing passage of an ellipsoid 500 mm (19.7 inches) wide by 330 mm (11.8 inches) high). The purpose of this proposed requirement was to limit the potential for objects such as latch plates to protrude into the emergency exit window opening space even when the protrusion still allows the exit window to meet the opening size requirements. These requirements were proposed in the NPRM to only apply to emergency exit windows.

Minimum Window Size

Regarding minimum dimensions, ICB and Advocates provided comments and recommendations for changes to the requirements. Advocates expressed concern with the lack of evidence supporting the exemption from testing of windows with a maximum dimension of 11 inches or less. ICB stated that the minimum surface dimension should be 381 mm (15 in) based on a typical side passenger window size for school buses.

Agency Response

The testing standard, as discussed in the Martec report, provides that the window glazing impact loading event is modelled after a motorcoach side rollover with an occupant from one side of the bus being thrown from their seat and impacting glazing on the opposite side of the bus.

As stated in the NPRM: “The window would be tested if it is large enough to fit the impactor face plus a 25 mm (1 inch) border around the impactor face plate edge without contact with the window frame. The dimensions of the dynamic impactor the agency proposed to use were 177 mm by 212 mm (7 inches by 8.3 inches).” The headform impactor used in FMVSS No. 217 has a 6-inch diameter, and the minimum required dimension measured through the center of the window is 8 inches for the window to be tested. Using a proportional relationship for the wider (8.3 inch) dimension of the impactor in FMVSS No. 217a results in a minimum required dimension measured through the center of the window’s area of 11 inches (279 mm).

As discussed in the Martec report, the loading case was chosen as a representative loading situation so that a minimum level of protection would be provided for all bus occupants, drivers, and passengers, for all crash scenarios. The Martec study determined that the occupant impacting the opposite side window would primarily be through shoulder contact. The impactor was fabricated to represent the mass,

stiffness, and contacting area of the United States side impact dummy (US-SID) shoulder. The minimum window dimension is based upon this impactor size. Testing a window smaller than the impactor would cause the vehicle structure around the window to be loaded during testing, thus lowering the force applied to the glazing material. Using an impacting face smaller than the proposed guided impactor face in order to evaluate smaller windows would not be representative of the loading analysis conducted. The agency does not agree with the request to evaluate other crash scenarios for occupant-to-window contact.

ICB requested NHTSA increase the minimum window size to match the size of a typical school bus window, which ICB stated is 381 mm (15 inches). As discussed later in the preamble, since school bus-sized windows are large enough to satisfy emergency exit requirements, they are large enough to become an ejection portal that could permit the partial or complete ejection of a passenger if the glazing is vacated from the opening. Therefore, NHTSA will not increase the minimum window surface dimension as ICB has requested.

Rear Windows

ICB stated that the rear windows should be exempt from the anti-ejection requirements of FMVSS No. 217a. ICB pointed out that in traditional motorcoaches there is typically not a rear window, and that most bus crash injuries and fatalities involve traditional motorcoaches. Additionally, ICB stated that it is not aware of any crash reports for “a survivable rollover incident that would propel an occupant with such force to the rear of the vehicle that it would eject them through the rear glazing.” ICB further stated that rear windows are usually partially blocked by forward facing seats, which makes it less likely for passengers to be ejected out the rear of a bus. ICB pointed to a sentence from the Martec report which ICB interpreted to imply that the impactor anvil test does not apply to rear-window glazing.

BBBC stated that the rear windows should be exempt on “large commercial buses that are constructed substantially the same as school buses” because they are usually partially blocked by seats. Additionally, BBBC stated that since NHTSA’s testing was only performed on side windows, additional research would be required before establishing performance requirements for the rear glazing.

Agency Response

After reviewing the comments from ICB and BBBC, the agency further analyzed typical bus designs, ejection data, and fatal crash data. The agency has concluded that rear bus windows will be excluded from testing as part of this final rule.

In the NPRM, NHTSA proposed applying the dynamic impact test requirements to all side windows, rear windows, and glazing panels/windows on the roof of applicable buses that met the minimum window size requirements. The agency recognized that OTRBs typically have the bus engine in the rear, and therefore usually have no windows on the rear of the bus. However, the agency stated that nothing precludes bus designs from having windows in the rear of the bus that could be potential ejection portals.

The crash type most likely to result in an ejection through the rear glazing would be a rear impact. As stated by ICB and BBBC and confirmed by NHTSA, there were no recorded fatalities in applicable buses from rear impact crashes in the 2006–2019 FARS data. While it is conceivable occupants could be ejected through the rear glazing in other crash types, it is less likely. Further, as BBBC indicated, rear windows in large buses that are not OTRBs are often substantially blocked by the rear seats. As a result, occupants are less likely to be ejected through the rear glazing. In the event of a partial ejection through a rear window, the occupant is less likely to experience serious injury or death, because there is a low likelihood the bus will roll onto its rear side.

The requirements and evaluation procedures of FMVSS No. 217a are based upon analysis of unbelted passenger impacting side bus windows during a rollover crash scenario. This loading case was chosen as a representative loading situation so that a minimum level of protection would be provided for all bus occupants, drivers, and passengers, for all crash scenarios. Therefore, as a practical matter, NHTSA has decided rear windows will be exempt from the impact test requirements of FMVSS No. 217a.

Windows Mounted on Doors and Hatches

ICB questioned whether the dynamic impact test requirements apply to all window glazing, including those in doors and emergency exit hatches. In their comments, ICB argued that “NHTSA did not intend for the glazing anti-ejection requirements to be applicable to glazings in any door or

roof hatch emergency exit and we ask that NHTSA make that clear in the final rule.” BBBC stated that the NPRM did not “adequately convey NHTSA’s intention to exclude windows that are part of a side or rear door.”

Agency Response

Both BBBC and ICB stated that windows which are part of doors should be exempt from the anti-ejection requirements. NHTSA has observed that in current buses there are typically windows in the emergency exit doors and in regular doors. The agency stated in the NPRM that NHTSA would not be applying the proposed requirements to the front windshield, or to emergency exit doors, service doors, or roof hatches. The agency does not intend to apply the glazing ejection mitigation requirements to the structure securing side and rear doors to the vehicle. However, all bus windows are potential ejection portals if the glazing material breaks. If a window in a side door or roof hatch and has the requisite minimum dimensions of 279 mm (11 in) or greater measured through the center of its area, that window will be subject to the proposed anti-ejection requirements.

The agency has concluded that this final rule is applicable to all side and roof window glazing that meet the minimum window dimensions. Furthermore, NHTSA wishes to clarify that the anti-ejection requirements proposed for FMVSS No. 217a do not apply to the non-window portion of doors, service doors, or roof hatches. Any window in a door, service door, or roof hatch would have to meet the anti-ejection requirements if such a window exceeds the minimum size (279 mm or 11 inches) specified in S5 of FMVSS No. 217a.

School Bus Sized Windows

SBMTC commented that school bus size windows used on commercial buses derived from school bus designs are too small to be covered by the proposed anti-ejection requirements. BBBC, ICB, and SBMTC claimed that since OTRBs have larger windows than the commercial buses derived from school buses, commercial buses with these windows should not be subject to the same requirements as traditional OTRBs. ICB indicated that it does “install larger ‘non-typical’ school bus windows in some of its commercial buses and [it is] not asking for any exemption for these larger bus windows.”

Agency Response

First, as mentioned in the preceding paragraphs, if a bus derived from a school bus design is not a school bus and has a GVWR greater than 11,793 kg (26,000 lb), it will have to comply with FMVSS No. 217a. The fact that certain school bus derivative buses may have smaller windows does not change this requirement. Furthermore, FMVSS No. 217 requires buses other than school buses to have emergency exit windows large enough to “admit unobstructed passage, keeping a major axis horizontal at all times, of an ellipsoid generated by rotating about its minor axis an ellipse having a major axis of 50 centimeters and a minor axis of 33 centimeters.” Since these school bus windows are large enough to satisfy emergency exit requirements, they are large enough to become an ejection portal that could permit the partial or complete ejection of a passenger if the glazing is vacated from the opening. FARS data from 2006–2019 include 26 fatal ejections from school buses with a GVWR greater than 26,000 lbs. This data shows that school bus sized windows can become ejection portals.

Lastly, although school bus derivative buses may use the same sized windows as school buses, NHTSA believes that school bus derivative buses are more likely than school buses to be used in a manner that has a higher risk of crashes. Therefore, although school bus derivative buses may have smaller windows than traditional OTRBs, these windows are large enough for a passenger, especially a child or smaller adult, to be fully or partially ejected through if such a window is broken out from the surrounding bus structure. Accordingly, a bus being equipped with “school bus sized” windows will not create an exemption to FMVSS No. 217a under this final rule. If the windows are large enough to be tested with the impactor, the fact that the windows are “school bus sized” will not impact their applicability to this standard.

Driver Side Windows

Both BBBC and ICB commented that because seat belts should protect bus drivers from ejection, driver side windows should be exempt from this final rule. ICB indicated that the seat belt usage rates for bus drivers is as high as or higher than the 84% rate for commercial truck drivers listed in a Federal Motor Carrier Safety Administration (FMCSA) study.⁴²

⁴² Safety Belt Usage by Commercial Motor Vehicle Drivers (SBUKMDV) 2013, U.S. Department of Transportation, Federal Motor Carrier Safety Administration (FMCSA).

Agency Response

The agency has decided not to exempt driver side windows from the requirements under this final rule. FARS data from 2006–2019 show 9 drivers were fatally ejected from school buses with a GVWR greater than 26,000 lb.⁴³ The numbers of ejected drivers are relatively low, but the risk is present in bus crashes. Also, advanced glazing in driver side windows will protect the drivers against partial ejections. Bus manufacturers will be able to use similar anti-ejection design features for driver side windows as those anti-ejection features used for the remaining bus windows. Under the final standard, if a bus driver side window meets the minimum size requirements, it will have to meet the requirements of FMVSS No. 217a.

Blocked Windows

SBMTC commented that some side wheelchair lift doors are “effectively blocked by the stowed wheelchair lift” and that as a result, these windows do not pose a risk for ejection. ICB commented that NHTSA should exclude glazing in “[d]oors, such as wheelchair lift doors, that have equipment or other items that would prevent or restrict passenger ejection.” ICB also commented that doors with no adjacent seat should be exempted from the 217a requirements.

Additionally, BBBC argued that NHTSA did not intend to apply the dynamic test requirements to glazing in wheelchair lift doors, “which would have a wheelchair lift between the passenger and the window.” BBBC also stated that in many of the buses it manufactures, the rear seats obstruct much of the rear window. BBBC stated these obstructed windows should be exempt from the dynamic impact test requirements.

Agency Response

SBMTC, BBBC, and ICB stated that since wheelchair lift ramps block the window in the wheelchair access door, such windows should not have to meet the proposed anti-ejection requirements. The agency examined different wheelchair access doors and the wheelchair lift ramps in their stowed positions. Some lift ramps are stowed outside the bus in a storage compartment under the bus. Other configurations stow the ramp inside the bus in a folded position. These interior

⁴³ According to the 2006–2019 FARS data, 6 of these fatal driver ejections were through a side door opening, 1 was through a side window, 1 was through the windshield, and 1 was an unknown ejection path.

ramps may partially block the door window.

Windows that have no blockage will have to meet the anti-ejection requirements, since no part of the vehicle would block a passenger from contacting the window. Windows completely blocked by wheelchair lift ramps will not have to meet the anti-ejection requirements, since passengers would not be able to contact such windows. Windows that are partially blocked by wheelchair lift ramps would need to meet the anti-ejection requirements if the daylight opening of such windows is large enough such that the minimum dimensions measured through the center of the daylight opening area is not less than 279 mm. Note that the definition of daylight opening states that the periphery includes surfaces 100 mm inboard of the window and 25 mm outboard of the window, not including gaskets, weather stripping, grab handles, or seats. Also, since bus passengers can walk about the bus while it is in motion, the agency does not agree with ICB's suggestion to restrict the anti-ejection requirements to only those windows which have a seating position near that window glazing.

Emergency Exit Windows and Latches

ICB agreed with the agency that the window latch release mechanism should not be a hindrance in evacuations through the emergency window exit. Both BBBC and ICB argued that the protrusion limits are intended to only apply to emergency exit windows, and not to other types of emergency exits such as doors or hatches. Both respondents specifically asked for the word "window" to be inserted into the sentence planned for the end of FMVSS No. 217, S5.4.1 so that their interpretation of the protrusion requirement applicability is specifically written into the standard.

Agency Response

The NPRM was silent on protrusion concerns for emergency exit doors and roof hatches. The NPRM did discuss latch protrusion issues in the context of the emergency exit windows on the school bus involved in the Gray Summit crash. Additionally, no other respondents commented on the lack of concern for protrusions impeding passenger emergency egress through side door or roof exits. The confusion

over which emergency exits are subject to the protrusion limits may stem from the section of regulatory text into which the protrusion limits were placed.

FMVSS No. 217, S5.4.1 does not specifically list the emergency exits to which that section applies. Further, the title for FMVSS No. 217 S5.4 is "Emergency exit opening," not "Window emergency exit opening." Window emergency exits are a subset of roof, side, and rear emergency exits. Placing the emergency window exit protrusion limits into a section covering multiple types of exits may have created confusion for the respondents that asked for this clarification. The protrusion limit for emergency exit window latches is also to be applied to school bus emergency exit windows, through addition of the similar text into S5.4.2.2 of FMVSS No. 217. However, to avoid additional confusion by including an emergency exit window specific provision into a section devoted to small school bus emergency exit doors, the agency has decided to place the emergency exit latch protrusion requirement at the end of S5.4.

As mentioned above in the discussion on the protrusion limit applicability for all buses, the agency is relocating this requirement into a new subsection, FMVSS No. 217 S5.4.4, so that the requirement will be more easily understood as applicable to all buses included in FMVSS No. 217. This location also clarifies the application of the protrusion requirements is only for window emergency exits. The NPRM's proposed text additions to FMVSS No. 217 S5.4.1 and S5.4.2.2 are not being adopted and the new S5.4.4 contains the planned protrusion limit requirements. NHTSA is including the word "window" in the standard for clarification as ICB and BBBC suggested.

c. Occupant Injury Protection

In the event of a rollover crash involving a large bus or OTRB, there is concern for more than just injury or death resulting from ejection from the bus; there is also a risk that passengers may suffer injuries from impacting reinforced glazing during a crash. While the main objective of this final rule is to protect occupants by preventing ejection through windows and glazing panels, the agency has also considered the impact forces bus occupants would experience when contacting the advanced glazing during a crash.

Several commenters discussed this potential issue, and a summary of those comments along with the agency's responses can be found in the paragraphs below.

Rigidity of Advanced Glazing

Greyhound, Prevost, and Van Hool suggested that advanced glazing would be too rigid, causing an increase in the number and severity of passenger injuries. Greyhound commented "that NHTSA should consider technologies that reduce ejections while not increasing impact injuries." Van Hool stated that "[t]he passenger on the rollover-side wearing the seat belt in a bus according to this NPRM might be victimized because in a single rollover his head will hit a surface that is strong enough to retain the body of a free-falling passenger of the other, non-rollover side." Prevost stated, based upon information in a 2007 Los Angeles Times article, that "[laminated] glass could increase head and neck injuries to passengers who wear seat belts."

Agency Response

The agency shares the respondents' concerns for injuries caused by collisions with advanced glazing and window panels in OTRB and large bus crashes. However, the agency disagrees with the argument that advanced glazing may cause injuries which would not otherwise occur from a broken or unbroken tempered glazing panel.

The Los Angeles Times article that Prevost referenced provided no supporting information for the conclusion that laminated glazing is harder than tempered glazing material. The agency has force deflection data from the bus glazing panel research conducted for this final rule, which can be seen in Table 7 below. In tests where the guided impactor struck the center of bus windows made of a single glazing panel, the tempered glazing panels had higher peak force levels and lower deflections than glazing panels made from laminated glass, polycarbonate, and acrylic. This test data indicates that tempered glass is harder and more rigid than the other glazing types, including laminate glass. The higher force levels and lower deflections indicate that a bus occupant hitting tempered glazing at high speeds could receive higher contact injuries than if they were to hit a different type glazing material.

TABLE 7—DATA FROM BUS GLAZING GUIDED IMPACTOR TESTING ⁴⁴ SINGLE PANEL WINDOW GLAZING

Glazing configuration (bonding method)	Actual impact velocity (km/h)	Peak force (N)	Peak impactor face excursion (mm)	Interior glass pane broken
Laminated glass (Rubber)	21.5	4,780	116	Yes.
Laminated Glass (Rubber)	21.2	5,879	106	Yes.
Tempered Glass (Rubber)	21.3	8,030	49	No.
Acrylic (Rubber)	21.4	6,211	66	No.
Tempered Glass (Glued)	20.8	8,518	41	No.
Laminated Glass (Glued)	20.9	7,592	57	Yes.
Polycarbonate (Glued)	21.2	6,822	69	No.

In the case of belted occupants, a belted occupant seated against the bus side wall is at risk of partial ejection of their upper torso, hands, arms, neck, and head if the window breaks. It is safer for any passenger to be retained inside the bus by an advanced glazing surface than to be partially outside the

bus when it hits and/or slides along the pavement or ground. According to FARS data from 2006–2019, thirty-nine percent of all large bus and OTRB fatalities were ejected, as detailed in Table 8 below. Because the vast majority of occupants in large bus and OTRB crashes are not ejected, this data and

study prove that, in the event of a rollover crash, it is safer for an occupant to remain inside the vehicle than to be ejected, even though that may mean a potential collision with an unbroken advanced glazing panel.

TABLE 8—OCCUPANT FATALITIES BY EJECTION STATUS FARS 2006–2019

[Large buses (GVWR greater than 26,000 lb) and all OTRBs]

Bus type	Not ejected	Ejected	Total
Van-based	1	0	1
Large Van	0	0	0
Intercity Bus	117	96	213
Other Bus	46	13	59
Unknown Bus	8	3	11

Other Means of Injury Prevention

In Greyhound's comment, it urged the agency to consider alternative technologies to prevent passenger ejection and reduce injuries. Greyhound suggested that the advanced glazing will not prevent fatalities due to ejection. Greyhound suggested that there are "other technologies, including those in use in the automotive and trucking industries, which may have a higher likelihood of retaining passengers in the vehicle in rollover/tipover events."

Agency Response

NHTSA is always willing to consider specific proposals that may enhance passenger safety in the agency's final rules. However, in this instance, Greyhound did not provide a name or description of the "other technologies" that may be more effective than advanced glazing in mitigating the risk of passenger ejection in OTRB and large bus crashes. Additionally, Greyhound may have overlooked several general aspects of occupant movement during a crash. All occupants come to a stop at some point during a crash; the main question is how occupants stop. The answer to this question plays a

significant role in determining the extent of passenger injuries or even risk of death in rollover crashes. The proposed requirements of this rule provide partial ejection protection for belted occupants seated against bus windows as well as protection against partial or complete ejections of unbelted passengers that may fall or move into the ejection portal created by a broken window. As stated above, the agency welcomes comments about other technologies or vehicle safety countermeasures that others believe would be more beneficial than the requirements proposed in the NPRM. However, in this case, there simply is not enough detail in Greyhound's comment to compare "other technologies" to the proposals in the NPRM. The agency is confident that the new requirements adopted in this final rule will be highly effective in mitigating the risk of passenger ejection during rollover crashes involving large buses and OTRBs.

d. Test Procedures and Equipment

Multiple commenters discussed the dynamic impact test procedure and the equipment used to conduct the dynamic

impact test. The agency has decided to adopt a few of the recommendations made in the comments, which means the adopted test procedure will be slightly different from the test procedure proposed in the NPRM. Specifically, the agency is amending the proposed regulatory text for the window pre-breakage procedure as well as the edge impact test procedure for increased clarity.

Guided Impactor Specifications

Two of the commenters asked for more details to be provided for the guided impactor test equipment. BBBC requested that NHTSA change the word "mass" to the phrase "mass to bring total mass of impactor to 26 kg" in the proposed Figure 1 of the regulatory text, which illustrates the guided impactor. Additionally, BBBC and SBMTC requested more details on the foam used on the impactor face.

Agency Response

The impactor design being adopted as part of this final rule is the same impactor design proposed in the NPRM. The agency has decided not to change the language for the proposed impactor

⁴⁴ Duffy, S., & Prasad, A., National Highway Traffic Safety Administration, Motorcoach Side

Glazing Retention Research, pg 18, (Report No. DOT HS 811 862) (Nov. 2013).

test as BBBC requested, as the agency does not believe that these changes are necessary to provide the clarity BBBC requested. Instead, NHTSA has made a few changes to the impactor design figure, shown below as Figure 1, which

will be included in the regulatory text as well as a separate technical supporting document that can be found in the docket for this rulemaking (Technical Support Document). The changes to the figure are designed to

provide additional clarity, and the agency believes these changes will resolve any confusion BBBC had regarding the mass of the impactor design.

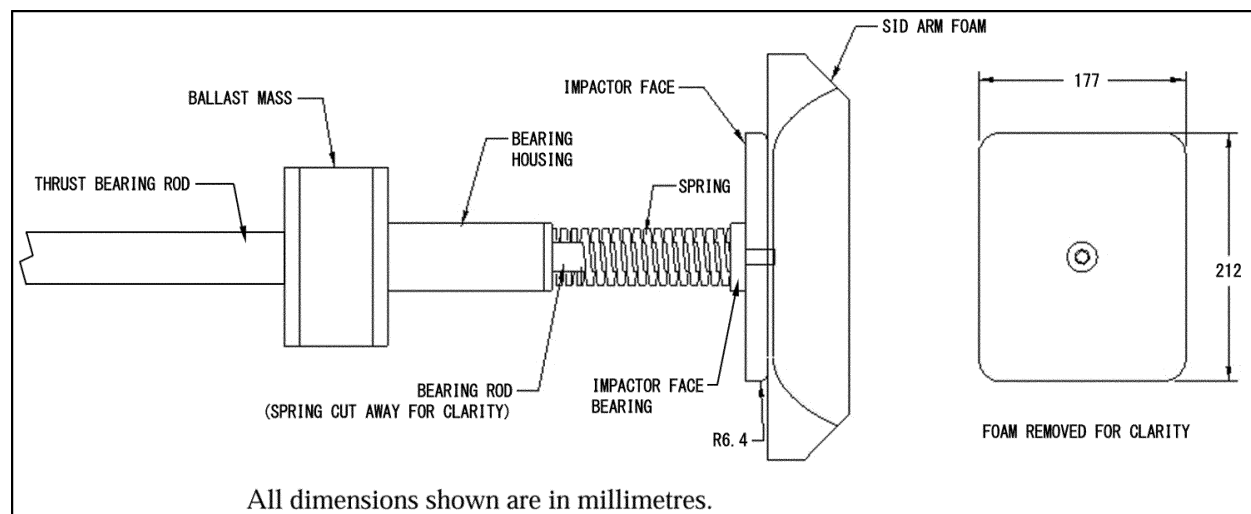


Figure 1: Components of the Guided Impactor

The changes between this figure and the figure proposed in the NPRM include (1) changing the term “mass” to “ballast mass,” (2) changing the term “foam” to “SID arm foam,” (3) adding the “thrust bearing rod” to the figure, and (4) labeling the “impactor face bearing.” This figure now illustrates and names all components of the impactor that contribute to the overall mass of 26 kg (57 lb). The Technical Support Document includes more details and figures that provide example masses for each component.

As proposed in the NPRM, the agency is adopting the requirement that the total mass of the impactor be 26 kg (57 lb), which represents the effective mass measurements from the Martec study. The impactor is designed to represent the torso of the SID. To clarify, when the regulatory text says that the impactor must be a total mass of 26 kg (57 lb), it is referring to the mass of the entire impactor assembly, not just one component of the impactor. In Figure 1 above—which will also be adopted as part of the regulatory text—the agency has decided to show the entire impactor assembly, and has labeled one component of the impactor as the “ballast mass.” The agency believes the clarification of the “total mass of the impactor” combined with labeling the ballast mass will alleviate any confusion BBBC had on the mass issue.

Regarding the foam used on the impactor face, in an effort to provide greater clarity, the agency is able to share the following additional details. The foam used on the impact side of the impactor plate is the 50th percentile male side impact dummy (SID) arm foam. SID arm foam is composed of a piece of urethane foam, conforming to the properties listed in the Technical Support Document. Additional details of the foam can be found in the Technical Support Document, and a copy of the engineering drawing, SID-069, is also in the docket of this final rule.

Window Pre-Breakage Test Procedure

In the NPRM, NHTSA proposed a breaking specification and method that involves applying a line load to the glazing, to simulate the damage the glazing could experience in a rollover prior to impact by an occupant. The line loads would be applied at set distances on both the interior and exterior glass plies of the laminated glazing. The window breaking procedure would damage but not destroy laminated glazing, while it would obliterate tempered glazing. Since tempered glazing would be obliterated, this proposal would have the effect of prohibiting manufacturers from having applicable bus windows made solely from tempered glazing.

The first step in the proposed test procedure is to mark the glazing surface on the occupant-side interior glass in a horizontal and vertical grid of points separated by 75 mm (3 inches), with the first point coincident with the geometric center of the daylight opening. Next, the grid on the opposite side of the glazing would be marked. For most glazing, the grid on the opposite side of the glazing would be staggered to avoid tearing the PVB interlayer. For laminates, “the opposite side of the glazing” means the opposing glass ply directly opposite of the PVB interlayer. “Staggered” means that the 75 mm (3 inch) offset pattern has a 75 mm × 75 mm (3 inch × 3 inch) pattern on the occupant-side interior glass and the same pattern, offset by 37.5 mm (1.5 inch) horizontally and vertically, on the outside exterior glass surface.

For windows that are a single-pane unit, NHTSA would use the grid pattern on the occupant-side interior surface and the staggered grid pattern on the outside exterior surface of the glazing.

For double-glazed windows, the agency proposed using a grid pattern on the occupant-side interior surface of the interior pane and on the outside of the exterior pane. For double-glazed windows that consist of one pane of tempered glass, that pane would be broken and removed, and the remaining glazing (that is not of tempered glass) would be pre-broken on both sides

(occupant interior and outside exterior) with the grid and staggered grid patterns, respectively. For double-glazed windows that do not consist of any tempered glass pane, it would not be practical to apply the 75 mm (3 inch) pre-break pattern to the insulated surface (inside the air gap) of the individual panes. For cases in which neither pane is tempered glass, both the occupant side of the interior pane and the outside of the exterior pane would be marked in the grid pattern, but the patterns would not be offset (one side would not use the staggered pattern) due to a lack of need. That is, for those windows there would be little likelihood of tearing the PVB interlayer even when the patterns are not offset.

The agency proposed breaking the defined grid points using an unloaded electric staple gun, since the device worked well for that purpose in our developmental testing. The staple gun would apply a 12.7 mm (0.5 inch) line load (with a thickness of 1.3 mm (0.05 inches)) (the size of a standard staple) onto the glazing with a force in the range of 3,500 newtons (N) (787 lb) to 5,000 N (1,124 lb) when the front nose opening of the staple gun is held parallel to the glazing surface. These staple gun specifications are intended to break the glass with a single punch without producing tears in the PVB interlayer. These line loads would be applied to the glazing starting with the inside surface of the glazing, and starting with the forwardmost, lowest hole in the pattern. NHTSA would continue applying the line loads 75 mm (3 inches) apart, moving rearward on the bus. When the end of a row is reached, the agency would move to the most forward hole in the next higher row, 75 mm (3 inches) from the punched row. After completing the applications on the inside surface, the agency would repeat the process on the outside surface.

When applying the line load, NHTSA would place a 100 mm (4 inch) by 100 mm (4 inch) piece of plywood on the opposite side of the glazing as a reaction surface against the punch. If a particular window were constructed such that the inner laminated material is penetrated or damaged, the procedure would not be halted or invalidated. The impactor test would be conducted at the conclusion of the glazing breakage procedure. If punching a hole causes the glazing to disintegrate, as would occur when testing tempered glazing, the procedure would be halted for that item of glazing and the impactor test would be conducted on what glazing, if any, remains. If there is no glazing remaining after the hole-punching procedure, there would be a failure to comply since the

window would not be able to restrain the impactor or prevent passage of the 102 mm (4 inch) diameter sphere.

BBBC requested that the specific electronic staple gun used during the agency's research testing be specified in the final rule. ICB commented that it does not understand why the FMVSS No. 226 spring-loaded center punch breakage method is not practical for this proposed regulation. SABIC, Exatec, and ICB each noted that it may not be possible to break or even force holes into all types of glazing, specifically glazing made from polycarbonate material. ICB also requested improved clarity through the addition of figures or diagrams for the glazing pre-breaking procedure.

Agency Response

While the agency understands BBBC's preference for a glazing material breakage procedure identical to that used during the agency's testing, NHTSA does not believe it is necessary to specify a model of electronic staple gun to be used in the regulatory text and will not be doing so as part of this final rule. Instead, the agency has decided to specify the length over which the line load is to be applied as well as the force applied by the staple gun to the glazing. Although the agency did not list any force level in the NPRM's proposed regulatory text, NHTSA believes it will be useful to include the average force level (4,200 N (994 lb)) and standard deviation (850 N (191 lb)) obtained from sampling the Duo Fast Model EWC electric staple gun force levels as the target force in this final rule. This force was adequate to break the laminate glazing's glass layer without tearing the inner PVB material. For these reasons, NHTSA declines to accept BBBC's suggestion to list a specific electric staple gun model in the final rule.

ICB questioned why NHTSA developed a new glass breakage procedure that differs from the existing glass breakage procedure in FMVSS No. 226. As stated in NHTSA's "Motorcoach Side Glazing Retention Research,"⁴⁵ "[i]t was quickly determined that the automatic center punch used in FMVSS No. 226 was not practical for large bus windows and was not tested in this study." Due to the effort required to actuate the center punch and the large size of motorcoach windows, NHTSA determined the center punch used in the FMVSS No. 226 glazing pre-breaking

procedure would not be a practical tool for the FMVSS No. 217a glazing pre-breaking procedure. Accordingly, NHTSA developed the breakage procedure proposed in the NPRM and is adopting that procedure as part of this final rule.

SABIC, Exatec, and ICB each shared concerns that the glazing breakage procedure could effectively preclude usage of their polycarbonate glazing material. These commenters stated it may be possible that certain glazing types would receive little to no marking when attempting to break that glazing using the required glazing breakage procedure. Their stated concern is that if no hole can be made, then their glazing cannot pass the test. A similar concern was addressed in the final rule for FMVSS No. 226.

Like FMVSS No. 226, the hole break pattern for FMVSS No. 217a will be marked onto the bus's window glazing, as shown in the regulatory text below, then the electric staple gun would be used once at each marked location. It is possible that certain glazing may have smaller, or no holes produced. Similar to the agency's response to the comment in response to the FMVSS No. 226 NPRM, NHTSA believes that even if certain glazing may have smaller, or no holes produced by the breakage procedure being adopted in this final rule, the window may still be weakened and should be tested in accordance with the rest of the procedures outlined for the impact test.

Even though the agency has decided to adopt the pre-breakage test procedure as proposed in the NPRM as part of this final rule, NHTSA has decided to include an additional figure to the regulatory text to aid in the clarification of the glazing pre-breakage procedure as ICB requested. The combined proposed revision to FMVSS No. 217a is shown in the appendix of this final rule.

Edge Impact Test Procedure

During agency review, NHTSA determined the edge impact test procedure could be improved with three distinct updates, which are described briefly here. The first update is to describe the impactor positioning for an additional glazing orientation. For the scenario where a window on the bus roof does not have a latch or other discrete attachment point, the agency has decided to define which edge with which to align the impactor. In order to be consistent with side windows that do not have a latch, the agency is using the rearmost edge of a roof window as the reference edge because if a latch were present, it would likely be located on the rearmost edge due to the

⁴⁵ Duffy, S., & Prasad, A., National Highway Traffic Safety Administration, Motorcoach Side Glazing Retention Research, pg 18, (Report No. DOT HS 811 862) (Nov. 2013).

requirement in FMVSS No. 217 S5.2.3.2(b). Second, the agency determined a tolerance to properly define the lateral distance between the impactor face plate edge and the window frame. NHTSA is defining a tolerance of ± 2 mm based on the positioning of a similar impactor as described in FMVSS No. 226, "Ejection mitigation." The third update is necessary to further clarify the alignment of the impactor face plate with respect to a latch. Due to varying latch designs, the center of the latch may not necessarily correspond to the center of the location where the latch attaches to the movable portion of the window. Because the location where the latch attaches to the movable portion of the window is where the latch is most likely to fail, the agency has decided to specify that location for the edge impact procedure by referencing the latch attachment point when aligning the impactor. The agency is adopting these three updates to the edge impact test procedure as part of this final rule.

e. Performance Requirements

Impact Testing Displacement Limits

In the NPRM, NHTSA proposed to specify performance requirements for windows comprised of unbroken and broken glazing when the glazing is subjected to impactor testing. In NHTSA's impactor test of glazing near a latching mechanism and in the impactor test of glazing at the center of the daylight opening, an "ejection reference plane" would be determined prior to the test. The plane would be based on the passage of a 102 mm (4 inch) diameter sphere through a potential ejection portal of the window. The agency would require that no part of the window (excluding glazing shards) may pass this "ejection reference plane" during the dynamic impact test. If any part of the window glazing or window frame passes the plane, there would be a failure to comply.

For unbroken glazing, the window would be subject to either of the following two impacts, as selected by NHTSA in a compliance test: (a) an impact near a latching mechanism, and (b) an impact at the center of the daylight opening. The displacement limit for these tests on the unbroken glazing was proposed to be 102 mm (4 inch) both during and after the test.

For pre-broken glazing, the window would be subject to an impact test at the center of the daylight opening. The displacement limit for this test was proposed to be 175 mm (6.89 inch)

during the test and 102 mm (4 inch) after the test.

Advocates expressed concerns that the pass/fail criteria for the rule had not been adequately supported. Advocates stated that the 6.9-inch excursion limit and the 4-inch dynamic displacement limits are inadequate requirements. Advocates was concerned that "[a]ny amount of excursion exposes the occupant in contact with the window to impacts with objects outside of the vehicle such as the roadway, and as such should be reduced the greatest extent possible." Advocates requested that the agency "establish requirements that push the industry to adopt the safest reasonable practices, as opposed to the bare minimum or current average performance."

Regarding permitted deflections, ICB provided comments and recommendations for changes to the requirements. ICB stated that there should not be a deflection requirement based on the ejection reference plane as part of the requirement.

Agency Response

The agency has decided not to adjust the proposed excursion limit of 175 mm for the pre-broken glazing impact test. Advocates stated that the agency used the International Code Council (ICC) guardrail spacing requirements as justification for 102 mm excursion limits in FMVSS No. 226. Advocates are incorrect in this belief, as the final rule notice establishing FMVSS No. 226 noted that other FMVSSs (FMVSS No. 206 and FMVSS No. 217) as well as the ICC have a 100 mm maximum limit on a portal/opening to minimize the risk of an occupant being ejected or of a child passing through the portal/opening. The final rule establishing FMVSS No. 226 reported that test data highlighted an increased likelihood of large portals forming when excursions were over 100 mm. The agency believes that the 102 mm excursion limit based upon the ejection reference plane remains an appropriate requirement.

Concerning the 175 mm displacement limit for the pre-broken glazing test, the agency asked for comments and additional data in the NPRM. NHTSA noted in the NPRM that this limit was based on two tests of a single production bus window design. It was also noted in the NPRM that results from laminate glazing testing conducted for the Martec study resulted in an average displacement of 175 mm for the impactor in the center of daylight opening impacts (using the 75 mm (3 inch) diagonally offset pattern).

No other respondents commented either for or against the excursion limits.

Advocates stated that "excursion exposes the occupant in contact with the window to impacts with objects outside of the vehicle such as the roadway, and as such should be reduced the greatest extent possible." As discussed earlier, the manner in which occupants come to a stop during a crash will contribute to the extent and severity of their injuries. Based on data from NHTSA's "Motorcoach Side Glazing Retention Research,"⁴⁶ where different configurations of pre-broken laminated glass window units were impacted at the Martec conditions, the thicker PVB layer resulted in lower excursion limits and higher impact force values for almost all of the pre-broken glazing configurations.

Advocates did not offer any additional data, studies, or suggestions for what a better, lower excursion limit should be for the pre-broken glazing test. Using the data at the agency's disposal, an excursion limit of 175 mm is reasonable and sufficient. NHTSA chose this excursion limit based on practicability, costs, and safety needs. Using a 100 percent thicker PVB layer yielded a 14 percent lower excursion limit in our testing. This method is effective for manufacturers to reduce the excursion limit if necessary to comply or for slight improvements. The NPRM requested comments on the practicability, costs, and potential benefits of using a lower excursion limit such as 146 mm, which is the average excursion found during the testing with the thicker PVB layer (using the same 75 mm diagonally offset breaking procedure). Advocates did not provide any comment on this aspect of the excursion limit, nor did any other commenter. Therefore, the agency will not adjust the proposed excursion limit of 175 mm for the pre-broken glazing impact test.

ICB also expressed doubt regarding the appropriateness of deflection limits as part of the bus glazing anti-ejection requirements. ICB suggested that the glazing and window frame should be allowed to flex. The agency understands that window glazing, and perhaps even the window frame, will flex when hit by the guided impactor face. However, unlimited flexing, or displacement, is undesirable because glazing deflection past the ejection reference plane would allow tears to develop in glazing that could lead to an ejection portal. Additionally, the displacement limit provides a means of ensuring the

⁴⁶ Duffy, S., & Prasad, A., National Highway Traffic Safety Administration, Motorcoach Side Glazing Retention Research, pg 18, (Report No. DOT HS 811 862) (Nov. 2013).

window does not open during the impact test, which would result in a portal for occupant ejection. Limiting the deflection to the ejection reference plane ensures that a minimum level of passenger retention will be maintained by the bus window glazing material. Therefore, the agency is not adopting ICB's recommendation to remove the deflection limit for the unbroken window test.

Emergency Exit Window Latch Protrusion

The NTSB investigation into the Grey Summit bus crash noted that passenger egress through the emergency exits was hindered when passengers snagged their clothing on the emergency exit latch hardware protruding into the egress route.⁴⁷ Several passengers in the lead school bus, and a witness who assisted in the evacuation, stated in post-crash interviews that emergency egress was hindered by the design of the emergency exit window. Particularly, the 4-inch by 3-inch emergency release latch plate for the emergency exit window was elevated about 1 inch from the window base and snagged the clothing of several passengers as they were exiting through the window opening.

The additional requirements as outlined in the NPRM proposed to limit how far emergency exit latches may protrude into the emergency exit opening. The NPRM for this rule proposed that emergency exit latch protrusions cannot extend more than 1 inch into the opening of the window when the window is opened to the minimum emergency egress opening specified under FMVSS No. 217. This opening is described in S5.4.1 as "large enough to admit unobstructed passage, keeping a major axis horizontal at all times, of an ellipsoid generated by rotating about its minor axis an ellipsoid having a major axis of 50 centimeters and a minor axis of 33 centimeters." The NPRM proposed making all buses governed under FMVSS No. 217 applicable under this requirement.

The NTSB agreed that emergency exit window latches need to be functional after a crash to ensure passengers can egress through all viable exits; consequently, the NTSB supported testing the latches after impact tests. Advocates also supported the agency's proposals to minimize emergency exit latch protrusions and to require these latches to remain operable following the impact testing.

Concerning the 1-inch protrusion limit proposed in the NPRM, both the NTSB and Advocates requested a lower limit for allowable protrusion. NTSB noted that the emergency latch in the Gray Summit crash protruded 1 inch into the emergency exit opening; therefore the proposed 1-inch maximum limit would not have prevented clothes from snagging in that crash scenario. NTSB noted that the manufacturer has since decreased the height of its buses' emergency release latch plate so that it does not protrude into the window opening more than 0.5 inches. Advocates stated in their comments that there exist "flush-mount [latch] designs that entail no protrusion at all." However, they added that these latches are implemented in non-motorcoach designs. NTSB stated that, if NHTSA allows any degree of latch protrusion, the latch should be designed to eliminate its potential to snag clothing or otherwise impede evacuation.

SBMTC suggested NHTSA should provide a formal definition of "opening" as used in the proposal that "emergency exit latches, or other related release mechanisms, shall not protrude more than 25 mm into the opening of the emergency exit when the window is in the open position." ICB commented that the "protrusion requirement applies to a latch or latch mechanism that is attached and remains with the bus body structure and not to a latch or latch mechanism that is attached to and moves with the exit window itself." ICB wrote that the protrusion limit applies to anywhere in the window opening, even if the opening is larger than required for the passage of the ellipsoid specified in S.5.4.1. ICB also asked if "a latch or latch mechanism, that is spring loaded and protrudes more than 25 mm into the window opening in order to release the window, but then returns to a position that protrudes less than 25 mm, would be compliant with this requirement."

Agency Response

The agency has decided that it cannot justify a reduction in the emergency exit window latch protrusion requirements based on the comments and data provided in response to the NPRM. It is unknown at this time what the financial burden on the industry would be to require emergency exit latches to be replaced with flush-mount designs or reduced protrusions. It is also unproven at this time whether flush-mount latch designs would withstand the impact forces from the FMVSS No. 217a impact tests without additional modifications. The commenters did not provide information on the current status of

latch designs used in different bus types, or what changes would be needed to comply with their suggested lower protrusion limits. Therefore, although we acknowledge that a one-inch protrusion may hinder egress in certain cases, NHTSA is denying the requests to reduce the emergency exit window latch protrusion limit.

ICB is correct that the protrusion limits apply only to the latch components that remain with the bus structure. The latch protrusion in the Grey Summit bus crash that snagged on occupants' clothing was mounted to the bottom of the window frame. Latches and related components that protrude into the window opening from the fixed bus structure are difficult for occupants to avoid when attempting to climb through the window opening during an emergency. This difficulty results in a high likelihood of the protrusion snagging onto occupants' clothing. If the latch components are located on the portion of the emergency exit window that opens, the occupant would likely be able to reduce the risk of snagging any protrusion by opening the window farther. Thus, the protrusion limits apply only to the latch components that remain with the bus structure when the emergency exit window is in the open position to allow passage of the ellipsoid specified in S5.4.1 of FMVSS No. 217.

ICB stated the protrusion limit applies to anywhere in the window opening even when the window is opened beyond what is required by S5.4.1 of FMVSS No. 217. This statement is incorrect. As proposed in the NPRM, the protrusion limit only applies to the window opening when the emergency exit is opened to the amount necessary to admit unobstructed passage of the ellipsoid specified in S5.4.1 of FMVSS No. 217.

ICB asked if "a latch or latch mechanism, that is spring loaded and protrudes more than 25 mm into the window opening in order to release the window, but then returns to a position that protrudes less than 25 mm," would be compliant with this requirement. An emergency exit opening system in which part of the latch mechanism protrudes into the opening space while the window latch lock is being released would be acceptable, as long as the latch components are all below the protrusion limit once the window is opened to the amount specified in S5.4.1. For example, a lever handle could protrude more than an inch into the opening while it is being moved from the closed position to the open position. However, once the lever is in the position to allow the window to be opened, all parts of

⁴⁷ NTSB/HAR-11/03, <https://www.nts.gov/investigations/AccidentReports/Reports/HAR1103.pdf>.

the lever and its attachment bracket must protrude less than one inch from the structure to which it is attached.

Force Required To Open Emergency Exits

NTSB stated that from its accident investigations it “found that some passengers have difficulty in opening motorcoach windows and evacuating from them because of the weight of the windows and the challenge of keeping them open.” NTSB cited results from its crash investigations that support this concern. NTSB also requested that NHTSA take action in this, or a future, rulemaking to address the ease of opening such windows and their ability to remain open independently. NTSB stated “[s]uch action is needed to improve evacuation from emergency exit windows for motorcoaches and school buses.”

Agency Response

While NHTSA shares the NTSB’s concern for the capability of school bus occupants to easily open emergency exits, this aspect of emergency egress is not within the scope of this rulemaking. Therefore, NHTSA will not be mandating requirements concerning the force required to open emergency exits on school buses as part of this final rule.

f. Organization of the Standard and Language Used in the Standard

Several commenters provided feedback on the organization of the proposed standard, as well as the language used in the proposed standard. In response to these comments, the agency has decided to make several amendments to the proposed organization and language of the standard, which will be adopted as part of this final rule. The amendments to the proposed organization and language are highlighted in several of the agency response sections below.

Merging FMVSS No. 217a Into FMVSS No. 217

ICB suggested “that there should not be a separate and distinct regulation for FMVSS 217a Anti-Ejection Glazing for Bus Portals.” ICB stated that it would be better to have all bus window and glazing requirements included in FMVSS No. 217. However, ICB did note that it is “helpful to keep the latch protrusion requirements separate from the anti-ejection requirements.”

Agency Response

The agency has chosen to keep the bus anti-ejection requirements and procedures in a separate standard. Having FMVSS No. 217a separate from

FMVSS No. 217 serves to highlight the differences in the two standards. Additionally, having the bus glazing anti-ejection requirements in a separate standard avoids confusion with existing FMVSS No. 217 requirements and procedures. This separation is useful for school bus applicability, since the planned FMVSS No. 217a has no applicability to school buses whereas FMVSS No. 217 does have specific requirements for school buses.

102 mm Sphere Application Force and Passage

Section 5.2(b) in the NPRM’s proposed regulatory text states that “[e]ach piece of window glazing and each surrounding window frame shall be retained by its surrounding structure in a manner that prevents the formation of any opening large enough to admit the passage of a 102 mm diameter sphere under a force, including the weight of the sphere, of up to 22 newtons.” This wording is different from the language used in S5.1(b) and S5.3(b). Those two sections use the phrase “. . . when a force of no more than 22 newtons is applied with the sphere at any vector . . .” The text in S5.1(b) and S5.3(b) correctly states a 22 N force is applied to the glazing by the sphere. To be consistent, the agency has decided that the same wording in S5.1(b) and S5.3(b) will be used in S5.2(b). Additionally, the agency has decided to amend S5.1(b), S5.2(b), and S5.3(b) so that “passage” is amended to “complete passage.” This change is based upon agency feedback recommending improved clarity in the regulatory text for compliance purposes. It was noted that without usage of the word “complete,” there would be no distinction between minimal, partial, and complete passage of the sphere through the glazing. The amended language is reflected in the final regulatory text for FMVSS No. 217a.

Testing Requirements Organization

ICB requested separate sections in the standard for each impact test (center impact, edge impact, and pre-broken glazing impact tests) with the requirements for each type of test in that section.

Agency Response

After reviewing the organization of the three types of tests (center impact, edge impact, and pre-broken glazing impact tests), the agency concluded that the requirements for each are already in separate sections. Within the proposed regulatory text for FMVSS No. 217a, S5.1 includes the requirements for the edge impact test, S5.2 includes

requirements for the center impact test, and S5.3 includes requirements for the pre-broken glazing impact test. Accordingly, NHTSA does not see any need to adjust the organization of these requirements as part of this final rule.

g. Compliance Date

When the NPRM for this rule was published, NHTSA proposed a compliance date of 3 years after publication of a final rule. Based on research from NHTSA’s Vehicle Research and Test Center, the agency believes that some manufacturers would need to redesign their emergency exit latch systems or adopt a design that would meet the proposed requirements. Also, manufacturers would have to transition from double-glazed tempered/tempered windows to a new setup that has at least one layer of laminated glass or advanced glazing that can meet the proposed requirements. The agency has determined that a 3-year lead time after publication of a final rule is appropriate as some design, testing, and development will be necessary to certify compliance to the new requirements.

The rollover structural integrity final rule has a compliance date of December 30, 2024, which is 3 years after the publication date of December 29, 2021. Similarly, the agency proposed a compliance date of 3 years after publication of the final rule for this advanced glazing rulemaking. Since the two rulemakings were initially being developed concurrently, and since the anti-ejection requirements are dependent upon the rollover structural integrity requirements, the agency proposed in the NPRM to make the compliance date of the two rulemakings the same. The agency also proposed that, to enable manufacturers to certify to the new requirements as early as possible, optional early compliance with the standard would be permitted. EPGAA commented that the glazing industry should have no issue supporting the three-year phase-in period since “the manufacturing technology and capacity already exist to produce advanced glazing solutions.” BBBC stated that making the compliance date the same for the two rulemakings (FMVSS No. 227 and FMVSS No. 217a) is preferred only if the date is a minimum of 3 years after the publication of both final rules. ICB also requested alignment of the implementation time for FMVSS No. 227 and FMVSS No. 217a. Van Hool stated that it would prefer to extend the crash requirements for the retention of glazing and the opening of emergency exits after the crash.

Agency Response

Since the rollover structural integrity final rule was published significantly earlier than this anti-ejection glazing final rule, the agency has decided not to align the compliance date of the two standards. The agency agrees with EPGAA that the MAP-21 mandated lead time of 3 years is sufficient for the necessary design, testing, and development to comply with this standard. To align the compliance dates of FMVSS No. 227 and a final rule for advanced glazing, the agency would either need to delay the compliance date of FMVSS No. 227 or accelerate the compliance date of advanced glazing final rule establishing FMVSS No. 217a. As stated in the NPRM, NHTSA believes a lead time of 3 years is an appropriate amount of time to account for the changes required to comply with this anti-ejection glazing standard. The agency will not decrease the lead time of this standard to align the compliance date with FMVSS No. 227. Additionally, the structural integrity improvements due to compliance with FMVSS No. 227 will benefit occupants during a rollover crash even if the anti-ejection glazing improvements have not yet been implemented. Therefore, the agency will not delay the compliance date of FMVSS No. 227 to align with a final rule establishing FMVSS No. 217a as BBBC and ICB have requested.

The agency is unclear about what Van Hool was requesting in its comment on the compliance date. If Van Hool was asking for additional lead time, it did not state how much additional time it was requesting before implementation of improved passenger anti-ejection benefits. Accordingly, NHTSA has decided not to grant Van Hool's request.

For the reasons discussed above, NHTSA is adopting the 3-year compliance date as proposed in the NPRM as part of this final rule.

h. Retrofitting

Greyhound and ICB agreed with the agency that it would make little sense to require retrofitting of bus windows without improving the structural integrity of the bus. Greyhound indicated that any requirements for enhanced window standards should apply only to buses manufactured after the implementation date of those standards. NTSB requested NHTSA consider requiring retrofit of existing buses for improved window latch design, stating that "NHTSA has identified simple countermeasure latch designs that reduce latch openings when the window is struck near the latch."

Agency Response

The agency has decided to not require retrofitting of buses with improved latch designs and window glazing materials as part of this final rule. As stated in the NPRM, the simple countermeasure for latch designs was to add a washer screwed onto the top of the existing MCI E/J-series striker post. The agency has no data to determine if this fix would work for other latch systems, or if other redesigns to those latch systems would be necessary. For example, it is not known if the other buses have enough strength at the latch anchorage locations of each window for the improved latch system. Every window system would require analysis and most likely testing to verify its capability to successfully manage the new loads. Each window structure would need to be inspected for pre-existing damage that would cause the improved latch system to fail when subjected to the new loads. Therefore, NHTSA disagrees with the NTSB's argument that a simple countermeasure exists for retrofitting all existing buses. It is not practical to retrofit improved latch systems onto existing buses because of the unique nature of each existing window structure and latching mechanism.

Additionally, NHTSA retains its plan to not require retrofitting of advanced glazing into existing buses. The agency agrees with Greyhound and ICB that it makes little sense to upgrade the window glazing without also improving the bus structure in accordance with FMVSS No. 227. Therefore, NHTSA will not require retrofitting for any requirements of this standard.

i. Definitions and Descriptions

Daylight Opening

BBBC commented that the proposed S4 definition of "daylight opening" through its use of the terms "horizontal" and "vertical" assumes the opening is essentially purely horizontal or vertical, respectively. While BBBC stated that openings are usually one or the other, BBBC recommended that NHTSA consider how to apply that definition to an opening that may be in a plane that is not purely vertical or horizontal, such as one 45 degrees to either plane.

Replying to the questions asked in the NPRM concerning Executive Order (E.O.) 12866 and E.O. 13563, ICB and SBMTC requested improved clarity through the addition of figures and diagrams for various terms, including daylight opening and periphery. ICB stated that the definition for daylight opening given in the NPRM is "confusing and overly complicated." It also asked for clarification concerning

the items to be included in the daylight opening measurement and further suggested that any window frame, weather stripping, or flexible gasket material should not be included in portal size measurements.

Agency Response

NHTSA is adopting the proposed definition of daylight opening; however the specifications for daylight opening for rear windows have been deleted.⁴⁸ Due to the number of comments received concerning the definition of daylight opening, NHTSA has elected to add figures and additional details in the Technical Support Document to aid in understanding the definition as part of this final rule. This Technical Support Document is included in the docket for this final rule. For the purposes of FMVSS No. 217a, "daylight opening" is the opening generated when the visible glazing, including flexible material, is removed from the window. It is the opening bounded by the bus structure's window frame. "Daylight opening" applies to all side and roof windows of the vehicle, including emergency exit windows. "Daylight opening" is used to help determine where the FMVSS No. 217a guided impactor will hit.

BBBC commented that the proposed definition for daylight opening does not account for window openings that are not purely vertical or horizontal. BBBC is correct that while most windows are oriented vertically or horizontally, there are applications where the window may be installed at an angle or consist of curved glazing. The agency believes the proposed definition of daylight opening properly accounts for these situations where the window is not purely horizontal or vertical. The proposed definition specifies the orientation of the "daylight opening" to be based on the bus's longitudinal axis and whether the window is on the bus's side wall or roof. If the window is installed at an angle or uses curved glazing, the daylight opening would still be measured based on the proposed definition depending on whether the window is located in the bus side wall or roof. Therefore, whether a window is purely vertical or horizontal, the daylight opening would be determined in the same manner. The Technical Support Document provides illustrations and examples for determining the daylight opening for curved glazing. The Technical Support Document also addresses the comments from ICB and SBMTC, which requested

⁴⁸ Since the impact tests no longer apply to rear windows in this final rule, there is no need for defining daylight opening for rear windows.

additional figures and clarification surrounding the definition of daylight opening and periphery.

Portal

ICB commented that a portal is related to the opening created in the bus structure when the window is opened. ICB stated that the term “portal” is confusing and that the term be replaced with “opening.”

Agency Response

NHTSA has decided not to replace the term “portal” with “opening” as part of this final rule. The definition of a portal according to the proposed FMVSS No. 217a text is “an opening that could, in the event of a crash involving the vehicle, permit the partial or complete ejection of an occupant from the vehicle, including a young child.” This definition comes directly from MAP–21. An opening is a more general term, and a portal is a specific type of opening. A portal can be any type of opening in a bus wall, floor, or roof that could allow even a partial ejection of an occupant in the event of a crash. Some examples of a portal include an open window or door, a broken window with some glazing removed, a hole in the bus wall, or an open roof hatch. While there are no minimum dimensions associated with portals, it must be large enough to admit at least partial passage of an

occupant, even if they are a smaller child. NHTSA will not replace the word “portal” with “opening,” because an opening does not have to be large enough to admit at least partial passage of an occupant.

Miscellaneous Comments on Clarification of Terms

In addition to the clarifications discussed above, ICB requested improved clarity through the addition of figures and diagrams for measuring minimum surface dimension of an opening and glazing pre-breaking procedures.

Agency Response

NHTSA believes these topics are discussed in sufficient detail in the NPRM and in this final rule. Additional details for the glazing breaking procedures, the latch protrusion into the emergency exit when the window is in the open position, and how to measure minimum surface dimension of an opening are items that will be included in the agency’s compliance test procedures for this rule.

j. Costs and Benefits

In the NPRM and Preliminary Regulatory Evaluation (PRE), NHTSA anticipated that tempered glazing would not meet the requirements of the dynamic impact tests, particularly the

pre-broken impact test, and the agency believed the double-glazed tempered/tempered windows would need to be replaced, at minimum, with a single-glazed laminated window. Thus, the cost and benefit estimates assumed the manufacturers would be upgrading from double-glazed tempered/tempered glazing to single-glazed laminated glazing.

The target population for total lives saved was based on fatalities from rollover crashes in applicable buses and was reduced by the expected lives saved due to Electronic Stability Control (ESC), seat belt usage, and rollover structural integrity. The NPRM noted that advanced glazing would also prevent fatalities in other crash types, but it did not include those crash types in the estimation due to lack of need to further justify the rule.⁴⁹

For the governing scenario of replacing double-glazed tempered/tempered glazing with single-glazed laminated glazing, NHTSA estimated the costs and benefits as summarized in Table 9 below. NHTSA determined replacing a double-glazed tempered/tempered glazing with a single-glazed laminated glazing would result in a weight decrease and cost increase.⁵⁰ For additional details and the calculations associated with these data, refer to the PRE included in the docket with the NPRM.

TABLE 9—ADVANCED GLAZING ANNUAL COSTS AND BENEFITS FROM PRE

Costs		Benefits	
Item	Value (\$M)	Item	Amount
Material	\$0.191	Lives Saved ^	0.33–1.54 lives per year.
		Fuel Savings ^	0.04 mpg.

Notes:

^ Range is dependent on seat belt usage, from 15 percent usage to 84 percent usage.

^ Fuel savings due to weight savings estimated at 336 lb per vehicle.

According to the PRE and NPRM, the main cost associated with the requirements in this rule would be the material costs for the new glazing types and window units. The agency also anticipated that modifications to the window latch systems would be needed to meet the dynamic impact test

requirements. Applying these material costs to the population of new, large buses and motorcoaches produced annually resulted in approximately \$191,000.⁵¹

Switching from a double-glazed tempered/tempered window unit to a single-glazed laminated window unit

would reduce the overall weight of the window unit. This weight reduction would result in improved fuel economy for each bus. The weight of the double-glazed tempered/tempered window units used in NHTSA’s testing were 100 lb and 110 lb (avg of 105 lb). The single-glazed laminated window unit weighed

⁴⁹ 81 FR 27925.

⁵⁰ The agency estimated that a fully framed and assembled double-glazed tempered/tempered window (approximately 25 square feet) costs \$340. Likewise, the agency estimated that a fully framed and assembled single-glazed laminated window (approximately 25 square feet) costs \$353.75. The incremental cost of choosing a single-glazed laminated window over a double-glazed tempered/tempered window is \$13.75 per window or \$165.00 per bus assuming 12 windows. The weight of the

double-glazed tempered/tempered window units used in NHTSA’s testing were 100 lb and 110 lb (avg of 105 lb). The single-glazed laminated window unit weighed 77 lb. This difference results in an average weight savings of 28 lb per window unit. Assuming an average of 12 windows per bus results in 336 lb of weight savings per bus.

⁵¹ The agency estimated that there are 2,200 new over-the-road and applicable large buses manufactured annually. NHTSA estimated that MCI manufactures about 47.7 percent of the market

population and already includes laminated glazing as part of its production window options. Assuming 12 windows per bus, the cost to equip laminated glass instead of tempered glass is \$13.75 per window, and the cost of latch improvements is \$0.05 per window, the total annual incremental cost for new buses covered under this proposal is \$191,169 (= 2,200 × 0.477 × \$0.60 + 2,200 × 0.523 × \$165.60) in 2013 dollars.

77 lb. This difference resulted in an average weight savings of 28 lb per window unit. Assuming an average of 12 window units per bus resulted in 336 lb of weight savings per bus. Based on

the calculations outlined in the PRE, this change resulted in an increase of 0.04 mpg per bus. Projecting that fuel economy benefit over the life of each affected bus produced annually resulted

in approximately \$2.90 million worth of fuel economy savings at a 3% discount rate.⁵² Table 10 below summarizes the costs and benefits of the rule as outlined in the PRE.

TABLE 10—SUMMARY OF ANNUALIZED COSTS AND BENEFITS DUE TO THE ANTI-EJECTION GLAZING NPRM

[Costs are in millions of 2013 dollars]

	15% belt use rate			84% belt use rate		
	Undiscounted	3%	7%	Undiscounted	3%	7%
Equivalent Lives Saved	1.60	1.37	1.03	0.34	0.29	0.22
Net Cost ^A	(\$5.57)	(\$4.30)	(\$3.20)	(\$3.98)	(\$3.05)	(\$2.25)
Cost per Equivalent Lives Saved	(\$3.48)	(\$3.14)	(\$3.11)	(\$11.71)	(\$10.52)	(\$10.23)
Benefits from Comprehensive Costs						
Avoided	\$15.44	\$13.22	\$9.95	\$3.30	\$2.82	\$2.12
Net Benefits	\$21.02	\$17.52	\$13.15	\$7.28	\$5.87	\$4.37

Notes: ^A Net costs are negative because the fuel savings are expected to outweigh the material costs.

Glazing Construction for Compliance

BBBC, Prevost, Van Hool, SBMTC, and ICB expressed concerns that usage of laminated glazing could result in increased weight and cost per bus, leading to increased fuel usage and possibly resulting in reduced seating capacity in buses close to their weight limit. Prevost questioned the agency's assumption that double-glazed tempered/tempered windows could be replaced with a single pane of laminated glazing. Van Hool and Prevost expressed concern for changes in thermal properties, which would directly influence costs associated with heating and cooling of the bus interiors. Prevost also obtained a price quotation for installing laminated glazing in its motorcoaches. According to Prevost, for equivalent sizes, shapes, and tinting, the estimated cost increase when compared to its current double-glazed tempered/tempered configuration was "on the order of five thousand dollars (\$5,000) per vehicle." ICB stated it uses single-paned tempered glazing for bus windows. According to ICB, replacing this material with single paned laminated glazing "could add up to 200 lb of additional weight." Van Hool also stated that "[d]ouble laminate or tempered/laminated glazing might do the trick at no expense for seating capacity, but with no gain either."

EPGAA agreed with the agency's conclusion that there is a weight reduction in direct replacement of laminated for tempered glazing in situations where the overall thickness remains the same since the density of the plastic interlayer is about half that of glass. EPGAA expressed doubt that

there will be a significant change in the desire of bus OEMs to employ double-glazed insulating assemblies for buses used in colder climate zones. EPGAA stated that the insulating units are employed to increase the interior glass temperature and thus reduce any propensity for condensation or fogging while increasing occupant thermal comfort. EPGAA stated that advanced glazing does not in itself create a significant impact in thermal performance compared to monolithic glass since it has a similar thermal conductivity.

EPGAA commented that advanced glazing would offer a benefit through reduced sound transmission when compared to monolithic tempered glass, creating a quieter cabin. EPGAA also commented that advanced glazing would result in a significant reduction in UV exposure of occupants and interior components. EPGAA stated that with the addition of optional low emissivity or solar control layers the advanced glazing may also be used to significantly reduce the solar load and hence air conditioning load. EPGAA also stated that certain added layers may function to reduce condensation or fogging thresholds and could in some cases help to eliminate the need for the double-glazed insulating assemblies. EPGAA concluded that while the fuel savings based on reduction in use of insulating glass assemblies may be overestimated, there are unstated monetary savings associated with air conditioning load reduction as well as reduced UV exposure of occupants.

Agency Response

Based on comments and feedback from the bus manufacturers and SBMTC, NHTSA understands most bus manufacturers will not be replacing double-glazed tempered/tempered windows with single-glazed laminated windows. Instead, it is more representative of the industry to assume the manufacturers will simply exchange at least one pane of tempered glazing with laminated glazing but keep the double-glazed window construction. In other words, the double-glazed tempered/tempered windows will likely be replaced with double-glazed laminated/tempered windows, where either the interior or exterior pane is laminated glazing. This replacement will maintain or improve the thermal and sound insulation properties that are experienced by occupants with the current glazing units. The cost-benefit analysis in this final rule uses this change as the governing scenario, instead of the scenario presented in the PRE.

This change in governing scenario results in the removal of the weight reduction benefit that was estimated in the PRE. EPGAA stated in its comments that there is some weight reduction when directly replacing tempered glazing with laminated glazing due to the lower density of the PVB interlayer compared to glass. However, the laminated glazing is often thicker than the tempered glazing it replaces, and the PVB interlayer only makes up approximately 6 percent of the glazing thickness.⁵³ Therefore, any weight difference is considered negligible for

⁵² A typical large bus travels 56,000 miles per year and has an average fuel economy of 6.1 mpg. With the 47.7 percent current compliance rate, an

estimated 1,151 buses would benefit from this fuel economy increase.

⁵³ Duffy, S., & Prasad, A., National Highway Traffic Safety Administration, Motorcoach Side

Glazing Retention Research, pp. 10–13 (Report No. DOT HS 811 862) (Nov. 2013). Washington, DC:.

the purposes of the cost and benefit calculations.

As Prevost commented, there are additional costs to consider if manufacturers would be replacing their current double-glazed window units with single-glazed laminated windows. Switching from a double-glazed tempered/tempered window construction to a double-glazed laminated/tempered window construction will be more expensive for bus manufacturers than switching to a single-glazed laminated window as previously calculated. The agency estimates that a fully framed and assembled double-glazed tempered/tempered window (approximately 25 square feet) costs \$377.73. Likewise, NHTSA estimated that a fully framed and assembled double-glazed laminated/tempered window (approximately 25 square feet) costs \$438.84. The incremental cost of choosing a double-glazed laminated/tempered window over a double-glazed tempered/tempered window is \$61.11 per window or \$733.32 per bus (assuming 12 windows per bus). As outlined in the costs and benefits section of this final rule, even with the higher costs associated with this governing scenario this final rule is still cost beneficial.

Previous Rulemakings

Van Hool expressed concern that the possible positive influences of ESC on bus rollovers were not properly accounted for. Van Hool asked how effective an ESC system would be during a bus rollover. Further, Van Hool proposed that the severity of an unbelted occupant's contact with the opposite side glazing during a rollover would be mitigated by the effects of ESC.

Prevost stated that it "believe[s] that the estimated usage of seat belts is higher than what is listed in the NPRM." Prevost also stated that "[s]eat belt usage is the single most important safety system to mitigate passenger ejection and we commend NHTSA on the attention they continue to give to this. We believe that pre-trip safety briefings will further increase the percentage of seat belt usage." Van Hool stated that any seat belt usage data is speculative at best and that the agency manipulated the seat belt estimates "in order to make the numbers work."

Van Hool commented that the effects of the requirements from FMVSS No. 227 have not been taken into account and that there has not been enough consideration of the performance changes to the vehicle structure that will be created by bus designs changing

to meet FMVSS No. 227. Van Hool stated that its bus windows do not break in a rollover test under Regulation No. 66 of the Economic Commission for Europe of the United Nations (ECE R.66). Van Hool stated the agency has not adequately proven that the FMVSS No. 217a impactor test represents rollover forces acting on the windows of future buses that fulfill the requirements of FMVSS No. 227 and/or ECE R.66.

Agency Response

Details concerning the effectiveness of ESC for buses was discussed in both the agency's 2012 NPRM proposing to require ESC on heavy vehicles and a 2011 agency research note.⁵⁴ The analysis estimated that ESC would be 40–56 percent effective against a rollover event. In other words, 44–60 percent of the rollover events would still occur, even with ESC installed in the heavy buses. Since ESC alone only partially mitigates the risk of rollover crashes, there remains a need to protect passengers from ejection conditions in applicable vehicles. NHTSA has accounted for the crash reducing effects of ESC when calculating the estimated lives saved from the advanced glazing requirements in this final rule.

The agency agrees with Prevost on the importance of seat belt usage in all motor vehicles. The agency examined seat belt usage rates of 15% and 84% in the NPRM. For the cost-benefit analysis in this final rule, the upper bound was increased to 90 percent. Nationally the seat belt usage rate in passenger vehicles has been approximately 90 percent very year from 2016 to 2021.⁵⁵ Therefore, the agency analysis based on the 90 percent usage rate in motorcoaches is reasonable as a conservative upper bound since usage rates in buses are not believed to be as high as passenger vehicles. NHTSA has accounted for a range of bus occupants using seat belts when calculating the estimated lives saved from the advanced glazing requirements in this final rule.

The bus structural integrity rollover test used in FMVSS No. 227 and ECE R.66 is an effective test to determine a bus's capability to maintain a survival space during a rollover event.⁵⁶

⁵⁴ 77 FR 3076 NPRM for new FMVSS No. 136 (May 23, 2012); Effectiveness of Stability Control Systems for Truck Tractors, DOT HS 811 437 (Jan. 2011).

⁵⁵ Seat Belt Use in 2021—Overall Results, Traffic Safety Facts Research Note, Report number DOT HS 813 241 (Dec. 2021), <https://crashstats.nhtsa.dot.gov/Api/Public/Publication/813241>, last accessed December 18, 2023.

⁵⁶ Matolcsy, M., "The Severity of Bus Rollover Accidents," 20th International Technical Conference for the Enhanced Safety of Vehicles,

However, in that test, ballast weight for each occupant is strapped to the seats for the FMVSS No. 227 evaluation. Windows are not intended to be evaluated under loading from moving objects in that test. While the increased structural rigidity is expected to reduce the number of fatal ejections, those requirements do not account for passengers being ejected through windows that have been broken by internal impacts. The rollover structural integrity FRE estimates a 74 percent effectiveness of ejection mitigation in preventing fatalities. It also states that the enhanced rollover structural integrity test procedure does not include a condition to simulate occupant loading, and therefore estimates a midpoint effectiveness of 37 percent for unrestrained ejected fatalities. As outlined above, this effectiveness is accounted for when calculating the expected number of lives saved from the requirements in this final rule.

Supporting Data

Van Hool stated that "the data driving this NPRM seems to be from 1980–2004" and that this data was collected well before seat belts were in use. Van Hool commented that if 2010–2015 data were used there would not be a strong case for requiring anti-ejection glazing. Van Hool commented that "recently released FMCSA crash data indicates the lowest fatality rates given the higher numbers of coaches on the road and the highest number in miles traveled."

Van Hool also expressed doubt for the particular occupant loading chosen in the Martec study, and the agency's usage of that loading to develop the proposed anti-ejection requirements for this rule. Van Hool expressed a preference to use the structural integrity rollover test used in FMVSS No. 227 as the bus motion to study for window glazing loading during crashes. Van Hool stated a "passenger could not be projected against the window, nor could he be ejected out of the bus through the opposite side."

Agency Response

The 1980–2004 data to which Van Hool refers was used for the Martec report, which was completed in 2006. The data presented in the report was the most recently available information at the time that study was conducted. Those crashes were investigated to identify the rollover events most likely to produce worst-case occupant to glazing impact loads. While the Martec report and its source data are over 10

Paper 989, Lyon, France (2007). Available at: www.nrd.nhtsa.dot.gov/pdf/esv/esv20/07-0152-O.pdf.

years old, data indicate that passengers continue to be ejected from motorcoaches during rollover and other crashes. NHTSA did not rely on the Martec report data as the “driving data” for this rule. The driving data used for the NPRM and PRE was from 2004–2013. NHTSA has updated that data to be from 2006 to 2019 for the final rule.

The Martec report stated that its objective was “to improve the level of safety protection of passengers in motorcoach crashes by reducing the likelihood of ejection during vehicle collision or rollover, as such ejections are associated with a high probability of fatality.” The report authors examined Transport Canada bus crash investigation reports and then chose to model the passenger motion in a bus during a crash where

. . . the bus rolled onto its side after yawing while trying to negotiate a sharp turn at elevated speed. The bus had a significant lateral velocity, the underside of the bus contacted the ground, furrowed into the sod, and the bus rolled over on its side. A rear hinged/latched emergency window (on the impacted side) was either dislodged during the crash or had been opened prior to the rollover, and there were fatalities due to ejections through the window opening.⁵⁷

The claim that a passenger could not move unobstructed to the opposite side of a bus during a vehicle rollover does not apply to all bus seating configurations. The Martec study appropriately used a severe bus crash event and conducted computer simulations to determine a possible window loading scenario caused by a passenger’s unrestrained movement

during such a crash event. With this bus glazing anti-ejection rule the agency is establishing requirements such that the retained windows will mitigate partial ejections of belted occupants seated next to the windows as well as retain the estimated 10 to 85 percent of unbelted occupants. The anti-ejection requirements will mitigate the occurrence of window portals being created by movement of unrestrained passengers. Accordingly, the agency will not be adopting Van Hool’s recommendation to use the motion from a belted passenger in a rollover test as the load basis for window glazing anti-ejection requirements as part of this final rule.

VI. Overview of Costs and Benefits

After accounting for the above comments from the NPRM, NHTSA analyzed the anticipated effects of a final rule and determined the net result is cost beneficial. The agency anticipates that tempered glazing will not meet the requirements of the dynamic impact tests, particularly the pre-broken impact test. Therefore, the governing scenario we use for the cost-benefit analysis assumes the manufacturers will replace at least one pane of their double-glazed tempered/tempered window units with laminated glass.

For fatality data analysis, NHTSA used FARS data from 2006–2019. The agency decided not to use 2020 data for data summaries and averages due to the effect of the COVID–19 pandemic on the industry. NHTSA believes the 2020 data

could disproportionately skew the costs and benefits analysis. For injury data analysis, NHTSA used the National Automotive Sampling System—General Estimates System (NASS–GES) data from 2006–2015 and Crash Report Sampling System (CRSS) data from 2016–2019. The NASS–GES system was retired in 2016 and replaced by the CRSS system. The same 14-year period 2006–2019 was used to match the time frame of fatality data.

The costs resulting from today’s final rule are the material costs attributed to upgrading the window glazing material and improving the latching mechanisms as necessary. As discussed in the FRE for today’s final rule, approximately 47.7 percent of motorcoach manufacturers currently use laminated glass in their window units. The remaining 52.3 percent of motorcoach and large bus manufacturers are assumed to use double-glazed tempered/tempered window units, or some other glazing construction that may not comply with the performance requirements in this final rule. These windows will need to be upgraded to at least a double-glazed laminated/tempered glazing window unit construction. Additionally, NHTSA estimates that modifications to the window latch systems for all motorcoach and large bus manufacturers will be needed in order to meet the dynamic impact test requirements. Table 11 summarizes the incremental costs associated with administering the upgrades necessary for compliance with today’s final rule.

TABLE 11—INCREMENTAL COSTS FROM REPLACING TEMPERED/TEMPERED GLAZING WITH LAMINATED/TEMPERED GLAZING AND UPGRADED WINDOW LATCHES

Glazing type	Cost per window	Cost for improved latch per window	Number of side glass positions	Cost per vehicle	Number of applicable vehicles	Total cost to upgrade all applicable vehicles	Total cost assuming 47.7% compliance rate
Double-glazed tempered/tempered	\$430.62	\$0.00	12	\$5,167.48	2,200	\$11,368,457	NA
Double-glazed laminated/tempered	500.28	0.06	12	6,003.40	2,200	13,209,144	NA
Incremental cost	69.66	0.06	12	835.92	2,200	1,840,687	963,477

The benefits of today’s final rule are calculated based on the number of expected equivalent lives saved⁵⁸ from ejections during crashes involving the applicable buses. NHTSA calculated the fatal target population using FARS data from 2006–2019 and injury data from NASS–GES (2006–2015) and CRSS

(2016–2019). The target population was estimated using both a 15 percent seat belt usage scenario and a 90 percent seat belt usage scenario based on the 2021 large bus rollover structural integrity final rule. The resulting target population (*i.e.*, unrestrained ejected⁵⁹ occupants) estimated for today’s final

rule after accounting for the benefits from the other initiatives applicable to the same group of buses (seat belts, ESC, and structural integrity) is 6.38 fatalities at the 15 percent seat belt use rate and 1.18 fatalities at the 90 percent seat belt use rate. Based on the various rollover tests on buses performed by the agency,

⁵⁷ Motor Coach Glazing Retention Test Development for Occupant Impact During a Rollover (Martec Study), Final Report published on August 2006, Docket No. NHTSA–2002–11876–15.

⁵⁸ For details concerning equivalent lives saved, reference the FRE docketed with this final rule.

⁵⁹ For the analysis, both complete and partial ejections are included as “ejected occupants” since

the anti-ejection glazing is expected to reduce the risk of both ejection types.

NHTSA believes that the required advanced glazing would maintain its retention capability in single and double

¼-turn bus rollover crashes. Accordingly, the agency expects that the requirements would result in 0.37 to

1.91 equivalent lives saved annually. Table 12 below summarizes the costs and benefits of today’s final rule.

TABLE 12—SUMMARY OF ANNUALIZED COSTS AND BENEFITS DUE TO ADVANCED GLAZING
[Costs are in millions of 2022 dollars]

Discount rate	15% belt use rate			90% belt use rate		
	Undiscounted	3%	7%	Undiscounted	3%	7%
Equivalent Lives Saved ^{A B}	1.9191	1.5064	1.1491	0.3740	0.2936	0.2240
Material Costs	\$0.96	\$0.96	\$0.96	\$0.96	\$0.96	\$0.96
Cost per Equivalent Lives Saved	0.50	0.64	0.84	2.58	3.28	4.30
Benefits from Comprehensive Costs Avoided	24.72	19.40	14.80	4.82	3.78	2.88
Net Benefits	23.75	18.44	13.84	3.85	2.82	1.92

Notes:
^A These values from the FRE account for serious injuries (MAIS 3–5) by utilizing a relative injury factor.
^B MAIS = Maximum AIS, AIS = Abbreviated Injury Scale, MAIS 0 = No Injury, MAIS 1 = Minor, MAIS 2 = Moderate, MAIS 3 = Serious, MAIS 4 = Severe, MAIS 5 = Critical, MAIS 6 = Maximum (untreatable).

VII. Regulatory Notices and Analyses

E.O. 12866, E.O. 14904, E.O. 13563, and DOT Regulatory Policies and Procedures

NHTSA has considered the potential impact of this final rule under E.O. 12866, E.O. 14094, E.O. 13563, DOT Order 2100.6A and the DOT’s regulatory policies and procedures. This final rule is not considered to be significant under the DOT’s regulatory policies and procedures.⁶⁰

This final rule creates a new FMVSS (FMVSS No. 217a) and makes several changes to FMVSS No. 217. Specifically, the final rule creates a new standard that will establish requirements for advanced glazing in over-the-road buses and buses weighing over 26,000 lb. The final rule also creates a requirement establishing a minimum protrusion limitation requirement for emergency exit latches. The agency estimates that compliance with the final rule would result in an annual cost of \$0.96 million to manufacturers. More information on costs can be found in section VI above.

Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (*i.e.*, small businesses, small organizations, and small governmental jurisdictions). The Small Business Administration’s regulations at 13 CFR part 121 define a small business, in part, as a business

entity “which operates primarily within the United States.” (13 CFR 121.105(a)). No regulatory flexibility analysis is required if the head of an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the Regulatory Flexibility Act to require federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities.

NHTSA has considered the effects of this rulemaking action under the Regulatory Flexibility Act. According to 13 CFR 121.201, the Small Business Administration’s size standards regulations used to define small business concerns, manufacturers of the vehicles covered by this final rule would fall under North American Industry Classification System (NAICS) No. 336111, Automobile Manufacturing, which has a size standard of 1,000 employees or fewer. NHTSA estimates that there are 26 manufacturers of these types of vehicles in the United States (including manufacturers of motorcoaches, cutaway buses, second-stage motorcoaches, and other types of large buses covered by this final rule). Using the size standard of 1,000 employees or fewer, we estimate that approximately 10 of these 26 manufacturers would be considered small businesses.

The agency does not believe that this final rule will have a significant economic impact on those small entities. First, the agency estimates that the incremental costs to each vehicle that currently does not comply with the requirements would be approximately \$836 per unit to meet the final rule. This incremental cost will not constitute a significant impact given that the average

cost of the vehicles covered by this final rule ranges from \$200,000 to \$400,000. Further, these incremental costs, which are very small compared to the overall cost of the vehicle, can ultimately be passed on to the purchaser and user.

In addition, the agency believes that certifying compliance with the rule will not have a significant impact on the manufacturers. Small manufacturers have various options available that they may use in certifying compliance with the standard. Manufacturers are not required to use NHTSA’s test as the basis for their certification. While the agency’s test defined in the regulatory text will be an objective test capable of determining which vehicles meet the minimum requirements, manufacturers can use other methods in certifying the compliance of their own vehicles.

For instance, a manufacturer could obtain advanced glazing windows from a glazing supplier and test the glazing on body sections of the vehicle. NHTSA used this approach in its motorcoach side glazing retention research program. The manufacturer could “section” the vehicle or otherwise obtain a body section representative of the vehicle, or test the glazing on test frames. It could base its certification on these tests, without testing a full vehicle.

Unlike NHTSA, manufacturers certifying compliance of its own vehicles have more detailed information regarding their own vehicles and can use reasonable engineering analyses to determine whether its vehicles will comply with the requirements. We believe that a small manufacturer would be closely familiar with its own vehicle design and would be able to use modeling and relevant analyses on a vehicle-by-vehicle basis to reasonably predict whether its design will meet the requirements of this final rule.

⁶⁰ 44 FR 11034 (Feb. 26, 1979).

We also note that the product cycle of the covered buses is significantly longer than those of other vehicle types. With a longer product cycle, we believe that the costs of certification for manufacturers would be further reduced as the costs of conducting compliance testing and the relevant analyses could be spread over a significantly longer period of time.

Finally, we note that the requirements in this final rule may affect the operators of the buses that are the subject of today's final rule—some of which may be small businesses—but only indirectly as purchasers of these vehicles. As mentioned above, we anticipate that the impact on these businesses will not be significant because the expected price increase of the vehicles (those that do not comply with the requirements) used by these businesses is small (\$836 for each vehicle valued between \$200,000 and \$400,000).

For the aforementioned reasons, I hereby certify that this final rule will not have a significant economic impact on a substantial number of small entities.

Federalism

NHTSA has examined this final rule pursuant to E.O. 13132 (64 FR 43255; Aug. 10, 1999) and concluded that no additional consultation with states, local governments, or their representatives is mandated beyond the rulemaking process. The agency has concluded that the final rule does not have sufficient federalism implications to warrant consultation with state and local officials or the preparation of a federalism summary impact statement. The final rule does not have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”

NHTSA rules can have preemptive effect in two ways. First, the National Traffic and Motor Vehicle Safety Act contains an express preemption provision: When a motor vehicle safety standard is in effect under this chapter, a state or a political subdivision of a state may prescribe or continue in effect a standard applicable to the same aspect of performance of a motor vehicle or motor vehicle equipment only if the standard is identical to the standard prescribed under this chapter. 49 U.S.C. 30103(b)(1). It is this statutory command by Congress that preempts any non-identical state legislative and administrative law address the same aspect of performance.

The express preemption provision described above is subject to a savings clause under which “[c]ompliance with a motor vehicle safety standard prescribed under this chapter does not exempt a person from liability at common law.” 49 U.S.C. 30103(e). Pursuant to this provision, state common law tort causes of action against motor vehicle manufacturers that might otherwise be preempted by the express preemption provision are generally preserved.

NHTSA rules can also preempt state law if complying with the FMVSS would render the motor vehicle manufacturers liable under state tort law. Because most NHTSA standards established by an FMVSS are minimum standards, a state common law tort cause of action that seeks to impose a higher standard on motor vehicle manufacturers will generally not be preempted. However, if and when such a conflict does exist—for example, when the standard at issue is both a minimum and a maximum standard—the state common law tort cause of action is impliedly preempted. See *Geier v. American Honda Motor Co.*, 529 U.S. 861 (2000).

Pursuant to E.O. 13132, NHTSA has considered whether this final rule could or should preempt state common law causes of action. The agency's ability to announce its conclusion regarding the preemptive effect of one of its rules reduces the likelihood that preemption will be an issue in any subsequent tort litigation. To this end, the agency has examined the nature (*e.g.*, the language and structure of the regulatory text) and objectives of this final rule and finds that this final rule, like many NHTSA rules, prescribes only a minimum safety standard.

Accordingly, NHTSA does not intend that this final rule preempt state tort law that would effectively impose a higher standard on motor vehicle manufacturers than that established by this final rule. Establishment of a higher standard by means of state tort law would not conflict with the minimum standard finalized in this document. Without any conflict, there could not be any implied preemption of a state common law tort cause of action.

National Environmental Policy Act

NHTSA has analyzed this final rule for the purposes of the National Environmental Policy Act. The agency has determined that implementation of this action will not have any significant impact on the quality of the human environment.

Paperwork Reduction Act

Under the procedures established by the Paperwork Reduction Act of 1995, a person is not required to respond to a collection of information by a federal agency unless the collection displays a valid Office of Management and Budget (OMB) control number. This rulemaking will not establish any new information collection requirements.

Unfunded Mandates Reform Act (UMRA)

The Unfunded Mandates Reform Act of 1995 (UMRA) requires federal agencies to prepare a written assessment of the costs, benefits and other effects of proposed or final rules that include a federal mandate likely to result in the expenditure by state, local or tribal governments, in the aggregate, or by the private sector, of more than \$100 million annually (adjusted annually for inflation, with base year of 1995). UMRA also requires an agency issuing an NPRM or final rule subject to the Act to select the “least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule.” This final rule would not result in a federal mandate that will likely result in the expenditure by state, local or tribal governments, in the aggregate, or by the private sector, of more than \$100 million annually (adjusted annually for inflation, with base year of 1995).

E.O. 12778 (Civil Justice Reform)

When promulgating a regulation, agencies are required under E.O. 12988 to make every reasonable effort to ensure that the regulation, as appropriate: (1) specifies in clear language the preemptive effect; (2) specifies in clear language the effect on existing federal law or regulation, including all provisions repealed, circumscribed, displaced, impaired, or modified; (3) provides a clear legal standard for affected conduct rather than a general standard, while promoting simplification and burden reduction; (4) specifies in clear language the retroactive effect; (5) specifies whether administrative proceedings are to be required before parties may file suit in court; (6) explicitly or implicitly defines key terms; and (7) addresses other important issues affecting clarity and general draftsmanship of regulations.

Pursuant to this Order, NHTSA notes as follows. The preemptive effect of this final rule is discussed above. NHTSA notes further that there is no requirement that an individual submit a petition for reconsideration or pursue

other administrative proceedings before they may file suit in court.

National Technology Transfer and Advancement Act

Under the National Technology Transfer and Advancement Act of 1995 (NTTAA) (Pub. L. 104–113), all federal agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies, such as the International Organization for Standardization and the Society of Automotive Engineers. The NTTAA directs us to provide Congress, through OMB, explanations when we decide not to use available and applicable voluntary consensus standards. There are no voluntary consensus standards developed by voluntary consensus standards bodies pertaining to this final rule.

Plain Language Requirement

E.O. 12866 requires each agency to write all rules in plain language. Application of the principles of plain language includes consideration of the following questions:

- Have we organized the material to suit the public's needs?
- Are the requirements in the rule clearly stated?
- Does the rule contain technical language or jargon that isn't clear?
- Would a different format (grouping and order of sections, use of headings, paragraphing) make the rule easier to understand?
- Would more (but shorter) sections be better?
- Could we improve clarity by adding tables, lists, or diagrams?
- What else could we do to make the rule easier to understand?

NHTSA has considered these questions and attempted to use plain language in promulgating this final rule. If readers have suggestions on how we can improve our use of plain language, please write us.

Regulatory Identifier Number (RIN)

The DOT assigns a RIN to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN

contained in the heading at the beginning of this notice may be used to find this action in the Unified Agenda.

Privacy Act

In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its decision-making process. DOT posts these comments, without edit, including any personal information the commenter provides, to www.regulations.gov, as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at www.transportation.gov/privacy. Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78).

List of Subjects in 49 CFR Part 571

Imports, motor vehicles, motor vehicle safety.

Amended Regulatory Text

In consideration of the foregoing, NHTSA amends 49 CFR part 571 as follows:

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

- 1. The authority citation for part 571 continues to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30117, and 30166; delegation of authority at 49 CFR 1.95.

- 2. Section 571.217 is amended by
- a. In paragraph S.4 removing the definition of “Daylight opening”; and
 - b. Adding paragraph S5.4.4 to read as follows:

§ 571.217 Standard No. 217; Bus emergency exits and window retention and release.

* * * * *

S5.4.4 Protrusion Limit on Emergency Exit Window Latches and other related mechanisms

For buses applicable under S3 of this standard, manufactured on or after October 30, 2027, any emergency exit window latch and other related release mechanisms shall not protrude more than 25 mm (1 inch) into the opening of the emergency exit window when that window is in the open position as described under S5.4.1 and S5.4.2.

* * * * *

- 3. Section 571.217a is added to read as follows:

§ 571.217a Standard No. 217a; Anti-ejection glazing for bus portals; Mandatory applicability beginning October 30, 2027.

S1. Scope. This standard establishes requirements to improve side and roof bus portals by way of glazing that is highly resistant to partial or complete occupant ejection in all types of crashes.

S2. Purpose. The purpose of this standard is to reduce death and injuries resulting from complete and partial ejections of bus occupants through side and roof portals during rollovers and other crashes.

S3. Application.

(a) Subject to S3(b) of this section, this standard applies to:

(1) Over-the-road buses manufactured on or after October 30, 2027, and

(2) Buses, other than over-the-road buses, that have a gross vehicle weight rating (GVWR) greater than 11,793 kilograms (kg) manufactured on or after October 30, 2027.

(b) This standard does not apply to school buses, transit buses, prison buses, and perimeter-seating buses.

S4. Definitions.

Daylight opening means, for openings on the side of the vehicle (other than a door opening), the locus of all points where a horizontal line, perpendicular to the vehicle longitudinal centerline, is tangent to the periphery of the opening. For openings on the roof of the vehicle, daylight opening means the locus of all points where a vertical line is tangent to the periphery of the opening. The periphery includes surfaces 100 millimeters (mm) inboard of the inside surface of the window glazing and 25 mm outboard of the outside surface of the window glazing. The periphery excludes the following: Any flexible gasket material or weather stripping used to create a waterproof seal between the glazing and the vehicle interior; grab handles used to facilitate occupant egress and ingress; and any part of a seat.

Over-the-road bus means a bus characterized by an elevated passenger deck located over a baggage compartment.

Perimeter-seating bus means a bus with 7 or fewer designated seating positions rearward of the driver's seating position that are forward-facing or can convert to forward-facing without the use of tools.

Portal means an opening that could, in the event of a crash involving the vehicle, permit the partial or complete ejection of an occupant from the vehicle, including a young child.

Prison bus means a bus manufactured for the purpose of transporting persons subject to involuntary restraint or

confinement and has design features consistent with that purpose.

Stop-request system means a vehicle-integrated system for passenger use to signal to a vehicle operator that they are requesting a stop.

Transit bus means a bus that is equipped with a stop-request system sold for public transportation provided by, or on behalf of, a Federal, State, or local government and that is not an over-the-road bus.

S5. Requirements. When tested according to the procedures specified in S6 of this section and under the conditions specified in paragraph S7 of this section, each applicable bus shall meet the following requirements specified in this section. The requirements of this paragraph S5 n do not apply to portals other than side and roof portals, and do not apply to a side or roof portal whose minimum surface dimension measured through the center of its area is less than 279 mm.

S5.1 Edge impact.

(a) When the ejection impactor described in S8 of this section contacts the target location specified in S6.1.1 of this section of each side or roof daylight opening of a vehicle at $21.6 \text{ km/h} \pm 0.4 \text{ km/h}$, no portion of the window (excluding glazing shards) may pass the ejection reference plane defined under the procedures of S6 of this section.

(b) Each piece of window glazing and each surrounding window frame shall be retained by its surrounding structure in a manner that prevents the formation of any opening large enough to admit the complete passage of a 102 mm diameter sphere when a force of no more than 22 newtons (N) is applied with the sphere at any vector in a direction from the interior to the exterior of the vehicle.

S5.2 Center impact.

(a) When the ejection impactor described in paragraph S8 of this section contacts the target location specified in paragraph S6.1.2 of this section of each side or roof daylight opening of a vehicle at $21.6 \text{ km/h} \pm 0.4 \text{ km/h}$, no portion of the window (excluding glazing shards) may pass the ejection reference plane defined under the procedures of paragraph S6.3 of this section.

(b) Each piece of window glazing and each surrounding window frame shall be retained by its surrounding structure in a manner that prevents the formation of any opening large enough to admit the complete passage of a 102 mm diameter sphere when a force of no more than 22 N is applied with the sphere at any vector in a direction from the interior to the exterior of the vehicle.

S5.3 Center impact to pre-broken glazing.

(a) When the ejection impactor described in S8 of this section contacts the target location specified in S6.1.3 of this section of each side or roof daylight opening of a vehicle at $21.6 \text{ km/h} \pm 0.4 \text{ km/h}$, no portion of the impactor may displace more than 175 mm past where the surface of the glazing had been in an unbroken condition.

(b) Each piece of window glazing and each surrounding window frame shall be retained by its surrounding structure in a manner that prevents the formation of any opening large enough to admit the complete passage of a 102 mm diameter sphere when a force of no more than 22 N is applied with the sphere at any vector in a direction from the interior to the exterior of the vehicle.

S5.4 Post-Impact Emergency Exit Release and Operability.

After the impacts described in paragraphs S5.1, S5.2, and S5.3 of this section, each emergency exit provided in accordance with Standard No. 217 (§ 571.217) shall be capable of releasing and opening according to the requirements specified in that standard.

S6. Test procedures.

S6.1 Target locations.

S6.1.1 Edge impact. Position the impactor face on the glazing adjacent to a latch or discrete attachment point such that, when viewed perpendicular to the glazing surface, the center of the impactor face plate is as close as practicable to the center of the latch attachment point or discrete attachment point with the impactor face plate either horizontal or vertical, whichever orientation provides the shortest distance between the two centers, while maintaining at least a $25 \text{ mm} \pm 2 \text{ mm}$ distance between the impactor face plate edge and the window frame. "Window frame" includes latches, handles, attachments, and any solid structures other than the glazing material or flexible gaskets. If the window does not have any latches or discrete attachment points (e.g., it is fully rubber bonded or glued), position the impactor as follows:

(a) For side windows, directly above the center of the lower window edge, with the impactor face plate either horizontal or vertical, whichever orientation provides the shortest distance between the two centers, with the bottom edge of the impactor face plate $25 \text{ mm} \pm 2 \text{ mm}$ above the daylight opening periphery when viewed perpendicular to the glazing surface.

(b) For roof glazing panels or roof windows, directly forward of the center of the rearmost window edge, with the impactor face plate either horizontal or

vertical, whichever orientation provides the shortest distance between the two centers, with the rearmost edge of the impactor face plate $25 \text{ mm} \pm 2 \text{ mm}$ forward of the daylight opening periphery when viewed perpendicular to the glazing surface.

S6.1.2 Center impact.

Position the center of the impactor face, with the long axis of the impactor face plate either vertical or horizontal, at the center of the daylight opening area of the window with the glazing intact.

S6.1.3 Center impact to pre-broken glazing.

Position the center of the impactor face, with the long axis of the impactor face plate either vertical or horizontal, at the center of the daylight opening area of the window with the glazing pre-broken following the procedure in paragraphs S6.2.1 and S6.2.2 of this section.

S6.2 Window glazing pre-breaking procedure.

S6.2.1 Breakage pattern. Locate the geometric center of the daylight opening. Mark the surface of the window glazing in a horizontal and vertical grid of points separated by $75 \text{ mm} \pm 2 \text{ mm}$ with one point coincident within $\pm 2 \text{ mm}$ of the geometric center of the daylight opening (Figure 2).

(a) If the window is a single-pane unit, then both the occupant space interior and outside exterior surfaces of the glass pane are marked with the 75 mm grid pre-break pattern. The patterns are offset diagonally from one another (the points on one surface of the glass pane are offset $37.5 \text{ mm} \pm 2 \text{ mm}$ horizontally and $37.5 \text{ mm} \pm 2 \text{ mm}$ vertically from the points on the contralateral surface of the glass pane).

(b) If the window is an insulated unit or double-glazed window, then both the occupant space side of the interior pane and the outside of the exterior pane are marked with the 75 mm grid prebreak pattern.

(1) If one of the glass panes is constructed of tempered or toughened glass, the insulated surface of the remaining glass pane (within the air gap) is marked with the 75 mm grid pre-break pattern. The patterns are offset diagonally from the remaining glass pane's contralateral surface.

(2) If neither pane is tempered glass, then both the occupant space side of the interior pane and the outside of the exterior pane are marked with the 75 mm grid pre-break pattern. The patterns are not diagonally offset from one another. The insulated surfaces of the glass panes (within the air gap) are not marked.

S6.2.2 Breakage method.

(a) Use a $100\text{ mm} \pm 10\text{ mm} \times 100\text{ mm} \pm 10\text{ mm}$ piece of rigid material as a reaction surface on the opposite side of the glazing to prevent to the extent possible the window surface from deforming by more than 10 mm when pressure is being applied by the staple gun.

(b) Start with the inside surface of the window and forwardmost, lowest mark made as specified in S6.2.1 of this section. Use an electric staple gun without any staples to apply a load along a line of 12 to 14 mm onto the glazing. The applied force shall be $4,200\text{ N} \pm 850\text{ N}$. Apply the line load only once at each marked location, even if the glazing does not break or no perceptible mark or hole results.

(c) Continue applying the line load with the electric staple gun by moving rearward in the grid until the end of a row is reached. Then move to the

forwardmost mark on the next higher row and apply the line load. Continue in this pattern until the line load has been applied to all grid points on the inside surface of the glazing.

(d) Repeat the process on the outside surface of the window.

(e) If applying the line load causes the glazing to disintegrate, halt the breakage procedure and proceed with the next step in the compliance test.

S6.3 Determination of ejection reference planes.

(a) For side windows, the “ejection reference plane” is a vertical plane parallel to the longitudinal vertical center plane of the bus passing through a point located at a lateral distance of 102 mm from the lateral most point on the glazing and surrounding frame, with the window in the closed position.

(b) For roof glazing panels/windows, the “ejection reference plane” is a

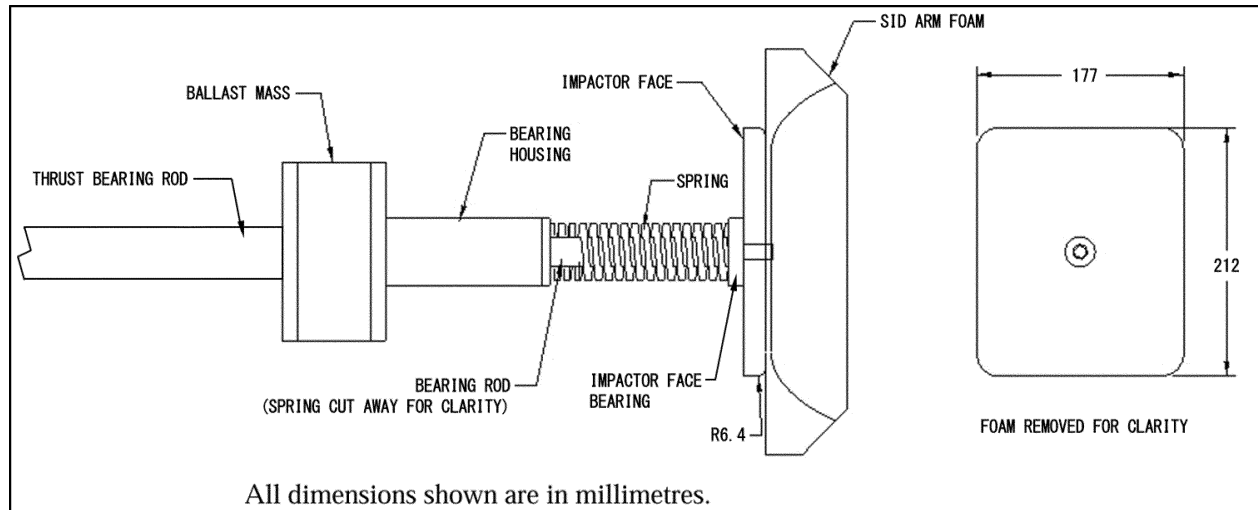
horizontal plane passing through a point located at a vertical distance of 102 mm from the highest point on the glazing and surrounding frame, with the window/panel in the closed position.

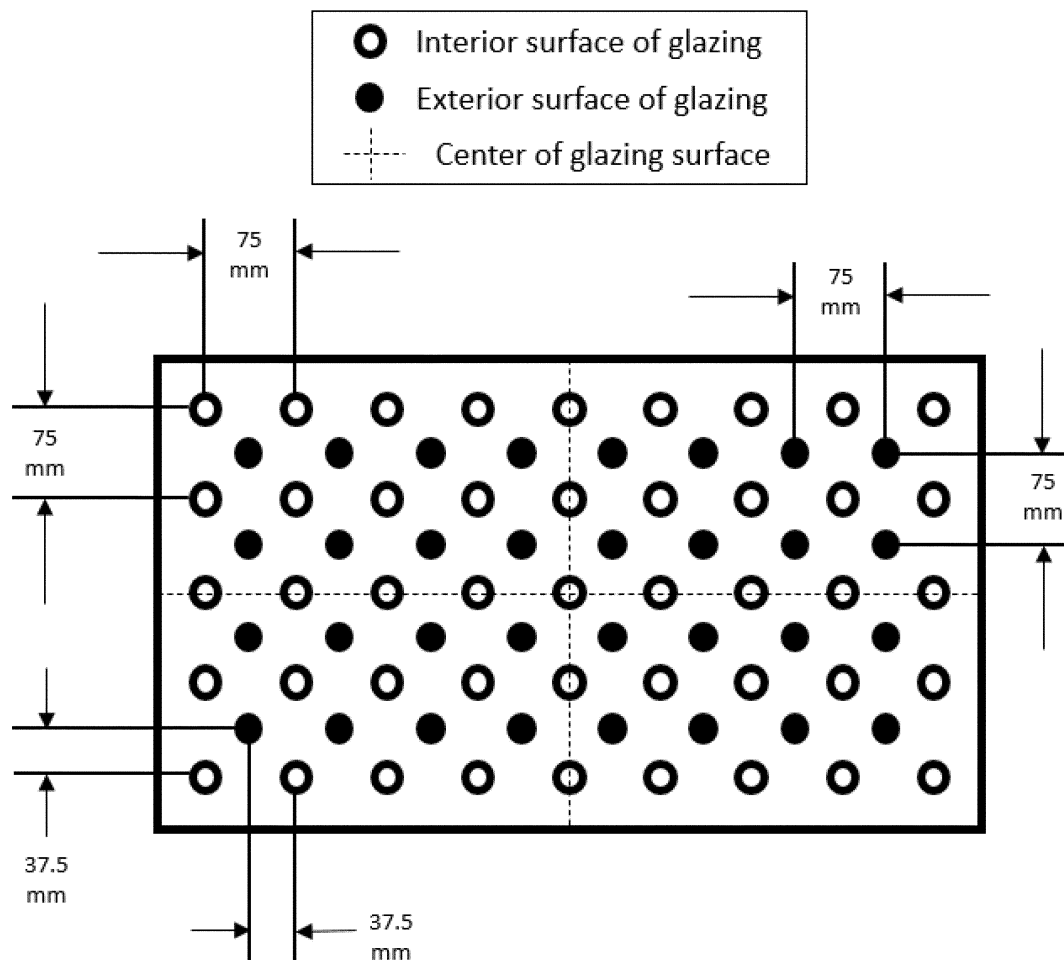
S7. Test conditions.

During testing, the ambient temperature is between 18 degrees C. and 29 degrees C., at any relative humidity between 10 percent and 70 percent.

S8. Guided impactor.

The impactor test device has the dimensions shown in Figure 1 of this section. It has a total impactor mass of $26\text{ kg} \pm 1.0\text{ kg}$ and a spring stiffness of $258\text{ N/mm} \pm 39\text{ N/mm}$. The impactor is propelled in the horizontal direction in impacts to the side daylight openings and is propelled vertically in impacts to the roof daylight openings.





Issued in Washington, DC, under authority delegated in 49 CFR 1.95 and 501.5.

Sophie Shulman,
Deputy Administrator.

[FR Doc. 2024-24462 Filed 10-29-24; 8:45 am]

BILLING CODE 4910-59-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 622

[Docket Nos. 090206140-91081-03 and 120405260-4258-02; RTID 0648-XE422]

Revised Reporting Requirements Due to Catastrophic Conditions for Federal Seafood Dealers, Individual Fishing Quota Dealers, and Charter Vessels and Headboats in Portions of Florida

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; determination of catastrophic conditions.

SUMMARY: In accordance with the regulations implementing the individual fishing quota (IFQ) and Federal dealer reporting specific to the commercial reef fish fishery in the Gulf of Mexico (Gulf) and the coastal migratory pelagic (CMP) fisheries in the Gulf, the Regional Administrator (RA), Southeast Region, NMFS has determined that the catastrophic conditions caused by Hurricane Helene in the Gulf for certain Florida counties still exist. This temporary rule authorizes in the described affected area any dealer who does not have access to electronic reporting to delay reporting of dealer reports (trip tickets), any Southeast Region Headboat Survey (SRHS) program participant to delay reporting electronic logbooks, and authorizes IFQ dealers within the affected area to use paper-based forms, if necessary, for basic required administrative functions, e.g., landing transactions. This temporary rule is intended to facilitate continuation of IFQ and dealer reporting operations during the period of catastrophic conditions.

DATES: The RA is authorizing Federal dealers, for-hire electronic reporting

program participants, and IFQ dealers in the affected area to use revised reporting methods from November 2, 2024, through December 1, 2024.

FOR FURTHER INFORMATION CONTACT: IFQ Customer Service, Britni Lavine, telephone: 866-425-7627, email: nmfs.ser.catchshare@noaa.gov. Federal dealer reporting, Fisheries Monitoring Branch, telephone: 305-361-4581. NMFS Southeast For-Hire Integrated Electronic Reporting Program: 1-833-707-1632.

SUPPLEMENTARY INFORMATION: The reef fish fishery of the Gulf is managed under the Fishery Management Plan (FMP) for Reef Fish Resources of the Gulf of Mexico (Reef Fish FMP), prepared by the Gulf of Mexico Fishery Management Council (Gulf Council). The CMP fishery is managed under the FMP for CMP Resources in the Gulf of Mexico and Atlantic Region (CMP FMP), prepared by the Gulf Council and South Atlantic Fishery Management Council. Both FMPs are implemented through regulations at 50 CFR part 622 under the authority of the Magnuson Stevens Fishery Conservation and

Management Act (Magnuson Stevens Act).

The Generic Dealer Amendment established Federal dealer reporting requirements for federally permitted dealers in the Gulf and South Atlantic (79 FR 19490, April 9, 2014). The Headboat Reporting Framework Action established the SRHS electronic reporting program (79 FR 6097, February 3, 2014). Amendment 26 to the Reef Fish FMP established an IFQ program for the commercial red snapper component of the Gulf reef fish fishery (71 FR 67447, November 22, 2006). Amendment 29 to the Reef Fish FMP established an IFQ program for the commercial grouper and tilefish components of the Gulf reef fish fishery (74 FR 44732, August 31, 2009). Regulations implementing these dealer reporting requirements, SRHS reporting requirements, and IFQ programs require that Federal dealers, SRHS participants, and IFQ participants have access to a computer and the internet. However, these regulations also specify that during catastrophic conditions, as determined by the RA, the RA may waive or modify the reporting time requirements for Federal dealers and SRHS participants, and authorize both Federal dealers and IFQ participants to use paper-based forms to complete administrative functions for the duration of the catastrophic conditions. The RA must determine that catastrophic conditions exist, specify the duration of the catastrophic conditions, and specify which participants or geographic areas are deemed affected.

Hurricane Helene made landfall in the U.S. in Taylor County, Florida, in the Gulf as a Category 4 hurricane on September 26, 2024. Strong winds and flooding from this hurricane impacted communities along coastal Florida in the Gulf. This resulted in power outages and damage to homes, businesses, and infrastructure. The RA previously authorized Federal dealers and Federal for-hire operators in several counties in Florida and Georgia to delay reporting of trip tickets and for-hire logbooks to NMFS, and IFQ participants in this affected area to use paper-based forms, from October 2, 2024, through November 1, 2024 (89 FR 81031, October 7, 2024). The RA has determined that catastrophic conditions continue to exist in the Gulf for the Florida counties of Taylor, Dixie, and

Levy and is authorizing Federal dealers and SRHS program participants to delay electronic reporting to NMFS and IFQ participants in these counties to use paper-based forms through December 1, 2024. NMFS will provide additional notification to affected dealers, SRHS participants, and IFQ participants via NOAA Weather Radio, Fishery Bulletins, and other appropriate means. NMFS will continue to monitor and re-evaluate the areas and duration of the catastrophic conditions, as necessary.

Dealers may delay electronic reporting of trip tickets to NMFS during catastrophic conditions. Dealers are to report all landings to NMFS as soon as possible. Assistance for Federal dealers in the affected area is available from the NMFS Fisheries Monitoring Branch at 1-305-361-4581. SRHS program participants may delay electronic reporting of logbooks to NMFS during catastrophic conditions. SRHS participants are to report all logbooks to NMFS as soon as possible. NMFS previously provided Federal dealers and IFQ participants with the necessary paper forms and instructions for submission in the event of catastrophic conditions. Paper forms are also available from the RA upon request. The electronic systems for submitting information to NMFS will continue to be available to all dealers, and dealers in the affected area are encouraged to continue using these systems, if accessible.

The administrative program functions available to IFQ participants in the area affected by catastrophic conditions will be limited under the paper-based system. There will be no mechanism for transfers of IFQ shares or allocation under the paper-based system in effect during catastrophic conditions. Assistance in complying with the requirements of the paper-based system will be available via the NMFS Catch Share Support line, 1-866-425-7627 Monday through Friday, between 8 a.m. and 4:30 p.m., Eastern Time.

Classification

NMFS issues this action pursuant to section 305(d) of the Magnuson-Stevens Act. This action is consistent with the regulations in 50 CFR 622.5(c)(1)(iii), 622.21(a)(3)(iii), 622.22(a)(3)(iii), 622.26(b)(3) (2020), and 622.374(b)(3) (2020), which were issued pursuant to section 304(b) of the Magnuson-Stevens

Act, and is exempt from review under Executive Order 12866.

Pursuant to 5 U.S.C. 553(b)(B), there is good cause to waive prior notice and an opportunity for public comment on this action, as notice and comment are unnecessary and contrary to the public interest. Such procedures are unnecessary because the final rules implementing the Gulf SRHS and Federal dealer reporting requirements and the Gulf IFQ programs, have already been subject to notice and public comment. These rules authorize the RA to determine when catastrophic conditions exist, and which participants or geographic areas are deemed affected by catastrophic conditions. The final rules also authorize the RA to provide timely notice to affected participants via publication of notification in the **Federal Register**, NOAA Weather Radio, Fishery Bulletins, and other appropriate means. All that remains is to notify the public that catastrophic conditions exist, that Federal dealers and IFQ participants may use paper forms, and that Federal dealers and SRHS participants may submit delayed reports. Such procedures are also contrary to the public interest because of the need to immediately implement this action because affected dealers continue to receive these species in the affected area and fishermen continue to operate, and both need a means of completing their landing transactions and logbook reports. With the power outages and damages to infrastructure that have occurred in the affected area due to Hurricane Helene, numerous businesses are unable to complete landings transactions, fishing reports, and dealer reports electronically. In order to continue with their businesses, IFQ participants need to be aware they can report using the paper forms, and Federal dealers and SRHS participants need to be aware that they can delay reporting.

For the aforementioned reasons, there is good cause to waive the 30-day delay in the effectiveness of this action under 5 U.S.C. 553(d)(3).

Authority: 16 U.S.C. 1801 *et seq.*

Dated: October 25, 2024.

Karen H. Abrams,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2024-25200 Filed 10-25-24; 4:15 pm]

BILLING CODE 3510-22-P

Proposed Rules

Federal Register

Vol. 89, No. 210

Wednesday, October 30, 2024

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 983

[Doc. No. AMS–SC–24–0021]

Pistachios Grown in California, Arizona and New Mexico; Decreased Assessment Rate

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Proposed rule.

SUMMARY: This proposed rule would implement a recommendation from the Administrative Committee for Pistachios (Committee) to decrease the assessment rate established for the 2024–2025 and subsequent production years from \$0.0007 to \$0.0003 per pound of assessable pistachios handled under the marketing order. The proposed assessment rate would remain in effect indefinitely unless modified, suspended, or terminated.

DATES: Comments must be received by November 29, 2024.

ADDRESSES: Interested persons are invited to submit written comments concerning this proposed rule. Comments can be sent to the Docket Clerk, Market Development Division, Specialty Crops Program, AMS, USDA, 1400 Independence Avenue SW, STOP 0237, Washington, DC 20250–0237. Comments can also be sent to the Docket Clerk electronically by Email: MarketingOrderComment@usda.gov or internet: <https://www.regulations.gov>. Comments should reference the document number and the date and page number of this issue of the **Federal Register**. Comments submitted in response to this proposed rule will be included in the record, will be made available to the public and can be viewed at: <https://www.regulations.gov>. Please be advised that the identity of the individuals or entities submitting the comments will be made public on the internet at the address provided above.

FOR FURTHER INFORMATION CONTACT:

Peter Sommers, Marketing Specialist, or Abigail Maharaj, Chief, West Region Branch, Market Development Division, Specialty Crops Program, AMS, USDA; Telephone: (559) 487–5901; or Email: PeterR.Sommers@usda.gov or Abigail.Maharaj@usda.gov.

Small businesses may request information on complying with this regulation by contacting Richard Lower, Marketing Development Division, Specialty Crops Program, AMS, USDA, 1400 Independence Avenue SW, STOP 0237, Washington, DC 20250–0237; Telephone: (202) 720–8085, or Email: Richard.Lower@usda.gov.

SUPPLEMENTARY INFORMATION: This action, pursuant to 5 U.S.C. 553, proposes to amend regulations issued to carry out a marketing order as defined in 7 CFR 900.2(j). This proposed rule is issued under Marketing Order No. 983, as amended (7 CFR part 983), regulating the handling of pistachios grown in California, Arizona, and New Mexico. Part 983 (referred to as the “Order”) is effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601–674), hereinafter referred to as the “Act.” The Committee locally administers the Order and is comprised of producers and handlers of pistachios operating within the area of production, and a public member.

The Agricultural Marketing Service (AMS) is issuing this proposed rule in conformance with Executive Orders 12866, 13563, and 14094. Executive Orders 12866 and 13563 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, reducing costs, harmonizing rules, and promoting flexibility. Executive Order 14094 reaffirms, supplements, and updates Executive Order 12866 and further directs agencies to solicit and consider input from a wide range of affected and interested parties through a variety of means. This proposed action falls within a category of regulatory actions that the Office of Management and Budget (OMB) exempted from Executive Order 12866 review.

This proposed rule has been reviewed under Executive Order 13175—Consultation and Coordination with Indian Tribal Governments, which requires Federal agencies to consider whether their rulemaking actions would have Tribal implications. AMS has determined this proposed rule is unlikely to have substantial direct effects on one or more Indian Tribes, on the relationship between the Federal Government and Indian Tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes.

This proposed rule has been reviewed under Executive Order 12988—Civil Justice Reform. Under the Order now in effect, pistachio handlers are subject to assessments. Funds to administer the Order are derived from such assessments. It is intended that the assessment rate would be applicable to all assessable pistachios for the 2024–2025 production year, and continue until amended, suspended, or terminated.

The Act provides that administrative proceedings must be exhausted before parties may file suit in court. Under section 8c(15)(A) of the Act (7 U.S.C. 608(c)(15)(A)), any handler subject to an order may file with U. S. Department of Agriculture (USDA) a petition stating that the order, any provision of the order, or any obligation imposed in connection with the order is not in accordance with law and request a modification of the order or to be exempted therefrom. Such handler is afforded the opportunity for a hearing on the petition. After the hearing, USDA would rule on the petition. The Act provides that the district court of the United States in any district in which the handler is an inhabitant, or has his or her principal place of business, has jurisdiction to review USDA’s ruling on the petition, provided an action is filed no later than 20 days after the date of the entry of the ruling.

This proposed rule would decrease the assessment rate for pistachios handled under the Order from \$0.0007 per pound, the rate that was established for the 2021–2022 and subsequent production years, to \$0.0003 per pound for the 2024–2025 and subsequent production years.

Sections 983.70 and 983.71 of the Order authorize the Committee, with the approval of AMS, to formulate an

annual budget of expenses and collect assessments from handlers to administer the program. The members of the Committee are familiar with the Committee's needs and with the costs of goods and services in their local area and are able to formulate an appropriate budget and assessment rate. The assessment rate is formulated and discussed in a public meeting, and all directly affected persons have an opportunity to participate and provide input.

For the 2021–2022 and subsequent production years, the Committee recommended, and AMS approved, an assessment rate of \$0.0007 per pound of assessable pistachios within the production area (87 FR 22105). That rate continues in effect from production year to production year unless modified, suspended, or terminated by AMS upon recommendation and information submitted by the Committee or other information available to AMS. This rule would decrease the assessment rate from \$0.0007 to \$0.0003 per pound of assessable pistachios for the 2024–2025 and subsequent production years.

The Committee held a public meeting on April 9, 2024, and unanimously recommended an assessment rate of \$0.0003 per pound of assessable pistachios for the 2024–2025 and subsequent production years. The Committee also met on July 10, 2024, and unanimously recommended 2024–2025 production year expenditures of \$956,700. In comparison, last period's budgeted expenses were \$1,145,161. The proposed assessment rate of \$0.0003 is \$0.0004 less than the rate currently in effect. The Committee recommended decreasing the assessment rate to help ensure the Committee's compliance with § 983.74, which stipulates that assessments will be reduced to bring reserve funds to an amount that is less than or equal to two production years' budgeted expenses.

The major expenditures recommended by the Committee for the 2024–2025 production year include \$512,900 for salaries and related expenses, \$125,000 for research, \$100,000 for a contingency fund, \$73,500 for administrative expenses, and \$10,000 for compliance expenses. By comparison, budgeted expenses for these items during the 2023–24 production year were \$631,900, \$125,000, \$200,000, \$76,450 and \$10,000, respectively.

The Committee derived the recommended assessment rate by considering anticipated expenses, anticipated production of assessable pistachios, and the amount of funds available in the authorized reserve. The

expected 1 billion pounds of pistachios for the 2024–2025 production year would generate \$300,000 in assessment revenue at the proposed assessment rate (1,000,000,000 pounds multiplied by \$0.0003 assessment rate). Income derived from handler assessments, along with the California Pistachio Research Board (CPRB) management income of approximately \$220,200 and funds from the Committee's authorized reserve of approximately \$436,500, should be adequate to cover budgeted expenses of \$956,700. Funds available in the reserve (currently about \$844,000) would be kept within the maximum level of approximately two production years' budgeted expenses as authorized by the Order.

The proposed assessment rate would continue in effect indefinitely unless modified, suspended, or terminated by AMS upon recommendation and information submitted by the Committee or other available information. Although this assessment rate would be in effect for an indefinite period, the Committee will continue to meet prior to or during each production year to recommend a budget of expenses and consider recommendations for modification of the assessment rate. The dates and times of Committee meetings are available from the Committee or AMS. Committee meetings are open to the public and interested persons may express their views at these meetings. AMS will evaluate Committee recommendations and other available information to determine whether modification of the assessment rate is needed. Further rulemaking would be undertaken as necessary. The Committee's 2024–2025 budget, and those for subsequent production years would be reviewed and, as appropriate, approved by AMS.

Initial Regulatory Flexibility Analysis

Pursuant to requirements set forth in the Regulatory Flexibility Act (RFA) (5 U.S.C. 601–612), AMS has considered the economic impact of this proposed rule on small entities. Accordingly, AMS has prepared this initial regulatory flexibility analysis.

The purpose of the RFA is to fit regulatory actions to the scale of businesses subject to such actions in order that small businesses will not be unduly or disproportionately burdened. Marketing orders issued pursuant to the Act, and the rules issued thereunder, are unique in that they are brought about through group action of essentially small entities acting on their own behalf.

There are 19 handlers subject to regulation under the Order, and

approximately 1,871 producers of pistachios in the production area. Small agricultural producers of pistachios are defined by the Small Business Administration (SBA) as those having annual receipts equal to or less than \$3.75 million (NAICS code 111335, Tree Nut Farming). Small agricultural service firms (handlers) have been defined as those whose annual receipts are equal to or less than \$34 million (NAICS code 115114, Postharvest Crop Activities) (13 CFR 121.201).

Data from USDA's National Agricultural Statistics Service (NASS) can be used to characterize the proportion of small versus large pistachio producers and handlers according to the SBA standards. Due to the significant year-to-year variation in pistachio production and crop value, it is helpful to use two-year averages. The average value for crop years 2022 and 2023 (\$1.861 and \$2.98 billion, respectively) is \$2.42 billion. Dividing \$2.42 billion by 1,871 producers yields an estimated average sales receipt per producer estimate of about \$1.29 million, which is well below the \$3.75 million threshold for small producers. Assuming a normal distribution, the majority of pistachio producers may be classified as small entities.

Estimating the proportion of small handlers requires an additional computation. An average price per handler can be estimated using AMS Market News prices for pistachio packages at the San Francisco terminal market. The average terminal market price for 12 one-pound packages of pistachios at the San Francisco terminal market from January to July 2024 was \$41 per package. Dividing \$41 by the weight of the package (12 pounds) yields a handler average price estimate of \$3.417 per pound. Dividing the SBA size standard of \$34 million by \$3.417 yields an estimate of 9.951 million pounds per year (just under 10 million pounds).

The Committee reported that 12 out of 19 handlers (63 percent) handled under 10 million pounds per year. Therefore, 63 percent of the pistachio handlers would be considered small handlers under the SBA standard.

The Committee's recommended assessment rate of \$0.0003 per pound of assessable pistachios complies with section 983.71(b) of the Order, which states that any proposed assessment rate must not exceed one-half of one percent of the average price received by producers in the preceding production year. The proposed decreased assessment rate of \$0.0003 per pound is well below the computed maximum allowable rate of \$0.01 per pound (0.5

percent times \$2.00, the 2023 average producer price reported by NASS).

Using the proposed new rate, the 2024–2025 annual Committee assessment as a percent of producer revenue (crop value) can be approximated using average production and crop value for the two prior years. NASS reported utilized inshell pistachio production of 882 million pounds and 1.49 billion pounds, respectively, for the 2022 and 2023 crop years, with an average of 1.186 billion pounds. Multiplying 1.186 billion pounds by \$0.0003 per pound yields estimated annual Committee revenue of \$355,800. Dividing estimated Committee revenue of \$355,800 by the two-year average crop value of \$2.42 billion crop yields an estimate of 0.01 percent. That is, the \$355,800 estimated annual assessment total represents one hundredth of one percent of estimated producer revenue.

This proposal decreases the assessment rate collected from handlers for the 2024–2025 and subsequent production years from \$0.0007 to \$0.0003 per pound of assessable pistachios. The Committee unanimously recommended 2024–2025 production year expenditures of \$956,700 and an assessment rate of \$0.0003 per pound of assessable pistachios. The proposed assessment rate of \$0.0003 is \$0.0004 lower than the rate currently in effect. The volume of assessable pistachios for the 2024–2025 production year is estimated at one billion pounds. Thus, the \$0.0003 per pound of assessable pistachios should provide \$300,000 in assessment income (1,000,000,000 pounds multiplied by \$0.0003 assessment rate). Income derived from handler assessments, along with CPRB management income of approximately \$220,200 and funds from the Committee's authorized reserve of approximately \$436,500, should be adequate to cover budgeted expenses.

The major expenditures recommended by the Committee for the 2024–2025 production year include \$512,900 for salaries and related expenses, \$125,000 for research, \$100,000 for a contingency fund, \$73,500 for administrative expenses, and \$10,000 for compliance expenses. By comparison, budgeted expenses for these activities for the 2023–24 production year were \$631,900, \$125,000, \$200,000, \$76,450 and \$10,000, respectively.

The Committee recommended decreasing the assessment rate in conjunction with utilization of funds from the authorized reserve to cover Committee expenditures and ensure the

financial reserve remains at a level in compliance with Order requirements.

Prior to arriving at this budget and assessment rate, the Committee considered alternate potential expenditure levels and the impact of reducing the assessment rate more and/or less than the rate proposed herein. However, the Committee determined that the recommended assessment rate would achieve its goals of both adequately funding Committee operations and reducing the reserve to an appropriate level.

A review of historical information and preliminary information pertaining to the upcoming production year indicates the average producer price for the 2024–2025 season should be approximately \$2 per pound. Therefore, the estimated assessment revenue for the 2024–2025 production year as a percentage of total producer revenue would be about .015 percent (\$0.0003 divided by \$2 multiplied by 100).

This proposed rule would decrease the assessment obligation imposed on pistachio handlers. Assessments are applied uniformly on all handlers, and some of the cost may be passed on to producers. However, these costs are expected to be offset by the benefits derived by the operation of the Order.

The Committee's meetings are widely publicized throughout the pistachio industry and all interested persons are invited to attend the meetings and participate in Committee deliberations on all issues. Like all Committee meetings, the April 9, 2024, and July 10, 2024, meetings were public and all entities, both large and small, were able to express views on this issue. Finally, interested persons are invited to submit comments on this proposed rule, including the regulatory and information collection impacts of this action on small businesses.

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35), the Order's information collection requirements have been previously approved by OMB and assigned OMB No. 0581–0215, Pistachios. No changes in those requirements are necessary as a result of this proposed rule. Should any changes become necessary, they would be submitted to OMB for approval.

This proposed rule would not impose any additional reporting or recordkeeping requirements on either small or large pistachio handlers. As with all Federal marketing order programs, reports and forms are periodically reviewed to reduce information requirements and duplication by industry and public sector agencies.

AMS is committed to complying with the E-Government Act, to promote the use of the internet and other information technologies to provide increased opportunities for citizen access to Government information and services, and for other purposes.

AMS has not identified any relevant Federal rules that duplicate, overlap, or conflict with this proposed rule.

A small business guide on complying with fruit, vegetable, and specialty crop marketing agreements and orders may be viewed at: <https://www.ams.usda.gov/rules-regulations/moa/small-businesses>. Any questions about the compliance guide should be sent to Richard Lower at the previously mentioned address in the **FOR FURTHER INFORMATION CONTACT** section.

After consideration of all relevant material presented, including the information and recommendations submitted by the Committee and other available information, AMS has determined that this proposed rule is consistent with and would effectuate the purposes of the Act.

A 30-day comment period is provided to allow interested persons to respond to this proposed rule. All written comments timely received will be considered before a final determination is made on this rulemaking.

List of Subjects in 7 CFR Part 983

Marketing agreements, Nuts, Reporting and recordkeeping requirements.

For the reasons set forth in the preamble, the Agricultural Marketing Service proposes to amend 7 CFR part 983 as follows:

PART 983—PISTACHIOS GROWN IN CALIFORNIA, ARIZONA, AND NEW MEXICO

- 1. The authority citation for 7 CFR part 983 continues to read as follows:

Authority: 7 U.S.C. 601–674.

- 2. Section 983.253 is revised to read as follows:

§ 983.253 Assessment rate.

On and after September 1, 2024, an assessment rate of \$0.0003 per pound is established for California, Arizona, and New Mexico pistachios covered under the Order.

Erin Morris,

Associate Administrator, Agricultural Marketing Service.

[FR Doc. 2024–24733 Filed 10–29–24; 8:45 am]

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CONSUMER PRODUCT SAFETY COMMISSION

16 CFR Part 1421

[Docket No. CPSC–2021–0014]

Notice of Availability and Request for Comment: Data Regarding Debris Penetration Hazards for Recreational Off-Highway Vehicles and Utility Task/Terrain Vehicles; Extension of Comment Period

AGENCY: Consumer Product Safety Commission.

ACTION: Proposed rule; extension of comment period.

SUMMARY: The U.S. Consumer Product Safety Commission (Commission or CPSC) published a notice of proposed rulemaking (NPR) in July 2022 to address debris penetration hazards for recreational off-highway vehicles (ROVs) and utility task/terrain vehicles (UTVs). On October 4, 2024, the Commission published a notice of availability and request for comment (NOA) to announce the availability of, and to seek comments on, details about incident data relevant to the NPR. The NOA invited the public to submit written comments during a 30-day comment period ending on November 4, 2024. In response to a request for an extension of the NOA comment period, the Commission is extending the comment period to December 4, 2024.

DATES: The comment period for the proposed rule published on October 4, 2024, at 89 FR 80831, is extended. Submit comments by December 4, 2024.

ADDRESSES: Submit comments, identified by Docket No. CPSC–2021–0014, by any of the following methods:

Electronic Submissions: Submit electronic comments to the Federal eRulemaking Portal at: <https://www.regulations.gov>. Follow the instructions for submitting comments. CPSC does not accept comments submitted by email, except as described below. CPSC encourages you to submit electronic comments by using the Federal eRulemaking Portal.

Mail/Hand Delivery/Courier Written Submissions: Submit comments by mail/hand delivery/courier to: Office of the Secretary, U.S. Consumer Product Safety Commission, 4330 East West Highway, Bethesda, MD 20814; telephone: (301) 504–7479. If you wish to submit confidential business information, trade secret information, or other sensitive or protected information that you do not want to be available to the public, you may submit such comments by mail, hand delivery, or

courier, or you may email them to: cpsc-os@cpsc.gov.

Instructions: All submissions must include the agency name and docket number. CPSC may post all comments without change, including any personal identifiers, contact information, or other personal information provided, to: <https://www.regulations.gov>. Do not submit electronically: confidential business information, trade secret information, or other sensitive or protected information that you do not want to be available to the public. If you wish to submit such information, please submit it according to the instructions for mail/hand delivery/courier written submissions.

Docket: To read background documents or comments received, go to: <https://www.regulations.gov>, insert Docket No. CPSC–2021–0014 in the “Search” box, and follow the prompts.

FOR FURTHER INFORMATION CONTACT: Han Lim, Project Manager, Office of Hazard Identification and Reduction, Directorate for Engineering Sciences, U.S. Consumer Product Safety Commission, 5 Research Place, Rockville, MD 20850; telephone: (301) 987–2327; email: hlim@cpsc.gov.

SUPPLEMENTARY INFORMATION:

A. Background

Section 7(a) of the Consumer Product Safety Act authorizes the Commission to promulgate a mandatory consumer product safety standard that sets forth performance or labeling requirements for a consumer product, if such requirements are reasonably necessary to prevent or reduce an unreasonable risk of injury. 15 U.S.C. 2056(a). Under this statutory authority, in 2021, the Commission initiated a rulemaking to reduce the risk of injuries and deaths associated with penetration of ROVs and UTVs by debris such as fallen tree branches. The Commission published an advance notice of proposed rulemaking (ANPR) on May 11, 2021 (86 FR 25817), and an NPR on July 21, 2022 (87 FR 43688).¹

On October 4, 2024 (89 FR 80831), the Commission published in the **Federal Register** a notice of availability and request for comment to announce the availability of, and to seek comments on, details about incident data relevant to the NPR. The NOA invited the public to submit written comments during a 30-day comment period ending on November 4, 2024.

¹ On December 21, 2022, the Commission also published a notice of availability and request for comment on a report from SEA, Ltd. titled “Study of Debris Penetration of Recreational Off-Highway Vehicle (ROV) Proof-of-Concept (POC) Floorboard Guards” (87 FR 78037).

B. Comment Period Extension

On October 8, 2024, the Outdoor Power Equipment Institute (OPEI) and the Recreational Off-Highway Vehicle Association (ROHVA) submitted a request to extend the public comment period of the NOA for an additional 30 days to December 4, 2024. In particular, OPEI and ROHVA asserted that, given the volume of the data and the format in which CPSC has provided access to the data,² a 30-day extension is necessary to permit OPEI, ROHVA, and other members of the public to have a meaningful opportunity to comment. The Commission has considered OPEI’s and ROHVA’s request to extend the comment period. Currently, the comment period is due to close on November 4, 2024. To provide the public additional time to review and comment on the data, the Commission will grant the requested 30-day extension of the comment period, until December 4, 2024.³

Alberta E. Mills,

Secretary, Consumer Product Safety Commission.

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BILLING CODE 6355–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Parts 175, 176, 177, and 178

[Docket No. FDA–2016–F–1253]

Environmental Defense Fund, et al.; Response to Objections and Requests for a Public Hearing

AGENCY: Food and Drug Administration, HHS.

ACTION: Notification; response to objections and denial of public hearing requests.

SUMMARY: The Food and Drug Administration (FDA or we) received objections and requests for a public hearing submitted by the Environmental Defense Fund, Learning Disabilities Association of America, Center for Food Safety, Center for Environmental Health, Center for Science in the Public Interest, Breast Cancer Prevention Partners, Defend our Health, and Alaska Community Action on Toxics on the denial of a food additive petition (FAP

² To obtain access to the data, a request can be submitted to: <https://forms.office.com/g/Yz4tNFdhDp>; a website link to access the data will be sent to the email address provided.

³ The Commission voted (4–1) on October 22, 2024, to publish this document.

6B4815) requesting that we revoke specified regulations to no longer provide for the food contact use of 28 *ortho*-phthalates. We are overruling the objections and denying the requests for a public hearing.

DATES: October 30, 2024.

FOR FURTHER INFORMATION CONTACT:

Jessica Urbelis, Office of Food Chemical Safety, Dietary Supplements, and Innovation, Human Foods Program, Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740, 240-402-5187; or Carrol Bascus, Office of Policy, Regulations and Information, Human Foods Program, Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740, 240-402-2378.

SUPPLEMENTARY INFORMATION:

I. Background

In the **Federal Register** of May 20, 2016 (81 FR 31877), we announced the filing of a food additive petition (FAP 6B4815) (petition) submitted by the Breast Cancer Fund (now Breast Cancer Prevention Partners), Center for Environmental Health, Center for Food Safety, Center for Science in the Public Interest, Clean Water Action, Consumer Federation of America, Earthjustice, Environmental Defense Fund, Improving Kids' Environment, Learning Disabilities Association of America, and Natural Resources Defense Council (hereinafter, petitioners).

The petition, received March 18, 2016, initially requested that we amend or revoke specified food additive regulations under parts 175, 176, 177, and 178 (21 CFR parts 175, 176, 177, and 178) to no longer provide for the food contact uses of 30 substances that the petition identified as *ortho*-phthalates. Additionally, petitioners requested that we amend regulations in part 181 (21 CFR part 181) related to prior-sanctioned uses of five *ortho*-phthalates and issue a new regulation in part 189 (21 CFR part 189) prohibiting the use of eight specific *ortho*-phthalates in food contact articles. We declined to file these portions of the submissions as a food additive petition because those requests were not within the scope of a food additive petition (81 FR 31877 at 31878).

Following our May 20, 2016, announcement that we had filed the food additive petition, the petitioners provided supplementary information on October 8, 2016, and August 24, 2017 (see FAP 6B4815 regarding *ortho*-phthalates/Responses to September 1, 2016, request from Tom Neltner, Breast Cancer Fund, et al., dated October 8, 2016, and August 24, 2017) (Supp., October 8, 2016, and Supp., August 24,

2017, respectively). In the October 8, 2016, supplement, the petitioners also requested that FDA remove two substances from the petitioner's original list of 30 substances, stating that they are not *ortho*-phthalates (Supp., October 8, 2016 at 2). Consequently, the subject of the food additive petition was limited to food additive regulations for 28 *ortho*-phthalates. In addition, regarding the certain portions of the submissions that we declined to file as a food additive petition because those requests were not within the scope of a food additive petition, on April 19, 2016, the petitioners submitted a citizen petition containing those requests (see Citizen Petition from Nancy Buermyer, Breast Cancer Fund, et al., submitted to the Dockets Management Staff, Food and Drug Administration, dated April 19, 2016 (Comment ID FDA-2016-P-1171-0001) (citizen petition). Specifically, the citizen petition requested that we initiate rulemaking to remove the prior sanctions in part 181 for five *ortho*-phthalates and that we add a new section to part 189 prohibiting the use of eight *ortho*-phthalates (citizen petition at 1 through 2). On May 12, 2022, we denied the citizen petition.

The core premise of FAP 6B4815 was that the 28 subject *ortho*-phthalates are chemically and pharmacologically related and should therefore be treated as a class for purposes of evaluating their safety. The petitioners argued that a single purported acceptable daily intake (ADI) for one substance should be applied to the purported class of 28 *ortho*-phthalates and that the cumulative exposure to all 28 *ortho*-phthalates significantly exceeded the purported ADI for the one substance petitioners selected, thereby rendering the entire purported class unsafe for use as food additives.

In the **Federal Register** of May 20, 2022 (87 FR 31066), we announced that we were denying FAP 6B4815. In that **Federal Register** document (hereinafter, denial order), we explained that the petition did not provide sufficient information to support a finding that there is no longer a reasonable certainty of no harm for the authorized uses of the proposed class of 28 *ortho*-phthalates. As an additional matter, based on the information available to FDA, the denial order stated that we did not have a basis to conclude that dietary exposure levels from the authorized *ortho*-phthalates exceed a safe level (87 FR 31066 at 31075). The denial order advised that objections and requests for a hearing were due by June 21, 2022 (87 FR 31066). Subsequently, we received one submission from a group of eight objectors that raised several objections

and requests for hearing in response to the denial order.

Following receipt of FAP 6B4815 in March 2016, on June 25, 2018, we received a food additive petition (FAP 8B4820) submitted by the Flexible Vinyl Alliance (hereinafter, the abandonment petition). The abandonment petition proposed that we amend our food additive regulations in parts 175, 176, 177, and 178 to revoke the approvals of 25 plasticizer substances that the petition identified as *ortho*-phthalates for various food contact applications because such uses were permanently abandoned. In response to the abandonment petition, we issued a final rule on May 20, 2022 (87 FR 31080) amending the food additive regulations in parts 175, 176, 177, and 178 to revoke the authorization of the 25 substances that were the subject of the petition for various food contact applications (the abandonment final order). FDA issued the abandonment final order concurrently with its denial order for FAP 6B4815. On May 20, 2022, we also issued a request for information (RFI) seeking scientific data and information on current uses, use levels, dietary exposure, and safety data for *ortho*-phthalates that remain authorized for use in food contact applications (87 FR 31090). The objections and requests for hearing we received refer to the denial order, citizen petition, abandonment final order, and RFI.

Ortho-phthalates also are included on FDA's list of chemicals in the food supply that are under review (see <https://www.fda.gov/food/food-chemical-safety/list-select-chemicals-food-supply-under-fda-review>). We are committed to continuing the evaluation of all relevant scientific information and data to determine whether additional regulatory action regarding *ortho*-phthalates is warranted to ensure the safety of all authorized food contact uses of *ortho*-phthalates.

II. Objections and Requests for Hearing

Section 409(f)(1) of the Federal Food, Drug, and Cosmetic Act (FD&C Act) (21 U.S.C. 348(f)(1)) provides that, within 30 days after publication of an order denying a food additive petition, any person adversely affected by such order may file objections, specifying with particularity the provisions of the order deemed objectionable, stating reasonable grounds therefor, and requesting a public hearing upon such objections.

Under our regulations at 21 CFR 171.110, objections and requests for a hearing relating to food additive regulations are governed by part 12 (21 CFR part 12). Under § 12.22(a), each

objection must: (1) be submitted on or before the 30th day after the date of publication of the final rule; (2) be separately numbered; (3) specify with particularity the provision of the regulation or proposed order objected to; (4) specifically state each objection on which a hearing is requested (failure to request a hearing on an objection constitutes a waiver of the right to a hearing on that objection); and (5) include a detailed description and analysis of the factual information to be presented in support of the objection if a hearing is requested (failure to include a description and analysis for an objection constitutes a waiver of the right to a hearing on that objection).

We received one submission, on June 21, 2022, from the Environmental Defense Fund, Learning Disabilities Association of America, Center for Food Safety, Center for Environmental Health, Center for Science in the Public Interest, Breast Cancer Prevention Partners, Defend Our Health, and Alaska Community Action on Toxics (hereinafter, objectors) (see Objections and Request for Evidentiary Public Hearing Regarding FDA's Denial of Phthalates Food Additive Petition (FAP 6B4815)), submitted by Katherine K. O'Brien, Earthjustice, dated June 21, 2022, to the Dockets Management Staff, Food and Drug Administration (Comment ID FDA-2016-F-1253-0462) (Objections). The submission raises eight specific objections to the denial and requests hearings on six objections.

III. Standards for Granting a Hearing

The criteria for granting a hearing are set out in § 12.24(b). Under that regulation, a hearing will be granted if the material submitted by an objector shows that: (1) there is a genuine and substantial factual issue for resolution at a hearing (a hearing will not be granted on issues of policy or law); (2) the factual issue can be resolved by available and specifically identified reliable evidence (a hearing will not be granted on the basis of mere allegations or denials or general descriptions of positions and contentions); (3) the data and information submitted, if established at a hearing, would be adequate to justify resolution of the factual issue in the way sought by the objector (a hearing will be denied if the data and information submitted are insufficient to justify the factual determination urged, even if accurate); (4) resolution of the factual issue in the way sought by the objector is adequate to justify the action requested (a hearing will not be granted on factual issues that are not determinative with respect to the action requested, e.g., if the action

would be the same even if the factual issue were resolved in the way sought); (5) the action requested is not inconsistent with any provision in the FD&C Act or any FDA regulation particularizing statutory standards (the proper procedure in those circumstances is for the person requesting the hearing to petition for an amendment or waiver of the regulation involved); and (6) the requirements in other applicable regulations, e.g., 21 CFR 10.20, 12.21, 12.22, 314.200, 514.200, and 601.7(a), and in the document issuing the final regulation or the notice of opportunity for a hearing are met.

In general, in an administrative proceeding under section 409(f) of the FD&C Act, FDA is authorized to issue a decision without holding a part 12 hearing when a party's objections do not raise a genuine and material issue of fact that, if proved in that party's favor, would suffice to warrant the relief requested (see *Community Nutrition Inst. v. Young*, 773 F.2d 1356, 1364 (D.C. Cir. 1985), *cert. denied*, 475 U.S. 1123 (1986); see also *Vermont Dep't of Pub. Serv. v. FERC*, 817 F.2d 127, 140 (D.C. Cir. 1987)). A party seeking a hearing must meet a "threshold burden of tendering evidence suggesting the need for a hearing" (*Costle v. Pacific Legal Foundation*, 445 U.S. 198, 214–215 (1980), citing *Weinberger v. Hynson, Westcott & Dunning, Inc.*, 412 U.S. 609, 620–621 (1973)). An allegation that a hearing is necessary to "sharpen the issues" or to "fully develop the facts" does not meet this test (*Georgia Pacific Corp. v. EPA*, 671 F.2d 1235, 1241 (9th Cir. 1982)). If a hearing request fails to identify sufficient factual evidence that would be the subject of a hearing, there is no reason to hold one. In judicial proceedings, a court is authorized to issue summary judgment without an evidentiary hearing whenever it finds that there are no genuine issues of material fact in dispute, and a party is entitled to judgment as a matter of law (see *Rule 56, Federal Rules of Civil Procedure*). The same principle applies to administrative proceedings (§ 12.24). In reviewing whether an objecting party made "an adequate proffer of evidence" to show that an "actual dispute exist[s]," courts consider whether the dispute lies in "a highly technical area [within] the agency's expertise" (see *Cerro Wire & Cable Co. v. FERC*, 677 F.2d 124, 129 (D.C. Cir. 1982)).

A hearing request must not only contain evidence, but that evidence also must raise a material issue of fact "concerning which a meaningful hearing might be held" (*Pineapple Growers Ass'n of Haw. v. FDA*, 673 F.2d

1083, 1085 (9th Cir. 1982)). Where the issues raised in the objection are, even if true, legally insufficient to alter the decision, an agency need not grant a hearing (see *Dyestuffs and Chemicals, Inc. v. Flemming*, 271 F.2d 281, 286 (8th Cir. 1959), *cert. denied*, 362 U.S. 911 (1960)). A hearing is justified only if the objections are made in good faith and if they raise "'material' issues of fact" (*Pineapple Growers Ass'n*, 673 F.2d at 1085 (quoting *Pactra Indus., Inc. v. CPSC*, 555 F.2d 677, 684 (9th Cir. 1977)). The issues raised in objections "must be material to the question involved; that is, the legality of the order attached" (*Pineapple Growers Ass'n*, 673 F.2d at 1085 (quoting *Dyestuffs and Chemicals*, 271 F.2d at 286)). A hearing need not be held to resolve questions of law and policy (see *Kourouma v. FERC*, 723 F.3d 274, 278 (D.C. Cir. 2013) (citing *Citizens for Allegan County, Inc. v. FPC*, 414 F.2d 1125, 1128 (D.C. Cir. 1969)); *Sun Oil Co. v. FPC*, 256 F.2d 233, 240 (5th Cir. 1958)).

IV. Analysis of Objections and Response to Hearing Requests

The submission from the Environmental Defense Fund et al., contains eight numbered objections, some with multiple parts, and six requests for a hearing. We address each objection below, as well as any evidence and/or information filed in support of each. For each objection that requests a hearing, we evaluate whether the objection and any evidence and/or information submitted in support of it satisfies the standards for granting a hearing in § 12.24(b).

A. Objection 1

In Objection 1, the objectors argue that "FDA unlawfully placed on the petitioners the burden of proving that the approved food-additive uses of phthalates are not safe" (Objections at 8). The objectors assert that "this legal error infected FDA's entire analysis and requires FDA to withdraw" its order denying FAP 6B4815 (Objections at 13). Because this objection raises a purely legal dispute, no hearing is warranted to adjudicate it (§ 12.24(b)(1)). Even if a hearing were available, the objectors did not request one with respect to this objection and, therefore, waive any right to a hearing (§ 12.22(a)(4)). The only remaining issue on this objection, then, is whether it establishes that FDA's order denying FAP 6B4815 should be modified or revoked. As described below, we conclude that the objectors have not established a basis for modifying or revoking the denial order.

In Objection 1, the objectors assert that FDA reviewed FAP 6B4815 under an incorrect legal standard. The objectors argue that FDA must not expect revocation petitions to demonstrate the lack of safety of the food additives whose approvals the petitions seek to revoke. The objectors state that “parties petitioning FDA to revoke approval of a food additive on safety grounds do not bear the burden of proving that the additive is unsafe, *i.e.*, that it will cause harm to human health under the intended conditions of use” (Objections at 9). Placing such a burden on the party seeking revocation would, the objectors assert, “be inconsistent with the Food Act’s central premise for food-additive regulation, namely, that food additives are presumptively unsafe and may not be used unless the available evidence establishes with ‘reasonable certainty’ that their use ‘will be safe’” (id. (quoting section 409(c)(3)(A) of the FD&C Act)). (The reference to the “Food Act” is a reference to the FD&C Act.)

The objectors also assert that FDA’s basis for denying FAP 6B4815 is inconsistent with our regulations. The objectors point to § 171.130 (21 CFR 171.130), which provides that petitions seeking amendments or repeals of existing food additive approvals must “include an assertion of facts, supported by data, showing that new information exists with respect to the food additive or that new uses have been developed or old uses abandoned, that new data are available as to toxicity of the chemical, or that experience with the existing regulation may justify its amendment or repeal” (Objections at 10). The objectors interpret this regulation to mean that repeal petitions are required only to “[tender] new information regarding a food additive’s toxicity or otherwise demonstrating that amendment or repeal of the additive’s authorization may be justified” but do not bear “the burden of persuasion on the ultimate question of an additive’s safety” (id.). Therefore, the objectors contend, “the burden of persuasion on the ultimate question of safety lies with the party advocating for continued authorization of the product” (id. at 11). The objectors state that FDA applied an incorrect standard to evaluating FAP 6B4815 because “FDA did not assess in the Order whether the petitioners provided ‘new information’ regarding the ‘toxicity of the chemical[s]’ at issue, as its regulations require, nor whether that information ‘establish[es] the existence of safety questions significant enough to support a finding that there is no longer a reasonable certainty of no

harm from the currently approved uses’” (id. at 12 (quoting § 171.130(b) and the denial order at 87 FR 31066 at 31067)).

The objectors state that their position is consistent with *League of United Latin Am. Citizens v. Regan*, 996 F.3d 673 (9th Cir. 2021), a case involving the U.S. Environmental Protection Agency’s (EPA’s) regulation of pesticides (Objections at 10–11). The objectors further state their position is consistent with FDA’s statement in a final rule concerning the food additive olestra (61 FR 3118, January 30, 1996) as well as the standard FDA applied in revoking food-additive authorizations for certain long-chain perfluorinated compounds (81 FR 5, January 4, 2016) (Objections at 12).

The crux of these arguments is that “FDA unlawfully placed the burden of proof regarding the safety of the phthalate additives on the petitioners, asserting that FDA need only revoke a food additive authorization if presented with new evidence that ‘approved additives are in fact unsafe’” (Objections at 12 (emphasis in original)).

Finally, the objectors criticize FDA’s approach in denying FAP 6B4815 on the same day that we amended our regulations to no longer provide for most phthalates to be used in food contact applications because these uses were abandoned by industry (Objections at 12). The objectors state that the abandonment action “significantly altered the scope of food-additive authorizations for phthalates that remain in effect, and for which a safety evaluation is still required” (id.). The objectors state that our action “reflects FDA’s erroneous position that it may leave the extant food-additive authorizations in effect unless and until petitioners prove that they are in fact unsafe” (id. at 12–13).

FDA Response: We disagree with the assertion that FDA applied an incorrect legal standard in evaluating FAP 6B4815. It is fundamental that a food additive petition—whether requesting an authorization, modification, or repeal—must provide sufficient support for its request.

We denied FAP 6B4815 because it failed to provide sufficient support for its request to revoke the authorization for the 28 *ortho*-phthalates that were the subject of the petition. In reviewing FAP 6B4815, we observed that the petition was premised on three distinct assertions (which, for ease of reference, we referred to as Assertions A, B, and C). Assertion A claimed that the 28 subject *ortho*-phthalates are chemically and pharmacologically related and should therefore be treated as a class for

purposes of evaluating their safety. Under Assertion B, the petition proposed applying a purported ADI for di(2-ethylhexyl) phthalate (DEHP) to all 28 *ortho*-phthalates (*i.e.*, the petition proposed applying the proposed ADI to the entire purported class). Assertion C stated that the estimated daily intake (EDI) for the asserted class of 28 *ortho*-phthalates significantly exceeded the proposed ADI, thus rendering the purported class unsafe for their authorized uses as food contact substances. Our denial order explained in detail why the petition did not adequately support any of these three assertions. Consequently, we concluded that the petition did not contain sufficient data to support a finding that there is no longer a reasonable certainty of no harm from the approved uses (87 FR 31066 at 31075). As an additional matter, we noted that, based on the information available to FDA, we did not have a basis to conclude that dietary exposure levels from authorized *ortho*-phthalates exceeded a safe level (id.). We stated that, as new information becomes available to us, we will continue to examine such data as appropriate to assess whether there remains a reasonable certainty of no harm (id.).

Objection 1 rests on a flawed interpretation of the FD&C Act’s legal framework governing food additives—in particular, its provisions concerning the premarket review of food additives. Under this framework, food additives are deemed unsafe and prohibited except to the extent FDA authorizes their use (see, *e.g.*, sections 301(a), 301(k), and 409(a) of the FD&C Act (21 U.S.C. 331(a), 331(k), and 348(a))). Section 409 of the FD&C Act sets forth a process under which a person can submit a petition requesting that FDA issue a regulation prescribing the conditions under which a food additive may be safely used (see section 409(b)(1) of the FD&C Act). The statute specifies that a person must support such a petition by supplying the data specified in section 409(b)(2) of the FD&C Act. After a person submits a petition seeking approval of a food additive’s use, FDA may issue a regulation authorizing the use only if the data before us establish that the proposed use of the food additive will be safe (see section 409(c)(3)(A) of the FD&C Act).

In addition to establishing the procedure for issuing regulations authorizing food additives, Congress directed FDA to establish a regulatory procedure prescribing how regulations authorizing food additives may be amended or repealed (see section 409(i) of the FD&C Act). Importantly, the

statute specifies that this regulatory “procedure *shall conform* to the procedure provided in this section for the promulgation of such regulations” (id.) (emphasis added) (section 409(i) of the FD&C Act). FDA’s regulation at § 171.130 establishes the procedure by which interested persons may petition FDA for amending or repealing a food additive authorization.

FDA’s approach to evaluating FAP 6B4815 was fully consistent with the legal framework described above. The provisions of section 409 of the FD&C Act make clear that the evidentiary burden to support authorization of a food additive’s use lies with the petitioner seeking such authorization (see section 409(b) and (c) of the FD&C Act). Given the FD&C Act’s directive that the regulatory procedure for amending or repealing an authorization “shall conform” to the statutory procedure for granting an authorization, it follows that a person seeking amendment or repeal likewise must provide a well-supported petition adequately justifying such action. See section 409(i) of the FD&C Act; *In re Nat. Res. Def. Council*, 645 F.3d 400, 403 (D.C. Cir. 2011) (“When a food additive petition seeks to amend an existing regulation, the petitioner must include full information on each proposed change”) (internal quotations and citations omitted). FDA’s denial order thoroughly explained why the petition did not provide adequate evidence to support its requested postmarket remedy: the repeal of already-authorized food additive uses. This conclusion did not conflict in any way with the premarket review framework invoked by the objectors.

Moreover, to the extent the objectors contend that FDA disregarded any general statutory obligation to remove unsafe products from the market, we note that we have made no finding that the subject food additives are unsafe. Indeed, our denial order stated that we did not have a basis to conclude that dietary exposure levels from authorized *ortho*-phthalates exceeded a safe level (87 FR 31066 at 31075).

The objectors’ argument that FDA disregarded its own regulations is also in error. This argument relies on a portion of § 171.130(b) providing that petitions for amendment or repeal must include an assertion of facts, supported by data, showing that new information exists. Citing this excerpt, the objectors maintain that this regulation “establishes that petitioners seeking revocation of a food-additive regulation bear a burden of production—specifically, the burden of tendering new information regarding a food

additive’s toxicity or otherwise demonstrating that amendment or repeal of the additive’s authorization may be justified” (Objections at 10). To the extent that the objectors assert that a repeal petition need only point to the existence of new toxicity data, this argument disregards the concluding sentence of § 171.130(b).

The concluding sentence provides that new data must be furnished in the form specified in § 171.1 (21 CFR 171.1) for submitting petitions. Under § 171.1(c), a petition must include “full reports of investigations made with respect to the safety of the food additive.” In addition, § 171.1(c) provides that a petition “may be regarded as incomplete unless it includes full reports of adequate tests reasonably applicable to show whether or not the food additive will be safe for its intended use.” Further, under § 171.1(c), for petitions seeking modification of existing regulations issued pursuant to section 409(c)(1)(A) of the FD&C Act (*i.e.*, a regulation authorizing the use of a food additive under specified conditions), “full information on each proposed change that is to be made in the original regulation must be submitted.” Accordingly, petitions seeking revocation of a food additive regulation must do more than merely identify the existence of new toxicity studies. See also *In re NRDC*, 645 F.3d at 403 (considering petition to repeal existing food additive authorization and citing § 171.1 to conclude that food additive petitions seeking to amend existing food additive authorizations must include full information on each proposed change). Thus, FDA’s regulations make clear that repeal petitions such as FAP 6B4815 must include adequate supporting information. We therefore acted consistently with our regulations when we evaluated FAP 6B4815 to determine whether its assertions were supported and whether the petition contained sufficient data to support a finding that there is no longer a reasonable certainty of no harm from the currently approved uses.

Next, the objectors maintain that FDA’s approach in evaluating FAP 6B4815 was inconsistent with the following: (1) the *League of United Latin Am. Citizens v. Regan*, 996 F.3d 673 (9th Cir. 2021), a case involving EPA’s regulation of pesticides; (2) an FDA statement in a food additive proceeding involving olestra; and (3) FDA’s action on three specific perfluoroalkyl ethyl-containing food-contact substances. We address each of these in turn.

First: The League of United Latin Am. Citizens (LULAC) case cited by the

objectors is not germane because its holding was based on a distinct statutory scheme applicable to pesticides under section 408 of the FD&C Act (21 U.S.C. 346a) and factual circumstances different from the facts underlying this proceeding. In that case, EPA had received a petition asking the agency to prohibit foods that contained any residue of the insecticide, chlorpyrifos (996 F.3d at 673). EPA argued that the agency could leave in effect tolerances for the pesticide while the agency continued to evaluate the science (id. at 688). The *LULAC* court held that EPA has a continuing obligation under section 408 of the FD&C Act to ensure the safety of established pesticide tolerances that were previously found to be safe (id. at 691) (finding that EPA “has its own continuing duty under [section 408 of the FD&C Act] to determine whether a tolerance that was once thought to be safe still is”). The court’s conclusion regarding EPA’s continuing obligation was based on statutory language in section 408 of the FD&C Act that is materially different from the language in section 409 of the FD&C Act at issue in this proceeding.

Under section 408(b)(2)(A)(i) of the FD&C Act, EPA “may establish *or leave in effect* a tolerance for a pesticide chemical residue in or on a food only if the Administrator determines that the tolerance is safe” (emphasis added). In contrast, section 409 of the FD&C Act does not contain anything comparable to the “*leave in effect* a tolerance . . . only if the Administrator determines that the [substance] is safe” language in section 408, which was the linchpin for the *LULAC* court’s conclusion that EPA had “a continuous duty” to determine whether a tolerance for a pesticide chemical residue is safe (id. at 692 (“[Section 408 of the FD&C Act] imposes a continuous duty upon the EPA by permitting it to ‘leave in effect’ a tolerance ‘only’ if it finds it is safe. To ‘leave’ something in effect means ‘to cause or allow [it] to be or remain in a specified condition. Denying the 2007 Petition caused the chlorpyrifos tolerances to remain in place But in so doing, the EPA did not ‘[determine] that the tolerance is safe.’”)) (Compare Sec. 409 of the FD&C Act).

Further, unlike section 408 of the FD&C Act, section 409 of the FD&C Act directs FDA to establish procedures for repealing food additive authorizations that “shall conform” to the statutory procedure for promulgating authorizations, under which the evidentiary burden to support authorization of a food additive’s use

lies with the petitioner seeking such authorization (see section 409(c) and (i) of the FD&C Act). Given the statutory framework established in section 409 of the FD&C Act and the ways in which it differs from the framework established in section 408 of the FD&C Act, it was entirely reasonable that FDA assessed the information in the objectors' repeal petition to determine whether there was sufficient data to establish the existence of safety questions significant enough to support a finding that there is no longer a reasonable certainty of no harm from the approved *ortho*-phthalates' uses. Furthermore, the factual circumstances are distinct. In *LULAC*, the record showed that EPA "repeatedly determined" that the pesticide at issue was unsafe under the approved tolerance levels. Here, however, FDA has never determined the *ortho*-phthalates at issue in this proceeding to be unsafe. Instead, our denial order explained that FDA did not have a basis to conclude that dietary exposure levels from approved *ortho*-phthalates exceed a safe level (87 FR 31066 at 31075).

Second: The objectors cite as support for their argument the following statement in the **Federal Register** document announcing FDA's decision to approve olestra: "It is important to recognize that to institute a proceeding to limit or revoke the approval of olestra, FDA would not be required to show that olestra is unsafe. Rather, the agency would only need to show that based upon new evidence, FDA is no longer able to conclude that the approved use of olestra is safe, *i.e.*, that there is no longer a reasonable certainty of no harm from the use of the additive" (Objections at 11 (quoting 61 FR 3118 at 3169)). The objectors also refer to a statement in the olestra proceeding where FDA stated that "in any proceeding to [withdraw] or limit the approval of olestra, Procter and Gamble would have the burden to establish the safety of the additive" (Objections at 11, n. 39 (quoting 61 FR 3118 at 3169); see also § 12.87(c)). The objectors cite these excerpts from the olestra proceeding as support for the following proposition: "FDA has stated plainly that when FDA is in the position of raising concerns about the safety of a food additive or other product that it has previously authorized, the agency bears only an initial burden of producing new information that calls into question its previous safety finding; the burden of persuasion on the ultimate question of safety lies with the party advocating for continued authorization of the product" (Objections at 11). However, contrary to the objectors' suggestion, FDA did *not*

say or imply that we would initiate revocation proceedings based merely on new information that might "[call] into question its previous safety finding," nor did FDA say or imply that we would be required to initiate such a proceeding upon being presented with such information. Instead, FDA stated that, to initiate the withdrawal process, we would "need to show that based upon new evidence, FDA is no longer able to conclude that the approved use of olestra is safe, *i.e.*, that there is no longer a reasonable certainty of no harm from the use of the additive" (61 FR 3118 at 3169). Subsequently, in a hearing regarding the withdrawal of olestra, we stated that the sponsor, Procter and Gamble, would then have the burden of establishing safety (*id.* (citing § 12.87(c)). Our review of FAP 6B4815 was entirely consistent with the statements from the olestra proceeding cited by the objectors as to the evidence necessary to initiate the process of repealing a food additive authorization. In reviewing FAP 6B4815, we concluded that its assertions were not adequately supported, and therefore, the petition did not contain sufficient data to support a finding that there is no longer a reasonable certainty of no harm from the currently approved uses of the subject *ortho*-phthalate food additives (87 FR 31066 at 31075). Accordingly, we did not grant the petition's request that we institute proceedings to repeal the authorizations that were the subject of FAP 6B4815.

Third: Regarding FDA's action to revoke the authorizations for the food additive uses of three specific perfluoroalkyl-ethyl-containing food-contact substances (see 81 FR 5), the objectors state that FDA did so "based on data raising 'significant questions as to the safety of the authorized uses'" (Objections at 9). However, the objectors' characterization of what FDA's perfluoroalkyl ethyl action was "based on" misunderstands the basis for that action. FDA stated in the perfluoroalkyl ethyl order that "we conclude that there is no longer a reasonable certainty of no harm from the food contact use of these [substances]" and that we were, therefore, taking the revocation action (81 FR 5 at 7).

FDA did *not* state that the perfluoroalkyl ethyl revocation action was being instituted based on a finding of "significant questions" in isolation. Instead, FDA stated that "[i]n order for FDA to grant a petition that seeks an amendment to a food additive regulation based upon new data concerning the toxicity of the food additive, such data must be adequate for FDA to conclude that there is no longer

a reasonable certainty of no harm for the intended use of the substance" (81 FR 5 at 7) (FDA's statements in the *ortho*-phthalates denial order were consistent, see 87 FR 31066 at 31067).

Finally, the objectors criticize FDA's approach in denying FAP 6B4815 on the same day that we amended our regulations to no longer provide for 25 *ortho*-phthalates to be used in food contact applications because these uses were abandoned by industry (*i.e.*, the abandonment final order). We issued the abandonment final order in response to a separate food additive petition that was based on abandonment, not safety (see 87 FR 31080). While the objectors assert that our decision to take action based on abandonment "reflects FDA's erroneous position that it may leave the extant food-additive authorizations in effect unless and until petitioners prove that they are in fact unsafe," this assertion is unsupported.

We did not deny FAP 6B4815 for the reason that the petition failed to prove that the *ortho*-phthalates are in fact unsafe (*i.e.*, they cause harm under their intended conditions of use); that was not the necessary showing. Instead, we denied FAP 6B4815 because the assertions in the petition were not adequately supported and the petition did not contain sufficient data to support a finding that there is no longer a reasonable certainty of no harm from the approved uses (*i.e.*, FAP 6B4815 did not contain sufficient data to support a finding that there is no longer a reasonable certainty in the minds of competent scientists that the substances are not harmful under the conditions of their intended use, see § 170.3(i) (21 CFR 170.3(i)). Our denial order (87 FR 31066) correctly stated that a petition that seeks to amend or repeal existing regulations based on safety must contain sufficient data to establish the existence of safety questions significant enough to support a finding that there is no longer a reasonable certainty of no harm from the currently approved uses (see 87 FR 31066 at 31067 (citing section 409(c) of the FD&C Act) (describing the data requirements); §§ 171.1 through 171.130 (prescribing food additive petition regulations)).

For all these reasons, we disagree with the objectors' assertion that we committed any legal error that justifies modifying or revoking our denial order.

B. Objection 2

In Objection 2, the objectors state that "FDA unlawfully failed to evaluate the safety of the food-additive uses of phthalates that remain authorized" (Objections at 13). The objectors refer to the fact that FDA issued the denial order

on the same day that we issued the abandonment final order, which amended our regulations to remove food additive authorizations for the use of 25, but not all, authorized *ortho*-phthalates that were the subject of FAP 6B4815 (see 87 FR 31080). FDA took this action based on evidence that the authorized food additive uses of most, but not all, of those *ortho*-phthalates were abandoned (id. at 31086). We did not receive evidence showing abandonment for the following five *ortho*-phthalates that remain authorized as food additives for specified uses: diisononyl phthalate (DINP) (CAS No. 28553–12–0), diisodecyl phthalate (DIDP) (CAS No. 26761–40–0), di(2-ethylhexyl) phthalate (DEHP) (CAS No. 117–81–7), dicyclohexyl phthalate (DCHP) (CAS No. 84–61–7), and diallyl phthalate (DAP) (CAS No. 131–17–9, for use as a monomer). Therefore, the food additive authorizations for these five *ortho*-phthalates remain in place.

The objectors assert that FDA failed to meet its obligation to oversee the safety of the food supply by not conducting a new safety analysis for these five *ortho*-phthalates that remain authorized as food additives (Objections at 13). The objectors assert that FDA failed to satisfy its obligations to evaluate whether FAP 6B4815 contained “‘new data . . . that would justify amendment’ of the applicable authorizations” by assessing both “the data and information in the petition and other available relevant material.” (id. at 14 (quoting 81 FR 7, FDA’s revocation of certain perfluoroalkyl ethyl-containing food-contact substances)). The objectors also state that FDA’s separate RFI (87 FR 31090) regarding the still-authorized *ortho*-phthalates constituted an “attempt to kick the proverbial can down the road” that discredits FDA’s assertion in its response to FAP 6B4815 that it had adequately assessed currently available research regarding phthalates, and that “unlawfully . . . defer[red]” consideration of an “[issue] that FDA was required to address—years ago—in response to [FAP 6B4815]” (id. at 15–16).

The objectors do not request a hearing. Therefore, the objectors waive their right to a hearing on this objection (§ 12.22(a)(4)). The only remaining issue on Objection 2, then, is whether it establishes that FDA’s order denying FAP 6B4815 should be modified or revoked. As described below, we conclude that the objectors have not established a basis for modifying or revoking the denial order.

FDA Response: We do not agree with the objectors’ assertions that FDA’s response to FAP 6B4815 was unlawful

because FDA did not conduct a new safety analysis of DINP, DIDP, DEHP, DCHP, and DAP; *i.e.*, the five *ortho*-phthalates that were the subject of their petition that still have food additive authorizations in effect. When we originally authorized the use of these five additives, we concluded that the use of the food additives satisfied the statutory safety standard.

FAP 6B4815 did not identify deficiencies with our original approval of phthalates for food contact use. Instead, FAP 6B4815 proposed a class-based grouping approach for evaluating the safety of the subject *ortho*-phthalates. In FAP 6B4815, the petitioners proposed that the authorizations should be revoked because, according to the petition: the subject *ortho*-phthalates share common chemical and pharmacological characteristics that justify grouping them as a class; a single ADI value from one *ortho*-phthalate should be applied to all members of the proposed class collectively; and both the EDI value for select phthalates as well as the cumulative estimated daily intake for the proposed class significantly exceeds the purported ADI value for the proposed class. In Objection 2, the objectors turn their attention to the phthalates that remain authorized as food additives. Regarding these *ortho*-phthalates that remain authorized, we conducted additional analysis by evaluating, in a supplementary memorandum, whether the core premise of FAP 6B4815 (*i.e.*, the assertion that the subject *ortho*-phthalates should be grouped as a class for purposes of a safety assessment) could be applied to the five still-authorized *ortho*-phthalates. Our review used the information contained in the petition as well as other available information, including assessments from other regulatory bodies (Ref. 1). In that memorandum, which we made publicly available on the docket, we explained why the information before us did not support the grouping of these five substances for purposes of a safety assessment (id.). We based this conclusion on the structural variations and the differences in metabolites, metabolism, and toxicological endpoints across the substances. We described these differences and the scientific literature we reviewed in the memorandum (id.).

Objection 2 urges us to disregard the very approach for analyzing food additive safety that the petitioners proposed in FAP 6B4815. Specifically, Objection 2 asserts that FDA committed legal error by not conducting a new safety assessment for the five still-

authorized *ortho*-phthalates even though FDA analyzed these substances in accordance with the class-grouping approach proposed by FAP 6B4815. Therefore, Objection 2 ignores the fact that we assessed the appropriateness of class grouping the five still-authorized *ortho*-phthalates (Ref. 1). Objection 2 largely recasts the arguments made in Objection 1 but with respect to the five still-authorized *ortho*-phthalates. It does this by citing FDA’s statement in the **Federal Register** document in which we authorized olestra, where we referred to “the agency’s continuing obligation to oversee the safety of the food supply” (61 FR 3118 at 3168; see also Objections at 13–14 and 16).

Our responses to Objection 1’s assertions apply with equal force to Objection 2’s assertions that we are required to conduct a new safety assessment with respect to the five still-authorized *ortho*-phthalates; as explained earlier, a petition that seeks to amend or repeal existing regulations based on safety must contain sufficient data to establish the existence of safety questions significant enough to support a finding that there is no longer a reasonable certainty of no harm from the currently approved uses. This standard for review is consistent with FDA’s actions in the olestra proceeding. Moreover, the administrative record makes it clear that we satisfied our duties in reviewing FAP 6B4815. We reviewed the assertions in FAP 6B4815 in detail. In a separate memorandum, we evaluated the five still-authorized *ortho*-phthalates, using the same core premise of class grouping proposed in FAP 6B4815 (Ref. 1).

Objection 2 also accuses FDA of publishing its RFI (87 FR 31090) to “unlawfully . . . defer its evaluation of whether the agency’s current authorizations for food-contact uses of phthalates are in fact safe” (Objections at 15). However, our publication of the RFI, which sought scientific data and information on current uses, use levels, dietary exposure, and safety data of certain *ortho*-phthalates, was intended to seek any data that we do not possess, which “may add to our knowledge of *ortho*-phthalates that remain authorized for use” (see 87 FR 31090–31091). The fact that we sought data from the public to inform our oversight of authorized *ortho*-phthalates does not reflect any deficiency in our evaluation of the specific assertions in FAP 6B4815 based on the information that was in the record.

Objection 2 also takes issue with FDA’s response to a comment to the docket concerning FAP 6B4815, in which we stated that “FDA is aware of

the research that has been conducted with respect to phthalates and that FDA considered ‘the research in its evaluation of the petition’” (Objections at 14 (quoting 87 FR 31066 at 31076)). The objectors criticize FDA for not disclosing how we considered “the research that has been conducted with respect to phthalates” (Objections at 14). The objectors also assert that FDA’s statement about having considered the research related to phthalates “cannot be credited” given that we issued the RFI on the same day that we denied FAP 6B4815. The statements that the objectors excerpt in Objection 2 were made in response to comments that referred to literature describing phthalates as hormone disrupting chemicals that are linked to certain adverse health outcomes (see 87 FR 31066 at 31076). We responded to the comments by stating that we are generally aware of the research on phthalates and considered the research cited in the comments (id.).

The denial order, as well as the memoranda we made publicly available when we published the denial order (specifically, the chemistry memorandum, the toxicology memorandum, and the memorandum evaluating the five still-authorized *ortho*-phthalates), demonstrate that we considered the numerous research studies in the administrative record, including the research cited in the comments (Refs. 1, 3, and 4). While we are generally aware of updated toxicological and use information that is publicly available, we published the RFI so that we could obtain a more complete picture of the data relevant to the general safety, dietary exposure, and usage of *ortho*-phthalates, which may include data that stakeholders have not made public (see 87 FR 31090).

Objection 2 also includes certain other arguments. In the last paragraph of Objection 2, the objectors repeat arguments they made in Objection 1 regarding the type of evidence that FAP 6B4815 was required to proffer (Objections at 16). Because we address these arguments in response to Objection 1, we do not repeat our evaluation of these arguments here. A footnote in Objection 2 also refers to the premarket review requirements for food additives (Objections at 14, n.48). However, as explained in response to Objection 1, FAP 6B4815 is a request for postmarket action, and our response to the petition did not conflict with the premarket review framework invoked by the objectors. Additionally, Objection 2 asserts that FDA should have evaluated FAP 6B4815 to determine whether it presented new data (Objections at 16).

As explained in our response to Objection 1 regarding the olestra proceeding, repeal petitions must do more than merely point to the existence of new data.

For these reasons, we disagree with the objectors’ assertion that we committed any legal error that justifies modifying or revoking our denial order.

C. Objection 3

In Objection 3, the objectors argue that FDA’s denial order “fails to address new toxicity information that raises significant questions about the safety of the approved food-additive uses of phthalates” (Objections at 17). In particular, the objectors state that new information became available since petitioners last supplemented the record for FAP 6B4815 in 2017. The objectors point to numerous studies and declarations concerning the health effects of *ortho*-phthalates. Most of these studies and declarations were submitted to the docket dedicated to their citizen petition addressing *ortho*-phthalates. In light of these studies and declarations, the objectors state that FDA should not have allowed DAP, DCHP, DEHP, DINP, and DIDP to remain authorized for food-contact use “without addressing the substantial body of relevant toxicity information” (Objections at 17).

The information that the objectors identify in Objection 3 includes studies that they describe as linking DEHP exposure to developmental toxicity, developmental neurotoxicity, adult neurotoxicity, reproductive toxicity, endocrine disruption, hepatotoxicity, metabolic toxicity, immunotoxicity, and epigenetic alterations (id. at 17–18). The objectors describe these studies as “provid[ing] evidence for a number of DEHP-related adverse health outcomes, including altered adult sex behavior, delayed puberty, insulin sensitivity, obesity, hypothyroidism, cognitive impairment, and even depressive-link behaviors” (Objections at 18). The objectors further assert that animal studies have linked DINP exposure to hepatotoxicity and exacerbated nerve cell damages and decline in learning and memory, as well as elevated cholesterol (id.). In addition, the objectors assert that two studies “found that phthalate mixtures induced reproductive tract malformations in male rats” and point to epidemiological studies they describe as “providing relevant toxicity information” with respect to associations between DEHP and multiple adverse health outcomes (id. at 18). The objectors reference studies they describe as linking DINP and/or DEHP to insulin resistance, delayed puberty onset in boys, preterm birth, and

neurodevelopmental harm (id. at 19). The objectors further point to certain publications by federal and European agencies (id.). Finally, the objectors point to the declarations they submitted to FDA that assert that phthalate exposure causes harm (id. at 20). The objectors request a hearing on Objection 3. They state that the hearing would address “whether the many years’ worth of data and information regarding the human health hazards of phthalates found in the diet presented in support of the Petition and Objections raise significant questions regarding the safety of the authorized food-additive uses of DAP, DCHP, DEHP, DINP, and DIDP” (Objections at 21).

FDA Response: To justify a hearing on this objection, it is not enough for the objectors to simply name health effects linked to the still-authorized *ortho*-phthalates or to list publications and declarations that address the topic of *ortho*-phthalates generally. The objectors cite numerous recent studies and publications but do not provide meaningful analysis or explanation for why these materials support a finding that there are significant questions about the safety of the still-authorized *ortho*-phthalates for their currently authorized conditions of use. The objectors’ mere citation of these studies and declarations is not adequate to justify resolution in the objectors’ favor of the factual question about safety of the still-authorized food additive uses of *ortho*-phthalates; the existence of toxicity findings, alone, is insufficient to establish significant questions about whether there is no longer a reasonable certainty of no harm for an authorized use and is, therefore, insufficient to justify resolution of the factual question of safety (§ 12.24(b)(3)).

All substances exhibit toxic effects at high enough exposure levels, and most substances exhibit an exposure threshold below which they do not exhibit a toxic effect. To support an assertion that the authorized use of a substance is unsafe or presents significant safety questions, it is not sufficient to cite studies that indicate that a substance is associated with a toxic effect; rather, that effect must be placed in the context of exposure. For this reason, when evaluating the safety of a substance, scientists will often determine the “dose-response” relationship of substance exposure and toxic effect.

To establish with reasonable certainty whether a food additive is harmful under its intended conditions of use, FDA considers the projected human dietary exposure to the food additive, the additive’s toxicological data, and

other available relevant information (such as published literature). To determine safety, one approach we may use is to compare the estimated dietary intake of the food additive to an ADI level established by appropriate toxicological data. An ADI is the amount of a substance that is considered safe to consume each day over the course of a person's lifetime (Ref. 2). The ADI is typically based on an evaluation of toxicological studies to determine the highest appropriate experimental exposure dose level in animal studies that was shown to cause no adverse effect (also known as the no-observed-adverse-effect level, or NOAEL), divided by an appropriate safety factor (id.). A calculated dietary exposure to the food additive (*i.e.*, the EDI) at or below the ADI is considered consistent with a reasonable certainty of no harm (id.).

The objectors list publications of various animal and *in vitro* studies in Objection 3, yet they do not attempt to address whether the publications are relevant to assessing an appropriate ADI, calculating an EDI, or whether the dietary exposure could result in a toxic effect (*i.e.*, the estimated daily exposure exceeds an appropriate ADI). The petitioners proposed an ADI in their underlying food additive petition, but our denial order explained why the proposed ADI was not supported and Objection 3 does not address or otherwise engage with FDA's identified concerns. Furthermore, the ADI that FAP 6B4815 proposed in the underlying petition was not based on any of the studies cited in Objection 3.

The information provided in Objection 3 consists largely of studies that link some phthalates to certain identified health effects. Some studies are useful for hazard identification to determine additional hypotheses for future research, but these studies are not designed to provide information to show at which threshold level of dietary exposure these effects may occur. Such hazard identification is the first step in a risk assessment, but the existence of a possible effect does not necessarily mean that the effect is the appropriate endpoint to use for a risk assessment, that the effect will occur at the level of the substance in the diet, or that the substance is in fact unsafe for its intended use. As the hazard identification studies do not examine a dose-response relationship, these data are not adequate for identifying a NOAEL to perform a risk assessment for the food contact uses of the still-authorized phthalates. The data from such hazard identification studies are, therefore, not adequate to establish

significant questions about whether there is no longer a reasonable certainty of no harm from the authorized uses and are insufficient to justify resolution of the factual question of safety.

The other information the objectors cite in Objection 3 includes epidemiological studies. While epidemiological studies may suggest a possibility of occurrence of an effect, they are generally not useful for risk assessment due to a lack of control of confounders such as dietary, medical, and lifestyle factors, socioeconomic status, and characterization of past exposures. Some studies may also include self-reported data by the test subjects which increases the potential for biases and inaccuracies, making it challenging to establish a consistent and reliable relationship between the cause and effect. Therefore, although epidemiological studies may be considered supplementary to the available toxicological data for conducting a safety evaluation, in general, they are not suitable to provide primary or sufficient basis for performing a risk assessment.

The objection also cites the two declarations that were also submitted to the docket for the *ortho*-phthalates citizen petition. The declarations cite numerous epidemiological studies and a few animal studies that provide information on potential hazard identification. The declarations do not provide any dietary exposure estimates for the remaining five phthalates from their authorized food additive uses or additional supporting information for assessing the safety of the uses of the phthalates studied as food contact substances.

The Federal and European publications cited in Objection 3 are the "Toxicological Profile for DEHP" released by the Agency for Toxic Substances and Disease Registry ("ATSDR") (Ref. 5), the "Technical Report on the Toxicology and Carcinogenesis Studies of Di(2-ethylhexyl) Phthalate" (Ref. 6) released by the National Toxicology Program (NTP), and an updated risk assessment of DEHP, DBP, BBP, DINP, and DIDP (Ref. 7) for use in food-contact materials released by the European Food Safety Authority (EFSA). Objection 3 states that these studies "provide novel insights and weight of evidence analyses that are relevant to the safety reevaluations that FDA must conduct" (Objections at 19). However, the objection does not provide any explanation for how these studies would be adequate to assess the safety of the substances' authorized food additive uses and, therefore, the

objection does not establish that these studies create significant questions about whether there is no longer a reasonable certainty of no harm such that they would resolve the factual question of safety.

The objection also cites two dose-response studies to state that "examining the cumulative effects of several phthalates (including DCHP and DEHP) found that phthalate mixtures induced reproductive tract malformations in male rats at doses well below those associated with harm from individual chemicals" (Objections at 18). However, the objection fails to mention that, while the study referenced (Conley, et al. 2021) (Ref. 8) did include two of the five phthalates that still have food additive uses in the United States (DEHP and DCHP), the study examined effects using a mixture of nine phthalates and five non-phthalate pesticides cumulatively, which cannot separate adverse effects caused by either a single phthalate, group of phthalates, or the non-phthalate pesticides. Similarly, the other study referenced (Conley, et al. 2018) (Ref. 12) dosed the rats using a mixture of 18 chemicals, which included 9 phthalates (including DEHP and DCHP) and nine non-phthalate pesticides or drugs. Therefore, the two dose-response studies cited in Objection 3 do not directly address the safety of the food contact uses of the five still-authorized *ortho*-phthalate food additives.

For these reasons, the objectors failed to demonstrate how the cited studies, publications, declarations, and facts asserted would be sufficient to justify resolution of the safety question in the objectors' favor. The objectors did not justify why the studies cited in Objection 3 would establish questions significant enough to support a finding that there is no longer reasonable certainty of no harm or that there are "significant questions regarding the safety of the authorized food-additive uses of DAP, DCHP, DEHP, DINP, and DIDP." In other words, the objectors did not establish that the information in the record is adequate to justify their factual assertion regarding safety. Accordingly, § 12.24(b)(3) supports denial of the request for the hearing. A hearing will not be granted when the information cited is not sufficient to support the factual assertion (§ 12.24(b)(3)).

Furthermore, a hearing will not be held unless resolution of the factual issue in the way sought by the objector is adequate to justify the action requested (§ 12.24(b)(4)). In Objection 3, the objectors alter the action requested from what they originally sought in FAP

6B4815, which was the revocation of food additive approvals for 28 *ortho*-phthalates. They now seek a hearing “regarding the safety of . . . DAP, DCHP, DEHP, DINP, and DIDP” (Objections at 21)—the five *ortho*-phthalates that remain authorized for use as food additives. This objection does not demonstrate how the outcome of the proceeding would be different if the factual issues addressed in this objection were resolved in the way sought, because this objection does not address the underlying requested action.

The underlying requested action was that FDA revoke the food additive authorizations for the 28 subject *ortho*-phthalates based on their grouping as a class. The basis for the underlying requested action was that FDA should: (1) consider the 28 subject *ortho*-phthalates to be a single class of chemically and pharmacologically related substances for safety evaluation; (2) apply FAP 6B4815’s proposed ADI to the purported class; and (3) determine that the EDI for the class exceeds that ADI. However, Objection 3 focuses only on five of the 28 *ortho*-phthalates and asks that we take action with respect to these five. Thus, we are denying the request for a hearing in Objection 3 because a hearing will not be granted on factual issues that are not determinative of the action requested in the proceeding (§ 12.24(b)(4)).

It is important to note that the objectors claim that our denial order was deficient because it did not address questions they failed to ask, and to take actions they failed to request, in the petition that is the subject of this proceeding.¹ Such matters are outside the scope of the process set forth in section 409(f)(1) of the FD&C Act, which requires objections to “[to specify] . . . the provisions of the [denial] order deemed objectionable.” Because this objection and the corresponding request for a hearing seek determinations regarding issues that are outside the scope of the provisions of FDA’s denial order, the objection and hearing request are improper. The assertions and information cited in Objection 3 regarding the health effects of the five still-authorized *ortho*-phthalate food additives would not change our conclusion that the requested action in FAP 6B4815 to remove the food contact

authorizations for a purported class of 28 *ortho*-phthalates was not adequately supported. A hearing will not be granted unless resolution of a factual issue in the way sought by the objector is adequate to justify the action requested (§ 12.24(b)(4)). This conclusion does not change the fact that FDA may, in the future, consider a subset of *ortho*-phthalates that remain authorized for use in food contact applications to be a single class of chemically and pharmacologically related substances for purposes of a safety evaluation.

D. Objection 4

In Objection 4, the objectors take the position that we misapplied section 409(c)(5)(B) of the FD&C Act, which provides that, in determining whether a food additive is safe under section 409 of the FD&C Act, FDA is to “consider among other relevant factors” the cumulative effect of such additive in the diet of man or animals, taking into account any chemically or pharmacologically related substance or substances in such diet. The objectors assert that to “conduct the safety evaluations the Food Act demands, FDA must withdraw the Order and properly apply the statutory standard for chemically or pharmacologically related substances to account for the cumulative effects of all related phthalates in the diet” (Objections at 26). Because this objection raises a purely legal dispute, no hearing is warranted to adjudicate it (§ 12.24(b)(1)). Even if a hearing were available, the objectors did not request one with respect to this objection and therefore waive any right to a hearing (§ 12.22(a)(4)). The only remaining issue on Objection 4, then, is whether the objection establishes that FDA’s order denying FAP 6B4815 should be modified or revoked. As described below, we conclude that the objectors have not established a basis for modifying or revoking of the denial order.

The objectors assert that while the denial order “does not articulate FDA’s interpretation of what constitutes a ‘related’ substance,” FDA nevertheless “applied an erroneous interpretation of ‘chemically or pharmacologically related’ substances for which the Food Act mandates a cumulative effects analysis” (Objections at 22). In describing our review of FAP 6B4815, the objectors assert that FDA “appeared to interpret” this provision of the FD&C Act as only applying if substances that are known to share *all* of the following three factors: “(1) well-defined similarities in chemical structure, and (2) a common defined toxicological

endpoint, and (3) a common mechanism of action associated with that common endpoint” (internal quotations omitted) (Objections at 23). The objectors disagree with this purported requirement and state that “FDA’s regulations make the focus on common effects, as opposed to a common mechanism of action” (citing § 170.18(a)) (Objections at 24). The objectors assert the proper focus is on common health effects (*id.*). The objectors state, “it would be irrational and contrary to the Food Act’s safety mandate to ignore the cumulative effects of substances in the diet that are known to contribute to the same adverse health effect because the mechanism of action is not known to be the same for both substances or is not known at all” (*id.*). Finally, the objectors assert in Objection 4 that we “erred in asserting that it is only required to consider the cumulative effects of substances that would be suitable for grouping into a single category for risk assessment” (internal quotations omitted) (*id.*).

FDA Response: Objection 4 questions FDA’s evaluation of the claim made in FAP 6B4815 that the 28 subject *ortho*-phthalates are chemically and pharmacologically related and should therefore be treated as a class for purposes of evaluating their safety. In describing FDA’s evaluation of this claim, the objectors assert that FDA required all of the following three factors to be satisfied: “(1) well-defined similarities in chemical structure, and (2) a common defined toxicological endpoint, and (3) a common mechanism of action associated with that common endpoint” (Objections at 23). As support for the proposition that FDA imposed such a requirement, Objection 4 cites to both the denial order and FDA’s toxicology memorandum supporting the denial order (Ref. 4).

There is no place in the denial order where we imposed such a requirement. In the denial order, we noted that other regulatory and scientific bodies have grouped phthalates based on these three considerations (87 FR 31066 at 31071). We also noted in our denial order that FAP 6B4815’s approach to class grouping was not consistent with the approach taken by other regulatory and scientific bodies, given that FAP 6B4815 identified the work of those other bodies as a basis for the requested action (*id.*).

To support their claim in Objection 4 that FDA required FAP 6B4815 to satisfy the three factors that the objectors identify, the objectors cite page 10 of our toxicology memorandum for FAP 6B4815 (Ref. 4). The toxicology memorandum, however, did not suggest that FDA required the three factors as a

¹ While FDA is denying this request for a hearing, we again note that, in the **Federal Register** of May 20, 2022, we issued an RFI seeking scientific data and information on current uses, use levels, dietary exposure, and safety data for *ortho*-phthalates that remain authorized for use in food contact applications (87 FR 31090). Any future evaluation may be informed by, among other things, appropriate scientific data and information submitted in response to the RFI.

condition for grouping. Rather, this portion of the toxicology memorandum addressed the claim in FAP 6B4815 that the 28 subject *ortho*-phthalates have similar health effects. In doing so, the toxicology memorandum noted that while FAP 6B4815 asserted that all *ortho*-phthalates must be assumed to have “reproductive/developmental, and endocrine health effects,” the terms “reproductive, developmental, and endocrine effects are broad terms that cover a wide range of toxicological effects that are not necessarily similar and can be caused by a variety of mechanisms.”

The toxicology memorandum also noted that the endocrine system is a generic term which encompasses multiple organs and multiple hormonal pathways, and disruption of different hormonal pathways may not result in common health outcomes (*i.e.*, are not related). The toxicology memorandum further stated that the proposed grouping of phthalates based on these broad terms was not consistent with the types of grouping undertaken by other scientific bodies. As with the denial order, the toxicology memorandum discussed the considerations underlying the groupings undertaken by these other scientific bodies because FAP 6B4815 pointed to the evaluations by these bodies as support for the requested action—not because FDA was presenting or imposing the three factors that the objectors identify. Thus, Objection 4 is incorrect in asserting that FDA required the three factors the objectors identify.

Likewise, the objectors mischaracterize FDA’s denial order by stating that, in assessing whether the subject *ortho*-phthalates are pharmacologically related, we erred in assessing whether the 28 *ortho*-phthalates exhibit a common mechanism of action; the objectors state that the more appropriate focus is whether there are common health effects (Objections at 24). According to Objection 4, “it would be irrational and contrary to the Food Act’s safety mandate to ignore the cumulative effects of substances in the diet that are known to contribute to the same adverse health effect because the mechanism of action is not known to be the same for both substances or is not known at all” (*id.*). In fact, we did evaluate the claim in FAP 6B4815 regarding common health effects, and our denial order explained why this claim was lacking. Specifically, our denial order explained that the generalized assertion in FAP 6B4815 that all the cited effects are pharmacologically related because they “result from the effects of *ortho*-

phthalates on the endocrine system” does not acknowledge that the endocrine system is a generic term that encompasses multiple organs and multiple hormonal pathways (87 FR 31066 at 31070). A substance that exhibits activity in one hormonal pathway may not have any effect on a different hormonal pathway, and disruption of different hormonal pathways may not result in common health outcomes (*id.*).

Our denial order also explained that the claim in FAP 6B4815 that all studied *ortho*-phthalates demonstrate similar effects on the endocrine system was directly contradicted by data cited in the petition (*id.*). We explained that one of the most commonly studied pharmacological effects for phthalates is antiandrogenicity and that the data cited in the petitioners’ literature search indicates that, among the 12 phthalates with available toxicological information, seven phthalates exhibit antiandrogenic effects, but four phthalates have been shown to *not* exhibit antiandrogenic effects (*id.* at 31070 through 31071). Thus, FDA’s evaluation of FAP 6B4815 did, in fact, evaluate whether the 28 *ortho*-phthalates have common health effects. Objection 4, therefore, errs in suggesting that FDA’s evaluation was “irrational and contrary to the Food Act” by virtue of disregarding evidence that the 28 *ortho*-phthalates cause common health effects.

Finally, Objection 4 is misplaced in asserting that FDA’s denial order maintained that FDA “is only required to consider the cumulative effects of substances that would be suitable for grouping into a single ‘category for risk assessment’” (Objections at 24). FDA’s denial document made no such statement. The internal quotation appears to refer to the following sentence in our denial order: “the common functional group rationale *should* be supported with a discussion of any structural variations within that common functional group definition and an explanation of why the chemical-structural differences between members would not impact the suitability of the category for risk assessment” (87 FR 31066 at 31069) (emphasis added). Contrary to the claim in Objection 4, this sentence does not announce any legal interpretation regarding when FDA may consider the cumulative effects of different food additives. Rather, it addresses one of the rationales offered by FAP 6B4815 for grouping the 28 *ortho*-phthalates: that the substances share a common functional group. In the sentence that petitioners quote from in Objection 4, we explain the type of scientific

evidence that is recommended to support an assertion of a common functional group, as outlined in the Organization for Economic Co-operation and Development (OECD) guidance that the original petition cites as support of its assertion that the 28 *ortho*-phthalates share a common functional group (Ref. 9).

For these reasons, we disagree with the assertion in Objection 4 that FDA committed legal error that justifies modifying or revoking our denial order. We also note that, even if there was a legal error with FDA’s application of section 409(c)(5)(B) of the FD&C Act, our resolution of FAP 6B4815 would have been the same. Our denial order did not rest solely on the question of whether the 28 *ortho*-phthalates should be considered a class for purposes of safety evaluation. Our denial order also rested on our conclusion that petitioners did not adequately support the other key assertions in FAP 6B4815 (*i.e.*, the assertion proposing a purported ADI for DEHP, the assertion that the purported ADI should be applied to all 28 phthalates, and the assertion that the EDI for the asserted class of *ortho*-phthalates significantly exceeds the proposed ADI). Thus, even if FAP 6B4815 had established that there was sufficient evidence to support treating the 28 subject *ortho*-phthalates as a class, FDA would have denied the petition because it failed to establish the two subsequent assertions supporting the petition’s request to revoke the authorizations of such substances.

E. Objection 5, 5–A, 5–B, and 5–C

In Objection 5, the objectors argue that “FDA acted arbitrarily and unlawfully” by not considering the relatedness of smaller groups of *ortho*-phthalates (Objections at 26). The objection contends that the relatedness of different groups of *ortho*-phthalates would mean that “FDA must consider their cumulative effects” (*id.* at 26). The premise of this objection is that FDA’s denial order erred in analyzing the relatedness of all the 28 *ortho*-phthalates that were the subject of FAP 6B4815, because on the same day that FDA issued the denial order we also issued the abandonment order. In Objection 5, the objectors assert that FDA’s analysis of the relatedness of the 28 *ortho*-phthalates was “irrational on its face” (*id.*). The objectors separate Objection 5 into three separate sub-objections. In each sub-objection, the objectors propose that FDA grant a public hearing to determine that the proposed groupings of phthalates show that the phthalates are chemically or pharmacologically “related.” The

specific groupings proposed in Objection 5 are:

(A) A group of nine *ortho*-phthalates, consisting of the five *ortho*-phthalates that remain approved as food additives following FDA's abandonment order combined with four *ortho*-phthalates that are authorized for use as food-contact substances because they were sanctioned prior to the food additive amendments to the FD&C Act (*i.e.*, they are prior sanctioned). A "prior sanction" is "an explicit approval granted with respect to use of a substance in food prior to September 6, 1958," by the FDA or the United States Department of Agriculture, pursuant to the FD&C Act, the Poultry Products Inspection Act, or the Meat Inspection Act (§ 170.3(l)). The term "prior sanction" derives from section 201(s)(4) of the FD&C Act (21 U.S.C. 321(s)(4)), which excepts from the definition of a "food additive" any substance "used in accordance with a sanction or approval granted prior to" September 6, 1958, the date of enactment of the Food Additives Amendment to the FD&C Act. Before that date, FDA had approved specific uses of various food-contact materials or food ingredients by issuing letters and other statements that stated that in FDA's view these substances were "not considered unsafe," that they did "not present a hazard," or that FDA "did not object to their use."

The nine *ortho*-phthalates that are at issue in this sub-objection are Di(2-ethylhexyl) phthalate (DEHP), Dicyclohexyl phthalate (DCHP), Diisononyl phthalate (DINP), Diisodecyl phthalate (DIDP), Dialyl phthalate (DAP), Diethyl phthalate (DEP), Butyl phthalyl butyl glycolate (BPPG), Diisooctyl phthalate (DIOP), and Ethyl phthalyl ethyl glycolate (EPG). The objectors assert that these nine *ortho*-phthalates should be grouped because they are "chemically related" and grouping them due to a common functional group would be consistent with the Organization for Economic Co-operation and Development (OECD) Guidance on Grouping Chemicals (Objections at 28).

(B) A group of seven *ortho*-phthalates, which consist of a subgroup of the nine *ortho*-phthalates that remain either approved in our food additive regulations or authorized because they are prior sanctioned. These *ortho*-phthalates are DCHP, DEHP, DINP, DAP, DEP, DIDP, and DIOP. The objectors state that these *ortho*-phthalates are "pharmacologically related substances on account of their common effect on developmental toxicity" (Objections at 31).

(C) A group of four *ortho*-phthalates, which consist of a subgroup of the nine *ortho*-phthalates that remain approved in our food additive regulations or authorized because they are prior sanctioned. These *ortho*-phthalates are DCHP, DEHP, DINP, and DIOP. The objectors state that these *ortho*-phthalates should be considered cumulatively "based on their structural similarity and common antiandrogenic effects associated with the mechanism of action of reduced fetal testosterone production" (Objections at 35).

FDA Response: Even if the objectors' statements regarding the asserted relatedness of these different groups of *ortho*-phthalates were shown to be correct, the outcome of FDA's denial order would not be altered. FAP 6B4815 did not seek to establish the relatedness of these different groups of *ortho*-phthalates, consisting of both food additives and prior sanctioned substances, for purposes of safety assessment. Rather, FAP 6B4815 proposed that FDA take a different approach. Specifically, FAP 6B4815 requested that we treat 28 *ortho*-phthalates authorized for food contact use in our food additive regulations as a class, apply a single ADI to the purported class, and then compare exposure estimates for the 28-member class to the proposed ADI. FAP 6B4815 did not ask us to consider these proposed groups of nine, seven, and four *ortho*-phthalates. As Objection 5 does not demonstrate how the outcome of this proceeding would be different based on the new assertions of the new proposed groupings, we deny the request for a hearing. A hearing will not be granted unless resolution of a factual issue in the way sought by the objector is adequate to justify the action requested (§ 12.24(b)(4)). As courts have recognized, the issues raised in objections "must be material to the question involved; that is, the legality of the order attached" (*Pineapple Growers Ass'n of Haw.*, 673 F.2d at 1085).

The objectors claim that our denial order was deficient because it did not address questions they failed to ask, and to take actions they failed to request, in the petition that is the subject of this proceeding. Such matters are outside the scope of the process set forth in section 409(f)(1) of the FD&C Act, which requires objections to "[to specify] . . . the provisions of the [denial] order deemed objectionable." The type of information necessary to consider for grouping chemicals for safety assessment is complex and proposing new groupings at the objection phase—when those groupings were not within the scope of the denial order—does not

allow for full consideration of the complex scientific issues involved (see *e.g.*, Ref. 1). Because Objection 5 and the corresponding request for a hearing seek determinations regarding issues that are outside the scope of the provisions of FDA's denial order, the objection and hearing request are improper.

Separately, the objectors claim that FDA's review of FAP 6B4815 failed to account for our abandonment order (Objections at 26). We disagree. On the same day that we issued our denial order, we published a detailed memorandum in which we addressed the purported relatedness of the five *ortho*-phthalates that remained approved as food additives following FDA's action on the abandonment petition (Ref. 1). FDA evaluated whether the five still-approved *ortho*-phthalates should be treated as a class for purposes of safety assessment and concluded that the five substances should not be grouped together for safety assessment. We based this conclusion on the structural variations and the differences in metabolites, metabolism, and toxicological endpoints across the substances. We described these differences in the memorandum that is in the docket (*id.*).

F. Objection 6

In Objection 6, the objectors assert that FDA should have treated a group of eight *ortho*-phthalates as a class because the eight *ortho*-phthalates, are "antiandrogenic and are likely present in the diet" (Objections at 38). The eight *ortho*-phthalates that Objection 6 identifies for treatment as a class are Di(2-ethylhexyl) phthalate (DEHP), Dicyclohexyl phthalate (DCHP), Diisononyl phthalate (DINP), Diisooctyl phthalate (DIOP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DiBP), and Dihexyl phthalate (DnHexP). The eight *ortho*-phthalates are a subset of the 28 *ortho*-phthalates that were the subject of FAP 6B4815. This proposed class consists of a subgroup of the *ortho*-phthalates that remain approved for food-contact use under our food additive regulations (DCHP, DEHP, and DINP), one that is prior sanctioned (DIOP), and four that are no longer authorized for food-contact use due to our abandonment order (DiBP, DBP, BBP, and DnHexP). The objection contends that the relatedness of these eight *ortho*-phthalates triggers FDA's obligation to take into account their cumulative effect, and the fact that FDA's denial order did not identify them as a class means that FDA acted "contrary to the Food Act and its regulations by failing to account for the

cumulative effects of dietary exposure” to this proposed group (id.).

The objectors request a hearing on Objection 6. They state that the hearing would address “whether FDA unlawfully failed to consider the cumulative effects of phthalates in the diet that are chemically or pharmacologically related to phthalates that remain approved for food-additive use” (internal quotations omitted) (Objections at 39 through 40). The objectors state that at a hearing they would “offer expert testimony regarding the presence of BBP, DBP, DIBP, and DnHP in the diet; the chemical and pharmacological relationship among these substances and DEHP, DINP, DCHP, and DIOP; and the approach or approaches FDA could take to appropriately account for the cumulative effects of these substances” (id. at 40).

FDA Response: Even if the objectors’ asserted statements regarding the chemical and pharmacological relatedness of this group of eight *ortho*-phthalates were shown to be correct, the outcome of FDA’s denial order would not be altered. The underlying proceeding did not address the relatedness of this smaller group of *ortho*-phthalates for purposes of safety assessment. FAP 6B4815 proposed that FDA take a different course of action. Specifically, as stated earlier, FAP 6B4815 requested that we group together 28 *ortho*-phthalates approved for food contact use in our food additive regulations, apply a single ADI to the purported class, and then compare exposure estimates for the 28-member class to the proposed ADI. FAP 6B4815 did not ask us to consider this new proposed group of eight *ortho*-phthalates.

As Objection 6 does not demonstrate how the outcome of this proceeding would be different if the assertions regarding the new proposed grouping in Objection 6 were shown to be correct, we deny the request for the hearing. A hearing request will not be granted unless resolution of a factual issue in the way sought by the objector is adequate to justify the action requested (§ 12.24(b)(4)). As courts have recognized, the issues raised in objections “must be material to the question involved; that is, the legality of the order attached” (see *Pineapple Growers Ass’n of Hawaii*, 673 F.2d at 1085). With this Objection, petitioners would have us address a question that was not involved in the underlying proceeding. As noted earlier, the objectors claim that our denial order was deficient because it did not address questions they failed to ask, and to take

actions they failed to request, in the petition that is the subject of this proceeding. However, such matters are outside the scope of the process set forth in section 409(f)(1) of the FD&C Act, which requires objections to “[to specify] . . . the provisions of the [denial] order deemed objectionable.” Because Objection 6 and the corresponding request for a hearing seek determinations regarding issues that are outside the scope of the provisions of FDA’s denial order, the objection and hearing request are improper.

Additionally, FDA *did* consider the relatedness of the 28 *ortho*-phthalates that were the subject of FAP 6B4815 as well as the five *ortho*-phthalates that remain approved for food-contact use in our food additive regulations and did not find that the substances should be grouped as a class for purposes of safety assessment (87 FR 31066 at 31075 and Ref. 1).

G. Objection 7

In Objection 7, the objectors argue that “FDA erred insofar as it required the petitioners to prove that current dietary exposure to the approved phthalates exceeds a safe level” (Objections at 40). The objectors assert that FDA’s evaluation of the information in FAP 6B4815 related to exposure “is contrary to the applicable statutory and regulatory provisions, the proper burden of proof, and FDA’s past practice” (Objections at 42). Because this objection raises a purely legal dispute, no hearing is warranted to adjudicate it (§ 12.24(b)(1)). Even if a hearing were available, the objectors did not request one with respect to this objection and therefore waive any right to a hearing (§ 12.22(a)(4)). The only remaining issue on Objection 7, then, is whether this objection establishes that FDA’s order denying FAP 6B4815 should be modified or revoked. As described below, we conclude that the objectors have not established a basis for modifying or revoking the denial order.

In Objection 7, the objectors assert that, while FDA is to consider exposure data when approving new food additives, “FDA’s regulation governing petitions to amend or repeal food additive regulations does not require the petitioners to tender exposure data” (Objections at 40). The objectors contend that, rather than requiring repeal petitions to provide exposure data, FDA’s regulations provide that repeal petitions “may be based solely on ‘new data as to the toxicity of the chemical’ or other ‘new information’ showing ‘that experience with the existing regulation may justify its amendment or repeal’” (quoting

§ 171.130(b)) (id.). The objectors acknowledge that § 171.130(b) provides for new data to be furnished in the form specified in § 171.1 but argue that “[t]o the extent that the substantive requirements of section 171.1 are applicable to petitions seeking revocation or repeal of food additive regulations, that provision also does not require exposure data” (Objections at 41). The objectors further state that “to the extent that FDA interprets [§ 171.1] to require exposure information, it must apply that requirement in a manner that comports with the burden of production the Food Act places on petitioners seeking revocation of food additive authorizations based on safety concerns,” such that “FDA cannot lawfully require such petitioners to tender data proving that existing exposure to the additives at issue and related substances is unsafe” (id. at 41). The objectors assert that FDA’s action on certain long-chain perfluorinated compounds (81 FR 5) was consistent with this interpretation (id. at 41 through 42).

FDA Response: We disagree with the assertion that we applied an incorrect legal standard in evaluating FAP 6B4815. We reviewed the exposure information provided in FAP 6B4815 based on the petition’s specific assertions. FAP 6B4815 asserted that the estimated dietary exposure for the asserted class of *ortho*-phthalates significantly exceeded the proposed ADI for the purported class, and the petition included dietary exposure estimates for select phthalates. In our denial order, we evaluated the proposed dietary exposure values and explained why they were not adequately supported. Specifically, we observed that FAP 6B4815 did not account for: (1) The imprecision of relying on exposures estimates derived from biomonitoring studies to assess dietary exposure; (2) the diverse parameters used in the cited dietary exposure analyses to determine which analysis, if any, most accurately reflects true U.S. dietary exposure; and (3) the contradiction in reported dietary exposure values between those analyses (87 FR 31066 at 31075; see also Ref. 3). Under our food additive regulations, petitioners must do more than request changes to FDA’s food additive regulations. Petitioners must provide support for the requested changes. Food additive petitions seeking amendments to existing authorizations “must include full information on each proposed change” (*In re Natural Resources Defense Council*, 645 F.3d 400, 403 (D.C. Cir. 2011) (internal quotations and citations omitted)). Here, FAP 6B4815

included dietary exposure estimates, and our denial order evaluated those estimates and explained why they were lacking. In doing so, we did not advance any new standards for the type of information that must be included in repeal petitions.

Further, our denial order was not inconsistent with our action on long-chain perfluorinated compounds. In that action, we evaluated available exposure information and explained why we were not able to determine migration of the relevant food contact substances (FCSs) into food as a result of their approved food-contact use. For this reason, FDA was unable to calculate consumer exposure to the substances in a manner which would allow a quantitative assessment of the safety of that exposure. However, FDA's review noted that available data demonstrate that long-chain perfluorocarboxylic acids and fluorotelomer alcohols biopersist in animals and that this biopersistence also occurs in humans. Although available migration information did not allow a quantitative assessment of the safety of exposure to these FCSs, the reproductive and development toxicity of the three food contact substances could be qualitatively assessed in the context of biopersistence and the expectation that chronic dietary exposure to these substances would result in a systemic exposure to the substances or their metabolic by-products at levels higher than their daily dietary exposure (81 FR 5 at 7). There is not comparable evidence in the administrative record for FAP 6B4815 to allow FDA to conclude that there is no longer a reasonable certainty of no harm regarding the subject *ortho*-phthalates for their intended use in the absence of adequate exposure information. While FDA had a basis for qualitatively assessing exposure in the action on long-chained perfluorinated compounds, the record here does not support that approach.

For these reasons, we disagree with the objectors' assertion that FDA committed any legal error that justifies modifying or revoking our denial order.

H. Objection 8

The final objection argues that "contrary to FDA's conclusion, the available exposure information raises serious safety questions regarding the approved food additive uses of phthalates" (Objections at 43). The objectors request a hearing on Objection 8 and state that the hearing would address whether biomonitoring data from the National Health and Nutrition Examination Survey (NHANES) "and other available exposure information

together establish significant questions concerning the safety of the food additive uses of phthalates that remain approved" (Objections at 49). The objectors state that "FDA did not address this issue in the order. Instead, it dismissed the NHANES biomonitoring data provided with the Petition based on arguments that are legally and factually unsupported, and it did not evaluate the most recent NHANES data in conjunction with ATSDR's MRL for DEHP" (id. at 49).

FDA Response: A hearing will not be granted on factual issues that are not determinative with respect to the action requested (§ 12.24(b)(4)). In this objection, the objectors challenge our evaluation of the information they provided in FAP 6B4815 related to exposure. However, our denial order made clear that our evaluation of exposure data was not the sole reason we denied FAP 6B4815. Instead, we based our denial on the lack of adequate support for each of the three assertions made in FAP 6B4815: (1) that the 28 *ortho*-phthalates should be treated as a class for purposes of evaluating their safety; (2) that a purported ADI for DEHP should be applied to all 28 *ortho*-phthalates that were the subject of the petition; and (3) that the EDI for the asserted class of *ortho*-phthalates significantly exceeded the proposed ADI, thus rendering the purported class unsafe for their use as food contact substances. Our denial order explained in detail why the petition did not adequately support any of these three assertions. Because we found that the petition was not adequately supported, we concluded that the petition did not contain sufficient data to support a finding that there is no longer a reasonable certainty of no harm from the approved uses (87 FR 31066 at 31075).

To the extent that Objection 8 is based on the premise that FDA's evaluation of the exposure data was determinative to how we evaluated FAP 6B4815, that premise is incorrect. Even if FDA were to have found, as Objection 8 urges, that the data in the record show that the exposure to certain *ortho*-phthalates significantly exceeds the ADI proposed by FAP 6B4815 for the reference *ortho*-phthalate selected (DEHP), such a finding would not have answered the antecedent questions of whether the 28 *ortho*-phthalates should be treated as a class or whether the proposed ADI for the selected *ortho*-phthalate should be applied to the purported class of 28 *ortho*-phthalates. Because FDA's conclusion regarding exposure data in the record was not determinative with respect to the repeal action requested in

FAP 6B4815, the objectors' request for a hearing on this subject is denied.

In addition, we are denying the request for a hearing on this objection because the data and information identified by the objectors in support of the objection, even if established at a hearing, would not be adequate to justify the factual determination about unsafe exposure urged by the objectors (see § 12.24(b)(3)). This is for two distinct reasons.

First, Objection 8 claims that "diet is a major, if not primary, source of exposure to the phthalates at issue" (Objections at 43). The objection points to the 2014 report from the Chronic Hazard Advisory Panel on Phthalates and Phthalate Alternatives (CHAP report), two declarations that cite the CHAP report as support, and a statement in ATSDR's 2022 toxicological profile of DEHP that "the principal route of human exposure to DEHP is oral," and that the ingestion of food accounts for the majority of total oral exposure to DEHP (Objections at 45) (Ref. 10). The objectors state that FDA's denial order "does not dispute the CHAP's conclusions regarding the primacy of diet as an exposure source for multiple approved phthalates and related substances" and that FDA "must qualitatively consider" conclusions by CHAP or ATSDR that diet is a "critically important source of exposure to DEHP and other phthalates at issue" (id. at 45). This criticism is misplaced. Even if FDA were to reach the general conclusion that the diet is a major source of exposure to approved *ortho*-phthalates, that would not answer the question of whether or not a specific approved food additive use is safe. Regarding the CHAP report, it did not answer the question of whether specific food additive uses of *ortho*-phthalates are safe. To the extent that this objection asserts that FDA did not evaluate the CHAP report in responding to FAP 6B4815, that is not the case. The denial order and FDA's supporting memoranda discussed the CHAP report at length (Refs. 3 and 4). Regarding ATSDR's report on DEHP, this report states that the intake approximations calculated for DEHP indicate that the general population is exposed to DEHP at levels that are 3–4 orders of magnitude lower than those observed to cause adverse health effects in animal studies. Accordingly, the ATSDR report does not justify resolution of the factual question about unsafe exposure in the objectors' favor.

The second reason the data and information identified by the objectors in support of the objection, even if established at a hearing, would not be

adequate to justify resolution of the factual question about unsafe exposure relates to FDA's evaluation of biomonitoring studies. Objection 8 asserts that "FDA irrationally dismissed the relevance of biomonitoring data from the CDC's NHANES, which tracks metabolites of DEHP, DCHP, DEP, and DINP, among other phthalates, in human urine" (Objections at 45). The objectors assert that FDA's denial order was mistaken in stating that petitioners relied on biomonitoring data "alone" as information presented in the petition established the primacy of diet as a source of exposure to multiple phthalates (Objections at 46). The objectors state that "the NHANES biomonitoring data must be evaluated in light of evidence that most human exposures to these phthalates come from the diet" (id.). Here, the objectors make several claims that are not supported. We did not, in fact, dismiss the potential relevance of biomonitoring evidence presented in the petition. Rather, our denial order specifically noted that human biomonitoring studies can be "part of an appropriate postmarket approach to determine dietary exposure for a substance that is already authorized for use as a food contact substance" (87 FR 31066 at 31074). However, we also explained that "many factors should be addressed to determine the suitability of any given dataset for determining dietary exposure" (id.). We explained that the approach of directly comparing biomonitoring-based exposure values to a proposed ADI for the purpose of assessing the safety of a food additive is not scientifically appropriate (id.). Relying on biomonitoring data alone does not differentiate the amount of exposure that results from the diet compared to environmental and other sources (id.). Because FAP 6B4815 did not account for these limitations by addressing how the biomonitoring data accounts for dietary exposure, we concluded that the petition's direct comparison of biomonitoring-based exposure values to the purported ADI was scientifically flawed. Our evaluation did not amount to a summary dismissal. We considered the information provided in the petition and found it lacking. The objectors' claim that we stated that FAP 6B4815 relied on biomonitoring data "alone" is also wrong. In our denial order, we discussed other evidence in FAP 6B4815 that was related to exposure (and identified shortcomings with the petition's evaluation of that data) (id.). Thus, the record shows that we

considered all relevant exposure-related data included in the petition.

The objectors' claims regarding the primacy of the diet and FDA's dismissal of biomonitoring data, even if established at a hearing, would not be sufficient to justify resolution of the factual conclusion urged by the objectors (§ 12.24(b)(3)). These claims were intended to support a conclusion that the available exposure information raises serious safety questions regarding the approved food-additive uses of phthalates. The information presented to support these claims do not provide a factual basis for determining that any *ortho*-phthalates have unsafe dietary exposure levels or that there are significant safety questions regarding the dietary exposure levels because these claims do not proffer evidence of unsafe dietary exposure levels for any *ortho*-phthalates with authorized uses. These arguments do not provide a basis for a hearing.

A separate argument that objectors put forth in Objection 8 purports to provide more direct data regarding exposure. The objectors described a new exposure analysis and provided a supporting memorandum (Objections at 48, n. 174) that calculated EDIs for 10 phthalates (DEHP, BBP, DBP, DIBP, DCHP, DEP, DIDP, DINP, DMP, and DnOP) using urinary metabolite concentrations from the most recent NHANES biomonitoring data (collection occurred from 2015 to 2016). The objectors state that the EDI estimate for DEHP (at the 90th and 95th percentiles) is above the 0.10 micrograms per kilogram body weight per day intermediate minimal risk level (MRL) for oral exposure established for DEHP by ATSDR in 2022 (id. at 48). The objectors state that this "indicate[s] unsafe exposure levels across the U.S. population" (id.). As explained in our denial order and above, relying on biomonitoring data alone to calculate an exposure estimate does not differentiate the amount of exposure that results from the diet compared to other sources. Neither the objectors nor the supporting memorandum accounts for these limitations by addressing how the biomonitoring data is representative of an estimate to dietary exposure only. Furthermore, the MRL for DEHP cited by the objectors was determined based on a single study that used only one dose level and only a limited number of animals. Due to the use of a single dose and limited animals, there is not enough supporting information to rely on this value for the purposes of a safety assessment for DEHP or to apply it as a value for risk assessments of the other substances cited by the objectors.

The objectors also assert that certain studies involving mixtures of *ortho*-phthalates "underscore the need for FDA to consider the available exposure information in response to these objections, and the importance of cumulative effects analysis to that assessment" (Objections at 49). The objectors state that "EPA scientists [who] have documented the magnitude of the cumulative effect of mixtures of anti-androgenic *ortho*-phthalates, and mixtures of anti-androgenic *ortho*-phthalates and other substances with similar anti-androgenic effects. Collectively, these studies found that *ortho*-phthalates in mixtures with structurally and pharmacologically related substances induced anti-androgenic effects at doses that were orders of magnitude lower than those associated with anti-androgenic effects of individual phthalates" (id. at 48). However, the objectors do not provide any dietary exposures to the proposed related anti-androgenic substances in the diet, nor do they identify what those related anti-androgenic substances are. While the Howdeshell (2017) (Ref. 11) and Conley et al., (2018 and 2021) (Refs. 8 and 12) studies demonstrate some additive effects of mixtures of anti-androgenic substances, the Conley et al., (2018 and 2021) studies also report a level of exposure of these phthalate and non-phthalate mixtures where no antiandrogenic effects were detected. Likewise, beyond the MRL for DEHP, the objectors do not provide a suitable safe level or a risk assessment value to compare that cumulative dietary exposure level for the purposes of conducting a safety assessment. The objectors do not demonstrate how determining that anti-androgenic effects from multiple substances may be additive would demonstrate Objection 8's assertion that the available exposure information raises serious safety questions regarding the approved food-additive uses of phthalates.

Separately, the objectors contend that FDA committed legal error in evaluating the exposure information included in FAP 6B4815. The objectors assert that FDA evaluated their petition "as if diet were the sole source of exposure to the approved phthalates," which Objection 8 describes as being in tension with the "among other relevant factors" text in section 409(c)(5) of the FD&C Act (Objections at 46). The applicability of the "among other relevant factors" text in section 409(c)(5) of the FD&C Act is a legal issue, and a hearing will not be granted on issues of law (§ 12.24(b)(1)). We note that, in determining whether a food additive is safe under section

409(c)(5) of the FD&C Act, FDA is to “consider among other relevant factors” the following: (1) probable consumption of the additive; (2) cumulative effect of such additive “in the diet of man or animals, taking into account any chemically or pharmacologically related substance or substances in such diet;” and (3) safety factors “generally recognized” by qualified experts “as appropriate for the use of animal experimentation data.”

Section 409(c)(5) of the FD&C Act does not impose a “legal obligation” for FDA to consider exposure from non-dietary sources in determining safety. Rather, section 409(c)(5) of the FD&C Act makes clear that FDA has discretion to review a number of factors to determine whether a food additive is safe. Besides the factors enumerated in subparagraphs (A), (B), and (C), section 409(c)(5) of the FD&C Act gives us discretion to decide, in our scientific expertise, whether there are other factors that are “relevant” to the safety of a food additive in the context of a particular petition. Moreover, the text of subparagraphs (A) and (B), which contemplate FDA considering *food-related* uses in assessing safety, provides additional support that it is not required for FDA to consider exposure from non-dietary sources as a relevant factor. Specifically, subparagraph (A) states that in determining safety, the Secretary shall consider “the probable consumption of the additive and of any substance formed in or on food because of the use of the additive,” and subparagraph (B) refers to the *diet* of man or animals” (emphasis added). Subparagraph 409(c)(5)(C) of the FD&C Act, which directs FDA to consider safety factors that “are generally recognized as appropriate for the use of animal experimentation data,” does not suggest that FDA must consider exposure from non-dietary sources. Therefore, the objectors’ argument that non-dietary exposure must be part of the safety analysis under section 409(c)(5) of the FD&C Act is incorrect. While the objectors state that other federal agencies “frequently consider background exposures when evaluating and regulating harmful chemicals,” we administer the FD&C Act and not authorities that are applicable to other Federal agencies.

V. Summary and Conclusions

After evaluating the objections, we conclude that the submission does not provide a basis to support modifying or revoking the denial of FAP 6B4815. Therefore, we are overruling the objections and denying the requests for a public hearing.

VI. References

The following references marked with an asterisk (*) are on display at the Dockets Management Staff, (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852, 240–402–7500 and are available for viewing by interested persons between 9 a.m. and 4 p.m., Monday through Friday; they also are available electronically at <https://www.regulations.gov>. References without asterisks are not on public display at <https://www.regulations.gov> because they have copyright restriction. Some may be available at the website address, if listed. References without asterisks are available for viewing only at the Dockets Management Staff. Although FDA verified the website addresses in this document, please note that websites are subject to change over time.

1. * FDA Memorandum from J. Urbelis to Administrative File for Food Additive Petition (FAP) 6B4815, May 11, 2022.
2. * FDA, Guidance for Industry, “Toxicological Principles for the Safety Assessment of Food Ingredients: Redbook 2000,” July 2007 (available at <https://www.fda.gov/media/79074/download>).
3. * FDA Chemistry Memorandum from R. Brinas to J. Urbelis, May 11, 2022.
4. * FDA Toxicology Memorandum from T–F. Cheng to J. Urbelis, May 11, 2022.
5. * Agency for Toxic Substances and Disease Registry (ATSDR) “Toxicological Profile for Di(2-ethylhexyl) Phthalate (DEHP),” January 2022.
6. * “NTP Technical Report on the Toxicology and Carcinogenesis Studies of Di(2-ethylhexyl) Phthalate Administered in Feed to Sprague Dawley Rats,” December 2021.
7. European Food Safety Authority Panel on Food Contact Materials, Enzymes and Processing Aids, “Update of the Risk Assessment of Di-Butylphthalate (DBP), Butyl-Benzyl-Phthalate (BBP), Bis(2-ethylhexyl)Phthalate (DEHP), Di-Isononylphthalate (DINP) and Di-Isodecylphthalate (DIDP) for Use in Food Contact Materials,” *European Food Safety Authority Journal*, 17(12):5838, 2019.
8. Conley, J., C.S. Lambright, N. Evans, et. al., “A Mixture of 15 Phthalates and Pesticides Below Individual Chemical No Observed Adverse Effects Levels (NOAELs) Produces Reproductive Tract Malformations in the Male Rat,” *Environment International*, 156:106615, 2021.
9. ** 2014 Organization for Economic Cooperation and Development (OECD) Guidance on Grouping of Chemicals.
10. ** 2014 Chronic Hazard Advisory Panel (CHAP) on Phthalates and Phthalate Alternatives Final Report.
11. Howdeshell, K., A.K. Hotchkiss, L.E. Gray Jr., et al., “Cumulative Effects of Antiandrogenic Chemical Mixtures and

Their Relevance to Human Health Risk Assessment,” *International Journal of Hygiene and Environmental Health* 220 (2Pt A):179, 2017.

12. Conley, J., C.S. Lambright, N. Evans, et. al., “Mixed Antiandrogenic Chemicals at Low Individual Doses Produce Reproductive Tract Malformations in the Male Rat,” *Toxicological Sciences* 164(1):166, 2018.

Dated: October 22, 2024.

Kimberlee Trzeciak,

Deputy Commissioner for Policy, Legislation, and International Affairs.

[FR Doc. 2024–25120 Filed 10–29–24; 8:45 am]

BILLING CODE 4164–01–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R08–OAR–2024–0207; FRL–12341–01–R8]

Air Plan Approval; Revisions to Colorado Common Provisions Regulation

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve revisions to the Common Provisions Regulation of the Colorado State Implementation Plan (SIP). These revisions were submitted by the State of Colorado in response to the EPA’s June 12, 2015, Findings of Substantial Inadequacy and “SIP call” for certain provisions in the SIP related to affirmative defenses applicable to excess emissions during startup, shutdown, and malfunction (SSM) events. The EPA is proposing approval of these SIP revisions because the Agency has determined that they are in accordance with the requirements for SIP provisions under the Clean Air Act (CAA or the Act).

DATES: Written comments must be received on or before November 29, 2024.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R08–OAR–2024–0207, to the Federal Rulemaking Portal: <https://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from <https://www.regulations.gov>. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business

Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www2.epa.gov/dockets/commenting-epa-dockets>.

Docket: All documents in the docket are listed in the <https://www.regulations.gov> index. Although listed in the index, some information is not publicly available, *e.g.*, CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available electronically in <https://www.regulations.gov>. Please email or call the person listed in the **FOR FURTHER INFORMATION CONTACT** section if you need to make alternative arrangements for access to the docket.

FOR FURTHER INFORMATION CONTACT:

Adam Clark, Air and Radiation Division, EPA, Region 8, Mailcode 8ARD-AQ, 1595 Wynkoop Street, Denver, Colorado 80202-1129, telephone number: (303) 312-7104, email address: clark.adam@epa.gov.

SUPPLEMENTARY INFORMATION:

Throughout this document whenever “we,” “us,” or “our” is used, we mean the EPA.

I. Background

Prior to the EPA’s 2015 SSM SIP Action,¹ which is discussed later in this section, the Agency had a longstanding interpretation of the CAA with respect to the treatment of excess emissions during periods of SSM in SIPs. This statutory interpretation had been expressed, reiterated, and elaborated upon in a series of guidance documents issued in 1982, 1983, and 1999 described below.

In the 1982 SSM Guidance, the EPA recommended the exercise of enforcement discretion to address

periods of excess emissions occurring during SSM events.² Subsequently, in the 1983 SSM Guidance, the EPA expanded on this approach by recommending that a State could elect to adopt SIP provisions providing parameters for the exercise of enforcement discretion by the State’s personnel.³ In our 1999 SSM Guidance, the EPA interpreted that States could elect to create “affirmative defense” provisions applicable to SSM events in their SIPs.⁴ The EPA has defined the term *affirmative defense provision* as a State law provision in a SIP that specifies particular criteria or preconditions that, if met, would purport to preclude a court from imposing monetary penalties or other forms of relief for violations of SIP requirements in accordance with CAA section 113 or CAA section 304.⁵ Also in the 1999 Guidance, the EPA established parameters that should be included as part of such an affirmative defense in order to ensure that it would be available only in certain narrow circumstances.⁶ Both of the provisions being addressed in today’s action, Colorado Common Provisions Regulation⁷ sections II.E. (applicable to qualifying sources during malfunctions), and II.J. (applicable to qualifying sources during periods of startup and shutdown) were approved by the EPA based on our finding that they were consistent with the recommendations of the 1999 Guidance.⁸

On February 22, 2013, the EPA proposed to take action on a petition for rulemaking that the Sierra Club filed with the EPA Administrator on June 30, 2011 (78 FR 12460). In that action, the EPA proposed to grant the Petitioner’s claim in part. The EPA proposed to revise its SSM policy with respect to

affirmative defenses for violations due to excess emissions that occur during startup and shutdown, thus rescinding our prior interpretation that the SSM policy allows for those types of affirmative defenses in SIPs. This was a change from the EPA’s interpretation of the CAA in the 1999 SSM Guidance, in which the EPA had interpreted that States could elect to create such affirmative defense provisions for startup and shutdown events, so long as the provisions were narrowly drawn and consistent with the established criteria to assure that they met CAA requirements. The EPA’s evaluation of the petition and the statutory basis for affirmative defense provisions initiated a review of the appropriateness of affirmative defense provisions applicable during startup and shutdown, which are ordinary modes of operation that are generally predictable and within the control of the source. As explained in more detail in the February 22, 2013, proposal document, the EPA’s evaluation of the Sierra Club Petition in light of then-recent case law⁹ caused the EPA to alter its view on the appropriateness of affirmative defenses applicable to planned events such as startup and shutdown. Specifically, the EPA stated that “because these events are modes of normal operation, the EPA believes that sources should be expected to comply with applicable emission limitations during such events.”¹⁰

The EPA distinguished between affirmative defense provisions for startup and shutdown and those for malfunctions, stating “the distinction that makes affirmative defenses appropriate for malfunctions is that by definition those events are unforeseen and could not have been avoided by the owner or operator of the source, and the owner or operator of the source will have taken steps to prevent the violation and to minimize the effects of the violation after it occurs.”¹¹ Because of this distinction, in the February 22, 2013 proposal, the EPA proposed to grant the Sierra Club’s petition with respect to Colorado Common Provisions section II.J., “Affirmative Defense Provision for Excess Emissions During Startup and Shutdown,” but to deny the Sierra Club’s petition with respect to Common Provisions section II.E., “Affirmative Defense Provision for

¹ “State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction.” 80 FR 33840, June 12, 2015.

² Memorandum to Regional Administrators, Region I–X; From: Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation; Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions. September 28, 1982.

³ Memorandum to Regional Administrators, Regions I–X; From: Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation; Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions. February 15, 1983.

⁴ Memorandum to Regional Administrators, Regions I–X; From: Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance, and Bob Perciasepe, Assistant Administrator for Air and Radiation; Subject: Policy on Excess Emissions During Malfunctions, Startup, and Shutdown. September 20, 1999.

⁵ 79 FR 55923 (September 17, 2014).

⁶ 1999 SSM Guidance.

⁷ The Common Provisions Regulation is codified at 5 Colorado Code of Regulations (CCR) 1001–2 of the Colorado SIP.

⁸ 71 FR 8958 (February 22, 2006) and 73 FR 45880 (August 7, 2008).

⁹ Court decisions confirmed that this requirement for continuous compliance prohibits exemptions for excess emissions during SSM events. *See, e.g., Sierra Club v. EPA*, 551 F.3d 1019, 1021 (D.C. Cir. 2008); *US Magnesium, LLC v. EPA*, 690 F.3d 1157, 1170 (10th Cir. 2012).

¹⁰ 78 FR 12480.

¹¹ 78 FR 12480.

Excess Emissions During Malfunctions.”¹²

Subsequent to the EPA’s issuance of the February 22, 2013 proposal, on April 18, 2014, the U.S. Court of Appeals for the District of Columbia Circuit ruled that CAA sections 113 and 304 preclude the EPA the authority to create affirmative defense provisions in the Agency’s own regulations imposing emission limits on sources, because such provisions purport to alter the jurisdiction of Federal courts to assess liability and impose penalties for violations of those limits in private civil enforcement cases.¹³ In light of this decision, on September 17, 2014, the EPA issued a supplemental proposed rulemaking which outlined our updated policy that affirmative defense SIP provisions, even if they are narrowly tailored and applicable only to malfunctions, are not consistent with CAA requirements. Accordingly, the EPA proposed to grant the portion of the Sierra Club’s petition with regard to affirmative defenses in the case of malfunctions that it had previously proposed to deny, including Colorado Common Provisions section II.E.¹⁴ In that supplemental proposal, the EPA stated that the reasoning of the court in that decision indicates that the States, like the EPA, have no authority in SIP provisions to alter the statutory jurisdiction of Federal courts under CAA section 113 and 304 to assess penalties for violations of CAA requirements through affirmative defense provisions. We additionally noted that if States lack authority under the CAA to alter the jurisdiction of the Federal courts through affirmative defense provisions in SIPs, then the EPA also lacks authority to approve any such provision in a SIP. (*Id.* at 79 FR 55929).

On June 12, 2015, pursuant to CAA section 110(k)(5), the EPA finalized “State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction,” (80 FR 33839, June 12, 2015), hereafter referred to as the “2015 SSM SIP Action.” The

2015 SSM SIP Action clarified, restated, and updated the EPA’s interpretation that SSM exemptions and affirmative defense SIP provisions are inconsistent with CAA requirements. The 2015 SSM SIP Action found that certain SIP provisions in 36 States, including Colorado, were substantially inadequate to meet CAA requirements and issued a SIP call to those States to submit SIP revisions to address these inadequacies. The EPA established an 18-month deadline by which the affected States had to submit such SIP revisions. With regard to the Colorado SIP, in the 2015 SSM SIP Action, the EPA determined that two affirmative defense provisions in the Colorado SIP (Common Provisions Regulation sections II.E. and II.J.) were substantially inadequate to meet CAA requirements (80 FR 33840, 33970).

On November 21, 2016, Colorado submitted SIP revisions to Common Provisions Regulation sections II.E. and II.J. in response to the SIP call issued in the 2015 SSM SIP Action, which did not include removal of the affirmative defense provisions. On September 8, 2021, Plaintiffs Sierra Club, Environmental Integrity Project, and Natural Resources Defense Council (collectively, Plaintiffs) filed a complaint in the United States District Court for the Northern District of California, Oakland Division, alleging that the EPA had failed to, among other things, take final rulemaking action on Colorado’s November 21, 2016 SIP submission.¹⁵ The EPA established a consent decree with the Plaintiffs which required the EPA to take final action on the Colorado November 21, 2016 submission by May 31, 2023, unless Colorado withdrew the submission.¹⁶ On May 31, 2023, Colorado withdrew the November 21, 2016, submission. As discussed further below, Colorado submitted new revisions to Common Provisions Regulation sections II.E. and II.J. on June 26, 2023.

The EPA issued a Memorandum in October 2020 (2020 Memorandum), which stated that certain provisions governing SSM periods in SIPs, including affirmative defense provisions, could be viewed as consistent with CAA requirements.¹⁷

¹⁵ *Sierra Club et al. v. Regan*, No. 21–cv–6956 (N.D. Cal., September 8, 2021).

¹⁶ 87 FR 21118 (April 11, 2022).

¹⁷ October 9, 2020 memorandum “Inclusion of Provisions Governing Periods of Startup, Shutdown, and Malfunctions in State Implementation Plans,” from Andrew R. Wheeler, Administrator. The 2020 Memorandum stated that it “did not alter in any way the determinations made in the 2015 SSM SIP Action that identified specific State SIP provisions that were substantially inadequate to meet the requirements of the Act.”

However, on September 30, 2021, the EPA’s Deputy Administrator withdrew the 2020 Memorandum and announced the EPA’s return to the policy articulated in the 2015 SSM SIP Action (2021 Memorandum).¹⁸ As articulated in the 2021 Memorandum, SIP provisions that contain exemptions or affirmative defense provisions are not consistent with CAA requirements and, therefore, generally are not approvable if contained in a SIP submission.

On March 1, 2024, the D.C. Circuit Court of Appeals issued a decision in *Environ. Comm. Fl. Elec. Power v. EPA*, 94 F.4th 77, 115 (D.C. Cir. 2024). The case was a consolidated set of petitions for review of the 2015 SSM SIP Action. The Court granted the petitions in part, vacating the SIP call with respect to SIP provisions that the EPA identified as automatic exemptions, director’s discretion provisions, and affirmative defenses that are functionally exemptions; and denied the petitions in part as to other provisions that the EPA identified as overbroad enforcement discretion provisions or affirmative defense provisions that would preclude or limit a court from imposing relief in the case of violations, which the Court also refers to as “specific relief.” This is juxtaposed against the Court’s granting of the petition as to affirmative defenses that are functionally exemptions because they “create an exemption from the normal emission rule.”¹⁹ The EPA finds that the affirmative defense provision in the 2008 Billings/Laurel SO₂ FIP to be “specific relief” as interpreted by the Court, as the provision specifically states that an owner or operator “may assert an affirmative defense to a claim for civil penalties for exceedances of such limits during periods of malfunction, startup, or shutdown,” and “to establish the affirmative defense and to be relieved of a civil penalty in any action to enforce such a limit, the owner or operator of the facility must meet the notification requirements of paragraph (i)(2) of this section in a timely manner and prove by a preponderance of evidence. . . .”²⁰ The EPA has assessed the impact of the decision with respect to our proposed approval of Colorado’s removal of the specific affirmative defense provisions

Accordingly, the 2020 Memorandum had no direct impact on the SIP call issued in 2015.

¹⁸ September 30, 2021, memorandum “Withdrawal of the October 9, 2020, Memorandum Addressing Startup, Shutdown, and Malfunctions in State Implementation Plans and Implementation of the Prior Policy,” from Janet McCabe, Deputy Administrator.

¹⁹ See *Environ. Comm. Fl. Elec. Power v. EPA*, 94 F.4th 77, 115 (D.C. Cir. 2024).

²⁰ See 40 CFR 52.1392(i)(1).

¹² 78 FR 12530.

¹³ *NRDC v. EPA*, 749 F.3d 1055 (D.C. Cir. 2014).

¹⁴ “State Implementation Plans: Response to Petition for Rulemaking; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction; Supplemental Proposal To Address Affirmative Defense Provisions in States Included in the Petition for Rulemaking and in Additional States.” 79 FR 55920, September 17, 2014.

at issue in the State's June 26, 2023, submission. We have concluded that the previously stated reasons for the inappropriateness of affirmative defense provisions like Common Provisions sections II.E. and II.J., as articulated in the 2015 SSM SIP Action and 2021 Memorandum, are consistent with the recent D.C. Circuit decision, as these are affirmative defense provisions against specific relief.²¹ The Court upheld the EPA's 2015 SSM SIP Action with regard to affirmative defenses against specific relief, finding that because CAA 304(a) and 113(b) authorize citizens and the EPA to seek injunctive relief and monetary penalties against sources that violate a SIP's emission rules, such an affirmative defense would "block that aspect of the Act's enforcement regime."²²

On June 26, 2023, Colorado submitted, among other revisions to the Colorado SIP that will be addressed in a separate rulemaking action, revisions to sections II.E. and II.J. of the Common Provisions Regulation which removed these rules from the Colorado SIP by making them State-only and therefore not federally enforceable under the CAA. The June 26, 2023, revision to sections II.E. and II.J. of the Common Provisions Regulation was submitted in response to the SIP call in the 2015 SSM SIP Action, and it is this SIP revision that the EPA is proposing to approve with today's action.

II. Analysis of SIP Submission

As discussed in detail in the 2015 SSM SIP Action, affirmative defense provisions like those in the Colorado SIP at sections II.E. and II.J. of the Common Provisions Regulation are inconsistent with CAA requirements. The EPA is proposing to find that the portion of Colorado's June 26, 2023, SIP submission removing these provisions from the SIP by making them State-only is consistent with CAA requirements and that it adequately addresses the specific deficiencies that the EPA identified in the 2015 SSM SIP Action with respect to the Colorado SIP.

III. Proposed Action

The EPA is proposing to approve the portion of Colorado's June 26, 2023, SIP submission revising the Colorado SIP by removing Common Provisions Regulation sections II.E. and II.J. from the SIP by making them State-only. We are proposing approval of the SIP revisions because we have determined

that they are consistent with the requirements for SIP provisions under the CAA. The EPA is further proposing to determine that finalizing such SIP revisions would correct the deficiencies identified in the 2015 SSM SIP Action. The EPA is not reopening the 2015 SSM SIP Action and is only taking comment on whether these SIP revisions are consistent with CAA requirements and whether they address the "substantial inadequacy" of the specific Colorado SIP provisions identified in the 2015 SSM SIP Action.

IV. Incorporation by Reference

In this action, we are proposing to include in a final rule regulatory text that includes incorporation by reference. In accordance with the requirements of 1 CFR 51.5 the EPA is proposing to incorporate by reference the revisions that would designate them as State-only, and thus remove from "5 CCR 1001–02, Common Provisions Regulation" of the Colorado SIP, sections II.E., "Affirmative Defense Provision for Excess Emissions During Malfunctions," and II.J., "Affirmative Defense Provision for Excess Emissions During Startup and Shutdown," as described in section III. of this preamble. The EPA has made, and will continue to make, these documents generally available electronically through <https://www.regulations.gov> and in hard copy at the EPA Region 8 office.

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve State choices, provided that they meet the criteria of the CAA. Accordingly, this action merely proposes to approve State law as meeting Federal requirements and does not impose additional requirements beyond those imposed by State law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 14094 (88 FR 21879, April 11, 2023);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities

under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);

- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
 - Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
 - Is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it approves a State program;
 - Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
 - Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian Tribe has demonstrated that a Tribe has jurisdiction. In those areas of Indian country, the proposed rule does not have Tribal implications and will not impose substantial direct costs on Tribal governments or preempt Tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). Executive Order 12898 (Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, Feb. 16, 1994) directs Federal agencies to identify and address "disproportionately high and adverse human health or environmental effects" of their actions on minority populations and low-income populations to the greatest extent practicable and permitted by law. The EPA defines environmental justice (EJ) as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." The EPA further defines the term fair treatment to mean that "no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies."

Colorado did not evaluate EJ considerations as part of its SIP submittal; the CAA and applicable implementing regulations neither prohibit nor require such an evaluation. The EPA did not perform an EJ analysis and did not consider EJ in this proposed

²¹ 80 FR 33840, 33970 (June 12, 2015) and 79 FR 55920, 55946 (September 17, 2014).

²² *Environ. Comm. Fl. Elec. Power v. EPA*, 94 F.4th 77, 114–115 (D.C. Cir. 2024).

action. Due to the nature of the action being proposed here, this action is expected to have a neutral to positive impact on the air quality of the affected area. Consideration of EJ is not required as part of this proposed action, and there is no information in the record inconsistent with the stated goal of E.O. 12898 of achieving EJ for people of

color, low-income populations, and Indigenous peoples.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Greenhouse gases, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and

recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: October 22, 2024.

K.C. Becker,

Regional Administrator, Region 8.

[FR Doc. 2024–25228 Filed 10–29–24; 8:45 am]

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Notices

Federal Register

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Wednesday, October 30, 2024

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

AGENCY FOR INTERNATIONAL DEVELOPMENT

Senior Executive Service: Membership of Performance Review Board

AGENCY: Agency for International Development (USAID).

ACTION: Notice of approved list of candidates.

SUMMARY: This notice provides a list of approved candidates who comprise a standing roster for service on the Agency's 2024 Senior Executive Service (SES) Performance Review Board. The Agency will use this roster to select SES Performance Review Board members.

DATES: October 30, 2024.

ADDRESSES: executiveresources@usaid.gov.

FOR FURTHER INFORMATION CONTACT:

Lena Travers, Director, Center for Performance Excellence, Office of Human Capital and Talent Management, USAID, at 202-712-5636 or ltravers@usaid.gov.

SUPPLEMENTARY INFORMATION: Under the Civil Service Reform Act of 1978, Public Law 95-454 (5 U.S.C. 4314(c)(4)) and 5 CFR 430.311(a)(4), the Agency must publish in the **Federal Register** a list of persons named to serve on the Performance Review Board that oversees the evaluation of performance appraisals for SES members of the Agency. The standing roster of approved candidates from which the Agency will select SES Performance Review Board members is as follows:

Bader, Harry
Ball, Kimberly
Beers, Mia
Bertram, Robert
Borodin, Sara
Broderick, Deborah
Brown, Erin
Buckley, Ruth
Chalif, Rebecca
Davis, Thomas
Detherage, Maria Price
Donohue, Katherine

Ehmann, Claire
ElGohary, Laila
Feinstein, Barbara
Girod, Gayle
Gray, Jason
Healy, Anne
Jin, Jun
Johnson, Mark
Kenon, Clifton
Knudsen, Ciara
Korde, Sonali
Lucas, Rachel
McGill, Brian
McLaughlin, Mary
Metzler, Michael
Mitchell, Reginald
Napoli, Roman
Ohlweiler, John
Pryor, Jeanne
Ram, Pavani
Rodgers, Jami
Schulz, Laura
Shih, Stephen
Singh, Sukhvinder
Sokolowski, Alexander
Voorhees, John
Wallace, Julia
Walton, David
Webb, Patrick
Willis, Lindsey
Winston, Lynn
Wright, Sheila

Lena Travers,

Director, Center for Performance Excellence.

[FR Doc. 2024-25216 Filed 10-29-24; 8:45 am]

BILLING CODE 6116-04-P

DEPARTMENT OF AGRICULTURE

Farm Service Agency

[Docket ID FSA-2023-0011]

Notice; Emergency Livestock Relief Program (ELRP) 2022

AGENCY: Farm Service Agency, USDA.

ACTION: Notice.

SUMMARY: The Farm Service Agency (FSA) is issuing this notice to announce that it is issuing a second round of payments for ELRP 2022 participants. These payments will be subject to a modified payment calculation in compliance with a court order currently in effect.

FOR FURTHER INFORMATION CONTACT:

Kathy Sayers; telephone: (202) 720-6870; email: Kathy.Sayers@usda.gov. Individuals who require alternative means of communication for program information should contact the USDA Target Center at (202) 720-2600 (voice) or dial 711 for Telecommunications

Relay Service (both voice and text telephone users can initiate this call from any telephone).

SUPPLEMENTARY INFORMATION:

Background

FSA announced ELRP 2022 in a notice published in the **Federal Register** on September 27, 2023 (88 FR 66361-66366). Eligible livestock producers were not required to submit an application for ELRP 2022. As specified in the September 2023 notice, FSA is using data already submitted to FSA through the Livestock Forage Disaster Program (LFP).

Initial ELRP 2022 payments were issued immediately after publication of the notice based on a producer's gross 2022 LFP calculated payment.¹

The ELRP 2022 Notice of Funding Availability provided that the initial ELRP 2022 payment was equal to the eligible livestock producer's gross 2022 LFP calculated payment multiplied by an ELRP 2022 payment percentage of 90 percent for underserved farmers and ranchers and 75 percent for all other producers, multiplied by a 25-percent factor to stay within available funding. It also specified that a second payment of up to 75 percent may be issued if funds remain available after initial payments are completed. Funding remains available.

This notice announces that FSA will issue a second ELRP 2022 payment for an additional 7.25-percent factor with available funding.

On June 7, 2024, the United States District Court for the Northern District of Texas, Amarillo Division, issued a preliminary injunction in *Rusty Strickland et al. v. U.S. Dept. of Agriculture et al.* (Case No. 2:24-CV-60-Z) enjoining USDA "from making or increasing payments, or providing any additional relief, based on its 'socially disadvantaged farmer or rancher' designation under [the Emergency Relief Program (ERP) 2022], whether used directly or as a subset of its 'underserved farmer or rancher' designation."² The complaint

¹ The deadline to submit a 2022 LFP Application was January 30, 2023.

² For ERP 2022 and ELRP 2022, "socially disadvantaged farmer or rancher" means a farmer or rancher who is a member of a group whose members have been subjected to racial, ethnic, or gender prejudice because of their identity as members of a group without regard to their individual qualities. For entities, at least 50 percent

challenges FSA's use of the socially disadvantaged farmer or rancher designation in several programs, including ELRP 2022; however, the preliminary injunction was applicable by its terms only to ERP 2022³, which was the only program for which the application period was open.

As USDA informed the court in *Strickland*,⁴ FSA will issue the second ELRP 2022 payments in a manner "consistent with the terms of the preliminary injunction, including not making or increasing any such payments based on the use of the socially disadvantaged designation." Provided there are no other complicating factors (such as payment limitations), if they have the same gross 2022 LFP calculated payment, a producer who is considered underserved based solely on a socially disadvantaged designation and a non-underserved producer will receive the same payment in dollars in any second round of ELRP 2022 payments while the preliminary injunction is in effect.

FSA intends to begin issuing these payments following publication of this document. If the preliminary injunction is lifted, with available funds, FSA will make or update payments to affected and eligible socially disadvantaged producers consistent with the terms of the Notice of Funding Availability.

Steven Peterson,

Acting Administrator, Farm Service Agency.

[FR Doc. 2024-25209 Filed 10-29-24; 8:45 am]

BILLING CODE 3411-EB-P

of the ownership interest must be held by individuals who are members of such a group. Socially disadvantaged groups include the following and no others unless approved in writing by the Deputy Administrator:

- (1) American Indians or Alaskan Natives;
- (2) Asians or Asian-Americans;
- (3) Blacks or African Americans;
- (4) Hispanics or Hispanic Americans;
- (5) Native Hawaiians or other Pacific Islanders;
- and
- (6) Women.

"Underserved farmer or rancher" means a beginning farmer or rancher, limited resource farmer or rancher, socially disadvantaged farmer or rancher, or veteran farmer or rancher.

³ FSA issued a notice to announce the actions it was taking to comply with the preliminary injunction related to payment calculations for ERP 2022 on August 23, 2024. (89 FR 68125)

⁴ Defendants' Notice of Compliance with the Court's Preliminary Injunction Order, at 2, ECF No. 27.

DEPARTMENT OF AGRICULTURE

Natural Resources Conservation Service

[Docket ID: NRCS-2024-0018]

Urban Agriculture and Innovative Production Advisory Committee

AGENCY: Natural Resources Conservation Service, United States Department of Agriculture.

ACTION: Notice to solicit nominees.

SUMMARY: The Department of Agriculture's (USDA) Office of Urban Agriculture and Innovative Production (OUAIP) is seeking nominations for one individual to serve on the Urban Agriculture and Innovative Production Advisory Committee (UAIPAC) as an urban producer. The UAIPAC advises the Secretary of Agriculture on the development of policies and outreach relating to urban, indoor, and other emerging agricultural production practices. The 12 members appointed by the Secretary of Agriculture are expected to serve a 3-year term.

DATES: USDA will consider nominations received via email or postmarked by November 29, 2024.

ADDRESSES: Please send nominations via email to: *UrbanAgricultureFederalAdvisoryCommittee@usda.gov*. Email is the preferred method for sending nominations; alternatively, nominations can be mailed to Brian Guse, Director of the Office of Urban Agriculture and Innovative Production, Department of Agriculture, 1400 Independence Avenue SW, Room 4083, Washington, DC 20250.

FOR FURTHER INFORMATION CONTACT: Markus Holliday, Coordinator, Office of Urban Agriculture and Innovative Production; telephone: (301) 974-1287; email: *UrbanAgricultureFederalAdvisoryCommittee@usda.gov*.

Individuals who require alternative means for communication may contact the USDA TARGET Center at (202) 720-2600 (voice and text telephone (TTY)) or dial 711 for Telecommunications Relay service (both voice and text telephone users can initiate this call from any telephone).

SUPPLEMENTARY INFORMATION:

UAIPAC Overview and Membership

Section 222 of the Department of Agriculture Reorganization Act of 1994, as amended, by section 12302 of the 2018 Farm Bill (7 U.S.C. 6923; Pub. L. 115-334), directed the Secretary of Agriculture to establish an "Urban Agriculture and Innovative Production Advisory Committee" to advise the

Secretary on any aspect of section 222, including the development of policies and outreach relating to urban, indoor, and other emerging agricultural production practices as well as identify any barriers to urban agriculture. UAIPAC will host public meetings to deliberate on recommendations for the Secretary of Agriculture. These recommendations provide advice to the Secretary on supporting urban agriculture and innovative production through USDA's programs and services. For additional background and member information visit the UAIPAC website at <https://www.usda.gov/partnerships/federal-advisory-committee-urban-ag>.

The UAIPAC consists of 12 members including:

- 4 representatives who are agriculture producers including 2 individuals who are located in an urban area or urban cluster; and 2 individuals who are farmers that use innovative technology;
- 2 representatives from an institution of higher education or extension program;
- 1 representative from a nonprofit organization, which may include a public health, environmental, or community organization;
- 1 representative who represents business and economic development, which may include a business development entity, a chamber of commerce, a city government, or a planning organization;
- 1 expert with supply chain experience, which may include a food aggregator, wholesale food distributor, food hub, or an individual who has direct-to-consumer market experience;
- 1 representative from a financing entity; and
- 2 representatives with related experience or expertise in urban, indoor, and other emerging agriculture production practices, as determined by the Secretary.

Member Nominations

Nominations are open to the public. Any interested person or organization may nominate qualified individuals for membership, including self-nominations. Individuals who wish to be considered for membership must submit a nomination package to include the following required items:

(1) A completed background disclosure form (Form AD-755) signed by the nominee (see <https://www.usda.gov/sites/default/files/documents/ad-755.pdf>);

(2) A brief summary explaining the nominee's experience as an urban producer including any unique qualifications or experience

representing and being an advocate for other producers; and

(3) A résumé providing the nominee's background, experience, and educational qualifications.

Additional optional items for your nomination package may include:

(1) Recent publications by the nominee relative to extending support for urban agriculture or innovative production; and

(2) Letter(s) of endorsement.

Please send nominations via email to: UrbanAgricultureFederalAdvisoryCommittee@usda.gov as the preferred method. Alternatively, nominations can be mailed to Brian Guse, Director of the Office of Urban Agriculture and Innovative Production, Department of Agriculture, 1400 Independence Avenue SW, Room 4083, Washington, DC 20250.

Ethics Statement

To maintain the highest levels of honesty, integrity, and ethical conduct, no committee or subcommittee member may participate in any "specific party matters" (for example, matters are narrowly focused and typically involve specific transactions between identified parties) such as a lease, license, permit, contract, claim, grant, agreement, or related litigation with USDA in which the committee or subcommittee member has a direct financial interest. This includes the requirement for committee or subcommittee members to immediately disclose to the Designated Federal Officer (DFO) (for discussion with USDA's Office of Ethics) any specific party matter in which the member's immediate family, relatives, business partners or employer would be directly seeking to financially benefit from the committee's recommendations.

All members will receive ethics training to identify and avoid any actions that would cause the public to question the integrity of the committee's advice and recommendations. Members who are appointed as "Representatives" are not subject to Federal ethics laws because the appointment allows them to represent the point(s) of view of a particular group, business sector or segment of the public.

Members appointed as "Special Government Employees" (SGEs) are considered intermittent Federal employees and are subject to Federal ethics laws. SGE's are appointed due to their personal knowledge, academic scholarship, background or expertise. No SGE may participate in any activity in which the member has a prohibited financial interest. Appointees who are SGEs are required to complete and submit a Confidential Financial

Disclosure Report (OGE-450 form) via the FDOonline e-filing database system. Upon request USDA will assist SGEs in preparing these financial reports. To ensure the highest level of compliance with applicable ethical standards USDA will provide ethics training to SGEs on an annual basis. The provisions of these paragraphs are not meant to exhaustively cover all Federal ethics laws and do not affect any other statutory or regulatory obligations to which advisory committee members are subject.

USDA Non-Discrimination Policy

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family or parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Individuals who require alternative means of communication for program information (for example, braille, large print, audiotope, American Sign Language, etc.) should contact the responsible Agency or USDA TARGET Center at (202) 720-2600 (voice and text telephone (TTY)) or dial 711 for Telecommunications Relay Service (both voice and text telephone users can initiate this call from any phone). Additionally, program information may be made available in languages other than English.

Equal opportunity practices in accordance with USDA's policies will be followed in all appointments to the FACA Committee. To ensure that the recommendations of UAIPC have taken into account the needs of the diverse groups served by USDA, membership will include to the extent practicable, individuals with demonstrated ability to represent the many communities, identities, races, ethnicities, backgrounds, abilities, cultures, and beliefs of the American people, including underserved communities.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at <https://>

www.usda.gov/oascr/how-to-file-a-program-discrimination-complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail to: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue SW, Washington, DC 20250-9410; (2) fax: (202) 690-7442; or (3) email: OAC@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

Dated: October 24, 2024

Cikena Reid,

Committee Management Officer, USDA.

[FR Doc. 2024-25208 Filed 10-29-24; 8:45 am]

BILLING CODE 3410-16-P

CIVIL RIGHTS COLD CASE RECORDS REVIEW BOARD

[Agency Docket Number: CRCCRRB-2025-0003-N]

Notice of Formal Determination on Records Release

AGENCY: Civil Rights Cold Case Records Review Board.

ACTION: Notice.

SUMMARY: The Civil Rights Cold Case Records Review Board received 227 pages of records from the National Archives and Records Administration (NARA) related to a civil rights cold case incident to which the Review Board assigned the unique identifier 2024-003-014. On October 18, 2024, the Review Board determined that 226 pages in full and 1 page in part should be publicly disclosed in the Civil Rights Cold Case Records Collection. The Review Board approved the one postponement proposed by NARA. By issuing this notice, the Review Board complies with section 7(c)(4) of the Civil Rights Cold Case Records Collection Act of 2018 that requires the Review Board to publish in the **Federal Register** its determinations on the disclosure or postponement of records in the Collection no more than 14 days after the date of its decision.

FOR FURTHER INFORMATION CONTACT: Stephannie Oriabure, Chief of Staff, Civil Rights Cold Case Records Review Board, 1800 F Street NW, Washington, DC 20405, (771) 221-0014, info@coldcaserecords.gov.

SUPPLEMENTARY INFORMATION:

Incident identifier	Postponement identifier	Review board decision
2024-003-014	2024-NARA-03-0001	Approve.

Authority: 44 U.S.C. 2107 (Pub. L. 115-426, 132 Stat. 5489).

Dated: October 24, 2024.

Stephannie Oriabure,
Chief of Staff.

[FR Doc. 2024-25159 Filed 10-29-24; 8:45 am]

BILLING CODE 67820-SY-P

DEPARTMENT OF COMMERCE

Census Bureau

Agency Information Collection Activities; Submission to the Office of Management and Budget (OMB) for Review and Approval; Comment Request; Current Population Survey, Annual Social and Economic Supplement

The Department of Commerce will submit the following information collection request to the Office of Management and Budget (OMB) for review and clearance in accordance with the Paperwork Reduction Act of 1995, on or after the date of publication of this notice. We invite the general public and other Federal agencies to comment on proposed, and continuing information collections, which helps us assess the impact of our information collection requirements and minimize the public's reporting burden. Public comments were previously requested via the **Federal Register** on July 19, 2024, during a 60-day comment period. This notice allows for an additional 30 days for public comments.

Agency: U.S. Census Bureau, Commerce.

Title: Current Population Survey, Annual Social and Economic Supplement.

OMB Control Number: 0607-0354.

Form Number(s): There are no forms. All interviews are conducted using computers.

Type of Request: Regular submission, Request for a Revision of a Currently Approved Collection.

Number of Respondents: 78,000.

Average Hours per Response: 0.41667.

Burden Hours: 32,500.

Needs and Uses: Information on work experience, personal income, noncash benefits, current and previous year health insurance coverage, employer-sponsored insurance take-up, and migration is collected through the ASEC. The work experience items in the ASEC provide a unique measure of the

dynamic nature of the labor force as viewed over a one-year period. These items produce statistics that show movements in and out of the labor force by measuring the number of periods of unemployment experienced by people, the number of different employers worked for during the year, the principal reasons for unemployment, and part-/full-time attachment to the labor force. We can make indirect measurements of discouraged workers and others with a casual attachment to the labor market.

The income data from the ASEC are used by social planners, economists, government officials, and market researchers to gauge the economic well-being of the country as a whole, and selected population groups of interest. Government planners and researchers use these data to monitor and evaluate the effectiveness of various assistance programs. Market researchers use these data to identify and isolate potential customers. Social planners use these data to forecast economic conditions and to identify special groups that seem to be especially sensitive to economic fluctuations. Economists use ASEC data to determine the effects of various economic forces, such as inflation, recession, recovery, and so on, and their differential effects on various population groups.

The ASEC is the official source of national poverty estimates calculated in accordance with the Office of Management and Budget's Statistical Policy Directive 14. Two other important national estimates derived from the ASEC are real median household income and the number and percent of individuals without health insurance coverage.

The ASEC also contains questions related to: (1) medical expenditures; (2) presence and cost of a mortgage on property; (3) child support payments; and (4) amount of childcare assistance received. These questions enable analysts and policymakers to obtain better estimates of family and household income, and more precisely gauge poverty status.

Affected Public: Individuals or households.

Frequency: Annually.

Respondent's Obligation: Voluntary.

Legal Authority: Title 13, United States Code, sections 141 and 182; and title 29, United States Code, sections 1-9.

This information collection request may be viewed at www.reginfo.gov. Follow the instructions to view the Department of Commerce collections currently under review by OMB.

Written comments and recommendations for the proposed information collection should be submitted within 30 days of the publication of this notice on the following website www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting "Currently under 30-day Review—Open for Public Comments" or by using the search function and entering either the title of the collection or the OMB Control Number 0607-0354.

Sheleen Dumas,

Departmental PRA Clearance Officer, Office of the Under Secretary for Economic Affairs, Commerce Department.

[FR Doc. 2024-25171 Filed 10-29-24; 8:45 am]

BILLING CODE 3510-07-P

DEPARTMENT OF COMMERCE

Bureau of Industry and Security

Transportation and Related Equipment Technical Advisory Committee; Notice of Partially Closed Meeting

The Transportation and Related Equipment Technical Advisory Committee will meet on November 13, 2024, 9:30 a.m.–3:00 p.m., Eastern Standard Time, in the Herbert C. Hoover Building, Room 3884, 1401 Constitution Avenue NW, Washington, DC (enter through Main Entrance on 14th Street between Constitution and Pennsylvania Avenues). The Committee advise and assist the Secretary of Commerce (Secretary) or, under authority delegated by the Secretary, the Under Secretary for Industry and Security, and other Federal officials and agencies with respect to actions designed to carry out the policy set forth in Section 1752(1)(A) of the Export Control Reform Act. The purpose of the meeting is to have Committee members and U.S. Government representatives mutually review updated technical data and policy-driving information that has been gathered.

Agenda

Public Session

1. Opening remarks by the Bureau of Industry and Security.

2. Status reports by working group chairs.
3. Public comments and Proposals.

Closed Session

4. Discussion of matters determined to be exempt from the open meeting and public participation requirements found in Sections 1009(a)(1) and 1009(a)(3) of the Federal Advisory Committee Act (FACA) (5 U.S.C. 1001–1014). The exemption is authorized by Section 1009(d) of the FACA, which permits the closure of advisory committee meetings, or portions thereof, if the head of the agency to which the advisory committee reports determines such meetings may be closed to the public in accordance with subsection (c) of the Government in the Sunshine Act (5 U.S.C. 552b(c)). In this case, the applicable provisions of 5 U.S.C. 552b(c) are subsection 552b(c)(4), which permits closure to protect trade secrets and commercial or financial information that is privileged or confidential, and subsection 552b(c)(9)(B), which permits closure to protect information that would be likely to significantly frustrate implementation of a proposed agency action were it to be disclosed prematurely. The closed session of the meeting will involve committee discussions and guidance regarding U.S. Government strategies and policies.

The open session will be accessible via teleconference. To join the conference, submit inquiries to Ms. Patricia Muldonian at PatriciaMuldonian@bis.doc.gov.

A limited number of seats will be available for members of the public to attend the open session in person. Reservations are not accepted.

Special Accommodations: Individuals requiring special accommodations to access the public meeting should contact Ms. Muldonian no later than Wednesday, November 6, 2024, so that appropriate arrangements can be made.

To the extent that time permits, members of the public may present oral statements to the Committee. The public may submit written statements at any time before or after the meeting. However, to facilitate distribution of materials to the Committee members, the Committee suggests that members of the public forward their materials prior to the meeting to Ms. Springer via email. Material submitted by the public will be made public and therefore should not contain confidential information. Meeting materials from the public session will be accessible via the Technical Advisory Committee (TAC) site at <https://tac.bis.doc.gov> within 30-days after the meeting.

The Deputy Assistant Secretary for Administration Performing the non-exclusive functions and duties of the Chief Financial Officer, with the concurrence of the delegate of the General Counsel, formally determined on August 23, 2024, pursuant to 5 U.S.C. 1009(d)), that the portion of the meeting dealing with pre-decisional changes to the Commerce Control List and the U.S. export control policies shall be exempt from the provisions relating to public meetings found in 5 U.S.C. 1009(a)(1) and 1009(a)(3). The remaining portions of the meeting will be open to the public.

Meeting cancellation: If the meeting is cancelled, a cancellation notice will be posted on the TAC website at <https://tac.bis.doc.gov>.

For more information, contact Ms. Muldonian.

Yvette Springer,

Committee Liaison Officer.

[FR Doc. 2024–25164 Filed 10–29–24; 8:45 am]

BILLING CODE 3510–JT–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–981, A–552–814, C–570–982]

Utility Scale Wind Towers From the People's Republic of China and the Socialist Republic of Vietnam: Continuation of Antidumping Duty Orders and Countervailing Duty Order

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: As a result of the determinations by the U.S. Department of Commerce (Commerce) and the U.S. International Trade Commission (ITC) that revocation of the antidumping duty (AD) order and countervailing duty (CVD) order on utility scale wind towers (wind towers) from the People's Republic of China (China) and the AD order on wind towers from the Socialist Republic of Vietnam (Vietnam) would likely lead to a continuation or recurrence of dumping, countervailable subsidies, and material injury to an industry in the United States, Commerce is publishing a notice of continuation of these AD and CVD orders.

DATES: Applicable October 17, 2024.

FOR FURTHER INFORMATION CONTACT:

Robert Bolling (China and Vietnam AD) or John Conniff (China CVD), AD/CVD Operations, Offices IV and III, Enforcement and Compliance, International Trade Administration,

U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20030; telephone: (202) 482–3434, or (202) 482–1009, respectively.

SUPPLEMENTARY INFORMATION:

Background

On February 15, 2013, Commerce published in the **Federal Register** the AD orders on wind towers from China and Vietnam and the CVD order on wind towers from China.¹ On April 1, 2024, the ITC instituted its review of the *Orders*,² and Commerce initiated³ the second sunset review of the *Orders*, pursuant to section 751(c) of the Tariff Act of 1930, as amended (the Act). As a result of its reviews, Commerce determined that revocation of the *Orders* would likely lead to continuation or recurrence of dumping and/or countervailable subsidies, and therefore, notified the ITC of the magnitude of the margins of dumping and net countervailable subsidy rates likely to prevail should the *Orders* be revoked.⁴

On October 17, 2024, the ITC published its determination, pursuant to sections 751(c) and 752(a) of the Act, that revocation of the *Orders* would likely lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.⁵

Scope of the Orders

The merchandise covered by the *Orders* are certain wind towers, whether or not tapered, and sections thereof. Certain wind towers are designed to support the nacelle and rotor blades in a wind turbine with a minimum rated

¹ See *Utility Scale Wind Towers from the People's Republic of China: Antidumping Duty Order*, 78 FR 11146 (February 15, 2013); *Utility Scale Wind Towers from the Socialist Republic of Vietnam: Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order*, 78 FR 11150 (February 15, 2013); and *Utility Scale Wind Towers from the People's Republic of China: Countervailing Duty Order*, 78 FR 11152 (February 15, 2013) (collectively, *Orders*).

² See *Utility Scale Wind Towers from China and Vietnam: Institution of Five-Year Reviews*, 89 FR 22445 (April 1, 2024).

³ See *Initiation of Five-Year (Sunset) Reviews*, 89 FR 22373 (April 1, 2024).

⁴ See *Utility Scale Wind Towers from China and Vietnam: Final Results of the Expedited Second Sunset Review of the Antidumping Duty Orders*, 89 FR 65585 (August 12, 2024), and accompanying Issues and Decision Memorandum (IDM); *Utility Scale Wind Towers from the People's Republic of China: Final Results of Expedited Second Sunset Review of the Countervailing Duty Order*, 89 FR 60603 (July 26, 2024), and accompanying IDM.

⁵ See *Utility Scale Wind Towers from China and Vietnam*, 89 FR 83702 (October 17, 2024) (*ITC Final Determination*); see also *Utility Scale Wind Towers from China and Vietnam: Investigation Nos. 701–TA–486 and 731–TA–1195–1196 (Second Review)*, USITC Publication 5553 (October 2024).

electrical power generation capacity in excess of 100 kilowatts and with a minimum height of 50 meters measured from the base of the tower to the bottom of the nacelle (*i.e.*, where the top of the tower and nacelle are joined) when fully assembled. A wind tower section consists of, at a minimum, multiple steel plates rolled into cylindrical or conical shapes and welded together (or otherwise attached) to form a steel shell, regardless of coating, end-finish, painting, treatment, or method of manufacture, and with or without flanges, doors, or internal or external components (*e.g.*, flooring/decking, ladders, lifts, electrical buss boxes, electrical cabling, conduit, cable harness for nacelle generator, interior lighting, tool and storage lockers) attached to the wind tower section. Several wind tower sections are normally required to form a completed wind tower.

Wind towers and sections thereof are included within the scope whether or not they are joined with non-subject merchandise, such as nacelles or rotor blades, and whether or not they have internal or external components attached to the subject merchandise.

Specifically excluded from the scope are nacelles and rotor blades, regardless of whether they are attached to the wind tower. Also excluded are any internal or external components which are not attached to the wind towers or sections thereof.

Merchandise covered by the *Orders* is currently classified in the Harmonized Tariff System of the United States (HTSUS) under subheadings 7308.20.0020 or 8502.31.0000. Prior to 2011, merchandise covered by the *Orders* was classified in the HTSUS under subheading 7308.20.0000 and may continue to be to some degree. While the HTSUS subheadings are provided for convenience and customs purposes, the written description of the subject merchandise is dispositive.

Continuation of the Orders

As a result of the determinations by Commerce and the ITC that revocation of the *Orders* would likely lead to a continuation or recurrence of dumping, countervailable subsidies, and material injury to an industry in the United States, pursuant to section 751(d)(2) of the Act and 19 CFR 351.218(a), Commerce hereby orders the continuation of the *Orders* on wind towers from China and Vietnam. U.S. Customs and Border Protection will continue to collect AD and CVD cash deposits at the rates in effect at the time of entry for all imports of subject merchandise.

The effective date of the continuation of the *Orders* will be October 17, 2024. Pursuant to section 751(c)(2) of the Act and 19 CFR 351.218(c)(2), Commerce intends to initiate the next five-year review of the *Orders* no later than 30 days prior to the fifth anniversary of the date of the last determination by the ITC.

Administrative Protective Order (APO)

This notice also serves as the only reminder to parties subject to an APO of their responsibility concerning the return, destruction, or conversion to judicial protective order of proprietary information disclosed under APO in accordance with 19 CFR 351.305(a)(3). Timely written notification of the return or destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply is a violation of the APO which may be subject to sanctions.

Notification to Interested Parties

These five-year sunset reviews and this notice are in accordance with sections 751(c) and 751(d)(2) of the Act and published pursuant to section 777(i)(1) of the Act and 19 CFR 351.218(f)(4).

Dated: October 24, 2024.

Ryan Majerus,

Deputy Assistant Secretary for Policy and Negotiations, performing the non-exclusive functions and duties of the Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2024–25230 Filed 10–29–24; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XE402]

Fisheries of the South Atlantic; Southeast Data, Assessment, and Review (SEDAR); Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of SEDAR 90 South Atlantic Red Snapper Data Scoping Webinar.

SUMMARY: The SEDAR 90 assessment process of South Atlantic red snapper will consist of a Data Workshop, and a series of assessment webinars, and a Review Workshop. See **SUPPLEMENTARY INFORMATION**.

DATES: The SEDAR 90 Data Workshop will be held on November 18, 2024, from 11 a.m. to 1 p.m. The established

times may be adjusted as necessary to accommodate the timely completion of discussion relevant to the assessment process. Such adjustments may result in the meeting being extended from or completed prior to the time established by this notice.

ADDRESSES:

Meeting address: The meeting will be held via webinar. The webinar is open to members of the public. Registration for the webinar is available by contacting the SEDAR coordinator via email at Emily.Ott@safmc.net.

SEDAR address: 4055 Faber Place Drive, Suite 201, North Charleston, SC 29405.

FOR FURTHER INFORMATION CONTACT:

Emily L. Ott, SEDAR Coordinator; (937) 479–6171; email: Emily.Ott@safmc.net.

SUPPLEMENTARY INFORMATION: The Gulf of Mexico, South Atlantic, and Caribbean Fishery Management Councils, in conjunction with NOAA Fisheries and the Atlantic and Gulf States Marine Fisheries Commissions have implemented the Southeast Data, Assessment and Review (SEDAR) process, a multi-step method for determining the status of fish stocks in the Southeast Region. SEDAR is a multi-step process including: (1) Data/Assessment Workshop, and (2) a series of webinars. The product of the Data/Assessment Workshop is a report which compiles and evaluates potential datasets and recommends which datasets are appropriate for assessment analyses, and describes the fisheries, evaluates the status of the stock, estimates biological benchmarks, projects future population conditions, and recommends research and monitoring needs. Participants for SEDAR Workshops are appointed by the Gulf of Mexico, South Atlantic, and Caribbean Fishery Management Councils and NOAA Fisheries Southeast Regional Office, HMS Management Division, and Southeast Fisheries Science Center. Participants include data collectors and database managers; stock assessment scientists, biologists, and researchers; constituency representatives including fishermen, environmentalists, and NGO's; International experts; and staff of Councils, Commissions, and state and federal agencies.

The items of discussion in the SEDAR 90 Data Scoping Webinar are as follows:

The group will discuss available data streams/sources, points of contact, data delivery deadlines, and any known data issues for South Atlantic red snapper.

Although non-emergency issues not contained in this agenda may come before this group for discussion, those

issues may not be the subject of formal action during this meeting. Action will be restricted to those issues specifically identified in this notice and any issues arising after publication of this notice that require emergency action under section 305(c) of the Magnuson-Stevens Fishery Conservation and Management Act, provided the public has been notified of the intent to take final action to address the emergency.

Special Accommodations

The meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to the Council office (see **ADDRESSES**) at least 5 business days prior to each workshop.

Note: The times and sequence specified in this agenda are subject to change.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: October 25, 2024.

Rey Israel Marquez,

Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2024-25204 Filed 10-29-24; 8:45 am]

BILLING CODE 3510-22-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648-XE407]

Endangered and Threatened Species; Initiation of 5-Year Review for the Saimaa Seal (*Phoca* (or *Pusa*) *hispida saimensis*)

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of initiation of 5-year review; request for information.

SUMMARY: NMFS announces its intent to conduct a 5-year review of the endangered ringed seal, Saimaa subspecies (*Phoca* (or *Pusa*) *hispida saimensis*), hereafter referred to as the Saimaa seal. NMFS is required by the Endangered Species Act (ESA) to conduct 5-year reviews to ensure that listing classifications of species are accurate. The 5-year review must be based on the best scientific and commercial data available at the time of the review. We request submission of any such information on the Saimaa seal, particularly information on its status, threats, and conservation efforts, which has become available since the previous 5-year review in January 2018.

DATES: To allow us adequate time to conduct this review, we must receive

your information no later than December 30, 2024. However, we will continue to accept new information about any listed species at any time.

ADDRESSES: Submit your information, identified by docket number NOAA-NMFS-2024-0126, by the following method:

- **Electronic Submissions:** Submit all electronic comments via the Federal eRulemaking Portal. Go to www.regulations.gov and enter NOAA-NMFS-2024-0126 in the Search box. Click on the “Comment” icon, complete the required fields, and enter or attach your comments.

Instructions: NMFS may not consider comments or other information if sent by any other method, to any other address or individual, or received after the comment period ends. All comments and information received are a part of the public record and NMFS will post the comments for public viewing on www.regulations.gov without change. All personal identifying information (e.g., name, address, etc.) submitted voluntarily by the sender will be publicly accessible. Do not submit confidential business information, or otherwise sensitive or protected information. NMFS will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous).

FOR FURTHER INFORMATION CONTACT: Chris Parsons, NOAA Affiliate, (301) 427-8403 or Chris.Parsons@noaa.gov.

SUPPLEMENTARY INFORMATION: This notice announces our active review of the Saimaa seal (*Phoca* (or *Pusa*) *hispida saimensis*), currently listed as endangered (58 FR 26920; June 7, 1993). It should be noted that in 2014, the scientific name of the Saimaa seal was updated in the list of endangered species to reflect use of either of the genus names *Phoca* or *Pusa* (79 FR 20802; April 14, 2014).

Section 4(c)(2)(A) of the ESA requires that the Secretary, through NMFS, conduct a review of listed species at least once every 5 years. The species was last reviewed in 2018 (82 FR 28304; June 21, 2017). The regulations in 50 CFR 424.21 require that we publish a notice in the **Federal Register** announcing species currently under active review. Based on such reviews, we determine whether a listed species should be removed from the list (i.e., delisted), or be changed in status from endangered to threatened or from threatened to endangered (16 U.S.C. 1533(c)(2)(B)). As described by the regulations in 50 CFR 424.11(e), the Secretary shall delist a species if the Secretary determines, based on

consideration of the factors and standards set forth in 50 CFR 424.11(c), that the best scientific and commercial data available substantiate that that, after conducting a status review based on the best scientific and commercial data available: (1) the species is extinct; (2) the species has recovered to the point at which it no longer meets the definition of an endangered species or a threatened species; or (3) new information that has become available since the original listing decision shows that the listed entity does not meet the definition of an endangered species or a threatened species; or (4) new information that has become available since the original listing decision shows the listed entity does not meet the definition of a species. Any change in Federal status would require a separate rulemaking process.

Background information on the Saimaa seal is available on the NMFS website at: <https://www.fisheries.noaa.gov/species/ringed-seal>.

Public Solicitation of New Relevant Information

To ensure that the 5-year review is complete and based on the best scientific and commercial data available, we are soliciting new information from the public, governmental agencies, Tribes, the scientific community, industry, environmental entities, and any other interested parties concerning the status of the listed Saimaa seal. Categories of requested information include: (1) species biology including, but not limited to, population trends, distribution, abundance, demographics, and genetics; (2) habitat conditions including, but not limited to, amount, distribution, suitability, and important features for conservation; (3) degree, nature, and trends of threats to the species and its habitats; (4) conservation measures that have been implemented that benefit the species, including monitoring data demonstrating effectiveness of such measures; and (5) other new information, data, or corrections including, but not limited to, taxonomic or nomenclatural changes and improved analytical methods for evaluating extinction risk.

If you wish to provide information for the review, you may submit your information and materials electronically (see **ADDRESSES** section). We request that all information be accompanied by supporting documentation such as maps, bibliographic references, or reprints of pertinent publications.

Authority: 16 U.S.C. 1531 *et seq.*

Dated: October 24, 2024.

Lisa Manning,

*Acting Chief, Endangered Species
Conservation Division, Office of Protected
Resources, National Marine Fisheries Service.*

[FR Doc. 2024–25177 Filed 10–29–24; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XE423]

Mid-Atlantic Fishery Management Council (MAFMC); Public Meeting

AGENCY: National Marine Fisheries
Service (NMFS), National Oceanic and
Atmospheric Administration (NOAA),
Commerce.

ACTION: Notice; public meeting.

SUMMARY: The Mid-Atlantic Fishery
Management Council's Summer
Flounder, Scup, and Black Sea Bass
Monitoring Committee will hold a
public webinar meeting.

DATES: The meeting will be held on
Tuesday, November 19, 2024, from 9
a.m. until 12 p.m. For agenda details,
see **SUPPLEMENTARY INFORMATION**.

ADDRESSES: The meeting will be held
via webinar. Connection information
will be posted at www.mafmc.org prior
to the meeting.

Council address: Mid-Atlantic Fishery
Management Council, 800 N State
Street, Suite 201, Dover, DE 19901;
telephone: (302) 674–2331;
www.mafmc.org.

FOR FURTHER INFORMATION CONTACT:

Christopher M. Moore, Ph.D., Executive
Director, Mid-Atlantic Fishery
Management Council, telephone: (302)
526–5255.

SUPPLEMENTARY INFORMATION: The
Summer Flounder, Scup, and Black Sea
Bass Monitoring Committee will meet
via webinar to discuss 2025 recreational
management measures for all three
species. Last year, two-year recreational
measures were adopted for summer
flounder and scup for 2024–2025, with
the intent to review 2025 measures in
2024. For black sea bass, recreational
measures were previously set only for
2024. The objectives of this meeting are
for the Monitoring Committee to: (1)
Review recent recreational fishery
performance information and
recommendations from the Advisory
Panel, (2) Review previously adopted
recreational measures for summer
flounder and scup and recommend any
changes if warranted; and (3)
Recommend 2025 recreational measures

for black sea bass. Meeting materials
will be posted to www.mafmc.org.

Special Accommodations

The meeting is physically accessible
to people with disabilities. Requests for
sign language interpretation or other
auxiliary aid should be directed to
Shelley Spedden, (302) 526–5251, at
least 5 days prior to the meeting date.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: October 25, 2024.

Rey Israel Marquez,

*Acting Deputy Director, Office of Sustainable
Fisheries, National Marine Fisheries Service.*

[FR Doc. 2024–25203 Filed 10–29–24; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Agency Information Collection Activities; Submission to the Office of Management and Budget (OMB) for Review and Approval; Comment Request; NOAA Satellite Customer Questionnaire

The Department of Commerce will
submit the following information
collection request to the Office of
Management and Budget (OMB) for
review and clearance in accordance
with the Paperwork Reduction Act of
1995, on or after the date of publication
of this notice. We invite the general
public and other Federal agencies to
comment on proposed, and continuing
information collections, which helps us
assess the impact of our information
collection requirements and minimize
the public's reporting burden. Public
comments were previously requested
via the **Federal Register** on July 25,
2024, during a 60-day comment period.
This notice allows for an additional 30
days for public comments.

Agency: National Oceanic and
Atmospheric Administration,
Commerce.

Title: NOAA Satellite Customer
Questionnaire.

OMB Control Number: 0648–0227.

Form Number(s): None.

Type of Request: Regular submission
[extension of a current information
collection].

Number of Respondents: 30.

Average Hours per Response: 6
minutes per response.

Total Annual Burden Hours: 3.

Needs and Uses: This request is for
extension of a current information
collection.

The National Oceanic and
Atmospheric Administration (NOAA)

operates a minimum of four
meteorological satellite imagery
transmission systems, two from
geostationary operational environmental
(GOES) satellites and two from Joint
Polar Satellite System (JPSS) satellites.
In addition, a commercially broadcast
data stream and legacy/backup/standby
polar-orbiting satellites continue to be
operated as their health permits. The
data transmitted are available
worldwide, and any user can establish
a ground receiving station for reception
of the data without the prior consent,
notification, or other approval from
NOAA. With such an open access
policy, it is currently not possible to
have a comprehensive understanding of
the range and numbers of the data users
and application of the data received
and/or used. The purpose of collecting
the information contained in the
“Questionnaire” is to satisfy the
following objectives: (1) To comply with
international agreements such as the
Department of Commerce (DOC)/
NOAA's memorandum of understanding
(MOU) with the World Meteorological
Organization (WMO), so that NOAA can
provide environmental satellite data and
processed satellite data products to the
public domain, and (2) To improve
Government efficiencies of data
dissemination using cost-saving
technologies to minimize the
expenditure of personnel and financial
resources. The NOAA Policy on
Partnerships in the Provision of
Environmental Information is also
pertinent to this information collection.
This policy was developed to strengthen
the partnership among government,
academia, and the private sector, which
provides the nation with high quality
environmental information.

The collection of information from a
respondent is initiated when an
individual contacts National
Environmental Satellite, Data, and
Information Service (NESDIS) via letter,
telephone, fax or email, or when they
visit a web page. If the nature of the
contact indicates the individual may
operate a satellite receiving station for
the acquisition of NOAA satellite data
or may use NOAA satellite data or
services, the individual is requested to
complete an on-line electronic
questionnaire, which is found on a
NOAA internet site. The questionnaire
is completed at the respondent's
discretion. The information received is
used by NOAA for short-term operations
and long-term planning. Collection of
this data assists in complying with the
terms of the MOU with the WMO, MOU
with DOC, and NOAA on areas of

common interest and other international agreements.

Affected Public: Federal government, Not-for-profit institutions.

Frequency: Once.

Respondent's Obligation: Voluntary.

This information collection request may be viewed at www.reginfo.gov. Follow the instructions to view the Department of Commerce collections currently under review by OMB.

Written comments and recommendations for the proposed information collection should be submitted within 30 days of the publication of this notice on the following website www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting "Currently under 30-day Review—Open for Public Comments" or by using the search function and entering either the title of the collection or the OMB Control Number 0648–0227.

Sheleen Dumas,

Departmental PRA Clearance Officer, Office of the Under Secretary for Economic Affairs, Commerce Department.

[FR Doc. 2024–25176 Filed 10–29–24; 8:45 am]

BILLING CODE 3510–HR–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XE420]

Mid-Atlantic Fishery Management Council (MAFMC); Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; public meeting.

SUMMARY: The Mid-Atlantic Fishery Management Council's (Council) Law Enforcement Committee will hold a meeting.

DATES: The meeting will be held on Tuesday, November 12, 2024, from 2 p.m. to 4 p.m. See **SUPPLEMENTARY INFORMATION** for agenda details.

ADDRESSES: The meeting will take place via internet webinar. Details on how to connect to the webinar by computer and by telephone will be available at: www.mafmc.org/ (see website Calendar).

Council address: Mid-Atlantic Fishery Management Council, 800 N State Street, Suite 201, Dover, DE 19901; telephone: (302) 674–2331; website: www.mafmc.org.

FOR FURTHER INFORMATION CONTACT: Christopher M. Moore, Ph.D., Executive Director, Mid-Atlantic Fishery

Management Council, telephone: (302) 526–5255.

SUPPLEMENTARY INFORMATION: The Law Enforcement Committee will review a potential butterfly mesh requirement change and make recommendations regarding enforceability issues. An agenda and background documents will be made available on the Council's website (www.mafmc.org) prior to the meeting.

Special Accommodations

The meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aid should be directed to Shelley Spedden, (302) 526–5251, at least 5 days prior to the meeting date.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: October 25, 2024.

Rey Israel Marquez,

Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2024–25205 Filed 10–29–24; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XE357]

South Atlantic Fishery Management Council; Public Meetings

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of public meetings.

SUMMARY: The South Atlantic Fishery Management Council (Council) will hold three Best Fishing Practices Master Volunteer Program (BFP MVP) Workshops covering best fishing practices, specifically for snapper grouper species, how to get involved in Citizen Science projects, and how to get involved in the Council process.

DATES: The BFP MVP workshops are scheduled for November 19, 2024, November 20, 2024 and November 21, 2024. Workshops will begin at 5 p.m., local time. See **SUPPLEMENTARY INFORMATION**.

ADDRESSES:

Meeting addresses: The workshops will be held in Wilmington, NC; Morehead City, NC; and Cary, NC. See **SUPPLEMENTARY INFORMATION**.

Council address: South Atlantic Fishery Management Council, 4055 Faber Place Drive, Suite 201, N Charleston, SC 29405.

FOR FURTHER INFORMATION CONTACT:

Ashley Oliver, Best Fishing Practices Outreach Specialist, SAFMC; phone: (843) 571–4366 or toll free: (866) SAFMC–10; fax: (843) 769–4520; email: ashley.oliver@safmc.net.

SUPPLEMENTARY INFORMATION: The Council is hosting a series of BFP MVP workshops along the South Atlantic coast throughout 2024. The workshops are designed to empower key members of the fishing community to share information on best fishing practices and opportunities to get involved in the Council process. Council staff will introduce the BFP MVP and the program's goals and objectives and share information on Best Fishing Practices including the topics of barotrauma and barotrauma mitigation devices. The workshop agenda also includes discussions of the Council's Citizen Science projects, an introduction to the regional fishery management councils, specifically the South Atlantic Fishery Management Council, and how to get involved in the federal fishery management process. If applicable, state agencies will share information pertaining to their fisheries management and BFP efforts. Throughout the workshop, attendees will have the opportunity to share their expertise and ideas with staff on improving outreach efforts in their community. A summary of the 2024 workshops will be provided to the Council for use in ongoing outreach efforts.

Workshop Locations:

Tuesday, November 19, 2024: Cape Fear Museum: 814 Market St., Wilmington, NC 28401; phone: (910) 798–4370;

Wednesday, November 20, 2024: Crystal Coast Civic Center: 203 College Cir, Morehead City, NC; phone: (561) 694–5431; and

Thursday, November 21, 2024: Bass Pro Shops: 801 Bass Pro Lane Cary, NC; phone: (252) 247–3883.

Special Accommodations

These meetings are physically accessible to people with disabilities. Requests for auxiliary aid should be directed to the Council office (see **ADDRESSES**) 5 days prior to the meeting.

Note: The times and sequence specified in this agenda are subject to change.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: October 25, 2024.

Rey Israel Marquez,

Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2024–25201 Filed 10–29–24; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration**

[RTID 0648–XE291]

Marine Mammals; File No. 27984

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; receipt of application.

SUMMARY: Notice is hereby given that Jooke Robbins, Ph.D., Center for Coastal Studies, 5 Holway Avenue, Provincetown, MA 02657, has applied in due form for a permit to conduct research on marine mammals.

DATES: Written comments must be received on or before November 29, 2024.

ADDRESSES: The application and related documents are available for review by selecting “Records Open for Public Comment” from the “Features” box on the Applications and Permits for Protected Species home page, <https://apps.nmfs.noaa.gov>, and then selecting File No. 27984 from the list of available applications. These documents are available upon written request via email to NMFS.Pr1Comments@noaa.gov.

Written comments on this application should be submitted via email to NMFS.Pr1Comments@noaa.gov. Please include File No. 27984 in the subject line of the email comment.

Those individuals requesting a public hearing should submit a written request via email to NMFS.Pr1Comments@noaa.gov. The request should set forth the specific reasons why a hearing on this application would be appropriate.

FOR FURTHER INFORMATION CONTACT:

Courtney Smith, Ph.D., or Shasta McClenahan, Ph.D., (301) 427–8401.

SUPPLEMENTARY INFORMATION: The subject permit is requested under the authority of the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1361 *et seq.*), the regulations governing the taking and importing of marine mammals (50 CFR part 216), the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), and the regulations governing the taking, importing, and exporting of endangered and threatened species (50 CFR parts 222–226).

The applicant proposes to target humpback (*Megaptera novaeangliae*; Gulf of Maine stock/West Indies Distinct Population Segment) and endangered fin (*Balaenoptera physalus*; Western North Atlantic stock) whales for research purposes in the Gulf of Maine

and adjacent waters, and the waters off Georgia and Florida. An additional 12 species of cetaceans and 2 species of pinnipeds may be unintentionally harassed during research, including endangered North Atlantic right (*Eubalaena glacialis*) and sei (*B. borealis*) whales. Marine mammals may be approached during vessel surveys for photo-identification, photogrammetry, underwater photography/videography, counts, unmanned aircraft system operations, behavioral observations, and biological sampling (skin and blubber biopsy, feces, and sloughed skin). Additionally, samples would be imported and exported for analysis and the creation of cell lines. See the application for complete numbers of animals requested by species, age-class, and procedure. The objectives of the research are to continue the long-term study of the biology and ecology of humpback and fin whales by examining population dynamics, movement and habitat use, entanglement and other human impacts, molecular genetics, aging, toxicology, foraging ecology, microbiology, reproduction, and health. The permit would be valid for 5 years.

In compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), an initial determination has been made that the activity proposed is categorically excluded from the requirement to prepare an environmental assessment or environmental impact statement.

Concurrent with the publication of this notice in the **Federal Register**, NMFS is forwarding copies of the application to the Marine Mammal Commission and its Committee of Scientific Advisors.

Dated: October 24, 2024.

Amy Sloan,

Acting Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 2024–25126 Filed 10–25–24; 4:15 pm]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration**

[RTID 0648–XE386]

Notice of Availability of a Final Programmatic Environmental Assessment on the Effects of Permitting Translocation of Sturgeon for Scientific Research and Enhancement Under Section 10(a)(1)(A) of the Endangered Species Act

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of availability of final programmatic environmental assessment and finding of no significant impact.

SUMMARY: NOAA has prepared a final programmatic environmental assessment (PEA) and Finding of No Significant Impact (FONSI) under the National Environmental Policy Act of 1969 (NEPA), as amended, analyzing the environmental impacts of the NMFS Office of Protected Resources (OPR) proposal to authorize directed take under the sturgeon Endangered Species Act (ESA) permitting program for the translocation of shortnose (*Acipenser brevirostrum*) and Atlantic (*A. oxyrinchus oxyrinchus*) sturgeons for research and enhancement purposes. Based on its finding of no significant impact, NMFS has determined that an environmental impact statement need not be prepared.

FOR FURTHER INFORMATION CONTACT: Erin Markin, Ph.D., erin.markin@noaa.gov, (301) 427–8416; Malcolm Mohead, malcolm.mohead@noaa.gov, (301) 427–8427.

SUPPLEMENTARY INFORMATION:**Background**

This final PEA analyzes the potential impacts on the natural and human environments for the authorization of directed take of sturgeon by translocation, in scientific research or enhancement permits under section 10(a)(1)(A) of the ESA, to achieve recovery objectives. For the purposes of the sturgeon permitting program, translocation is the intentional capture, holding, handling, transport, and release of individuals within a river system (*e.g.*, translocation of fish across a dam or fish passage) or between river systems within the U.S. historical range of Atlantic and shortnose sturgeon (*i.e.*, Maine to Florida). Under the Proposed Action, NMFS would authorize directed

take for the translocation of ESA-listed Atlantic and shortnose sturgeon as a research or enhancement activity to support sturgeon conservation management and recovery objectives. NMFS would authorize translocation concurrent with additional research or enhancement activities, if the research or enhancement activity's objectives are (1) stated as a term and condition to implement reasonable and prudent measures of an active biological opinion, (2) an identified objective in a NMFS recovery outline or recovery plan for the species, or (3) determined necessary by NMFS Regional Offices and the NMFS OPR to recover the species. Programmatic NEPA reviews add value and efficiency to the decision making process when they inform the scope of decisions and subsequent tiered NEPA reviews. Therefore, NMFS decided that completing a PEA for the proposed action was appropriate.

NMFS published a Notice of Availability of the draft PEA in the **Federal Register** on December 27, 2023 (88 FR 89385) beginning a 30-day public comment period. NMFS considered the public comments received on the draft PEA and has responded to comments in appendix 1 of the final PEA.

After publishing the draft PEA for public comment, NMFS identified one additional sampling method that was inadvertently left out of the draft PEA. Epidermal mucus sampling was found to be consistent with an existing category of activities that normally do not have a significant effect on the human environment, and therefore do not require preparation of an environmental assessment or environmental impact statement (40 CFR 1501.4). NMFS incorporated this additional method into the final PEA which resulted in no changes to the impact determinations. Additional information is located in section 1.2.1 of the final PEA.

The PEA and FONSI have been prepared in compliance with NEPA of 1969, as amended (42 U.S.C. 4321, *et seq.*), the 2020 Council on Environmental Quality Regulations (40 CFR 1500–1508) as modified by the Phase 1 2022 revisions, and NOAA policy and procedures (NOAA Administrative Order 216–6A and its Companion Manual). The final PEA and FONSI may be downloaded or viewed at: <https://www.fisheries.noaa.gov/action/draft-environmental-assessment-permitting-translocation-sturgeon-scientific-research-and>.

Dated: October 25, 2024.

Amy Sloan,

Acting Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 2024–25214 Filed 10–29–24; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XE429]

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Pile Driving Training Exercises at Naval Base Ventura County, Port Hueneme; Correction

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; proposed issuance of an incidental harassment authorization; request for comments on proposed authorization and possible renewal; correction.

SUMMARY: This notice contains corrections to a notice of the proposed issuance an incidental harassment authorization (IHA) to the United States Navy (Navy). The document being corrected is Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Pile Driving Training Exercises at Naval Base Ventura County, Port Hueneme, which was published on October 23, 2024.

DATES: Comments and information must be received no later than November 22, 2024.

FOR FURTHER INFORMATION CONTACT:

Reny Tyson Moore, Office of Protected Resources, NMFS, (301) 427–8401. Electronic copies of the application and supporting documents, as well as the **Federal Register** notices and IHAs, may be obtained online at: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-construction-activities>. In case of problems accessing these documents, please call the contact listed above.

SUPPLEMENTARY INFORMATION:

Background

NMFS published a notice in the **Federal Register** on October 23, 2024 (89 FR 84534) announcing the proposed issuance of an IHA to the Navy concerning the authorization of take of

marine mammals incidental to pile driving training exercises at Naval Base Ventura County, Port Hueneme. The proposed IHA, which would authorize the Navy to incidentally take California sea lions (*Zalophus californius*) and harbor seals (*Phoca vitulina richardii*), by Level B harassment only, during the described activities and specified timeframe, prescribe the methods of taking and other means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat, as well as propose requirements pertaining to the monitoring and reporting of such taking. NMFS refers the reader to the October 23, 2024, (89 FR 84534) **Federal Register** notice for background information concerning the proposed issuance of the IHA. The information in the notice of proposed issuance is not repeated here.

Correction

The error to be corrected appears in the **DATES** section. The text incorrectly states that Comments and information must be received no later than November 7, 2024, which suggests the comment period for this proposed IHA is 15 days. However, proposed IHAs require a 30-day public comment period. Therefore, the correct public comment period should be 30 days, and should end on November 22, 2024.

Dated: October 25, 2024.

Kimberly Damon-Randall,

Director, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 2024–25226 Filed 10–29–24; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Agency Information Collection Activities; Submission to the Office of Management and Budget (OMB) for Review and Approval; Comment Request; StormReady, TsunamiReady, TsunamiReady Supporter, StormReady Supporter, and Weather-Ready Ambassador Application Forms

The Department of Commerce will submit the following information collection request to the Office of Management and Budget (OMB) for review and clearance in accordance with the Paperwork Reduction Act of 1995, on or after the date of publication of this notice. We invite the general public and other Federal agencies to comment on proposed, and continuing information collections, which helps us

assess the impact of our information collection requirements and minimize the public's reporting burden. Public comments were previously requested via the **Federal Register** on July 30, 2024 during a 60-day comment period. This notice allows for an additional 30 days for public comments.

Agency: National Oceanic & Atmospheric Administration (NOAA), Commerce.

Title: StormReady, TsunamiReady, TsunamiReady Supporter, StormReady Supporter & Weather-Ready Nation Ambassador Application Forms

OMB Control Number: 0648–0419.

Form Number(s): None.

Type of Request: Regular [Revision and extension of a current information collection].

Number of Respondents: 700 per year.

Average Hours per Response:

StormReady and TsunamiReady Application: 1 hour.

StormReady Supporter Application Form: 1 hour.

TsunamiReady Supporter Application Form: 1 hour.

Weather-Ready Ambassador Application Form: 0.25 hours.

Total Annual Burden Hours: 625 hours.

Needs and Uses: This is a request for extension and revision of an existing information collection. The National Weather Service (NWS) established the StormReady program in 1999 and the TsunamiReady program in 2002 to help communities, counties, Indian nations, universities and colleges, military bases, government sites, commercial enterprises and other groups reduce the potential for weather-related and tsunami hazards through advanced planning, education and awareness. The program encourages communities to take a new, proactive approach to improving local hazardous weather operations by providing emergency managers with clear-cut guidelines on how to improve their hazardous weather operations. By participating in this program, local agencies earn recognition for their jurisdiction by meeting guidelines established by the NWS in partnership with federal, state, and local emergency management professionals. Information and details on the StormReady and TsunamiReady programs are located at <https://www.weather.gov/stormready/> and <https://www.weather.gov/tsunamiready/>.

A Supporter is an organization, business, facility, or local government entity actively engaged in weather safety and preparedness that is unable to meet all the requirements of the full StormReady or TsunamiReady program.

Sites may be eligible based on the bylaws of the local NWS StormReady Advisory Board and endorsement of local emergency management. A local StormReady Advisory Board has final approval for Supporter designation.

StormReady/TsunamiReady are voluntary programs that provide guidance and incentive to officials interested in improving their hazardous weather operations. The government will use the information collected by the StormReady/TsunamiReady application to determine whether a community has met all of the guidelines to receive StormReady/TsunamiReady recognition.

NOAA requests revision to the title of the collection to include the Weather-Ready Nation Ambassador™ program which is being added as a new information collection to this control number. The Weather-Ready Nation (WRN) Ambassador™ is a program of the National Oceanic and Atmospheric Administration (NOAA), designed to strengthen partnerships with external organizations toward building community resilience in the face of increasing vulnerability to extreme weather, climate, and water events. Organizations can apply for Weather-Ready Nation Ambassador™ recognition. This program recognizes NOAA partners who are improving the nation's readiness, responsiveness, and overall resilience against extreme weather, water, and climate events. As a Weather-Ready Nation Ambassador, partners commit to working with NOAA and other Ambassadors to strengthen national resilience against extreme weather.

Affected Public: Business or other for-profit organizations; Not-for-profit institutions; State, Local, or Tribal government.

Frequency: On occasion.

Respondent's Obligation: Voluntary.

This information collection request may be viewed at www.reginfo.gov. Follow the instructions to view the Department of Commerce collections currently under review by OMB.

Written comments and recommendations for the proposed information collection should be submitted within 30 days of the publication of this notice on the following website www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting "Currently under 30-day Review—Open for Public Comments" or by using the search function and

entering either the title of the collection or the OMB Control Number 0648–0419.

Sheleen Dumas,

Departmental PRA Clearance Officer, Office of the Under Secretary for Economic Affairs, Commerce Department.

[FR Doc. 2024–25227 Filed 10–29–24; 8:45 am]

BILLING CODE 3510–KE–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XE298]

Deepwater Horizon Natural Resource Damage Assessment Open Ocean Trustee Implementation Group Draft Restoration Plan 4 and Environmental Assessment: Fish and Water Column Invertebrates and Sea Turtles

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of availability; request for public comments.

SUMMARY: The Deepwater Horizon (DWH) natural resource Trustees for the Open Ocean Trustee Implementation Group (Open Ocean TIG) have prepared the Draft Restoration Plan 4 and Environmental Assessment: Fish and Water Column Invertebrates (FWCI) and Sea Turtles (RP4/EA). The Draft RP4/EA proposes alternatives to help restore fish and water column invertebrates and sea turtles impacted by the DWH oil spill. The Draft RP4/EA evaluates twelve restoration alternatives under the Oil Pollution Act (OPA), including criteria set forth in the OPA Natural Resource Damage Assessment (NRDA) regulations, and the National Environmental Policy Act (NEPA) and its implementing regulations. A No Action Alternative is also evaluated pursuant to the NEPA. The total estimated cost to implement the Open Ocean TIG's 10 preferred alternatives is approximately \$210,020,000. The Open Ocean TIG invites the public to comment on the Draft RP4/EA.

DATES:

Submitting Comments: The Open Ocean TIG will consider public comments on the Draft RP4/EA received on or before December 16, 2024.

Public Webinar: The Open Ocean TIG will host two public webinars to facilitate public review and comment on the Draft RP4/EA. The webinar dates, times, and registration links are as follows:

- Thursday, November 14, 2024 from 1–2 p.m. Eastern Time. Register at:

<https://attendee.gotowebinar.com/register/7244601192809206361>.

• Wednesday, November 20, 2024 from 5–6 p.m. Eastern Time. Register at: <https://attendee.gotowebinar.com/register/7473782296991218265>.

After registering, participants will receive a confirmation email with instructions for joining the webinar and how to make comments during the webinar. Shortly after the webinar concludes, the presentation material will be posted on the web at <https://www.gulfspillrestoration.noaa.gov/restoration-areas/open-ocean>.

ADDRESSES:

Obtaining Documents: You may view and download the Draft RP4/EA at <https://www.gulfspillrestoration.noaa.gov/restoration-areas/open-ocean>. You may also request a flash drive containing the Draft RP4/EA (see **FOR FURTHER INFORMATION CONTACT**).

Submitting Comments: You may submit comments on the Draft RP4/EA by either of the following methods:

• **Website:** <https://parkplanning.nps.gov/OOTIGRP4>. Follow the online instructions for submitting comments.

• **Mail:** U.S. Fish and Wildlife Service Gulf Restoration Office, 1875 Century Blvd., Atlanta, GA 30345. To be considered, mailed comments must be postmarked on or before the comment deadline given in **DATES**.

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

FOR FURTHER INFORMATION CONTACT: National Oceanic and Atmospheric Administration—Laurie Rounds, NOAA Restoration Center, (850) 378–1263, openocean.tig@noaa.gov.

SUPPLEMENTARY INFORMATION:

Introduction

On April 20, 2010, the mobile offshore drilling unit Deepwater Horizon, which was drilling a well for BP Exploration and Production, Inc. (BP), experienced a significant explosion, fire and subsequent sinking in the Gulf of Mexico, resulting in the release of millions of barrels of oil and other discharges into the Gulf. Under the authority of the OPA, designated Federal and state Trustees, acting on behalf of the public, assessed the

injuries to natural resources and prepared the Deepwater Horizon Oil Spill Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (Final PDARP/PEIS), and the Record of Decision for the Deepwater Horizon Oil Spill Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (ROD), which sets forth the governance structure and process for DWH restoration planning under the OPA NRDA regulations. On April 4, 2016, the United States District Court for the Eastern District of Louisiana entered a Consent Decree resolving civil claims by the Trustees against BP.

The Open Ocean TIG, which is composed of the National Oceanic and Atmospheric Administration, Environmental Protection Agency, the U.S. Department of the Interior, the U.S. Environmental Protection Agency, and the U.S. Department of Agriculture, selects and implements restoration projects under the Open Ocean TIG's management authority in accordance with the Consent Decree. The Final PDARP/PEIS, ROD, Consent Decree, and information on the DWH Trustees can be found at <https://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan>.

Background

On June 1, 2023, the Open Ocean TIG issued a notice of solicitation on the Gulf Spill Restoration website requesting project ideas for FWCI and Sea Turtles Restoration Types as described in the Final PDARP/PEIS. On June 25, 2024, the TIG announced on the Gulf Spill Restoration website that they reviewed project idea submissions and were initiating drafting of the RP4/EA which tiers from the Final PDARP/PEIS and would include a reasonable range of restoration project alternatives for the FWCI and Sea Turtle Restoration Types.

Overview of the Open Ocean TIG Draft RP4/EA

In the Draft RP4/EA, the Open Ocean TIG analyzes a reasonable range of 12 project alternatives and, pursuant to the NEPA, a No Action alternative for each Restoration Type. Two of the alternatives are not preferred by the TIG at this time. Funding to implement any of the alternatives ultimately selected by the Open Ocean TIG would come from the FWCI and Sea Turtles Restoration Types and Monitoring and Adaptive Management allocations. The reasonable range of project alternatives evaluated by the TIG are listed below:

- Return 'Em Right: Species and Area Expansion (Reduction of Postrelease Mortality from Barotrauma in Gulf of Mexico Reef Fish Recreational Fisheries) (preferred);
- Next Generation Fishing (preferred);
- Communication Networks and Mapping Tools to Reduce Fish Mortality (preferred);
- Reduction of Diverse Threats to Fish and Water Column Invertebrates (preferred);
- Education and Stewardship Partnerships with Charter Anglers (preferred);
- Communication, Adaptive Management, Planning, and Integration (preferred);
- Reduction in Fish Post-Release Mortality from Depredation (non-preferred);
- Sea Turtle Nesting Habitat Protection Expansion in Florida (Long Term Nesting Habitat Protection for Sea Turtles) (preferred);
- Gulf-Wide Sea Turtle Bycatch Reduction (preferred);
- Gulf-Wide Sea Turtle Vessel Strike Reduction (preferred);
- Gulf-Wide Sea Turtle Stranding Network and Emergency Response Enhancements (preferred); and
- Kemp's Ridley Nesting Enhancement in Mexico (non-preferred).

The total estimated cost to implement the ten preferred alternatives is approximately \$210,020,000.

Next Steps

After the public comment period ends, the Open Ocean TIG will consider and address all substantive comments received before making a final decision on which, if any, alternatives to fund and implement. A Final RP4/EA and Finding of No Significant Impact, as appropriate, identifying the selected alternatives will be made publicly available.

Administrative Record

The Administrative Record for the Draft RP4/EA can be viewed electronically at <https://www.doi.gov/deepwaterhorizon/adminrecord> under the folder 6.5.2.2.4.

Authority

The authority for this action is the OPA of 1990 (33 U.S.C. 2701 *et seq.*), its implementing NRDA regulations found at 15 CFR part 990, and the NEPA of 1969 (42 U.S.C. 4321 *et seq.*), its implementing regulations found at 40 CFR parts 1500–1508.

Dated: October 25, 2024.

Carrie Diane Robinson,

*Director, Office of Habitat Conservation,
National Marine Fisheries Service.*

[FR Doc. 2024–25180 Filed 10–29–24; 8:45 am]

BILLING CODE 3510–12–P

DEPARTMENT OF DEFENSE

Office of the Secretary

Notice of Intent To Grant a Partially Exclusive License; BrandRank.AI

AGENCY: National Security Agency (NSA), Department of Defense (DoD).

ACTION: Notice of intent.

SUMMARY: The NSA hereby gives notice of its intent to grant BrandRank.AI a revocable, non-assignable, partially exclusive, license to practice the following Government-Owned invention as described and claimed in United States Patent Number, 8,799,339 Device for and Method of Measuring Similarity Between Sets.

DATES: Anyone wishing to object to the grant of this license has until November 14, 2024 to file written objections including evidence and argument that establish that the grant of the license would not be consistent with the requirements of 35 United States Code (U.S.C.) 209 and 37 Code of Federal Regulations (CFR) 404.7.

ADDRESSES: Written objections are to be filed with the National Security Agency Technology Transfer Program, 9800 Savage Road, Suite 6843, Fort George G. Meade, MD 20755–6843.

FOR FURTHER INFORMATION CONTACT: Karen D. Presley, Director, Technology Transfer Program, 9800 Savage Road, Suite 6843, Fort George G. Meade, MD 20755–6843, telephone (443) 634–3519.

SUPPLEMENTARY INFORMATION: The prospective partially exclusive license will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR 404.7. The patent rights in these inventions have been assigned to the United States Government as represented by the NSA.

Dated: October 25, 2024.

Aaron T. Siegel,

*Alternate OSD Federal Register Liaison
Officer, Department of Defense.*

[FR Doc. 2024–25218 Filed 10–29–24; 8:45 am]

BILLING CODE 6001–FR–P

DEPARTMENT OF DEFENSE

Office of the Secretary

Defense Science Board; Notice of Federal Advisory Committee Meeting

AGENCY: Under Secretary of Defense for Research and Engineering, Department of Defense (DoD).

ACTION: Notice of Federal Advisory Committee meeting.

SUMMARY: The DoD is publishing this notice to announce that the following Federal Advisory Committee meeting of the Defense Science Board (DSB) will take place.

DATES: Closed to the public Wednesday, November 13, 2024, from 10 a.m. to 2 p.m. Eastern Standard Time.

ADDRESSES: The address of the closed meeting is Strategic Analysis, Inc., 4075 Wilson Blvd., #300, Arlington, VA 22203.

FOR FURTHER INFORMATION CONTACT: Ms. Elizabeth J. Kowalski, Designated Federal Officer (DFO): (703) 571–0081 (Voice), (703) 697–1860 (Facsimile), elizabeth.j.kowalski.civ@mail.mil, (Email). Mailing address is Defense Science Board, 3140 Defense Pentagon, Washington, DC 20301–3140. Website: <http://www.acq.osd.mil/dsb/>. The most up-to-date changes to the meeting agenda can be found on the website.

SUPPLEMENTARY INFORMATION: This meeting is being held under the provisions of chapter 10 of title 5, United States Code (U.S.C.) (commonly known as the “Federal Advisory Committee Act” or “FACA”), 5 U.S.C. 552b (commonly known as the “Government in the Sunshine Act”), and title 41 Code of Federal Regulations (CFR) 102–3.140 and 102–3.150.

Purpose of the Meeting: The mission of the DSB is to provide independent advice and recommendations on matters relating to the DoD’s scientific and technical enterprise. The objective of the meeting is to obtain, review, and evaluate classified information related to the DSB’s mission. The DSB will convene to deliberate and vote on classified findings and recommendations.

Agenda: The meeting will begin on Wednesday, November 13, 2024, at 10:00 a.m. Ms. Betsy Kowalski, DFO, and Dr. Eric Evans, Chair of the DSB, will provide opening remarks and a classified overview of the objectives of the 2024 Summer Study on Advanced Capabilities for Potential Future Conflict. Next, the DSB will deliberate on updating the classified findings and recommendations of the 2024 Summer

Study on Advanced Capabilities for Potential Future Conflict. The DSB will then vote on the updated classified findings and recommendations. The meeting will adjourn at 2:00 p.m.

Meeting Accessibility: In accordance with 5 U.S.C. 1009(a) and 41 CFR 102–3.140 through 102–3.165, the DoD has determined that the DSB meeting will be closed to the public. Specifically, the Under Secretary of Defense for Research and Engineering, in consultation with the DoD Office of the General Counsel, has determined in writing that the meeting will be closed to the public because it will consider matters covered by 5 U.S.C. 552b(c)(1). The determination is based on the consideration that it is expected that discussions throughout will involve classified matters of national security concern. Such classified material is so intertwined with the unclassified material that it cannot reasonably be segregated into separate discussions without defeating the effectiveness and meaning of the overall meetings. To permit the meeting to be open to the public would preclude discussion of such matters and would greatly diminish the ultimate utility of the DSB’s findings and recommendations to the Secretary of Defense and to the Under Secretary of Defense for Research and Engineering.

Written Statements: In accordance with 5 U.S.C. 1009(a)(3) and 41 CFR 102–3.105(j) and 102–3.140, interested persons may submit a written statement for consideration by the DSB at any time regarding its mission or in response to the stated agenda of a planned meeting. Individuals submitting a written statement must submit their statement to the DSB DFO at the email address provided in the **FOR FURTHER INFORMATION CONTACT** section at any point; however, if a written statement is not received at least three calendar days prior to the meeting, which is the subject of this notice, then it may not be provided to or considered by the DSB until a later date.

Dated: October 25, 2024.

Aaron T. Siegel,

*Alternate OSD Federal Register Liaison
Officer, Department of Defense.*

[FR Doc. 2024–25215 Filed 10–29–24; 8:45 am]

BILLING CODE 6001–FR–P

DEPARTMENT OF EDUCATION

Applications for New Awards; Fulbright-Hays Doctoral Dissertation Research Abroad Fellowship Program

AGENCY: Office of Postsecondary Education, Department of Education.

ACTION: Notice.

SUMMARY: The Department of Education is issuing a notice inviting applications for fiscal year (FY) 2025 for the Fulbright-Hays Doctoral Dissertation Research Abroad (DDRA) Fellowship Program.

DATES:

Applications Available: October 30, 2024.

Deadline for Transmittal of

Applications: January 15, 2025.

Pre-Application Webinar Information: The Department will hold a pre-application meeting via webinar for prospective applicants. Detailed information regarding this webinar will be provided on the DDRA website at <https://www.ed.gov/grants-and-programs/grants-higher-education/ifle/fulbright-hays-doctoral-dissertation-research-abroad#How-To-Apply>.

For additional information about the Department's discretionary grant process, especially for new potential grantees unfamiliar with grantmaking at the Department, please review the Education Grants: Application, Management, & Closeout website at www2.ed.gov/fund/grant/about/grantmaking/index.html.

The resources will be especially helpful for individuals who are exploring the Department's funding opportunities for the first time.

ADDRESSES: The addresses pertinent to this competition—including the addresses for obtaining and submitting an application—can be found under **SUPPLEMENTARY INFORMATION**.

FOR FURTHER INFORMATION CONTACT:

Pamela J. Maimer, U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20202. Telephone: (202) 453-6891. Email: DDRA@ed.gov.

If you are deaf, hard of hearing, or have a speech disability and wish to access telecommunications relay services, please dial 7-1-1.

SUPPLEMENTARY INFORMATION:**Full Text of Announcement****I. Funding Opportunity Description**

Purpose of Program: The Fulbright-Hays DDRA Fellowship Program provides opportunities for doctoral students to engage in dissertation research abroad in modern foreign languages and area studies. The program is designed to contribute to the development and improvement of the study of modern foreign languages and area studies in the United States.

Assistance Listing Number: 84.022A.

OMB Control Number: 1840-0005.

Priorities: This notice contains one absolute priority and three competitive

preference priorities. In accordance with 34 CFR 75.105(b)(2)(ii), the absolute priority and Competitive Preference Priorities 1 and 2 are from the regulations for this program (34 CFR 662.21(d)). Competitive Preference Priority 3 is from the Secretary's Notice of Final Supplemental Priorities and Definitions for Discretionary Grant Programs, published in the **Federal Register** on December 10, 2021 (86 FR 70612) (Supplemental Priorities).

Absolute Priority: For FY 2025, this priority is an absolute priority. Under 34 CFR 75.105(c)(3), we consider only applications that meet this priority.

This priority is:

Specific Geographic Regions of the World.

A research project that focuses on one or more of the following geographic areas: Africa, East Asia, Southeast Asia and the Pacific Islands, South Asia, the Near East, Central and Eastern Europe and Eurasia, and the Western Hemisphere (excluding the United States and its territories).

Competitive Preference Priorities: For FY 2025, these priorities are competitive preference priorities. Under 34 CFR 75.105(c)(2)(i), we award an additional two points to an application that meets Competitive Preference Priority 1; an additional two points to an application that meets Competitive Preference Priority 2; and an additional two points to an application that meets Competitive Preference Priority 3 (up to 6 additional points possible).

These priorities are:

Competitive Preference Priority 1—Focus on Less Commonly Taught Languages (2 points).

A research project that focuses on any modern foreign language except French, German, or Spanish.

Competitive Preference Priority 2—Thematic Focus on Academic Fields (2 points).

Applications that propose dissertation research projects in modern foreign languages and area studies with an academic focus on any of the following academic fields: science (including climate change), technology, engineering (including infrastructure studies), mathematics, computer science, psychology, social work, education (comparative or international), international development, political science, public health (including epidemiology), or economics.

Competitive Preference Priority 3—Promoting Equity in Student Access to Educational Resources and Opportunities (2 points).

The project will be implemented by one of the following entities:

- Historically Black colleges and universities (as defined in this notice).
- Minority-serving institutions (as defined in this notice).
- Tribal colleges and universities (as defined in this notice).

Definitions: The following definitions are from the Supplemental Priorities and 34 CFR 662.7.

Area studies means a program of comprehensive study of the aspects of a society or societies, including the study of their geography, history, culture, economy, politics, international relations, and languages.

Binational commission means an educational and cultural commission established, through an agreement between the United States and either a foreign government or an international organization, to carry out functions in connection with the DDRA Fellowship program.

Historically Black colleges and universities means colleges and universities that meet the criteria set out in 34 CFR 608.2.

Institution of Higher Education means the definition contained in 34 CFR 600.4.

Minority-serving institution means an institution that is eligible to receive assistance under sections 316 through 320 of part A of title III, under part B of title III, or under title V of the Higher Education Act of 1965 (HEA).

Tribal college or university has the meaning ascribed it in section 316(b)(3) of the HEA.

Note: Hispanic-Serving Institutions that meet the criteria in 34 CFR 606.2(a) are, among other qualifying institutions, "minority-serving institutions."

Program Authority: 22 U.S.C. 2452(b)(6).

Note: Projects will be awarded and must be operated in a manner consistent with the nondiscrimination requirements contained in Federal civil rights laws.

Applicable Regulations: (a) The Education Department General Administrative Regulations in 34 CFR parts 75, 77, 81, 82, 84, 86, 97, 98, and 99. (b) The Office of Management and Budget (OMB) Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement) in 2 CFR part 180, as adopted and amended as regulations of the Department in 2 CFR part 3485. (c) The Guidance for Federal Assistance in 2 CFR part 200, as adopted and amended as regulations of the Department in 2 CFR part 3474. (d) The regulations for this program in 34 CFR part 662. (e) The Supplemental Priorities.

Note: The open licensing requirement in 2 CFR 3474.20 does not apply to this program.

II. Award Information

Type of Award: Discretionary grants redistributed as fellowships to individual beneficiaries.

Estimated Available Funds: \$8,249,000 for the Fulbright-Hays Overseas programs. We intend to use an estimated \$3,000,000 for the DDRA competition. The actual level of funding, if any, depends on final congressional action. However, we are inviting applications to allow enough time to complete the grant process if Congress appropriates funds for this program.

Estimated Range of Awards: \$15,000–\$60,000.

Estimated Average Size of Awards: \$37,500.

Estimated Number of Awards: 80.

Note: The Department is not bound by any estimates in this notice.

Project Period: The institutional project period is 18 months. Doctoral students may request funding for a period of no less than 6 months and no more than 12 months.

III. Eligibility Information

1.a. *Eligible Applicants:* Institutions of higher education (IHEs). Eligible doctoral students submit their individual research narratives and application forms to the project director at their home IHE, who then compiles all the research narratives from the doctoral students and incorporates them into the institutional grant application package that the institution submits electronically through the Department's G6 system on behalf of all doctoral student applicants at that institution.

b. *Individuals Eligible to Receive a Fellowship:* An individual is eligible to receive a fellowship if the individual: is a citizen, national or permanent resident of the United States; is a graduate student in good standing at an institution of higher education and, when the fellowship period begins, is admitted to candidacy in a doctoral degree program in modern foreign languages and area studies at that institution; is planning a teaching career in the United States upon completion of his or her doctoral program; and possesses sufficient foreign language skills to carry out the dissertation research project.

2.a. *Cost Sharing or Matching:* This program does not require cost sharing or matching.

b. *Administrative Cost Limitation:* In accordance with 34 CFR 663.30(d), the Secretary awards the institution an

administrative allowance of \$100 for each fellowship listed in the grant award document.

3. *Subgrantees:* A grantee under this competition may not award subgrants to entities to directly carry out project activities described in the grantee's application.

4. *Build America, Buy America Act:* This program is not subject to the Build America, Buy America Act (Pub. L. 117–58) domestic sourcing requirements.

5. *Other:* Under 34 CFR 662.22(b), no applicant for a fellowship may be awarded more than one graduate fellowship under the Fulbright-Hays Act from appropriations for a given fiscal year. Therefore, no DDRA Fellowship Program applicant concurrently may receive a grant from the Fulbright U.S. Student Program (FUSP) and a grant from the Fulbright-Hays DDRA Fellowship Program from the same fiscal year's appropriation. For this reason, when applying for a grant under the Fulbright-Hays DDRA Fellowship Program, a doctoral student must indicate in the application whether they have also applied for a FUSP grant. At any time during the U.S. Department of Education Fulbright-Hays DDRA Fellowship Program competition process, if a doctoral student accepts a fellowship award from the FUSP, or the FUSP disperses funds to provide training services to a doctoral student, that doctoral student is automatically deemed ineligible for consideration for a grant under the Fulbright-Hays DDRA Fellowship Program. Also, if the FUSP notifies the Fulbright-Hays DDRA Fellowship Program that it has awarded funds or provided training to a potential recipient of a Fulbright-Hays DDRA Fellowship, the Department will automatically deem the doctoral student ineligible for further consideration. Doctoral students thus should notify the person listed under **FOR FURTHER INFORMATION CONTACT** prior to accepting any grant support or training from the FUSP.

IV. Application and Submission Information

1. *Address to Request Application Package:* Both IHEs and doctoral student applicants can obtain an application package via the internet at the following internet address: www.g6.ed.gov.

2. *Submission Dates and Times:* Submit applications for grants under the program electronically using www.g6.ed.gov. For information (including dates and times) about how to submit your application electronically, please refer to *Other Submission Requirements*.

We do not consider an application that does not comply with the deadline requirements.

Individuals with disabilities who need an accommodation or auxiliary aid in connection with the application process should contact the person listed under **FOR FURTHER INFORMATION**

CONTACT. If the Department provides an accommodation or auxiliary aid to an individual with a disability in connection with the application process, the individual's application remains subject to all other requirements and limitations in this notice.

3. *Intergovernmental Review:* This program is not subject to Executive Order 12372 and the regulations in 34 CFR part 79.

4. *Funding Restrictions:* We reference regulations outlining funding restrictions in the *Applicable Regulations* section of this notice.

5. *Recommended Page Limit:* The application narrative is where you, the applicant, address the selection criteria that reviewers use to evaluate your application. We recommend that you (1) limit the application narrative to no more than 10 pages and the bibliography to no more than two pages and (2) use the following standards:

- A "page" is 8.5" x 11", on one side only, with 1" margins at the top, bottom, and both sides.

- Double-space (no more than three lines per vertical inch) all text in the application narrative, including titles, headings, footnotes, quotations, references, and captions, as well as all text in charts, tables, figures, and graphs.

- Use a font that is either 12 point or larger, or no smaller than 10 pitch (characters per inch).

- Use one of the following fonts: Times New Roman, Courier, Courier New, or Arial.

The recommended page limit does not apply to the cover sheet, budget section, including the narrative budget justification; the assurance and certifications; or the one-page abstract, the resumes, the biography, or the letters of support. However, the recommended page limit does apply to all of the application narrative.

6. *Unique Entity Identifier (UEI), Taxpayer Identification Number (TIN), and System for Award Management (SAM):*

To do business with the Department, you must—

a. Have a UEI and a TIN;

b. Register both your UEI and TIN with SAM, the Government's primary registrant database;

c. Provide your UEI and TIN on your application; and

d. Maintain an active SAM registration with current information while your application is under review by the Department and, if you are awarded a grant, during the project period.

If you are a corporate entity, agency, institution, or organization, you can obtain a TIN from the Internal Revenue Service. If you are an individual, you can obtain a TIN from the Internal Revenue Service or the Social Security Administration. If you need a new TIN, please allow two to five weeks for your TIN to become active.

The SAM registration process can take approximately seven business days, but may take upwards of several weeks, depending on the completeness and accuracy of the data you enter into the SAM database. Thus, if you think you might want to apply for Federal financial assistance under a program administered by the Department, please allow sufficient time to obtain and register your UEI and TIN. We strongly recommend that you register early.

Note: Once your SAM registration is active, it may be 24 to 48 hours before you can submit an application through G6.

If you are currently registered with SAM, you may not need to make any changes. However, please make certain that the TIN associated with your UEI is correct. Also note that you will need to update your registration annually. This may take three or more business days.

Information about SAM is available at www.SAM.gov. To further assist you with obtaining and registering your UEI and TIN in SAM or updating your existing SAM account, please visit <https://sam.gov/content/help>.

7. Other Submission Requirements: Applications for grants under this program must be submitted electronically unless an IHE qualifies for an exception to this requirement in accordance with the instructions in this section.

a. Electronic Submission of Applications.

Submit applications for grants under the Fulbright-Hays DDRA Fellowship Program, Assistance Listing Number 84.022A, electronically using the G6 system, accessible through the Department's G6 site at www.g6.ed.gov. While completing the electronic application, both the IHE and the doctoral student applicant will be entering data online that will be saved into a database. Neither the IHE nor the doctoral student applicant may email an electronic copy of a grant application to us.

Please note the following:

- The process for submitting applications electronically under the Fulbright-Hays DDRA Fellowship Program requires several steps. The following is a brief overview of the process; however, all applicants should review the detailed description of the application process in the application package. In summary, the major steps are:

(1) IHEs must email the name of the institution and the full name and email address of the project director to DDRA@ed.gov. We suggest that applicant IHEs submit this information no later than 2 weeks prior to the application deadline date to ensure that they obtain access to G6 well before that date;

(2) Doctoral students must complete their individual applications and submit them to their home IHE project director using G6;

(3) Persons providing references for individual doctoral students must complete and submit reference forms for the doctoral students to the IHE project director using G6; and

(4) The IHE project director must officially submit the IHE's application, including all eligible individual doctoral student applications, reference forms, and other required forms, using G6.

- The IHE must complete the electronic submission of the grant application by 11:59:59 p.m., Eastern Time, on the application deadline date. G6 will not accept an application for this competition after 11:59:59 p.m., Eastern Time, on the application deadline date. Therefore, we strongly recommend that both the IHE and the doctoral student applicant not wait until close to the application deadline date to begin the application process. The table below shows the days and times that the G6 website will be available.

G6 HOURS OF OPERATION IN EASTERN TIME

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Unavailable from 03:00 p.m.–11:59 p.m	Unavailable from 12:00 a.m.–06:00 a.m	Available 24 hours	Unavailable from 09:00 p.m.–11:59 p.m	Unavailable from 12:00 a.m.–06:00 a.m	Available 24 hours	Available 24 hours.

- Doctoral student applicants will not receive additional points because they submit their applications in electronic format, nor will we penalize the IHE or the doctoral student applicant if the applicant qualifies for an exception to the electronic submission requirement, as described elsewhere in this section, and submits an application in paper format.

- IHEs must upload all application documents electronically, including the following forms: the Application for Federal Assistance (SF 424), the Department of Education Supplemental Information for SF 424, Budget Information—Non-Construction

Programs (ED 524), and all necessary assurances and certifications.

- Both IHEs and doctoral student applicants must upload their applications, including the required narrative sections and all required attachments to their applications, as files in a read-only flattened Portable Document Format (PDF), meaning any fillable documents must be saved and submitted as non-fillable PDF files. Do not upload any interactive or fillable PDF files. If you upload a file type other than a read-only, non-modifiable PDF (e.g., Word, Excel, WordPerfect, etc.) or submit a password-protected file, we will be unable to review that material. Please note that this will likely result in

your application not being considered for funding. The Department will not convert material from other formats to PDF.

- Submit doctoral student transcripts electronically through the G6 system.
- Prior to submitting your electronic application, you may wish to print a copy of it for your records.
- After the individual doctoral student electronically submits their application to the IHE, the doctoral student will receive an automatic acknowledgment from the G6 system. After the person designated to provide a reference submits the reference electronically to the Department on behalf of a doctoral student applicant,

they will receive an automatic acknowledgment from the G6 system. After the applicant IHE submits its application to the Department, including all eligible individual doctoral student applications, the applicant IHE will receive an automatic acknowledgment from G6 that will include a unique PR/Award number for the IHE's application.

- Within 3 working days after submitting its electronic application, the applicant IHE must—

- (1) Print the SF 424 from G6;

- (2) Have the Authorizing

Representative sign the SF 424 form;

- (3) Place the PR/Award number in the upper right-hand corner of the hard-copy signature page of the SF 424; and

- (4) Email the signed SF 424 to DDRA@ed.gov.

- We may request that you provide us hard copies with original signatures for other forms in the application at a later date.

Application Deadline Date Extension in Case of System Unavailability: If an IHE is prevented from electronically submitting its application on the application deadline date because the G6 system is unavailable, we will grant the IHE an extension until 11:59:59 p.m., Eastern Time, the following business day to enable the IHE to transmit its application electronically, by mail, or by hand delivery. We will grant this extension if—

- (1) The IHE is a registered user of the G6 system and the IHE has initiated an electronic application for this competition; and

- (2) G6 is unavailable for 60 minutes or more between the hours of 8:30 a.m. and 11:59 p.m., Eastern Time, on the application deadline date.

We must acknowledge and confirm these periods of unavailability before granting the IHE an extension. To request this extension or to confirm our acknowledgment of any system unavailability, an IHE may contact either (1) the person listed under **FOR FURTHER INFORMATION CONTACT** or (2) the e-Grants help desk at 1-888-336-8930. If G6 is unavailable due to technical problems with the system and, therefore, the application deadline is extended, an email will be sent to all registered users who have initiated a G6 application. Extensions referred to in this section apply only to the unavailability of the G6 system.

b. Submission of Paper Applications.

The Department discourages paper applications, but if electronic submission is not possible (e.g., you do not have access to the internet), (1) you must provide a prior written notification that you intend to submit a paper

application and (2) your paper application must be postmarked by the application deadline date.

The prior written notification may be submitted by email or by mail to the person listed in the **FOR FURTHER INFORMATION CONTACT** section above. If you submit your notification by email, it must be received by the Department no later than 14 calendar days before the application deadline date. If you mail your notification to the Department, it must be postmarked no later than 14 calendar days before the application deadline date.

If you submit a paper application, you must have and include in your application a UEI; and mail the original and two copies of your application, on or before the application deadline date, to the Department at the following address: U.S. Department of Education, OFO/G5 Functional Application Team, Mail Stop 5C231, Attention: 84.022A, 400 Maryland Avenue SW, Washington, DC 20202-4260.

The IHE must show proof of mailing consisting of one of the following:

- (1) A legibly dated U.S. Postal Service postmark.

- (2) A legible mail receipt with the date of mailing stamped by the U.S. Postal Service.

- (3) A dated shipping label, invoice, or receipt from a commercial carrier.

- (4) Any other proof of mailing acceptable to the Secretary of the U.S. Department of Education.

If the IHE mails its application through the U.S. Postal Service, we do not accept either of the following as proof of mailing:

- (1) A private metered postmark.

- (2) A mail receipt that is not dated by the U.S. Postal Service.

Note: The U.S. Postal Service does not uniformly provide a dated postmark. Before relying on this method, the IHE should check with its local post office.

The Department will not consider applications postmarked after the application deadline date.

c. Note for Mail or Hand Delivery of Paper Applications: If an IHE mails or hand delivers its application to the Department—

- (1) The IHE must indicate on the envelope and—if not provided by the Department—in Item 11 of the SF 424, the ALN, including suffix letter, if any, of the competition under which the IHE is submitting its application; and

- (2) The G6 Functional Application Team will notify you of the Department's receipt of your grant application. If you do not receive this notification within 15 business days from the application deadline date, you

should contact the person listed under **FOR FURTHER INFORMATION CONTACT**.

V. Application Review Information

1. **Selection Criteria:** The selection criteria for this competition are from the regulations for this program in 34 CFR 662.21 and are as follows:

(a) **Quality of proposed project.** (63 points) The Secretary reviews each application to determine the quality of the research project proposed by the applicant. The Secretary considers—

- (1) The statement of the major hypotheses to be tested or questions to be examined, and the description and justification of the research methods to be used (20 points);

- (2) The relationship of the research to the literature on the topic and to major theoretical issues in the field, and the project's originality and importance in terms of the concerns of the discipline (10 points);

- (3) The preliminary research already completed in the United States and overseas or plans for such research prior to going overseas, and the kinds, quality and availability of data for the research in the host country or countries (10 points);

- (4) The justification for overseas field research and preparations to establish appropriate and sufficient research contacts and affiliations abroad (10 points);

- (5) The applicant's plans to share the results of the research in progress and a copy of the dissertation with scholars and officials of the host country or countries (3 points); and

- (6) The guidance and supervision of the dissertation advisor or committee at all stages of the project, including guidance in developing the project, understanding research conditions abroad, and acquainting the applicant with research in the field (10 points).

(b) **Qualifications of the applicant.** (37 points) The Secretary reviews each application to determine the qualifications of the applicant. The Secretary considers—

- (1) The overall strength of the applicant's graduate academic record (10 points);

- (2) The extent to which the applicant's academic record demonstrates strength in area studies relevant to the proposed project (10 points);

- (3) The applicant's proficiency in one or more of the languages (other than English) of the host country or countries of research (10 points);

- (4) The extent to which the applicant's academic record demonstrates steps taken to further improve advanced language proficiency

to overcome any anticipated language barriers relative to the proposed research project (5 points); and

(5) The applicant's ability to conduct research in a foreign cultural context, as evidenced by the applicant's references or previous overseas experience, or both (2 points).

2. *Review and Selection Process:* We remind potential applicants that in reviewing applications in any discretionary grant competition, the Secretary may consider, under 34 CFR 75.217(d)(3), the past performance of the applicant in carrying out a previous award, such as the applicant's use of funds, achievement of project objectives, and compliance with grant conditions. The Secretary may also consider whether the applicant failed to submit a timely performance report or submitted a report of unacceptable quality.

In addition, in making a competitive grant award, the Secretary requires various assurances, including those applicable to Federal civil rights laws that prohibit discrimination in programs or activities receiving Federal financial assistance from the Department (34 CFR 100.4, 104.5, 106.4, 108.8, and 110.23).

For FY 2025, doctoral student applications will be divided into seven categories based on the geographic area focus of their research projects, as described in the absolute priority. Foreign language and area studies experts assigned to geographic area-based panels will review the doctoral student applications. Each panel will review, score, and rank its applications separately from the applications assigned to the other geographic area panels. At the conclusion of the peer review process, however, all fellowship applications in the competition will be ranked from the highest to the lowest score for funding purposes.

If there are applications on the rank order slate with the same average score, the Fulbright Foreign Scholarship Board's (FFSB) policy governing veteran's preference will be used in the tiebreaker and selection process. Veteran's preference will be used first to determine which application to recommend for funding. This means that in instances where two or more applications have the same average score on the rank order slate, and there are insufficient funds to support all of the equally ranked applications, the veteran's application will be given preference.

For applications that have tied average scores but are not subject to veteran's preference consideration, we will use the average score assigned on the Technical Review Forms for the

"Quality of proposed project" selection criterion. If a tie still exists, the average score for selection criterion (a)(1) under "Quality of proposed project" (20 points) will be used as the tiebreaker. As a final tiebreaker, should it become necessary, we will use the average score assigned for the "Qualifications of the applicant" selection criterion.

Finally, in selecting DDRA fellowship recipients, under 34 CFR 662.20 the Secretary will consider information on budget, political sensitivity, and feasibility from binational commissions or United States diplomatic missions, or both, in the proposed country or countries of research.

3. *Risk Assessment and Specific Conditions:* Consistent with 2 CFR 200.206, before awarding grants under this competition the Department conducts a review of the risks posed by applicants. Under 2 CFR 200.208, the Secretary may impose specific conditions and, under 2 CFR 3474.10, in appropriate circumstances, high-risk conditions on a grant if the applicant or grantee is not financially stable; has a history of unsatisfactory performance; has a financial or other management system that does not meet the standards in 2 CFR part 200, subpart D; has not fulfilled the conditions of a prior grant; or is otherwise not responsible.

4. *Integrity and Performance System:* If you are selected under this competition to receive an award that over the course of the project period may exceed the simplified acquisition threshold (currently \$250,000), under 2 CFR 200.206(a)(2) we must make a judgment about your integrity, business ethics, and record of performance under Federal awards—that is, the risk posed by you as an applicant—before we make an award. In doing so, we must consider any information about you that is in the integrity and performance system (currently referred to as the Federal Awardee Performance and Integrity Information System (FAPIIS)), accessible through SAM. You may review and comment on any information about yourself that a Federal agency previously entered and that is currently in FAPIIS.

Please note that, if the total value of your currently active grants, cooperative agreements, and procurement contracts from the Federal Government exceeds \$10,000,000, the reporting requirements in 2 CFR part 200, appendix XII, require you to report certain integrity information to FAPIIS semiannually. Please review the requirements in 2 CFR part 200, appendix XII, if this grant plus all the other Federal funds you receive exceed \$10,000,000.

VI. Award Administration Information

1. *Award Notices:* If your application is successful, we notify your U.S. Representative and U.S. Senators and send you a Grant Award Notification (GAN); or we may send you an email containing a link to access an electronic version of your GAN. We also may notify you informally.

If your application is not evaluated or not selected for funding, we notify you.

2. *Administrative and National Policy Requirements:* We identify administrative and national policy requirements in the application package and reference these and other requirements in the *Applicable Regulations* section of this notice.

We reference the regulations outlining the terms and conditions of an award in the *Applicable Regulations* section of this notice and include these and other specific conditions in the GAN. The GAN also incorporates your approved application as part of your binding commitments under the grant.

3. *Reporting:* (a) If you apply for a grant under this competition, you must ensure that you have in place the necessary processes and systems to comply with the reporting requirements in 2 CFR part 170 should you receive funding under the competition. This does not apply if you have an exception under 2 CFR 170.110(b).

(b) At the end of your project period, you must submit a final performance report, including financial information, as directed by the Secretary. If you receive a multiyear award, you must submit an annual performance report that provides the most current performance and financial expenditure information as directed by the Secretary under 34 CFR 75.118. The Secretary may also require more frequent performance reports under 34 CFR 75.720(c). For specific requirements on reporting, please go to www.ed.gov/fund/grant/apply/appforms/appforms.html.

4. *Performance Measures:* The objective for the Fulbright-Hays DDRA Fellowship Program is to provide grants to colleges and universities to fund individual doctoral students to conduct research in other countries in modern foreign languages and area studies for periods of 6 to 12 months.

For the purpose of Department reporting under 34 CFR 75.110, the Department will use the following measures to evaluate its success in meeting this objective:

DDRA Measure 1: The percentage of DDRA fellows who increased their foreign language scores in speaking, reading, or writing by at least one proficiency level.

DDRA Measure 2: The percentage of DDRA fellows who complete their degree in their program of study within four years of receipt of the fellowship.

DDRA Measure 3: The percentage of DDRA fellows who found employment that utilized their language and area studies skills within eight years of receiving their award.

DDRA Measure 4: Efficiency Measure—The cost per DDRA fellow who found employment that utilized their language and area studies skills within eight years.

The information provided by grantees in their performance reports submitted via the International Resource Information System (IRIS) will be the source of data for these measures. Reporting screens for institutions and fellows may be viewed at http://iris.ed.gov/iris/pdfs/DDRA_director.pdf, and http://iris.ed.gov/iris/pdfs/DDRA_fellow.pdf.

VII. Other Information

Accessible Format: On request to the program contact person listed under **FOR FURTHER INFORMATION CONTACT**, individuals with disabilities can obtain this document and a copy of the application package in an accessible format. The Department will provide the requestor with an accessible format that may include Rich Text Format (RTF) or text format (txt), a thumb drive, an MP3 file, braille, large print, audiotape, or compact disc, or other accessible format.

Electronic Access to This Document: The official version of this document is the document published in the **Federal Register**. You may access the official edition of the **Federal Register** and the Code of Federal Regulations at www.govinfo.gov. At this site you can view this document, as well as all other Department documents published in the **Federal Register**, in text or Portable Document Format (PDF). To use PDF, you must have Adobe Acrobat Reader, which is available free at the site.

You may also access Department documents published in the **Federal Register** by using the article search feature at www.federalregister.gov. Specifically, through the advanced search feature at this site, you can limit your search to documents published by the Department.

Nasser H. Paydar,

Assistant Secretary for Postsecondary Education.

[FR Doc. 2024–25127 Filed 10–29–24; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

National Board for Education Sciences

AGENCY: National Board for Education Sciences, Institute of Education Sciences (IES), U.S. Department of Education.

ACTION: Notice of a meeting.

SUMMARY: This notice sets forth the agenda, time, and instructions to access or participate in the open sessions of the National Board for Education Sciences (hereafter referred to as NBES or Board) meeting scheduled for November 15, 2024. This notice provides information about the meeting to members of the public who may be interested in attending the meeting and/or how to provide written comment(s).

ADDRESSES: The meeting will be conducted virtually via Microsoft Teams.

DATES: The NBES meeting will be held on Friday, November 15, 2024, from 1:30 p.m. to 3:30 p.m. (EST).

FOR FURTHER INFORMATION CONTACT: Ellie Pelaez, DFO for NBES, U.S. Department of Education, IES: 550 12th Street SW, Office 4126–1, Washington, DC 20202, telephone: (202) 987–0359, email: ellie.pelaez@ed.gov.

SUPPLEMENTARY INFORMATION:

Statutory Authority and Function: The Board is authorized by section 116 of the Education Sciences Reform Act of 2002 (20 U.S.C. 9516). The Board is established as part of the U.S. Department of Education, IES, and shall, consistent with 20 U.S.C. 9514, 9515(b)–(c), and 9516 function as a board of directors for IES. The mission of IES is to provide national leadership in expanding fundamental knowledge and understanding of education from early childhood through postsecondary study, in order to provide parents, educators, students, researchers, policymakers, and the general public with reliable information about the condition and progress of education in the United States; educational practices that support learning and improve academic achievement and access to educational opportunities for all students; and the effectiveness of Federal and other education programs.

The Board's responsibilities are: (1) advise and consult with the Director of IES (Director) on the policies of IES; (2) consider and approve priorities proposed by the Director under 20 U.S.C. 9515 to guide the work of IES; (3) transmit approved priorities to the appropriate congressional committee (20 U.S.C. 9515(b)); (4) ensure that the priorities of IES and the National

Education Centers are consistent with the mission of IES (20 U.S.C. 9515(c)); (5) review and approve procedures for technical and scientific peer review of the activities of IES; (6) advise the Director on the establishment of activities to be supported by IES, including the general areas of research to be carried out by the National Center for Education Research (NCER) and the National Center for Special Education Research (NCSER) (20 U.S.C. 9567); (7) present to the Director such recommendations as it may find appropriate for (a) the strengthening of education research, and (b) the funding of IES; (8) advise the Director on the funding of applications for grants, contracts, and cooperative agreements for research, after the completion of peer review; (9) review and regularly evaluate the work of IES, to ensure that scientifically valid research, development, evaluation, and statistical analysis are consistent with the standards for such activities under this title; (10) advise the Director on ensuring that activities conducted or supported by IES are objective, secular, neutral, and non-ideological, and are free of partisan political influence and racial, cultural, gender, or regional bias; (11) solicit advice and information from those in the educational field, particularly practitioners and researchers, to recommend to the Director topics that require long-term, sustained, systematic, programmatic, and integrated research efforts, including knowledge utilization and wide dissemination of research, consistent with the priorities and mission of IES; (12) advise the Director on opportunities for the participation in, and the advancement of, women, minorities, and persons with disabilities in education research, statistics, and evaluation activities of IES; (13) recommend to the Director ways to enhance strategic partnerships and collaborative efforts among other Federal and State research agencies; (14) recommend to the Director individuals to serve as Commissioners of the National Education Centers; and (15) make recommendations to the President with respect to the appointment of the Director. Notice of this meeting is required by Section 1009(a)(2) of 5 U.S.C. chapter 10 (commonly known as the Federal Advisory Committee Act).

Meeting Agenda: The agenda for the meeting is as follows:

1:30 p.m.–1:45 p.m. Call to order, remarks by the Chairwoman of the Board, member roll call, Board member approval of meeting transcript from the October 9 and

October 10, 2024, meeting, and member approval of meeting agenda (OPEN SESSION)

1:45 p.m.–2:30 p.m. Members will engage in a discussion about member qualifications for the position of Vice Chair of the Board. These discussions will involve the disclosure of information of a personal nature where such disclosure would constitute a clearly unwarranted invasion of personal privacy. As such, the discussions are protected by exemption 6 of the Government Sunshine Act, 5 U.S.C. 552b(c). (CLOSED SESSION)

2:30 p.m.–3:30 p.m. Members will vote to elect a Vice Chair for the Board and to authorize submission of the annual report upon completion and review. The Board will engage in closing remarks and adjourn. (OPEN SESSION)

Instructions for Accessing the Meeting: Members of the public interested in attending this meeting virtually may email the DFO listed in this notice no later than 11:59 p.m. Eastern Time (ET) on Wednesday, November 13, 2024. The DFO will provide a link to the virtual Microsoft Teams meeting.

Public Comment: Members of the public interested in submitting written comments related to the work of NBES may do so by emailing their comments to the DFO. Written comments should pertain to the mission and function of NBES. All written comments will become part of the official record of the meeting.

Reasonable Accommodations: The meeting is accessible to individuals with disabilities. If you will need an auxiliary aid or service for the meeting (e.g., interpreting service, assistive listening device, or materials in an alternate format), notify the DFO listed in this notice no later than Wednesday, November 13, 2024.

Access to Records of the Meeting: The official transcript of this meeting will be available for public review on the IES website, <https://ies.ed.gov/director/board/index.asp>, no later than 90 days after the meeting. Pursuant to 5 U.S.C. 1009(b), the public may also inspect NBES records at the U.S. Department of Education, IES, 550 12th Street SW, Washington, DC 20202, Monday–Friday, 8:30 a.m. to 5:00 p.m. ET. Please email ellie.pelaez@ed.gov to schedule an appointment.

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and the Code of Federal Regulations is available via the Federal Digital System at: www.gpo.gov/fdsys. At this site you can view this document, as well as all other documents of this Department published in the **Federal Register**, in text or Adobe Portable Document Format (PDF). To use PDF, you must have Adobe Acrobat Reader, which is available free at the site. You also may access documents of the Department published in the **Federal Register** by using the article search feature at: www.federalregister.gov. Specifically, through the advanced search feature at this site, you can limit your search to documents published by the Department.

Authority: Section 116 of the Education Sciences Reform Act of 2002 (20 U.S.C. 9516).

Matthew Soldner,

Acting Director, Institute of Education Sciences.

[FR Doc. 2024–25232 Filed 10–29–24; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

[Docket No.: ED–2024–SCC–0100]

Agency Information Collection Activities; Submission to the Office of Management and Budget for Review and Approval; Comment Request; Student Aid Internet Gateway (SAIG) Enrollment Document

AGENCY: Federal Student Aid (FSA), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act (PRA) of 1995, the Department is proposing an extension of a currently approved information collection request (ICR).

DATES: Interested persons are invited to submit comments on or before November 29, 2024.

ADDRESSES: Written comments and recommendations for proposed information collection requests should be submitted within 30 days of publication of this notice. Click on this link www.reginfo.gov/public/do/PRAMain to access the site. Find this information collection request (ICR) by selecting “Department of Education” under “Currently Under Review,” then check the “Only Show ICR for Public Comment” checkbox. Reginfo.gov provides two links to view documents related to this information collection request. Information collection forms and instructions may be found by clicking on the “View Information Collection (IC) List” link. Supporting

statements and other supporting documentation may be found by clicking on the “View Supporting Statement and Other Documents” link.

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact Beth Grebeldinger, (202) 570–8414.

SUPPLEMENTARY INFORMATION: The Department is especially interested in public comment addressing the following issues: (1) is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: Student Aid Internet Gateway (SAIG) Enrollment Document.

OMB Control Number: 1845–0002.

Type of Review: Extension of a currently approved ICR.

Respondents/Affected Public: Private Sector; State, Local, and Tribal Governments.

Total Estimated Number of Annual Responses: 57,543.

Total Estimated Number of Annual Burden Hours: 13,506.

Abstract: This is a request for an extension of the currently approved information collection package, 1845–0002. In order to manage the Title IV, HEA assistance programs, authorized by the Higher Education Act of 1965, as amended (HEA); 20 U.S.C. 1070 *et seq.*, eligible institutions and other partners must electronically transact business with Federal Student Aid (FSA) systems. This clearance allows institutions to request access to, designate personnel or make changes to current access to systems granted to the institutions and their personnel by FSA. No new data is being collected. No changes have been made to the forms approved on July 17, 2024.

Dated: October 24, 2024.

Kun Mullan,

PRA Coordinator, Strategic Collections and Clearance, Governance and Strategy Division, Office of Chief Data Officer, Office of Planning, Evaluation and Policy Development.

[FR Doc. 2024–25150 Filed 10–29–24; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION**[Docket No.: ED–2024–SCC–0133]****Agency Information Collection Activities; Comment Request; National Assessment of Educational Progress (NAEP) 2026****AGENCY:** National Center for Education Statistics (NCES), Department of Education (ED).**ACTION:** Notice.**SUMMARY:** In accordance with the Paperwork Reduction Act (PRA) of 1995, the Department is proposing a revision of a currently approved information collection request (ICR).**DATES:** Interested persons are invited to submit comments on or before December 30, 2024.**ADDRESSES:** To access and review all the documents related to the information collection listed in this notice, please use <http://www.regulations.gov> by searching the Docket ID number ED–2024–SCC–0133. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at <http://www.regulations.gov> by selecting the Docket ID number or via postal mail, commercial delivery, or hand delivery. If the www.regulations.gov site is not available to the public for any reason, the Department will temporarily accept comments at ICDocketMgr@ed.gov. Please include the docket ID number and the title of the information collection request when requesting documents or submitting comments. Please note that comments submitted after the comment period will not be accepted. Written requests for information or comments submitted by postal mail or delivery should be addressed to the Manager of the Strategic Collections and Clearance Governance and Strategy Division, U.S. Department of Education, 400 Maryland Ave. SW, LBJ, Room 4C210, Washington, DC 20202–1200.**FOR FURTHER INFORMATION CONTACT:** For specific questions related to collection activities, please contact Carrie Clarady, (202) 245–6347.**SUPPLEMENTARY INFORMATION:** The Department, in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the

Department's information collection requirements and provide the requested data in the desired format. The Department is soliciting comments on the proposed information collection request (ICR) that is described below. The Department is especially interested in public comment addressing the following issues: (1) is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: National Assessment of Educational Progress (NAEP) 2026.

OMB Control Number: 1850–0928.

Type of Review: Revision of a currently approved ICR.

Respondents/Affected Public: Individuals and Households; State, Local, and Tribal Governments *Total Estimated Number of Annual Responses:* 1,282,898.

Total Estimated Number of Annual Burden Hours: 710,085.

Abstract: The National Assessment of Educational Progress (NAEP), conducted by the National Center for Education Statistics (NCES), is a federally authorized survey of student achievement at grades 4, 8, and 12 in various subject areas, such as mathematics, reading, writing, science, U.S. history, civics, geography, economics, technology and engineering literacy (TEL), and the arts. The National Assessment of Educational Progress Authorization Act (Pub. L. 107–279, title III, section 303) requires the assessment to collect data on specified student groups and characteristics, including information organized by race/ethnicity, gender, socio-economic status, disability, and limited English proficiency. It requires fair and accurate presentation of achievement data and permits the collection of background, noncognitive, or descriptive information that is related to academic achievement and aids in fair reporting of results. The intent of the law is to provide representative sample data on student achievement for the nation, the states, and subpopulations of students and to monitor progress over time. NAEP consists of two assessment programs: the NAEP long-term trend (LTT)

assessment and the main NAEP assessment. The LTT assessments are given at the national level only and are administered to students at ages 9, 13, and 17 in a manner that is very different from that used for the main NAEP assessments. LTT reports mathematics and reading results that present trend data since the 1970s. In addition to the operational assessments, NAEP uses two other kinds of assessment activities: pilot assessments and special studies. Pilot assessments test items and procedures for future administrations of NAEP, while special studies (including the National Indian Education Study (NIES), the Middle School Transcript Study (MSTS), and the High School Transcript Study (HSTS)) are opportunities for NAEP to investigate particular aspects of the assessment without impacting the reporting of the NAEP results.

This request is to conduct NAEP in 2026, specifically: (1) Main NAEP operational assessments will include for grades 4 and 8 (first administration of the new frameworks for reading and mathematics), grade 8 (civics and U.S. history); in Puerto Rico, grades 4 and 8 mathematics will be the only subject assessed and will include the new framework; (2) Pilot testing in grades 4, 8, and 12 (reading and mathematics); in Puerto Rico, grades 4 and 8 mathematics will be the only subject assessed; (3) Field Trial for grades 4, 8, and 12 in U.S. mainland and grades 4 and 8 in Puerto Rico; and (4) Special studies for grades 4, 8, and 12 for one or more focused topics such as Multi-stage Testing (MST) and accessibility.

Some documents in this package will be updated after the 60-day public comment period for inclusion in the 30-day public comment period, which is likely to begin in January 2025. Further, two additional 30-day packages will be submitted in March and June 2025 in order to update all materials in time for the data collection in early 2026.

Dated: October 24, 2024.

Stephanie Valentine,

PRA Coordinator, Strategic Collections and Clearance, Governance and Strategy Division, Office of Chief Data Officer, Office of Planning, Evaluation and Policy Development.

[FR Doc. 2024–25138 Filed 10–29–24; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission****Combined Notice of Filings #1**

Take notice that the Commission received the following electric corporate filings:

Docket Numbers: EC25–12–000.

Applicants: BlackRock, Inc.

Description: Joint Application for Authorization Under Section 203 of the Federal Power Act of BlackRock, Inc., et al.

Filed Date: 10/21/24.

Accession Number: 20241021–5210.

Comment Date: 5 p.m. ET 11/12/24.

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER10–1484–033; ER12–2381–019; ER13–1069–022; ER14–1140–009.

Applicants: Inspire Energy Holdings, LLC, MP2 Energy LLC, MP2 Energy NE LLC, Shell Energy North America (US), L.P.

Description: Notice of Change in Status of Inspire Energy Holdings, LLC, et al.

Filed Date: 10/22/24.

Accession Number: 20241022–5192.

Comment Date: 5 p.m. ET 11/12/24.

Docket Numbers: ER22–962–007.

Applicants: PJM Interconnection, L.L.C.

Description: Compliance filing: Order No. 2222 Compliance Filing and Motion to Modify Effective Date to be effective 2/2/2026.

Filed Date: 10/23/24.

Accession Number: 20241023–5074.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER24–2896–001.

Applicants: ALLETE, Inc.

Description: Tariff Amendment: ALLETE CMA Deferral Filing to be effective 12/31/9998.

Filed Date: 10/23/24.

Accession Number: 20241023–5113.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER24–2899–001.

Applicants: PJM Interconnection, L.L.C.

Description: Tariff Amendment: Amendment of ER24–2899–000; Original GIA SA No. 7337; AF2–238 to be effective. 7/29/2024.

Filed Date: 10/23/24.

Accession Number: 20241023–5007.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER25–182–000.

Applicants: PacifiCorp.

Description: 205(d) Rate Filing: Colstrip Project Transmission Agreement 2nd A&R—Concurrence (RS No. 377) to be effective 10/5/2024.

Filed Date: 10/23/24.

Accession Number: 20241023–5032.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER25–183–000.

Applicants: Baron Winds LLC.

Description: 205(d) Rate Filing: Market Based Rate to be effective 12/5/2022.

Filed Date: 10/23/24.

Accession Number: 20241023–5076.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER25–184–000.

Applicants: Pleasant Hill Solar, LLC.

Description: 205(d) Rate Filing: Market Based Rate to be effective 12/19/2022.

Filed Date: 10/23/24.

Accession Number: 20241023–5086.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER25–185–000.

Applicants: Radford's Run Wind Farm, LLC.

Description: 205(d) Rate Filing: Market Based Rate to be effective 6/1/2017.

Filed Date: 10/23/24.

Accession Number: 20241023–5090.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER25–186–000.

Applicants: Water Strider Solar, LLC.

Description: 205(d) Rate Filing: Market Based Rate to be effective 10/13/2020.

Filed Date: 10/23/24.

Accession Number: 20241023–5091.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER25–187–000.

Applicants: Watlington Solar, LLC.

Description: 205(d) Rate Filing: Market Based Rate to be effective 12/19/2022.

Filed Date: 10/23/24.

Accession Number: 20241023–5093.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER25–189–000.

Applicants: Alabama Power Company, Georgia Power Company, Mississippi Power Company.

Description: 205(d) Rate Filing: Alabama Power Company submits tariff filing per 35.13(a)(2)(iii): Shubuta Creek Solar LGIA Filing to be effective 10/20/2024.

Filed Date: 10/23/24.

Accession Number: 20241023–5108.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER25–190–000.

Applicants: Midcontinent Independent System Operator, Inc.

Description: 205(d) Rate Filing: 2024–10–23_SA 4374 ATC-Superior Solar Project GIA (J1750) to be effective 10/15/2024.

Filed Date: 10/23/24.

Accession Number: 20241023–5133.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER25–191–000.

Applicants: Citizens S-Line Transmission LLC.

Description: 205(d) Rate Filing: Annual TRBAA Filing to be effective 12/31/9998.

Filed Date: 10/23/24.

Accession Number: 20241023–5148.

Comment Date: 5 p.m. ET 11/13/24.

Docket Numbers: ER25–192–000.

Applicants: The Dayton Power and Light Company.

Description: 205(d) Rate Filing: Transmission Customer New or Upgraded Service Construction Service Agreement to be effective 12/23/2024.

Filed Date: 10/23/24.

Accession Number: 20241023–5154.

Comment Date: 5 p.m. ET 11/13/24.

Take notice that the Commission received the following qualifying facility filings:

Docket Numbers: QF25–55–000.

Applicants: PVS Chemical Solutions, Inc.

Description: Form 556 of PVS Chemical Solutions, Inc.

Filed Date: 10/23/24.

Accession Number: 20241023–5048.

Comment Date: 5 p.m. ET 11/13/24.

The filings are accessible in the Commission's eLibrary system (<https://elibrary.ferc.gov/idmws/search/fercgensearch.asp>) by querying the docket number.

Any person desiring to intervene, to protest, or to answer a complaint in any of the above proceedings must file in accordance with Rules 211, 214, or 206 of the Commission's Regulations (18 CFR 385.211, 385.214, or 385.206) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: <http://www.ferc.gov/docs-filing/efiling/filing-req.pdf>. For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

The Commission's Office of Public Participation (OPP) supports meaningful public engagement and participation in Commission proceedings. OPP can help members of the public, including landowners, environmental justice communities, Tribal members and others, access publicly available information and navigate Commission processes. For public inquiries and assistance with making filings such as interventions, comments, or requests for rehearing, the public is encouraged to contact OPP at (202) 502–6595 or OPP@ferc.gov.

Dated: October 23, 2024.

Debbie-Anne A. Reese,
Secretary.

[FR Doc. 2024–25158 Filed 10–29–24; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Order on Intent To Revoke Market- Based Rate Authority

Before Commissioners: Willie L. Phillips, Chairman; Mark C. Christie, David Rosner, Lindsay S. See and Judy W. Chang.

	Docket Nos.
Electric Quarterly Reports	ER02–2001–020
Astral Energy LLC	ER14–519–000
Clear Green Energy LLC ...	ER23–946–000
GP Energy Management LLC.	ER15–230–000
Homer City Generation, L.P.	ER23–2614–000
Mega Energy Holdings LLC.	ER13–1298–001
Planet Energy (Maryland) Corp.	ER11–2168–001
Planet Energy (New York) Corp.	ER11–2179–001
Planet Energy (Pennsylvania) Corp.	ER11–2167–001
Planet Energy (USA) Corp	ER11–2166–001
Power Supply Services LLC.	ER12–862–000
Relief Energy LLC	ER23–945–000
The Valence Group, LLC ..	ER22–549–000

1. Section 205 of the Federal Power Act (FPA), 16 U.S.C. 824d, and 18 CFR part 35 (2024), require, among other things, that all rates, terms, and conditions for jurisdictional services be filed with the Commission. In Order No. 2001, the Commission revised its public utility filing requirements and established a requirement for public utilities, including power marketers, to file Electric Quarterly Reports.¹

¹ Revised Pub. Util. Filing Requirements, Order No. 2001, 99 FERC ¶ 61,107, *reh'g denied*, Order No. 2001–A, 100 FERC ¶ 61,074, *reh'g denied*, Order No. 2001–B, 100 FERC ¶ 61,342, *order directing filing*, Order No. 2001–C, 101 FERC ¶ 61,314 (2002), *order directing filing*, Order No. 2001–D, 102 FERC ¶ 61,334, *order refining filing requirements*, Order No. 2001–E, 105 FERC ¶ 61,352 (2003), *order on clarification*, Order No. 2001–F, 106 FERC ¶ 61,060 (2004), *order revising filing requirements*, Order No. 2001–G, 120 FERC ¶ 61,270, *order on reh'g and clarification*, Order No. 2001–H, 121 FERC ¶ 61,289 (2007), *order revising filing requirements*, Order No. 2001–I, 125 FERC ¶ 61,003 ¶ 31,282 (2008). See also *Filing Requirements for Elec. Util. Serv. Agreements*, 155 FERC ¶ 61,280, *order on reh'g and clarification*, 157 FERC ¶ 61,180 (2016) (clarifying Electric Quarterly Reports reporting requirements and updating Data Dictionary).

2. The Commission requires sellers with market-based rate authorization to file Electric Quarterly Reports summarizing contractual and transaction information related to their market-based power sales as a condition for retaining that authorization.² Commission staff's review of the Electric Quarterly Reports indicates that the following 12 public utilities with market-based rate authorization have failed to file their Electric Quarterly Reports: Astral Energy LLC, Clear Green Energy LLC, GP Energy Management LLC, Homer City Generation, L.P., Mega Energy Holdings LLC, Planet Energy (Maryland) Corp., Planet Energy (New York) Corp., Planet Energy (Pennsylvania) Corp., Planet Energy (USA) Corp., Power Supply Services LLC, Relief Energy LLC, and The Valence Group, LLC. This order notifies these public utilities that their market-based rate authorizations will be revoked unless they comply with the Commission's requirements within 15 days of the date of issuance of this order.

3. In Order No. 2001, the Commission stated that:

[i]f a public utility fails to file a[n] Electric Quarterly Report (without an appropriate request for extension), or fails to report an agreement in a report, that public utility may forfeit its market-based rate authority and may be required to file a new application for market-based rate authority if it wishes to resume making sales at market-based rates.³

4. The Commission further stated that:

the requirement to comply with this rule . . . supersede[s] the conditions in public utilities' market-based rate authorizations, and failure to comply with the requirements of this rule will subject public utilities to the same consequences they would face for not satisfying the conditions in their rate authorizations, including possible revocation of their authority to make wholesale power sales at market-based rates.⁴

5. Pursuant to these requirements, the Commission has revoked the market-based rate tariffs of market-based rate

sellers that failed to submit Electric Quarterly Reports.⁵

6. Sellers must file Electric Quarterly Reports consistent with the procedures set forth in Order Nos. 2001, 768,⁶ and 770.⁷ The exact filing dates for Electric Quarterly Reports are prescribed in 18 CFR 35.10b. As noted above, Commission staff's review of the Electric Quarterly Reports for the period up to the second quarter of 2024 identified 12 public utilities with market-based rate authorization that failed to file Electric Quarterly Reports. Commission staff contacted or attempted to contact these entities to remind them of their regulatory obligations. Despite these reminders, the public utilities listed in the caption of this order have not met these obligations. Accordingly, this order notifies these public utilities that their market-based rate authorizations will be revoked unless they comply with the Commission's requirements within 15 days of the issuance of this order.

7. In the event that any of the above-captioned market-based rate sellers have already filed Electric Quarterly Reports in compliance with the Commission's requirements, their inclusion herein is inadvertent. Such market-based rate seller is directed, within 15 days of the date of issuance of this order, to make a filing with the Commission identifying itself and providing details about its prior filings that establish that it complied with the Commission's Electric Quarterly Report filing requirements.

8. If any of the above-captioned market-based rate sellers do not wish to continue having market-based rate authority, that seller may file a notice of cancellation with the Commission pursuant to section 205 of the FPA to cancel its market-based rate tariff.

The Commission orders:

(A) Within 15 days of the date of issuance of this order, each public utility listed in the caption of this order shall file with the Commission all delinquent Electric Quarterly Reports. If a public utility subject to this order fails to make the filings required in this order, the Commission will revoke that public utility's market-based rate authorization and will terminate its

⁵ See, e.g., Electric Quarterly Reports, 82 FR 60976 (Dec. 26, 2017); Electric Quarterly Reports, 80 FR 58243 (Sep. 28, 2015); Electric Quarterly Reports, 79 FR 65,651 (Nov. 5, 2014).

⁶ *Electricity Mkt. Transparency Provisions of Section 220 of the Federal Power Act*, Order No. 768, 140 FERC ¶ 61,232 (2012), *order on reh'g*, Order No. 768–A, 143 FERC ¶ 61,054 (2013), *order on reh'g*, Order No. 768–B, 150 FERC ¶ 61,075 (2015).

⁷ *Revisions to Elec. Quarterly Rep. Filing Process*, Order No. 770, 141 FERC ¶ 61,120 (2012).

² See *Refinements to Policies & Procs. for Mkt.-Based Rates for Wholesale Sales of Elec. Energy, Capacity & Ancillary Servs. by Pub. Utils.*, Order No. 816, 153 FERC ¶ 61,065 (2015), *order on reh'g*, Order No. 816–A, 155 FERC ¶ 61,188 (2016); *Mkt.-Based Rates for Wholesale Sales of Elec. Energy, Capacity & Ancillary Servs. by Pub. Utils.*, Order No. 697, 119 FERC ¶ 61,295, *clarified*, 121 FERC ¶ 61,260 (2007), *order on reh'g*, Order No. 697–A, 123 FERC ¶ 61,055, *clarified*, 124 FERC ¶ 61,055, *order on reh'g*, Order No. 697–B, 125 FERC ¶ 61,326 (2008), *order on reh'g*, Order No. 697–C, 127 FERC ¶ 61,284 (2009), *order on reh'g*, Order No. 697–D, 130 FERC ¶ 61,206 (2010), *aff'd sub nom. Mont. Consumer Counsel v. FERC*, 659 F.3d 910 (9th Cir. 2011).

³ Order No. 2001, 99 FERC ¶ 61,107 at PP 222.

⁴ *Id.* P. 223.

electric market-based rate tariff. The Secretary is hereby directed, upon expiration of the filing deadline in this order, to promptly issue a notice, effective on the date of issuance, listing the public utilities whose tariffs have been revoked for failure to comply with the requirements of this order and the Commission's Electric Quarterly Report filing requirements.

(B) The Secretary is hereby directed to publish this order in the **Federal Register**.

By the Commission.

Issued: October 23, 2024.

Debbie-Anne A. Reese,
Secretary.

[FR Doc. 2024–25156 Filed 10–29–24; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. IC24–24–000]

Commission Information Collection Activities (FERC–725V); Comment Request; Extension

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of information collection and request for comments.

SUMMARY: In compliance with the requirements of the Paperwork Reduction Act of 1995, the Federal Energy Regulatory Commission (Commission or FERC) is soliciting public comment on the currently approved information collection, FERC–725V, Mandatory Reliability Standards: COM Reliability Standards. There are no changes to the reporting requirements with this information collection. The 60-day notice comment period ended on October 21, 2024, with no comments received.

DATES: Comments on the collection of information are due November 29, 2024.

ADDRESSES: Send written comments on FERC–725V to OMB through www.reginfo.gov/public/do/PRAMain. Attention: Federal Energy Regulatory Commission Desk Officer. Please identify the OMB Control Number (1902–0277) in the subject line of your comments. Comments should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain.

ADDRESSES: Send written comments on FERC–725V to OMB through www.reginfo.gov/public/do/PRAMain. Attention: Federal Energy Regulatory

Commission Desk Officer. Please identify the OMB Control Number (1902–0277) in the subject line of your comments. Comments should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain.

Please submit copies of your comments to the Commission. You may submit copies of your comments (identified by Docket No. IC24–24–000) by one of the following methods:

Electronic filing through <https://www.ferc.gov>, is preferred.

- Electronic Filing: Documents must be filed in acceptable native applications and print-to-PDF, but not in scanned or picture format.

- For those unable to file electronically, comments may be filed by USPS mail or by other delivery methods:

- Mail via U.S. Postal Service Only: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, NE, Washington, DC 20426.

- All other delivery methods: Federal Energy Regulatory Commission, Secretary of the Commission, 12225 Wilkins Avenue, Rockville, MD 20852.

Instructions: OMB submissions must be formatted and filed in accordance with submission guidelines at www.reginfo.gov/public/do/PRAMain. Using the search function under the “Currently Under Review” field, select Federal Energy Regulatory Commission; click “submit,” and select “comment” to the right of the subject collection.

FERC submissions must be formatted and filed in accordance with submission guidelines at: <https://www.ferc.gov/ferc-online/overview>. For user assistance, contact FERC Online Support by email at ferconlinesupport@ferc.gov, or by phone at: (866) 208–3676 (toll-free).

Docket: Users interested in receiving automatic notification of activity in this docket or in viewing/downloading comments and issuances in this docket may do so at <https://www.ferc.gov/ferc-online/overview>.

FOR FURTHER INFORMATION CONTACT:

Kayla Williams may be reached by email at DataClearance@FERC.gov, telephone at (202) 502–6468.

SUPPLEMENTARY INFORMATION: Title: FERC–725V, Mandatory Reliability Standards: COM Reliability Standards.

OMB Control No.: 1902–0277.

Type of Request: Three-year extension of the FERC–725V information collection requirements with no changes to the current reporting requirements.

Abstract: On August 15, 2016, the North American Electric Reliability Corporation (NERC) filed a petition for Commission approval, pursuant to

section 215(d)(1) of the Federal Power Act (“FPA”) ¹ and Section 39.5 ² of the Federal Energy Regulatory Commission’s regulations, for Reliability Standard COM–001–3 (Communications), the associated Implementation Plan, retirement of currently-effective Reliability Standard COM–001–2.1, and Violation Risk Factors (“VRFs”) and Violation Severity Levels (“VSLs”) associated with new Requirements R12 and R13 in Reliability Standard COM–001–3. Reliability Standard COM–001–3 reflects revisions developed under Project 2015–07 Internal Communications Capabilities, in compliance with the Commission’s directive in Order No. 888 that NERC “develop modifications to COM–001–2, or develop a new standard, to address the Commission’s concerns regarding ensuring the adequacy of internal communications capability whenever internal communications could directly affect reliable operations.

Reliability Standards COM–001–2 and COM–002–4 do not require responsible entities to file information with the Commission. COM–001–2 requires that transmission operators, balancing authorities, reliability coordinators, distribution providers, and generator operators to maintain documentation of interpersonal communication capability and designation of Alternate Interpersonal Communication, as well as evidence of testing of the Alternate Interpersonal Communication facilities. COM–002–4 requires balancing authorities, distribution providers, reliability coordinators, transmission operators, and generator operators to develop and maintain documented communication protocols, and to be able to provide evidence of training on the protocols in their annual assessment. Additionally, all applicable entities (balancing authorities, reliability coordinators, transmission operators, generator operators, and distribution providers) must be able to provide evidence of three-part communication when issuing or receiving an operating instruction during an Emergency.

The one-time consideration of responsibility for COM–002–4 associated with Requirement R1 is no longer needed as entities previously developed protocols associated with effective communication. The ongoing work for COM–001–3 and COM–002–4 will remain the same, but the type of job responsibilities to follow the requirements will be split between an

¹ 16 U.S.C. 824o (2012).

² 18 CFR 39.5 (2015).

engineer and record-keeper, instead of just an engineer. Since the previous renewal, there has been an incremental increase in the number of respondents

who must meet the requirements of these two COM reliability standards.

Type of Respondents: Public utilities.

*Estimate of Annual Burden:*³ The Commission estimates the annual public reporting burden for the information collection as:

FERC-725V, MANDATORY RELIABILITY STANDARDS: COM RELIABILITY STANDARDS

	Number of respondents ⁴	Annual number of responses per respondent	Total number of responses	Average burden & cost per response ⁵	Total annual burden hours & total annual cost	Cost per respondent (\$)
	(1)	(2)	(1) * (2) = (3)	(4)	(3) * (4) = (5)	(5) ÷ (1)
Maintain evidence of Interpersonal Communication capability [COM-001-3 R7 and R8].	(DP) 300	1	300	4 hrs. \$282.68	1,200 hrs. \$84,804	\$282.68
	(GOP) 1,028 ..	1	1,028	4 hrs. \$282.68	4,112 hrs. \$290,595.04	282.68
Maintain evidence of training and assessments [COM-002-4 R2, R4, R5 and R6].	(BA) 98	1	98	8 hrs. \$565.36	784 hrs. \$55,405.28	565.36
	(RC) 12	1	12	8 hrs. \$565.36	96 hrs. \$6,784.32	565.36
	(TOP) 165	1	165	8 hrs. \$565.36	1,320 hrs. \$93,284.40	565.36
Maintain evidence of training [COM-002-4 R3 and R6]	(DP) 300	1	300	8 hrs. \$565.36	2,400 hrs. \$169,608	565.36
	(GOP) 1,028 ..	1	1,028	8 hrs. \$565.36	8,224 hrs. \$581,190.08	565.36
Total		2,931		18,136 hrs. \$1,281,671.12		

Comments: Comments are invited on: (1) whether the collection of information is necessary for the proper performance of the functions of the Commission, including whether the information will have practical utility; (2) the accuracy of the agency's estimate of the burden and cost of the collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility and clarity of the information collection; and (4) ways to minimize the burden of the collection of information on those who are to respond, including the use of automated collection techniques or other forms of information technology.

Dated: October 23, 2024.

Debbie-Anne A. Reese,
Secretary.

[FR Doc. 2024-25155 Filed 10-29-24; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

³ The Commission defines burden as the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. For further explanation of what is included in the information collection burden, reference 5 Code of Federal Regulations 1320.3.

Filings Instituting Proceedings

Docket Numbers: RP25-87-000.

Applicants: Chandeaur Pipe Line, LLC.

Description: 4(d) Rate Filing: Chandeaur Updates to Gas Tariff to be effective 11/21/2024.

Filed Date: 10/23/24.

Accession Number: 20241023-5000.

Comment Date: 5 p.m. ET 11/4/24.

Any person desiring to intervene, to protest, or to answer a complaint in any of the above proceedings must file in accordance with Rules 211, 214, or 206 of the Commission's Regulations (18 CFR 385.211, 385.214, or 385.206) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

The filings are accessible in the Commission's eLibrary system (<https://elibrary.ferc.gov/idmws/search/fercgensearch.asp>) by querying the docket number.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: <http://www.ferc.gov/docs-filing/efiling/filing-req.pdf>. For

⁴ BA = balancing authority, RC = Reliability Coordinator, DP = distribution provider, TOP = transmission operator; GOP = generator operators. These values were derived from the NERC Compliance data of April 16, 2024, using only unique United States registered entities.

⁵ The estimated hourly cost (salary plus benefits) is a combination based on the Bureau of Labor

other information, call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

The Commission's Office of Public Participation (OPP) supports meaningful public engagement and participation in Commission proceedings. OPP can help members of the public, including landowners, environmental justice communities, Tribal members and others, access publicly available information and navigate Commission processes. For public inquiries and assistance with making filings such as interventions, comments, or requests for rehearing, the public is encouraged to contact OPP at (202) 502-6595 or OPP@ferc.gov.

Dated: October 23, 2024.

Debbie-Anne A. Reese,
Secretary.

[FR Doc. 2024-25157 Filed 10-29-24; 8:45 am]

BILLING CODE 6717-01-P

Statistics (BLS), as of 2024, for 75% of the average of an Electrical Engineer (17-2071) \$79.31/hr., $79.31 \times .75 = 59.4825$ (\$59.48-rounded) (\$59.48/hour) and 25% of an Information and Record Clerk (43-4199) \$44.74/hr., $44.74 \times .25\% = 11.185$ (\$11.19 rounded) (\$11.19/hour), for a total (\$59.48 + \$11.19 = \$70.67/hour).

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission**

[Docket No. IC24–25–000]

Commission Information Collection Activities (FERC–725X); Comment Request; Extension**AGENCY:** Federal Energy Regulatory Commission.**ACTION:** Notice of information collection and request for comments.

SUMMARY: In compliance with the requirements of the Paperwork Reduction Act of 1995, the Federal Energy Regulatory Commission (Commission or FERC) is soliciting public comment on the currently approved information collection, FERC 725X, Mandatory Reliability Standards: Voltage and Reactive (VAR) Standards. There were no changes made to the reporting requirements for this information collection. The 60-day notice comment period ended on October 18, 2024; no comments were received.

DATES: Comments on the collection of information are due November 29, 2024.

ADDRESSES: Send written comments on FERC–725X to OMB through www.reginfo.gov/public/do/PRAMain. Attention: Federal Energy Regulatory Commission Desk Officer. Please identify the OMB Control Number (1902–0278) in the subject line of your comments. Comments should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain.

Please submit copies of your comments to the Commission. You may submit copies of your comments (identified by Docket No. IC24–25–000) by one of the following methods:

Electronic filing through <https://www.ferc.gov>, is preferred.

- *Electronic Filing:* Documents must be filed in acceptable native applications and print-to-PDF, but not in scanned or picture format.

- For those unable to file electronically, comments may be filed by USPS mail or by other delivery methods:

- *Mail via U.S. Postal Service Only:* Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street NE, Washington, DC 20426.

- *All other delivery methods:* Federal Energy Regulatory Commission, Secretary of the Commission, 12225 Wilkins Avenue, Rockville, MD 20852.

Instructions: OMB submissions must be formatted and filed in accordance

with submission guidelines at www.reginfo.gov/public/do/PRAMain. Using the search function under the “Currently Under Review” field, select Federal Energy Regulatory Commission; click “submit,” and select “comment” to the right of the subject collection. *FERC submissions* must be formatted and filed in accordance with submission guidelines at: <https://www.ferc.gov/ferc-online/overview>. For user assistance, contact FERC Online Support by email at ferconlinesupport@ferc.gov, or by phone at: (866) 208–3676 (toll-free).

Docket: Users interested in receiving automatic notification of activity in this docket or in viewing/downloading comments and issuances in this docket may do so at <https://www.ferc.gov/ferc-online/overview>.

FOR FURTHER INFORMATION CONTACT:

Kayla Williams may be reached by email at DataClearance@FERC.gov, telephone at (202) 502–6468.

SUPPLEMENTARY INFORMATION:

Title: FERC 725X, Mandatory Reliability Standards: Voltage and Reactive (VAR) Standards.

OMB Control No.: 1902–0278.

Type of Request: Three-year extension of the FERC–725X information collection requirements with no changes to the current reporting requirements.

Abstract: Pursuant to Section 215 of the Federal Power Act (FPA),¹ North American Electric Reliability Corporation (NERC) established the Voltage and Reactive (“VAR”) group of Reliability Standards, which consists of two continent-wide Reliability Standards, VAR–001–5 and VAR–002–4.1. NERC conducts periodic reviews of Reliability Standards in accordance with Section 317 of the NERC Rules of Procedure and Section 13 of the NERC Standard Processes Manual. In accordance with these authorities and the NERC *Reliability Standards Development Plan: 2017–2019*, NERC recently completed Project 2016–EPR–02 Enhanced Periodic Review of Voltage and Reactive Reliability Standards. This project conducted a periodic review of mandatory and enforceable Reliability Standards VAR–001–4.1 (Voltage and Reactive Control)² and VAR–002–4 (Generator Operation for Maintaining Network Schedules).³ These two

¹ 16 U.S.C. 824o (2012).

² The Commission approved Reliability Standard VAR–001–4 (Voltage and Reactive Control) on August 1, 2014. See *North American Electric Reliability Corp.*, Docket No. RD14–11–000 (Aug. 1, 2014) (delegated letter order). The Commission approved errata version VAR–001–4.1 on November 13, 2015. See *North American Electric Reliability Corp.*, Docket No. RD15–6–000 (Nov. 13, 2015) (delegated letter order).

³ The Commission approved Reliability Standard VAR–002–4, which clarified the applicability of the

standards were designed to maintain voltage stability on the Bulk-Power System, protect transmission, generation, distribution, and customer equipment, and support the reliable operation of the Bulk-Power System. Voltage stability is the ability of a power system to maintain acceptable voltage levels throughout the system under normal operating conditions and following a disturbance. Failure to maintain acceptable voltage levels (*i.e.*, voltage levels become too high or too low) may cause violations of System Operating Limits (“SOLs”) and Interconnection Reliability Operating Limits (“IROLs”), result in damage to Bulk-Power System equipment, and thereby threaten the reliable operation of the Bulk-Power System. The number of manhours for VAR–001–5 and VAR–002–4.1 will remain the same, but the type of job responsibilities to follow the requirements will be split between an engineer and record-keeper, instead of just an engineer. This results in a decrease of the cost of compliance and record-keeping for these two standards.

Reliability Standard VAR–001–5

This Reliability Standard requires Transmission Operators to:

- Specify a system-wide voltage schedule (which is either a range or a target value with an associated tolerance band) as part of its plan to operate within SOLs and IROLs, and to provide the voltage schedule to its Reliability Coordinator and adjacent Transmission Operators upon request (Requirement R1);

- Schedule sufficient reactive resources to regulate voltage levels (Requirement R2);

- Operate or direct the operation of devices to regulate transmission voltage and reactive flows (Requirement R3);

- Develop a set of criteria to exempt generators from certain requirements under Reliability Standard VAR–002–4.1 related to voltage or Reactive Power schedules, automatic voltage regulations, and notification (Requirement R4);

- Specify a voltage or Reactive Power schedule (which is either a range or a target value with an associated tolerance band) for generators at either the high or low voltage side of the generator step-up transformer, provide the schedule to the associated Generator Operator, direct the Generator Operator to comply with that schedule in automatic voltage control mode, provide the Generator

VAR–002 standard to dispersed generation resources, on May 29, 2015. See *North American Electric Reliability Corp.*, 151 FERC ¶ 61,186 (May 29, 2015).

Operator the notification requirements for deviating from the schedule, and, if requested, provide the Generator Operator the criteria used to develop the schedule (Requirement R5); and

- Communicate step-up transformer tap changes, the time frame for completion, and the justification for these changes to Generator Owners (Requirement R6).

Reliability Standard VAR-002-4.1

This Reliability Standard includes an information collection activity for “Requirement R1” and a separate information collection activity for “Requirements R2 through R6.” This Reliability Standard requires Generator Operators to:

- Operate each of its generators connected to the interconnected transmission system in automatic voltage control mode or in a different control mode as instructed by the

Transmission Operator, unless the Generator Operator (1) is exempted pursuant to the criteria developed under VAR-001-5, Requirement R4, or (2) makes certain notifications to the Transmission Operator specifying the reasons it cannot so operate (Requirement R1);

- Maintain the Transmission Operator’s generator voltage or Reactive Power schedule, unless the Generator Operator (1) is exempted pursuant to the criteria developed under VAR-001-5, Requirement R4, or (2) complies with the notification requirements for deviations as established by the Transmission Owner pursuant to VAR-001-5, Requirement R5 (Requirement R2);

- Notify the Transmission Operator of a change in status of its voltage controlling device within 30 minutes, unless the status is restored within that time period (Requirement R3); and

- Notify the Transmission Operator of a change in reactive capability due to factors other than those described in VAR-002-4.1, Requirement R3 within 30 minutes unless the capability has been restored during that time period (Requirement R4).

- Provide information on its step-up transformers and auxiliary transformers within 30 days of a request from the Transmission Operator or Transmission Planner (Requirement R5); and

- Comply with the Transmission Operator’s step-up transformer tap change directives unless compliance would violate safety, an equipment rating, or applicable laws, rules or regulations (Requirement R6).

Type of Respondents: Generator owners and transmission operators.

*Estimate of Annual Burden:*⁴ The Commission estimates the annual public reporting burden for the information collection as:

FERC-725X, MANDATORY RELIABILITY STANDARDS: VOLTAGE AND REACTIVE (VAR) STANDARDS

	Number of respondents ⁵	Annual number of responses per respondent	Total number of responses	Average burden & cost per response ⁶	Total annual burden hours & total annual cost	Cost per respondent (\$)
	(1)	(2)	(1) * (2) = (3)	(4)	(3) * (4) = (5)	(5) ÷ (1)
VAR-001-5 Compliance and record-keeping	165 (TOP)	1	165	160 hrs. \$11,307.20	26,400 hrs. \$1,865,688	\$11,307.20
VAR-002-4.1 Compliance and record-keeping	1,028 (GOP) ..	1	1,028	200 hrs. \$14,134	205,600 hrs. \$14,529,752	14,134
Total			1,193		232,000 hrs. \$16,395,440	

Comments: Comments are invited on: (1) whether the collection of information is necessary for the proper performance of the functions of the Commission, including whether the information will have practical utility; (2) the accuracy of the agency’s estimate of the burden and cost of the collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility and clarity of the information collection; and (4) ways to minimize the burden of the collection of information on those who are to respond, including the use of automated collection techniques or other forms of information technology.

Dated: October 23, 2024.

Debbie-Anne A. Reese,
Secretary.

[FR Doc. 2024-25154 Filed 10-29-24; 8:45 am]

BILLING CODE 6717-01-P

ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OAR-2022-0449; FRL 10095-03-OAR]

Proposed Information Collection Request; Comment Request; GreenChill Advanced Refrigeration Partnership (Revision); Correction and Extension of Comment Period

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice; correction and extension of comment period.

SUMMARY: The U.S. Environmental Protection Agency (EPA) is correcting the Docket ID number under the **ADDRESSES** section of the **Federal Register** notice, which was published on October 16, 2024. This correction is associated with an information collection request (ICR), “GreenChill Advanced Refrigeration Partnership (Revision)” (EPA ICR No. 2349.03, OMB Control No. 2060-0702). Due to the incorrect Docket ID number in the previous notice, EPA is extending the comment period by 15 days to December 31, 2024.

DATES: The comment period has been extended until December 31, 2024.

FOR FURTHER INFORMATION CONTACT: Annie Kee, Stratospheric Protection

⁴ The Commission defines burden as the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. For further explanation of what is included in the information collection burden, reference 5 Code of Federal Regulations 1320.3.

⁵ TOP = transmission operator; GOP = generator operators. These values were derived from the NERC Compliance data of April 16, 2024, using only unique United States registered entities.

⁶ The estimated hourly cost (salary plus benefits) is a combination based on the Bureau of Labor Statistics (BLS), as of 2024, for 75% of the average

of an Electrical Engineer (17-2071) \$79.31/hr., $79.31 \times .75 = 59.4825$ (\$59.48-rounded) (\$59.48/hour) and 25% of an Information and Record Clerk (43-4199) \$44.74/hr., $44.74 \times .25 = 11.185$ (\$11.19 rounded) (\$11.19/hour), for a total (\$59.48 + \$11.19 = \$70.67/hour).

Division—Office of Air and Radiation, (3204A), Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460; telephone number: (202) 564–2056; email address: kee.annie@epa.gov.

SUPPLEMENTARY INFORMATION:**Correction**

In the **Federal Register** of October 16, 2024, in FR Doc. 2024–23835, on page 83495, in the second column under the **ADDRESSES** section, correct the Docket ID No. from “EPA–HQ–QAR–2022–0449” to “EPA–HQ–OAR–2022–0449”.

Cynthia A. Newberg,

Director, Stratospheric Protection Division.

[FR Doc. 2024–25217 Filed 10–29–24; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–12267–01–R9]

Clean Air Act Operating Permit Program; Order on Petition for Objection to State Operating Permit for Coolidge Generating Station

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of final order on petition.

SUMMARY: The Environmental Protection Agency (EPA) Administrator signed an order dated September 11, 2024, granting in part and denying in part a petition dated May 13, 2024, from Sierra Club. The Petition requested that the EPA object to a Clean Air Act (CAA) title V operating permit issued by the Pinal County Air Quality Control District (PCAQCD) to the Salt River Project Agricultural Improvement and Power District’s Coolidge Generating Station (“SRP Coolidge”), an electricity generating station located in Coolidge, Arizona.

FOR FURTHER INFORMATION CONTACT:

Catherine Valladolid, EPA Region 9, (415) 947–4103, valladolid.catherine@epa.gov. The final Order and Petition are available electronically at: <https://www.epa.gov/title-v-operating-permits/title-v-petition-database>.

SUPPLEMENTARY INFORMATION: The EPA received a petition from Sierra Club dated May 13, 2024, requesting that the EPA object to the issuance of operating permit no. V20676.R02, issued by PCAQCD to SRP Coolidge in Coolidge, Arizona. On September 11, 2024, the EPA Administrator issued an order granting in part and denying in part the petition. The Order explains the basis for the EPA’s decision.

Sections 307(b) and 505(b)(2) of the CAA provide that a petitioner may request judicial review of those portions of an order that deny issues in a petition. Any petition for review shall be filed in the United States Court of Appeals for the appropriate circuit no later than December 30, 2024.

Dated: October 21, 2024.

Martha Guzman Aceves,

Regional Administrator, Region IX.

[FR Doc. 2024–25153 Filed 10–29–24; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL ACCOUNTING STANDARDS ADVISORY BOARD**Notice of Deadline Extension for Applications To Serve as Non-Federal Members of the Federal Accounting Standards Advisory Board**

AGENCY: Federal Accounting Standards Advisory Board.

ACTION: Notice.

SUMMARY: Notice is hereby given that the Federal Accounting Standards Advisory Board (FASAB) is currently seeking candidates (candidates must not currently be Federal employees) to serve as non-Federal members of FASAB. The application deadline has been extended to November 30, 2024. Two new members will be selected to serve five-year terms beginning January 1, 2026, after the terms of two current non-Federal Board members end.

DATES: Please submit your resume by November 30, 2024, to be considered for the positions.

ADDRESSES: Responses may be sent to fasab@fasab.gov or Ms. Monica R. Valentine, Executive Director, 441 G Street NW, Suite 1155, Washington, DC 20548.

FOR FURTHER INFORMATION CONTACT: Ms. Monica R. Valentine, Executive Director, 441 G Street NW, Suite 1155, Washington, DC 20548, or call (202) 512–7350.

SUPPLEMENTARY INFORMATION: FASAB is the body designated to establish generally accepted accounting principles for Federal Government entities. Generally, non-Federal Board members are selected from the general financial community, the accounting and auditing community, or the academic community.

FASAB’s current chair will complete his ten-year tenure on the Board on December 31, 2025. As such, FASAB is also seeking nominations for a new chair who will start on January 1, 2026. The chair may be chosen from existing non-federal Board members or from

incoming members. After carefully considering the additional responsibilities of the chair, please indicate in your application if you would like to be considered for this position.

The Board generally meets for two days every other month in Washington, DC, except for its December and February meetings, which are virtual. Members are compensated for 24 days per year based on current Federal executive salaries. Travel expenses are reimbursed in accordance with Federal travel regulations.

Authority: 31 U.S.C. 3511(d); Federal Advisory Committee Act, 5 U.S.C. 1001–1014.

Dated: October 24, 2024.

Monica R. Valentine,

Executive Director.

[FR Doc. 2024–25160 Filed 10–29–24; 8:45 am]

BILLING CODE 1610–02–P

FEDERAL MARITIME COMMISSION

[FMC–2024–0016]

Renewal of Agency Information Collection of a Previously Approved Collection; 60-Day Public Comment Request; Passenger Vessel Operators

AGENCY: Federal Maritime Commission.

ACTION: Notice and request for comment.

SUMMARY: The Federal Maritime Commission (Commission) is giving public notice that the agency has submitted to the Office of Management and Budget (OMB) for approval an extension, without change, of an existing information collection related to Passenger Vessel Operators (PVOs). The public is invited to comment on the information collection pursuant to the Paperwork Reduction Act of 1995.

DATES: Written comments must be submitted on or before December 30, 2024.

ADDRESSES: The Commission is accepting comments using the Federal eRulemaking Portal at www.regulations.gov. The docket for this notice, which includes a copy of form FMC–131, Application for Certificate of Financial Responsibility (Performance and Casualty), and submitted comments, can be found at <https://www.regulations.gov/> under Docket No. FMC–2024–0016. Follow the instructions provided for submitting comments.

FOR FURTHER INFORMATION CONTACT:

Robyn K. Smith, (202) 523–5818, pvo@fmc.gov.

SUPPLEMENTARY INFORMATION: The Commission invites the general public and other Federal agencies to comment on any aspect of the continuing information collection listed in this notice, as required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). We are particularly interested in receiving comments on: (1) the necessity and utility of the proposed information collection for the proper performance of the agency's functions; (2) the accuracy of the estimated burden; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

Comments submitted in response to this notice will be included or summarized in our request for Office of Management and Budget (OMB) approval of the relevant information collection. All comments are part of the public record and subject to disclosure. Please do not include any confidential or inappropriate material in your comments.

Information Collection Open for Comment

Title: 46 CFR part 540—Application for Certificate of Financial Responsibility/Form FMC-131.

OMB Approval Number: 3072-0012 (Expires July 31, 2025).

Abstract: Sections 44101 through 44106 of title 46 of the United States Code require owners, charterers, or operators of passenger vessels with 50 or more passenger berths or stateroom accommodations that embark passengers at United States ports and territories to establish and maintain evidence of their financial responsibility to meet liability incurred for death or injury to passengers and other persons, and to indemnify passengers in the event of nonperformance of transportation. The Commission's regulations at 46 CFR part 540 implement these statutory provisions and specify financial responsibility coverage requirements for such owners, charterers, or operators.

Current Actions: There are no changes to this information collection, and it is being submitted for extension purposes only.

Type of Review: Extension.

Needs and Uses: The information will be used by Commission staff to ensure that passenger vessel owners, charterers, and operators have evidenced financial responsibility to indemnify passengers and others in the event of nonperformance or casualty.

Frequency: This information is collected when applicants apply for a certificate or when existing certificate holders change any information in their application forms.

Type of Respondents: Respondents are owners, charterers, or operators of passenger vessels with 50 or more passenger berths that embark passengers from U.S. ports or territories.

Number of Annual Responses: There are approximately 52 PVOs registered with the Commission that are required to demonstrate financial responsibility under the regulations.

Estimated Time per Response: The time per response ranges from 0.5 to 8 hours for reporting and recordkeeping requirements contained in the regulations (depending on the type of financial responsibility demonstrated, a PVO may be required to submit information multiple times per year), and 8 hours for completing Application Form FMC-131.

Total Annual Burden: The Commission estimates the total industry burden at 1,243 hours per year.

David Eng,
Secretary.

[FR Doc. 2024-25131 Filed 10-29-24; 8:45 am]

BILLING CODE 6730-02-P

FEDERAL RESERVE SYSTEM

Change in Bank Control Notices; Acquisitions of Shares of a Bank or Bank Holding Company

The notificants listed below have applied under the Change in Bank Control Act (Act) (12 U.S.C. 1817(j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire shares of a bank or bank holding company. The factors that are considered in acting on the applications are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The public portions of the applications listed below, as well as other related filings required by the Board, if any, are available for immediate inspection at the Federal Reserve Bank(s) indicated below and at the offices of the Board of Governors. This information may also be obtained on an expedited basis, upon request, by contacting the appropriate Federal Reserve Bank and from the Board's Freedom of Information Office at <https://www.federalreserve.gov/foia/request.htm>. Interested persons may express their views in writing on the standards enumerated in paragraph 7 of the Act.

Comments received are subject to public disclosure. In general, comments

received will be made available without change and will not be modified to remove personal or business information including confidential, contact, or other identifying information. Comments should not include any information such as confidential information that would not be appropriate for public disclosure.

Comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors, Ann E. Misback, Secretary of the Board, 20th Street and Constitution Avenue NW, Washington, DC 20551-0001, not later than November 14, 2024.

A. Federal Reserve Bank of Chicago (Colette A. Fried, Assistant Vice President) 230 South LaSalle Street, Chicago, Illinois 60690-1414.

Comments can also be sent electronically to

Comments.applications@chi.frb.org:

1. *The Andrew A. Black Living Trust, dated June 21, 2019, Andrew A. Black and Lesa A. Black, as co-trustees, all of Princeville, Illinois; Kay I. German Revocable Trust, Kay I. German, both of Chillicothe, Illinois, and Andrew A. Black, Princeville, Illinois, as co-trustees; William M. German Revocable Trust, dated November 7, 1994, William M. German, both of Chillicothe, Illinois, and Andrew A. Black, Princeville, Illinois, as co-trustees; Charles L. German and Kathryn J. German, both of Marco Island, Florida; Kathleen A. Messersmith Declaration of Trust, dated March 18, 2005, Kathleen A. Messersmith, as trustee, both of Princeville, Illinois; Julie K. Wilson, Sugar Grove, Illinois; and Beth A. Kurtz, Chillicothe, Illinois; each a member of the German Family Control Group, a group acting in concert, to acquire voting shares of Western Illinois Bancshares, Inc., Monmouth, Illinois, and thereby indirectly acquire voting shares of Midwest Bank, Monmouth, Illinois, and Princeville State Bank, Princeville, Illinois.*

B. Federal Reserve Bank of St. Louis (Holly A. Rieser, Senior Manager) P.O. Box 442, St. Louis, Missouri 63166-2034. Comments can also be sent electronically to

Comments.applications@stls.frb.org:

1. *Robert Gary Maxwell and Brandon Maxwell, both of Milan, Tennessee; to establish the Maxwell Family Control Group, to retain voting shares of Hometown Bancorp, Inc., and thereby indirectly retain voting shares of The Bank of Milan, both of Milan, Tennessee.*

C. Federal Reserve Bank of Kansas City (Jeffrey Imgarten, Assistant Vice President) 1 Memorial Drive, Kansas

City, Missouri, 64198–0001. Comments can also be sent electronically to KCApplicationComments@kc.frb.org:

1. *The Matthew Michaelis Trust B, Amy Madsen and Matthew Michaelis, as co-trustees, all of Wichita, Kansas*; to acquire voting shares of Emprise Financial Corporation, and thereby indirectly acquire voting shares of Emprise Bank, both of Wichita, Kansas, and to join the Michaelis Family Group, a group acting in concert. Amy Madsen and Matthew Michaelis have previously been approved as members of the Michaelis Family Group.

Board of Governors of the Federal Reserve System.

Michele Taylor Fennell,

Associate Secretary of the Board.

[FR Doc. 2024–25197 Filed 10–29–24; 8:45 am]

BILLING CODE P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[Docket No. CDC–2024–0090]

Availability of Draft Vessel Sanitation Program (VSP) Environmental Public Health Standards and VSP Construction Standards

AGENCY: Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

ACTION: Notice with comment period.

SUMMARY: The Centers for Disease Control and Prevention (CDC) in the Department of Health and Human Services (HHS) announces the opening of a docket to obtain comment on the draft Vessel Sanitation Program (VSP) Environmental Public Health Standards and VSP Construction Standards. Information about locating these documents can be found in the supporting materials section. VSP established these public health standards to target the control and prevention of environmentally associated illnesses and hazards on cruise ships. VSP inspectors use these standards to conduct operational public health inspections on cruise ships under the program’s jurisdiction and to complete cruise ship construction activities at industry request.

DATES: Written comments must be received on or before December 30, 2024.

ADDRESSES: You may submit comments, identified by Docket No. CDC–2024–0090 by either of the methods listed below. Do not submit comments by

email. CDC does not accept comments by email.

• **Federal eRulemaking Portal:** <https://www.regulations.gov/>. Follow the instructions for submitting comments.

• **Mail:** Vessel Sanitation Program, National Center for Environmental Health, Centers for Disease Control and Prevention, 4770 Buford Highway NE, MS S106–6, Atlanta, Georgia 30341.

Instructions: All submissions received must include the agency name and Docket Number. All relevant comments received will be posted without change to <https://www.regulations.gov/>, including any personal information provided. For access to the docket to read background documents or comments received, go to <https://www.regulations.gov/>.

FOR FURTHER INFORMATION CONTACT:

Captain Luis Rodriguez, Vessel Sanitation Program, National Center for Environmental Health, Centers for Disease Control and Prevention, 4770 Buford Highway NE, MS S106–6, Atlanta, Georgia 30341; email: vsp@cdc.gov; phone: (800) 323–2132.

SUPPLEMENTARY INFORMATION:

Public Participation

Interested persons or organizations are invited to participate by submitting written views, recommendations, and data.

Please note that comments received, including attachments and other supporting materials, are part of the public record and are subject to public disclosure. Comments will be posted on <https://www.regulations.gov/>. Therefore, do not include any information in your comment or supporting materials that you consider confidential or inappropriate for public disclosure. If you include your name, contact information, or other information that identifies you in the body of your comments, that information will be on public display. CDC will review all submissions and may choose to redact, or withhold, submissions containing private or proprietary information such as Social Security numbers, medical information, inappropriate language, or duplicate/near duplicate examples of a mass-mail campaign. Do not submit comments by email. CDC does not accept comment by email.

Background

HHS/CDC established the Vessel Sanitation Program (VSP) in the 1970s as a cooperative activity with the cruise ship industry. VSP helps the cruise ship industry prevent and control the introduction and spread of

environmentally associated illnesses and hazards on cruise ships. VSP operates under the authority of the Public Health Service Act (Section 361 of the Public Health Service Act; 42 U.S.C. 264, “Control of Communicable Diseases”). Regulations found at 42 CFR 71.41 (Foreign Quarantine—Requirements Upon Arrival at U.S. Ports: Sanitary Inspection; General Provisions) state that carriers arriving at U.S. ports from a foreign area are subject to sanitary inspections to determine whether potential rodent, insect, or other vermin infestations; contaminated food or water; or other sanitary conditions require measures to prevent introduction or spread of communicable diseases.

New requirements are not the focus for the VSP Environmental Public Health Standards (formerly the VSP Operations Manual) and VSP Construction Standards (formerly the VSP Construction Guidelines). Updates only clarify content or correct errors in the 2018 editions or address inconsistencies between the 2018 editions and the Food and Drug Administration 2022 Food Code.

The draft VSP Environmental Public Health Standards and VSP Construction Standards are available online at <https://www.regulations.gov/>, Docket No. CDC–2024–0090, under Supplemental Materials. All public comments will be reviewed and considered when finalizing these documents. Once finalized, documents will be available both in docket CDC–2024–0090 and on CDC’s website at <https://www.cdc.gov/vessel-sanitation/about/index.html>.

Noah Aleshire,

Chief Regulatory Officer, Centers for Disease Control and Prevention.

[FR Doc. 2024–25198 Filed 10–29–24; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

[Document Identifiers: CMS–10341, CMS–10875, CMS–40B, CMS–10797 and CMS–4040]

Agency Information Collection Activities: Proposed Collection; Comment Request

AGENCY: Centers for Medicare & Medicaid Services, Health and Human Services (HHS).

ACTION: Notice.

SUMMARY: The Centers for Medicare & Medicaid Services (CMS) is announcing

an opportunity for the public to comment on CMS' intention to collect information from the public. Under the Paperwork Reduction Act of 1995 (PRA), federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information (including each proposed extension or reinstatement of an existing collection of information) and to allow 60 days for public comment on the proposed action. Interested persons are invited to send comments regarding our burden estimates or any other aspect of this collection of information, including the necessity and utility of the proposed information collection for the proper performance of the agency's functions, the accuracy of the estimated burden, ways to enhance the quality, utility, and clarity of the information to be collected, and the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

DATES: Comments must be received by December 30, 2024.

ADDRESSES: When commenting, please reference the document identifier or OMB control number. To be assured consideration, comments and recommendations must be submitted in any one of the following ways:

1. *Electronically.* You may send your comments electronically to <http://www.regulations.gov>. Follow the instructions for "Comment or Submission" or "More Search Options" to find the information collection document(s) that are accepting comments.

2. *By regular mail.* You may mail written comments to the following address: CMS, Office of Strategic Operations and Regulatory Affairs, Division of Regulations Development, Attention: Document Identifier/OMB Control Number: __, Room C4-26-05, 7500 Security Boulevard, Baltimore, Maryland 21244-1850.

To obtain copies of a supporting statement and any related forms for the proposed collection(s) summarized in this notice, please access the CMS PRA website by copying and pasting the following web address into your web browser: <https://www.cms.gov/Regulations-and-Guidance/Legislation/PaperworkReductionActof1995/PRA-Listing>.

FOR FURTHER INFORMATION CONTACT: William N. Parham at (410) 786-4669.

SUPPLEMENTARY INFORMATION:

Contents

This notice sets out a summary of the use and burden associated with the following information collections. More

detailed information can be found in each collection's supporting statement and associated materials (see **ADDRESSES**).

CMS-10341 Section 1115

Demonstration Projects Regulations
CMS-10875 Reporting Requirements
and Corrective Action Plans Under
Section 1902(tt) of the Social Security
Act

CMS-40B Application for Enrollment
in Medicare Part B (Medical
Insurance)

CMS-10797 Application for Medicare
Part A and Part B Special Enrollment
Period
(Exceptional Circumstances)

CMS-4040 Request for Enrollment in
Supplementary Medical Insurance
(SMI)

Under the PRA (44 U.S.C. 3501-3520), federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. The term "collection of information" is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) and includes agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. Section 3506(c)(2)(A) of the PRA requires federal agencies to publish a 60-day notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension or reinstatement of an existing collection of information, before submitting the collection to OMB for approval. To comply with this requirement, CMS is publishing this notice.

Information Collections

1. Type of Information Collection

Request: Extension of a currently approved collection; *Title of Information Collection:* Section 1115 Demonstration Projects Regulations at 42 CFR 431.408, 431.412, 431.420, 431.424, and 431.428; *Use:* This collection is necessary to ensure that states comply with regulatory and statutory requirements related to the development, implementation and evaluation of demonstration projects. States seeking waiver authority under section 1115 are required to meet certain requirements for public notice, the evaluation of demonstration projects, and reports to the Secretary on the implementation of approved demonstrations. *Form Number:* CMS-10341 (OMB control number: 0938-1162); *Frequency:* Yearly and quarterly; *Affected Public:* State, Local, or Tribal Governments; *Number of Respondents:* 48; *Total Annual Responses:* 403; *Total*

Annual Hours: 41,847. (For policy questions regarding this collection contact Raven Smith at 410-786-3731.)

2. Type of Information Collection

Request: Extension of a currently approved collection; *Title of Information Collection:* Reporting Requirements and Corrective Action Plans Under section 1902(tt) of the Social Security Act; *Use:* The data and information in the CAP that states are required to report is used by CMS to document that states' redetermination activities are in compliance with Federal redetermination requirements, to identify concerns with eligibility renewals within a state's Medicaid program, and to inform any necessary programmatic changes to address unauthorized loss of coverage. CMS uses the information to conduct oversight of state activities and to make informed decisions whether to take enforcement action in the form of requiring the suspension of procedural terminations and/or imposing CMPs. *Form Number:* CMS-10875 (OMB control number: 0938-1462); *Frequency:* Once and on occasion; *Affected Public:* State, Local, or Tribal Governments; *Number of Respondents:* 8; *Total Annual Responses:* 16; *Total Annual Hours:* 408. (For policy questions regarding this collection contact Abby Kahn at 410-786-4321.)

3. Type of Information Collection

Request: Revision of a currently approved collection; *Title of Information Collection:* Application for Enrollment in Medicare Part B (Medical Insurance); *Use:* Medicare Part B is a voluntary program, financed from premium payments by enrollees, together with contributions from funds appropriated by the Federal government. The Social Security Act (the Act) at section 226(a) provides that individuals who are age 65 or older and eligible for, or entitled to, Social Security or Railroad Retirement Board (RRB) benefits shall be entitled to premium-free Part A upon filing an application for such benefits. Section 1836 of the Act permits individuals with Medicare premium-free Part A to enroll in Part B. The CMS-40B provides the necessary information to determine eligibility and to process the beneficiary's request for enrollment for Medicare Part B coverage. This form is only used for enrollment by beneficiaries who already have Part A, but not Part B.

Form CMS-40B is completed by the person with Medicare or occasionally by an SSA representative using information provided by the Medicare enrollee during an in-person interview. The form is owned by CMS, but not completed by

CMS staff. SSA processes Medicare enrollments on behalf of CMS. *Form Number:* CMS-40B (OMB control number: 0938-1230); *Frequency:* Once; *Affected Public:* Individuals and Households; *Number of Respondents:* 1,184,546; *Total Annual Responses:* 1,184,546; *Total Annual Hours:* 292,820. (For policy questions regarding this collection contact Carla Patterson at 410-786-8911 or Carla.Patterson@cms.hhs.gov.)

4. *Type of Information Collection Request:* Revision of a currently approved collection; *Title of Information Collection:* Application for Medicare Part A and Part B Special Enrollment Period (Exceptional Circumstances); *Use:* Section 1837(m) of the Social Security Act (the Act) provides authority for the Secretary of the Department of Health and Human Services to establish SEPs for individuals who are eligible to enroll in Medicare and meet such exceptional conditions as the Secretary may provide.

CMS provides SEPs for individuals experiencing an exceptional circumstance to enroll in Medicare premium Part A and Part B. To utilize these SEPs, an individual would have to submit an enrollment request via the form CMS-10797. The form is used by individuals who have missed an enrollment period due to an exceptional circumstance to enroll in Part A and/or Part B. Individuals complete the form and submit it to SSA to complete the enrollment.

The application form provides the necessary information to determine eligibility and to process the beneficiary's request for enrollment in premium Part A or Part B due to an exceptional circumstance. The form is only used for enrollment by beneficiaries who could not enroll during another enrollment period due to an exceptional circumstance. *Form Number:* CMS-10797 (OMB control number: 0938-1426); *Frequency:* Once; *Affected Public:* Individuals and Households, Business or other for-profits, Not-for-profits institutions; *Number of Respondents:* 34,612; *Total Annual Responses:* 34,612; *Total Annual Hours:* 19,901. (For policy questions regarding this collection contact Carla Patterson at 410-786-8911 or Carla.Patterson@cms.hhs.gov.)

5. *Type of Information Collection Request:* Revision of a currently approved collection; *Title of Information Collection:* Request for Enrollment in Supplementary Medical Insurance (SMI); *Use:* Section 1836 of the Social Security Act, and CMS regulations at 42 CFR 407.10, provide

the eligibility requirements for enrollment in Part B for individuals aged 65 and older who are not entitled to premium-free Part A. The individual must be a resident of the United States, and either a U.S. Citizen or an alien lawfully admitted for permanent residence that has lived in the US continually for 5 years.

Part B is a voluntary program and is financed from premium payments by enrollees together with contributions from funds appropriated by the Federal government. All individuals age 65 or older who are entitled to Part A can enroll in Part B. There are some individuals, age 65 and over who are not entitled to or eligible for premium-free Part A. These individuals may, however, enroll in Part B only.

The CMS-4040 solicits the information that is used to determine entitlement for individuals who meet the requirements in section 1836 as well as the entitlement of the applicant or their spouses to an annuity paid by OPM for premium deduction purposes. The application follows the application questions and requirements used by SSA. This is done not only for consistency purposes but to comply with other title II and title XVIII requirements because eligibility to title II benefits and free Part A under title XVIII must be ruled out in order to qualify for enrollment in Part B only. *Form Number:* CMS-4040 (OMB control number: 0938-0245); *Frequency:* Once; *Affected Public:* Individuals and Households, Business or other for-profits, Not-for-profits institutions; *Number of Respondents:* 48,642; *Total Annual Responses:* 48,642; *Total Annual Hours:* 12,161. (For policy questions regarding this collection contact Carla Patterson at 410-786-8911 or Carla.Patterson@cms.hhs.gov.)

William N. Parham, III,
Director, Division of Information Collections and Regulatory Impacts, Office of Strategic Operations and Regulatory Affairs.

[FR Doc. 2024-25148 Filed 10-29-24; 8:45 am]

BILLING CODE 4120-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administration for Children and Families

Proposed Information Collection Activity; Administration for Native Americans Project Outcome Assessment Survey (Office of Management and Budget #: 0970-0379)

AGENCY: Administration for Native Americans, Administration for Children

and Families, U.S. Department of Health and Human Services.

ACTION: Request for public comments.

SUMMARY: The Administration for Children and Families (ACF) is requesting a 3-year extension of the Administration for Native Americans Project Outcome Assessment Survey (OMB #: 0970-0379, expiration 6/30/2025). The survey was revised based on a review by the Administration for Native Americans (ANA) and feedback from grantees, which identified some data elements that could be eliminated and areas that could be clarified.

DATES: Comments due December 30, 2024. In compliance with the requirements of the Paperwork Reduction Act of 1995, ACF is soliciting public comment on the specific aspects of the information collection described above.

ADDRESSES: You can obtain copies of the proposed collection of information and submit comments by emailing infocollection@acf.hhs.gov. Identify all requests by the title of the information collection.

SUPPLEMENTARY INFORMATION:

Description: The information collected by the Project Outcome Assessment Survey is needed for two main reasons—(1) to collect crucial information required to report on ANA's established Government Performance and Results Act (GPRA) measures and (2) to properly abide by ANA's congressionally mandated statute (42 U.S.C. 2991 *et seq.*) found within the Native American Programs Act of 1974, as amended, which states that ANA will evaluate projects assisted through ANA grant dollars "including evaluations that describe and measure the impact of such projects, their effectiveness in achieving stated goals, their impact on related programs, and their structure and mechanisms for delivery of services." The survey information is requested once at the end of a project grant period. The information collected with this survey will fulfill ANA's statutory requirement and will also serve as an important planning and performance tool for ANA.

There are minor revisions proposed to the survey to align with ANA's current requirements of grant recipients and eliminate duplicative data elements.

Respondents: Tribal Governments, Native American nonprofit organizations, and Tribal Colleges and Universities.

ANNUAL BURDEN ESTIMATES

Instrument	Number of respondents	Number of responses per respondent	Average burden hours per response	Annual burden hours
ANA Project Outcome Assessment Survey	85	1	6	510

Comments: The Department specifically requests comments on (a) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Consideration will be given to comments and suggestions submitted within 60 days of this publication.

Authority: 42 U.S.C. 2992.

Mary C. Jones,
ACF/OPRE Certifying Officer.

[FR Doc. 2024–25139 Filed 10–29–24; 8:45 am]

BILLING CODE 4184–34–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government Owned Inventions Available for Licensing/Collaboration: Using Artificial Intelligence To Diagnose Uveitis

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The National Eye Institute seeks (NEI), an institute of the National Institutes of Health (NIH), Department of Health and Human Services (HHS), is giving notice of the licensing and collaboration opportunity for the inventions listed below, which are owned by an agency of the U.S. Government and are available for licensing/collaboration in the U.S. to achieve expeditious commercialization of results of federally-funded research and development.

FOR FURTHER INFORMATION CONTACT: Inquiries related to this licensing/collaboration opportunity should be directed to: Hiba Alsaffar, Ph.D., Technology Transfer Manager, NCI, Technology Transfer Center, Email:

hiba.alsaffar@nih.gov or Phone: 240–276–7489.

SUPPLEMENTARY INFORMATION: Uveitis is caused by inflammation in the eye that can cause pain and reduce vision. The rate of uveitis in the United States is 1 in every 200 people with eye-related irritation. Permanent symptoms such as vision loss can occur if untreated. Therefore, early detection is crucial. In certain uveitis cases, fluorescein angiography (FA) is essential for the diagnosis and management due to its ability to display retinal vascular leakage (RVL). Although proven to be critical in diagnosing and assessing severity, FA is invasive and side effects have been reported. Additionally, the procedure is time-consuming and imposes economic burdens to patients, physicians and payors. Scientists at the NEI have developed a deep learning tool to non-invasively detect RVL using ultrawide-field color fundus photos. This algorithm identifies fundus images with and without RVL with high accuracy (79%) and sensitivity (85%). Compared to the current gold standard of assessing RVL (clinician interpretation), this deep learning tool provides an improved method of detecting RVL for patients with uveitis.

This Notice is in accordance with 35 U.S.C. 209 and 37 CFR part 404.

NIH Reference Number: E–005–2023–0.

Potential Commercial Applications:

- Diagnostic tool to predict uveitis.
- Add-on to current color fundus imaging modalities.

Competitive Advantages:

- Greater accuracy and sensitivity versus current gold standard to assess RVL (clinician assessment).
- Deep learning tool to assess RVL.
- Deep learning to assess ultrawide-field color fundus images and assess RVL.

Publication: Young LH, et al. Automated Detection of Vascular Leakage in Fluorescein Angiography—A Proof of Concept. (PMID 35877095).

Patent Status: US Provisional Application 65/599,446 filed on November 15, 2023.

Development Stage: Prototype.

Therapeutic Area(s): Eye, Ear, Nose, Throat.

Dated: October 24, 2024.

Richard U. Rodriguez,

Associate Director, Technology Transfer Center, National Cancer Institute.

[FR Doc. 2024–25162 Filed 10–29–24; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Heart, Lung, and Blood Institute; Notice of Closed Meeting

Pursuant to section 1009 of the Federal Advisory Committee Act, as amended, notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Heart, Lung, and Blood Initial Review Group; NHLBI Institutional Training Mechanism Study Section.

Date: December 6, 2024.

Time: 10 a.m. to 6 p.m.

Agenda: To review and evaluate grant applications.

Address: National Institutes of Health, Rockledge I, 6705 Rockledge Drive, Bethesda, MD 20892.

Meeting Format: Virtual Meeting.

Contact Person: Michael P. Reilly, Ph.D., Scientific Review Officer, Office of Scientific Review/DERA, National Heart, Lung, and Blood Institute, National Institutes of Health, 6705 Rockledge Drive, Room 208–Z, Bethesda, MD 20892, 301–827–7975, email: reillymp@nhlbi.nih.gov.

(Catalogue of Federal Domestic Assistance Program Nos. 93.233, National Center for Sleep Disorders Research; 93.837, Heart and Vascular Diseases Research; 93.838, Lung Diseases Research; 93.839, Blood Diseases and Resources Research, National Institutes of Health, HHS)

Dated: October 25, 2024.
Bruce A. George,
Program Analyst, Office of Federal Advisory Committee Policy. Policy.
[FR Doc. 2024–25184 Filed 10–29–24; 8:45 am]
BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Eye Institute; Notice of Closed Meeting

Pursuant to section 1009 of the Federal Advisory Committee Act, as amended, notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Eye Institute Special Emphasis Panel; Clinical Applications.
Date: December 5, 2024.
Time: 9:30 a.m. to 5:00 p.m.
Agenda: To review and evaluate grant applications.
Address: National Eye Institute, 6700 Rockledge Dr., Bethesda, MD 20817.
Meeting Format: Virtual Meeting.
Contact Person: Ashley Fortress, Ph.D., Designated Federal Official, Division of Extramural Activities, National Eye Institute, National Institutes of Health, 6700 B Rockledge Dr., Bethesda, MD 20817, (301) 451–2020, ashley.fortress@nih.gov. (Catalogue of Federal Domestic Assistance Program No. 93.867, Vision Research, National Institutes of Health, HHS)

Dated: October 24, 2025.
David W. Freeman,
Supervisory Program Analyst, Office of Federal Advisory Committee Policy.
[FR Doc. 2024–25185 Filed 10–29–24; 8:45 am]
BILLING CODE 4140–01–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2024–0002]

Changes in Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, Department of Homeland Security.
ACTION: Notice.

SUMMARY: New or modified Base (1-percent annual chance) Flood Elevations (BFEs), base flood depths, Special Flood Hazard Area (SFHA) boundaries or zone designations, and/or regulatory floodways (hereinafter referred to as flood hazard determinations) as shown on the indicated Letter of Map Revision (LOMR) for each of the communities listed in the table below are finalized. Each LOMR revises the Flood Insurance Rate Maps (FIRMs), and in some cases the Flood Insurance Study (FIS) reports, currently in effect for the listed communities.

DATES: Each LOMR was finalized as in the table below.

ADDRESSES: Each LOMR is available for inspection at both the respective Community Map Repository address listed in the table below and online through the FEMA Map Service Center at <https://msc.fema.gov>.

FOR FURTHER INFORMATION CONTACT: Rick Sacbibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) patrick.sacbibit@fema.dhs.gov; or visit the FEMA Mapping and Insurance eXchange (FMIX) online at https://www.floodmaps.fema.gov/fhm/fmx_main.html.

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA) makes the final flood hazard determinations as shown in the LOMRs for each community listed in the table below. Notice of these modified flood hazard determinations has been published in newspapers of local

circulation and 90 days have elapsed since that publication. The Deputy Associate Administrator for Insurance and Mitigation has resolved any appeals resulting from this notification.

The modified flood hazard determinations are made pursuant to section 206 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4105, and are in accordance with the National Flood Insurance Act of 1968, 42 U.S.C. 4001 *et seq.*, and with 44 CFR part 65. The currently effective community number is shown and must be used for all new policies and renewals.

The new or modified flood hazard information is the basis for the floodplain management measures that the community is required either to adopt or to show evidence of being already in effect in order to remain qualified for participation in the National Flood Insurance Program (NFIP).

This new or modified flood hazard information, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities.

This new or modified flood hazard determinations are used to meet the floodplain management requirements of the NFIP. The changes in flood hazard determinations are in accordance with 44 CFR 65.4.

Interested lessees and owners of real property are encouraged to review the final flood hazard information available at the address cited below for each community or online through the FEMA Map Service Center at <https://msc.fema.gov>. (Catalog of Federal Domestic Assistance No. 97.022, “Flood Insurance.”)

Nicholas A. Shufro,
Assistant Administrator (Acting) for Risk Management, Federal Emergency Management Agency, Department of Homeland Security.

State and county	Location and case No.	Chief executive officer of community	Community map repository	Date of modification	Community No.
Arizona:	Cochise (FEMA Docket No.: B–2447).	The Honorable Clea McCaa II, Mayor, City of Sierra Vista, 1011 North Coronado Drive, Sierra Vista, AZ 85635.	Community Development Department, 1011 North Coronado Drive, Sierra Vista, AZ 85635.	Aug. 5, 2024	040017
	Coconino (FEMA Docket No.: B–2451).	The Honorable Becky Daggett, Mayor, City of Flagstaff, 211 West Aspen Avenue, Flagstaff, AZ 86001.	Community Development Department, 211 West Aspen Avenue, Flagstaff, AZ 86001.	Oct. 15, 2024	040020

State and county	Location and case No.	Chief executive officer of community	Community map repository	Date of modification	Community No.
Maricopa (FEMA Docket No.: B-2447).	City of Avondale (23-09-0716P).	The Honorable Kenneth N. Weise, Mayor, City of Avondale, 11465 West Civic Center Drive, Avondale, AZ 85323.	Development and Engineering Services Department, 11465 West Civic Center Drive, Avondale, AZ 85323.	Aug. 9, 2024	040038
Maricopa (FEMA Docket No.: B-2451).	City of El Mirage (23-09-0223P).	The Honorable Alexis Hermosillo, Mayor, City of El Mirage, 10000 North El Mirage Road, El Mirage, AZ 85335.	City Hall, 10000 North El Mirage Road, El Mirage, AZ 85335.	Oct. 11, 2024	040041
Maricopa (FEMA Docket No.: B-2447).	City of Phoenix (24-09-0419P).	The Honorable Kate Gallego, Mayor, City of Phoenix, 200 West Washington Street, 11th Floor, Phoenix, AZ 85003.	Street Transportation Department, 200 West Washington Street, 5th Floor, Phoenix, AZ 85003.	Aug. 9, 2024	040051
Maricopa (FEMA Docket No.: B-2447).	City of Surprise (23-09-0209P).	The Honorable Skip Hall, Mayor, City of Surprise, 16000 North Civic Center Plaza, Surprise, AZ 85374.	Public Works Department, Engineering Development Services, 16000 North Civic Center Plaza, Surprise, AZ 85374.	Sep. 6, 2024	040053
Maricopa (FEMA Docket No.: B-2451).	Town of Youngtown (23-09-0223P).	The Honorable Michael LeVault, Mayor, Town of Youngtown, 12030 Clubhouse Square, Youngtown, AZ 85363.	Town Hall, 12030 Clubhouse Square, Youngtown, AZ 85363.	Oct. 11, 2024	040057
Maricopa (FEMA Docket No.: B-2447).	Unincorporated areas of Maricopa County (23-09-0209P).	Jack Sellers, Chair, Maricopa County Board of Supervisors, 301 West Jefferson Street, 10th Floor, Phoenix, AZ 85003.	Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, AZ 85009.	Sep. 6, 2024	040037
Maricopa (FEMA Docket No.: B-2451).	Unincorporated areas of Maricopa County (23-09-0223P).	Jack Sellers, Chair, Maricopa County Board of Supervisors, 301 West Jefferson Street, 10th Floor, Phoenix, AZ 85003.	Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, AZ 85009.	Oct. 11, 2024	040037
Pima (FEMA Docket No.: B-2447).	Town of Marana (23-09-1387P).	The Honorable Ed Honea, Mayor, Town of Marana, 11555 West Civic Center Drive, Marana, AZ 85653.	Engineering Department, 11555 West Civic Center Drive, Marana, AZ 85653.	Sep. 9, 2024	040118
Pinal (FEMA Docket No.: B-2447).	City of Apache Junction (23-09-1322P).	The Honorable Chip Wilson, Mayor, City of Apache Junction, 300 East Superstition Boulevard, Apache Junction, AZ 85119.	City Hall, 300 East Superstition Boulevard, Apache Junction, AZ 85119.	Aug. 28, 2024	040120
California:					
Nevada (FEMA Docket No.: B-2447).	Town of Truckee (23-09-0444P).	The Honorable David Polivy, Mayor, Town of Truckee, 10183 Truckee Airport Road, Truckee, CA 96161.	Eric W. Rood Administrative Center, 950 Maidu Avenue, Nevada City, CA 95959.	Aug. 19, 2024	060762
San Diego (FEMA Docket No.: B-2447).	City of San Diego (23-09-0819P).	The Honorable Todd Gloria, Mayor, City of San Diego, 202 C Street, 11th Floor, San Diego, CA 92101.	Development Services Department, 1222 1st Avenue, MS 301, San Diego, CA 92101.	Aug. 16, 2024	060295
San Diego (FEMA Docket No.: B-2447).	City of San Diego (24-09-0077P).	The Honorable Todd Gloria, Mayor, City of San Diego, 202 C Street, 11th Floor, San Diego, CA 92101.	Development Services Department, 1222 1st Avenue, MS 301, San Diego, CA 92101.	Aug. 29, 2024	060295
Santa Clara (FEMA Docket No.: B-2447).	City of Cupertino (22-09-1032P).	The Honorable Sheila Mohan, Mayor, City of Cupertino, 10300 Torre Avenue, Cupertino, CA 95014.	Planning Department, 10300 Torre Avenue, Cupertino, CA 95014.	Sep. 5, 2024	060339
Santa Clara (FEMA Docket No.: B-2447).	City of Los Altos (22-09-1032P).	The Honorable Jonathan D. Weinberg, Mayor, City of Los Altos, 1 North San Antonio Road, Los Altos, CA 94022.	Public Works Department, 26379 Fremont Road, Los Altos, CA 94022.	Sep. 5, 2024	060341
Santa Clara (FEMA Docket No.: B-2447).	City of Mountain View (22-09-1032P).	The Honorable Pat Showalter, Mayor, City of Mountain View, P.O. Box 7540, Mountain View, CA 94039.	Public Works Department, 500 Castro Street, 1st Floor, Mountain View, CA 94041.	Sep. 5, 2024	060347
Santa Clara (FEMA Docket No.: B-2447).	Unincorporated Areas of Santa Clara County (22-09-1032P).	The Honorable Susan Ellenberg, President, Board of Supervisors, Santa Clara County, 70 West Hedding Street, 10th Floor, San Jose, CA 95110.	Santa Clara County Department of Planning and Development, 70 West Hedding Street, 7th Floor East Wing, San Jose, CA 95110.	Sep. 5, 2024	060337
Shasta (FEMA Docket No.: B-2447).	Unincorporated areas of Shasta County (23-09-0857P).	Kevin W. Crye, Chair, Shasta County Board of Supervisors, 1450 Court Street, Suite 308B, Redding, CA 96001.	Shasta County Resource Management and Public Works Building, 1855 Placer Street, Redding, CA 96001.	Aug. 22, 2024	060358
Tulare (FEMA Docket No.: B-2447).	Unincorporated areas of Tulare County (22-09-1347P).	Larry Micari, Chair, Tulare County Board of Supervisors, 2800 West Burrell Avenue, Visalia, CA 93291.	Tulare County Resource Management Agency, Government Plaza, 5961 South Mooney Boulevard, Visalia, CA 93277.	Aug. 8, 2024	065066
Ventura (FEMA Docket No.: B-2447).	Unincorporated areas of Ventura County (24-09-0395P).	Kelly Long, Chair, Ventura County Board of Supervisors, 1203 Flynn Road, Suite 220, Camarillo, CA 93012.	Ventura County Public Works Agency, 800 South Victoria Avenue, Ventura, CA 93009.	Aug. 27, 2024	060413
Yolo (FEMA Docket No.: B-2451).	City of Winters (23-09-1251P).	The Honorable Bill Biasi, Mayor, City of Winters, 318 1st Street, Winters, CA 95694.	City Hall, 318 1st Street, Winters, CA 95694.	Oct. 10, 2024	060425
Yolo (FEMA Docket No.: B-2451).	Unincorporated areas of Yolo County (23-09-1251P).	Angel Barajas, Chair, Yolo County Board of Supervisors, 625 Court Street, Woodland, CA 95695.	Yolo County Department of Planning and Public Works, 292 West Beamer Street, Woodland, CA 95695.	Oct. 10, 2024	060423

Idaho:

State and county	Location and case No.	Chief executive officer of community	Community map repository	Date of modification	Community No.
Ada (FEMA Docket No.: B-2447).	City of Eagle (23-10-0615P).	The Honorable Brad Pike, Mayor, City of Eagle, 660 East Civil Lane, Eagle, ID 83616.	City Hall, 660 East Civil Lane, Eagle, ID 83616.	Aug. 15, 2024	160003
Blaine (FEMA Docket No.: B-2447).	Unincorporated areas of Blaine County (23-10-0498P).	Muffy Davis, Chair, Blaine County Board of Commissioners, 206 South 1st Avenue, Suite 300, Hailey, ID 83333.	Blaine County Courthouse Annex Building, 219 1st Avenue South, Suite 208, Hailey, ID 83333.	Aug. 1, 2024	165167
Nevada: Clark (FEMA Docket No.: B-2451).	City of Henderson (23-09-1085P).	The Honorable Michelle Romero, Mayor, City of Henderson, 240 South Water Street, Henderson, NV 89015.	Public Works Department, 240 South Water Street, Henderson, NV 89015.	Oct. 3, 2024	320005
Clark (FEMA Docket No.: B-2447).	Unincorporated areas of Clark County (23-09-1159P).	Tick Segerblom, Chair, Clark County Board of Commissioners, 500 South Grand Central Parkway, 6th Floor, Las Vegas, NV 89155.	Clark County Public Works Office, 500 South Grand Central Parkway, 2nd Floor, Las Vegas, NV 89155.	Aug. 6, 2024	320003
Clark (FEMA Docket No.: B-2447).	Unincorporated areas of Clark County (23-09-1252P).	Tick Segerblom, Chair, Clark County Board of Commissioners, 500 South Grand Central Parkway, 6th Floor, Las Vegas, NV 89155.	Clark County Public Works Office, 500 South Grand Central Parkway, 2nd Floor, Las Vegas, NV 89155.	Sep. 9, 2024	320003
Independent City (FEMA Docket No.: B-2447).	City of Carson City (22-09-0387P).	The Honorable Lori Bagwell, Mayor, City of Carson City, 201 North Carson Street, Suite 2, Carson City, NV 89701.	Building Division, Permit Center, 108 East Proctor Street, Carson City, NV 89071.	Aug. 15, 2024	320001
Oregon: Benton (FEMA Docket No.: B-2447).	Unincorporated areas of Benton County (23-10-0749P).	Xanthippe Augerot, Chair, Benton County Board of Commissioners, 4500 Southwest Research Way, Corvallis, OR 97333.	Benton County Sheriff's Office, 180 Northwest 5th Street, Corvallis, OR 97333.	Jul. 31, 2024	410008

[FR Doc. 2024-25220 Filed 10-29-24; 8:45 am]

BILLING CODE 9110-12-P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA-2024-0002]

Changes in Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, Department of Homeland Security.

ACTION: Notice.

SUMMARY: New or modified Base (1-percent annual chance) Flood Elevations (BFEs), base flood depths, Special Flood Hazard Area (SFHA) boundaries or zone designations, and/or regulatory floodways (hereinafter referred to as flood hazard determinations) as shown on the indicated Letter of Map Revision (LOMR) for each of the communities listed in the table below are finalized. Each LOMR revises the Flood Insurance Rate Maps (FIRMs), and in some cases the Flood Insurance Study (FIS) reports, currently in effect for the listed communities.

DATES: Each LOMR was finalized as in the table below.

ADDRESSES: Each LOMR is available for inspection at both the respective Community Map Repository address

listed in the table below and online through the FEMA Map Service Center at <https://msc.fema.gov>.

FOR FURTHER INFORMATION CONTACT: Rick Sacbibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646-7659, or (email) patrick.sacbibit@fema.dhs.gov; or visit the FEMA Mapping and Insurance eXchange (FMIX) online at https://www.floodmaps.fema.gov/fhm/fmx_main.html.

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA) makes the final flood hazard determinations as shown in the LOMRs for each community listed in the table below. Notice of these modified flood hazard determinations has been published in newspapers of local circulation and 90 days have elapsed since that publication. The Deputy Associate Administrator for Insurance and Mitigation has resolved any appeals resulting from this notification.

The modified flood hazard determinations are made pursuant to section 206 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4105, and are in accordance with the National Flood Insurance Act of 1968, 42 U.S.C. 4001 *et seq.*, and with 44 CFR part 65. The currently effective community number is shown and must be used for all new policies and renewals.

The new or modified flood hazard information is the basis for the floodplain management measures that

the community is required either to adopt or to show evidence of being already in effect in order to remain qualified for participation in the National Flood Insurance Program (NFIP).

This new or modified flood hazard information, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities.

This new or modified flood hazard determinations are used to meet the floodplain management requirements of the NFIP. The changes in flood hazard determinations are in accordance with 44 CFR 65.4.

Interested lessees and owners of real property are encouraged to review the final flood hazard information available at the address cited below for each community or online through the FEMA Map Service Center at <https://msc.fema.gov>.

(Catalog of Federal Domestic Assistance No. 97.022, "Flood Insurance.")

Nicholas A. Shufro,
Assistant Administrator (Acting) for Risk Management, Federal Emergency Management Agency, Department of Homeland Security.

State and county	Location and case No.	Chief executive officer of community	Community map repository	Date of modification	Community No.
Florida:					
Bay (FEMA Docket No.: B-2447).	Unincorporated areas of Bay County (23-04-0322P).	Robert Majka, Manager, Bay County, Board of Commissioners, 840 West 11th Street, Panama City, FL 32401.	Bay County Planning and Zoning Department, 707 Jenks Avenue, Suite B, Panama City, FL 32401.	Aug. 8, 2024	120004
Nassau (FEMA Docket No.: B-2447).	Unincorporated areas of Nassau County (23-04-5724P).	Taco Pope, Manager, Nassau County, 96135 Nassau Place, Suite 1, Yulee, FL 32097.	Nassau County Building Department, 96161 Nassau Place, Yulee, FL 32097.	Aug. 8, 2024	120170
St. Johns (FEMA Docket No.: B-2447).	Unincorporated areas of St. Johns County (23-04-4828P).	Sarah Arnold, Chair, St. Johns County Board of Commissioners, 500 San Sebastian View, St. Augustine, FL 32084.	St. Johns County Permit Center, 4040 Lewis Speedway, St. Augustine, FL 32084.	Aug. 19, 2024	125147
Indiana:					
Boone (FEMA Docket No.: B-2447).	Town of Whitestown (23-05-1314P).	Dan Patterson President, Town of Whitestown Council, 6210 Veterans Drive, Whitestown, IN 46075.	Town Hall, 3 South Main Street, Whitestown, IN 46075.	Aug. 9, 2024	180015
Boone (FEMA Docket No.: B-2447).	Town of Zionsville (23-05-1314P).	The Honorable John Stehr, Mayor, Town of Zionsville, 1100 West Oak Street, Zionsville, IN 46075.	Planning Department, 1100 West Oak Street, Zionsville, IN 46077.	Aug. 9, 2024	180016
Elkhart (FEMA Docket No.: B-2447).	City of Elkhart (23-05-0829P).	The Honorable Rod Roberson, Mayor, City of Elkhart, 229 South 2nd Street, Elkhart, IN 46516.	City Hall, 229 South 2nd Street, Elkhart, IN 46516.	Aug. 22, 2024	180057
Johnson (FEMA Docket No.: B-2451).	Unincorporated areas of Johnson County (23-05-1894P).	Brian Baird, Chair, Johnson County Board of Commissioners, 86 West Court Street, Franklin, IN 46131.	Johnson County Courthouse Annex Building, 6 West Court Street, Franklin, IN 46131.	Oct. 4, 2024	180111
Lake (FEMA Docket No.: B-2447).	Town of Griffith (23-05-0583P).	Rick Ryfa, President, Town of Griffith Council, 111 North Broad Street, Griffith, IN 46319.	Town Hall, 111 North Broad Street, Griffith, IN 46319.	Aug. 26, 2024	185175
Lake (FEMA Docket No.: B-2447).	Town of Merrillville (23-05-0583P).	Rick Bella, President, Town of Merrillville Council, 7820 Broadway Street, Merrillville, IN 46410.	Town Hall, 7820 Broadway Street, Merrillville, IN 46410.	Aug. 26, 2024	180138
Lake (FEMA Docket No.: B-2447).	Town of Schererville (23-05-0583P).	Thomas J. Schmitt, President, Town of Schererville Council, 10 East Joliet Street, Schererville, IN 46375.	Town Hall, 10 East Joliet Street, Schererville, IN 46375.	Aug. 26, 2024	180142
Minnesota:					
Olmsted (FEMA Docket No.: B-2447).	City of Rochester (23-05-2698P).	The Honorable Kim Norton, Mayor, City of Rochester, 201 4th Street Southeast, Rochester, MN 55904.	Planning, Land Use, Zoning Department, 2122 Campus Drive Southeast, Suite 100, Rochester, MN 55904.	Aug. 14, 2024	275246
Olmsted (FEMA Docket No.: B-2447).	Unincorporated areas of Olmsted County (23-05-2698P).	Greg Wright, Olmsted County Commissioner, 3rd District, 151 4th Street Southeast, Rochester, MN 55904.	Olmsted County, Planning, Land Use, Zoning Department, 2122 Campus Drive Southeast, Suite 100, Rochester, MN 55904.	Aug. 14, 2024	270626
Wilkin (FEMA Docket No.: B-2451).	City of Nashua (23-05-2401P).	The Honorable Darin Raguse, Mayor, City of Nashua, 613 County Road 19, Nashua, MN 56522.	City Hall 613 County Road 19, Nashua, MN 56522.	Oct. 3, 2024	270918
Missouri:					
St. Charles (FEMA Docket No.: B-2447).	City of St. Charles (23-07-0528P).	The Honorable Dan Borgmeyer, Mayor, City of St. Charles, 200 North 2nd Street, St. Charles, MO 63301.	City Hall, 200 North 2nd Street, St. Charles, MO 63301.	Aug. 26, 2024	290318
St. Charles (FEMA Docket No.: B-2447).	Unincorporated areas of St. Charles County (23-07-0528P).	Steve Ehlmann, St. Charles County Executive, 100 North 3rd Street, St. Charles, MO 63301.	St. Charles County Administration Building, 201 North 2nd Street, Suite 420, St. Charles, MO 63301.	Aug. 26, 2024	290315
Nebraska: York (FEMA Docket No.: B-2447).	City of York (23-07-0607P).	The Honorable Barry Redfern, Mayor, City of York, 100 East 4th Street, York, NE 68467.	City Hall, 100 East 4th Street, York, NE 68467.	Aug. 16, 2024	310237
New York: Oswego (FEMA Docket No.: B-2447).	City of Oswego (23-02-0639P).	The Honorable Robert A. Corradino, Mayor, City of Oswego, 13 West Oneida Street, 2nd Floor, Oswego, NY 13126.	Engineering Department, 13 West Oneida Street, 3rd Floor, Oswego, NY 13126.	Oct. 10, 2024	360656
Ohio: Butler (FEMA Docket No.: B-2447).	Unincorporated areas of Butler County (23-05-1958P).	Cindy Carpenter, President, Butler County Board of Commissioners, 315 High Street, 6th Floor, Hamilton, OH 45011.	Butler County Zoning Department, 130 High Street, 1st Floor, Hamilton, OH 45011.	Aug. 14, 2024	390037
Texas: Tarrant (FEMA Docket No.: B-2447).	City of Fort Worth (22-06-2195P).	The Honorable Mattie Parker, Mayor, City of Fort Worth, 200 Texas Street, Fort Worth, TX 76102.	Department of Transportation and Public Works, 1000 Throckmorton Street, Fort Worth, TX 76102.	Aug. 7, 2024	480596
Wisconsin:					
Marathon (FEMA Docket No.: B-2447).	Unincorporated areas of Marathon County (23-05-1298P).	Kurt Gibbs, Marathon County Board Member District 32, 500 Forest Street, Wausau, WI 54403.	Marathon County Conservation, Planning and Zoning Office, 210 River Drive, Wausau, WI 54403.	Oct. 14, 2024	550245
Waukesha (FEMA Docket No.: B-2447).	Unincorporated areas of Waukesha County (23-05-1476P).	Paul Decker, Chair, Waukesha County Executive Committee, 325 Parkview Court, Hartland, WI 53029.	Waukesha County Administration Building, 515 West Moreland Boulevard, Waukesha, WI 53188.	Oct. 15, 2024	550476
Waukesha (FEMA Docket No.: B-2447).	Village of Sussex (23-05-1476P).	Anthony J. LeDonne, President, Village of Sussex, W233N6478 Kneiske Drive, Sussex, WI 53089.	Village Hall, N64W23760, Main Street, Sussex, WI 53089.	Oct. 15, 2024	550490

[FR Doc. 2024–25222 Filed 10–29–24; 8:45 am]
BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND
SECURITY

Federal Emergency Management
Agency

[Docket ID FEMA–2024–0002; Internal
Agency Docket No. FEMA–B–2469]

Proposed Flood Hazard
Determinations

AGENCY: Federal Emergency
Management Agency, Department of
Homeland Security.

ACTION: Notice.

SUMMARY: Comments are requested on proposed flood hazard determinations, which may include additions or modifications of any Base Flood Elevation (BFE), base flood depth, Special Flood Hazard Area (SFHA) boundary or zone designation, or regulatory floodway on the Flood Insurance Rate Maps (FIRMs), and where applicable, in the supporting Flood Insurance Study (FIS) reports for the communities listed in the table below. The purpose of this notice is to seek general information and comment regarding the preliminary FIRM, and where applicable, the FIS report that the Federal Emergency Management Agency (FEMA) has provided to the affected communities. The FIRM and FIS report are the basis of the floodplain management measures that the community is required either to adopt or to show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP).

DATES: Comments are to be submitted on or before January 28, 2025.

ADDRESSES: The Preliminary FIRM, and where applicable, the FIS report for each community are available for inspection at both the online location <https://hazards.fema.gov/femaportal/prelimdownload> and the respective

Community Map Repository address listed in the tables below. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at <https://msc.fema.gov> for comparison.

You may submit comments, identified by Docket No. FEMA–B–2469, to Rick Sacibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) patrick.sacibit@fema.dhs.gov.

FOR FURTHER INFORMATION CONTACT: Rick Sacibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) patrick.sacibit@fema.dhs.gov; or visit the FEMA Mapping and Insurance eXchange (FMIX) online at https://www.floodmaps.fema.gov/fhm/fmx_main.html.

SUPPLEMENTARY INFORMATION: FEMA proposes to make flood hazard determinations for each community listed below, in accordance with section 110 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4104, and 44 CFR 67.4(a).

These proposed flood hazard determinations, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities. These flood hazard determinations are used to meet the floodplain management requirements of the NFIP.

The communities affected by the flood hazard determinations are provided in the tables below. Any request for reconsideration of the

revised flood hazard information shown on the Preliminary FIRM and FIS report that satisfies the data requirements outlined in 44 CFR 67.6(b) is considered an appeal. Comments unrelated to the flood hazard determinations also will be considered before the FIRM and FIS report become effective.

Use of a Scientific Resolution Panel (SRP) is available to communities in support of the appeal resolution process. SRPs are independent panels of experts in hydrology, hydraulics, and other pertinent sciences established to review conflicting scientific and technical data and provide recommendations for resolution. Use of the SRP only may be exercised after FEMA and local communities have been engaged in a collaborative consultation process for at least 60 days without a mutually acceptable resolution of an appeal. Additional information regarding the SRP process can be found online at https://www.floodsrp.org/pdfs/srp_overview.pdf.

The watersheds and/or communities affected are listed in the tables below. The Preliminary FIRM, and where applicable, FIS report for each community are available for inspection at both the online location <https://hazards.fema.gov/femaportal/prelimdownload> and the respective Community Map Repository address listed in the tables. For communities with multiple ongoing Preliminary studies, the studies can be identified by the unique project number and Preliminary FIRM date listed in the tables. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at <https://msc.fema.gov> for comparison.

(Catalog of Federal Domestic Assistance No. 97.022, “Flood Insurance.”)

Nicholas A. Shufro,
*Assistant Administrator (Acting) for Risk
Management, Federal Emergency
Management Agency, Department of
Homeland Security.*

Community	Community map repository address
Butler County, Ohio and Incorporated Areas Project: 14–05–4456S Preliminary Date: July 10, 2024	
City of Fairfield	Municipal Building, 5350 Pleasant Avenue, Fairfield, OH 45014.
City of Hamilton	Municipal Building, 345 High Street, Third Floor, Hamilton, OH 45011.
City of Middletown	City Building, One Donham Plaza, Middletown, OH 45042.
City of Monroe	City Hall, 233 South Main Street, Monroe, OH 45050.
Unincorporated Areas of Butler County	Butler County Administrative Center, 130 High Street, Hamilton, OH 45011.

[FR Doc. 2024–25224 Filed 10–29–24; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND SECURITY**Federal Emergency Management Agency**

[Docket ID FEMA–2024–0002; Internal Agency Docket No. FEMA–B–2470]

Proposed Flood Hazard Determinations**AGENCY:** Federal Emergency Management Agency, Department of Homeland Security.**ACTION:** Notice.

SUMMARY: Comments are requested on proposed flood hazard determinations, which may include additions or modifications of any Base Flood Elevation (BFE), base flood depth, Special Flood Hazard Area (SFHA) boundary or zone designation, or regulatory floodway on the Flood Insurance Rate Maps (FIRMs), and where applicable, in the supporting Flood Insurance Study (FIS) reports for the communities listed in the table below. The purpose of this notice is to seek general information and comment regarding the preliminary FIRM, and where applicable, the FIS report that the Federal Emergency Management Agency (FEMA) has provided to the affected communities. The FIRM and FIS report are the basis of the floodplain management measures that the community is required either to adopt or to show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP).

DATES: Comments are to be submitted on or before January 28, 2025.

ADDRESSES: The Preliminary FIRM, and where applicable, the FIS report for each community are available for inspection at both the online location <https://hazards.fema.gov/femaportal/prelimdownload> and the respective

Community Map Repository address listed in the tables below. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at <https://msc.fema.gov> for comparison.

You may submit comments, identified by Docket No. FEMA–B–2470, to Rick Sacibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) patrick.sacibit@fema.dhs.gov.

FOR FURTHER INFORMATION CONTACT: Rick Sacibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) patrick.sacibit@fema.dhs.gov; or visit the FEMA Mapping and Insurance eXchange (FMIX) online at https://www.floodmaps.fema.gov/fhm/fmx_main.html.

SUPPLEMENTARY INFORMATION: FEMA proposes to make flood hazard determinations for each community listed below, in accordance with section 110 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4104, and 44 CFR 67.4(a).

These proposed flood hazard determinations, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities. These flood hazard determinations are used to meet the floodplain management requirements of the NFIP.

The communities affected by the flood hazard determinations are provided in the tables below. Any request for reconsideration of the

revised flood hazard information shown on the Preliminary FIRM and FIS report that satisfies the data requirements outlined in 44 CFR 67.6(b) is considered an appeal. Comments unrelated to the flood hazard determinations also will be considered before the FIRM and FIS report become effective.

Use of a Scientific Resolution Panel (SRP) is available to communities in support of the appeal resolution process. SRPs are independent panels of experts in hydrology, hydraulics, and other pertinent sciences established to review conflicting scientific and technical data and provide recommendations for resolution. Use of the SRP only may be exercised after FEMA and local communities have been engaged in a collaborative consultation process for at least 60 days without a mutually acceptable resolution of an appeal. Additional information regarding the SRP process can be found online at https://www.floodsrp.org/pdfs/srp_overview.pdf.

The watersheds and/or communities affected are listed in the tables below. The Preliminary FIRM, and where applicable, FIS report for each community are available for inspection at both the online location <https://hazards.fema.gov/femaportal/prelimdownload> and the respective Community Map Repository address listed in the tables. For communities with multiple ongoing Preliminary studies, the studies can be identified by the unique project number and Preliminary FIRM date listed in the tables. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at <https://msc.fema.gov> for comparison.

(Catalog of Federal Domestic Assistance No. 97.022, “Flood Insurance.”)

Nicholas A. Shufro,

Assistant Administrator (Acting) for Risk Management, Federal Emergency Management Agency, Department of Homeland Security.

Community	Community map repository address
City of Bayard, Morrill County, Nebraska Project: 23–07–0050S Preliminary Date: July 18, 2024	
City of Bayard	City Hall, 445 Main Street, Bayard, NE 69334.
Freestone County, Texas and Incorporated Areas Project: 23–06–0057S Preliminary Date: July 12, 2024	
City of Fairfield	City Hall, 527 East Commerce Street, Fairfield, TX 75840.
City of Oakwood	City Hall, 135 East Broad Street, Oakwood, TX 75855.
City of Streetman	City Hall, 204 East Main Street, Streetman, TX 75859.
City of Teague	City Hall, 105 South 4th Avenue, Teague, TX 75860.
Town of Kirvin	Town of Kirvin Mayor's Office, 100 Main Street, Fairfield, TX 75848.

Community	Community map repository address
Town of Wortham	Town Hall, 108 West Main Avenue, Wortham, TX 76693.
Unincorporated Areas of Freestone County	Freestone County Courthouse, 118 East Commerce Street, Room 205, Fairfield, TX 75840.

[FR Doc. 2024–25221 Filed 10–29–24; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND SECURITY**Federal Emergency Management Agency****[Docket ID FEMA–2024–0002; Internal Agency Docket No. FEMA–B–2468]****Proposed Flood Hazard Determinations****AGENCY:** Federal Emergency Management Agency, Department of Homeland Security.**ACTION:** Notice.

SUMMARY: Comments are requested on proposed flood hazard determinations, which may include additions or modifications of any Base Flood Elevation (BFE), base flood depth, Special Flood Hazard Area (SFHA) boundary or zone designation, or regulatory floodway on the Flood Insurance Rate Maps (FIRMs), and where applicable, in the supporting Flood Insurance Study (FIS) reports for the communities listed in the table below. The purpose of this notice is to seek general information and comment regarding the preliminary FIRM, and where applicable, the FIS report that the Federal Emergency Management Agency (FEMA) has provided to the affected communities. The FIRM and FIS report are the basis of the floodplain management measures that the community is required either to adopt or to show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP).

DATES: Comments are to be submitted on or before January 28, 2025.**ADDRESSES:** The Preliminary FIRM, and where applicable, the FIS report for each community are available for inspection at both the online location <https://hazards.fema.gov/femaportal/prelimdownload> and the respective

Community Map Repository address listed in the tables below. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at <https://msc.fema.gov> for comparison.

You may submit comments, identified by Docket No. FEMA–B–2468, to Rick Sacibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) patrick.sacibit@fema.dhs.gov.

FOR FURTHER INFORMATION CONTACT: Rick Sacibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) patrick.sacibit@fema.dhs.gov; or visit the FEMA Mapping and Insurance eXchange (FMIX) online at https://www.floodmaps.fema.gov/fhm/fmx_main.html.

SUPPLEMENTARY INFORMATION: FEMA proposes to make flood hazard determinations for each community listed below, in accordance with section 110 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4104, and 44 CFR 67.4(a).

These proposed flood hazard determinations, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities. These flood hazard determinations are used to meet the floodplain management requirements of the NFIP.

The communities affected by the flood hazard determinations are provided in the tables below. Any request for reconsideration of the

revised flood hazard information shown on the Preliminary FIRM and FIS report that satisfies the data requirements outlined in 44 CFR 67.6(b) is considered an appeal. Comments unrelated to the flood hazard determinations also will be considered before the FIRM and FIS report become effective.

Use of a Scientific Resolution Panel (SRP) is available to communities in support of the appeal resolution process. SRPs are independent panels of experts in hydrology, hydraulics, and other pertinent sciences established to review conflicting scientific and technical data and provide recommendations for resolution. Use of the SRP only may be exercised after FEMA and local communities have been engaged in a collaborative consultation process for at least 60 days without a mutually acceptable resolution of an appeal. Additional information regarding the SRP process can be found online at https://www.floodsrp.org/pdfs/srp_overview.pdf.

The watersheds and/or communities affected are listed in the tables below. The Preliminary FIRM, and where applicable, FIS report for each community are available for inspection at both the online location <https://hazards.fema.gov/femaportal/prelimdownload> and the respective Community Map Repository address listed in the tables. For communities with multiple ongoing Preliminary studies, the studies can be identified by the unique project number and Preliminary FIRM date listed in the tables. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at <https://msc.fema.gov> for comparison.

(Catalog of Federal Domestic Assistance No. 97.022, “Flood Insurance.”)

Nicholas A. Shufro,

Assistant Administrator (Acting) for Risk Management, Federal Emergency Management Agency, Department of Homeland Security.

Community	Community map repository address

Utah County, Utah and Incorporated Areas
Project: 19–08–0018S Preliminary Date: June 20, 2024

City of American Fork	Public Works Office, 275 East 200 N, American Fork, UT 84003.
City of Lehi	City Hall, 153 North 100 E, Lehi, UT 84043.

Community	Community map repository address
City of Lindon	Community Center, 25 North Main Street, Lindon, UT 84042.
City of Orem	City Center, 56 North State Street, Orem, UT 84057.
City of Provo	Public Works, 1377 South 350 E, Provo, UT 84606.
City of Saratoga Springs	Public Works, 213 North 900 E, Saratoga Springs, UT 84045.
City of Springville	City Hall, 110 South Main Street, Springville, UT 84663.
City of Vineyard	City Hall, 125 South Main Street, Vineyard, UT 84059.
Town of Genola	Town Hall, 74 West 800 S, Genola, UT 84655.
Unincorporated Areas of Utah County	Utah County Community Development Department, 51 South University Avenue, Suite 117, Provo, UT 84601.

[FR Doc. 2024–25223 Filed 10–29–24; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND SECURITY**Fiscal Year 2024 Senior Executive Service Performance Review Boards****AGENCY:** Department of Homeland Security.**ACTION:** Notice.

SUMMARY: This notice announces the appointment of members of the Fiscal Year (FY) 2024 Senior Executive Service (SES) Performance Review Boards (PRBs) for the Department of Homeland Security (DHS). The purpose of the PRBs is to make recommendations to the appointing authority (*i.e.*, Component Head) on the performance of senior executives (career, noncareer, and limited appointees), including recommendation on performance ratings, performance-based pay adjustments, and performance awards. The PRBs will also make recommendations on the performance of Transportation Security Executive Service, Senior-Level, and Scientific and Professional employees. To make its recommendations, the PRBs will review performance appraisals, initial summary ratings, any response by the employee, and any higher-level official's recommendation.

DATES: This notice is applicable as of October 30, 2024.

FOR FURTHER INFORMATION CONTACT: Christian Fajardo, Human Resources Specialist, Office of the Chief Human Capital Officer, *christian.fajardo@hq.dhs.gov*, 771–200–0392.

SUPPLEMENTARY INFORMATION: In accordance with 5 U.S.C. 4314(c) and 5 CFR 430.311, each agency must establish one or more PRBs to make recommendations to the appointing authority (*i.e.*, Component Head) on the performance of its senior executives. Each PRB must consist of three or more members. More than one-half of the membership of a PRB must be SES career appointees when reviewing

appraisals and recommending performance-based pay adjustments or performance awards for career appointees. Composition of the specific PRBs will be determined on an ad hoc basis from among the individuals listed below:

List of Names (Alphabetical Order)

Alles, Randolph D
Alpha, Avery
Antognoli, Anthony
Arnold, Jason
Baker, Paul E
Barrera, Staci A
Bartz, Christopher
Belcher, Brian C
Berger, Katrina W
Bornstein, Joshua
Brewer, Julie S
Bryson, Tony
Burriesci, Kelli A
Canevari, Holly E
Carraway, Melvin J
Cleary, Jennifer S
Cline, Richard K
Cook, Charles
Dawson, Inga I
DeNayer, Larry C
Doyle, Kerry
Dragani, Nancy J
Dunbar, Susan C
Eddy, Joseph A
Edwards, B. Roland
Edwards, Hannah
Emrich, Matthew D
Escobar Carrillo, Felicia A
Fenton, Jennifer M
Fitzmaurice, Stacey D
Fong, Heather
Franklin, Tami K
Frazier, Sterling
Gamble, Julius
Gorman, Chad M
Griggs, Christine
Harris, Melvin
Harrison, Kimberly R
Harvey, Melanie K
Havranek, John F
Higgins, Jennifer B
Hitt, Lucas
Holtzer, Christopher R
Hott, Russell E
Hough, Elizabeth
Huse, Thomas F
Hutchinson, Kimberly S
James, Michele M
Judson, Paul
Kaufer, Lauren
Kerner, Francine
Kim, Myung

Kolmstetter, Elizabeth
Lambert, Brian S
Lambeth, John
Logan, Christopher P
Lorincz, Csaba I
Maliga, Ted J
Marcott, Stacy
Maykovich, Vincent
McCane, Bobby J
McCleary Stephen
Meckley, Tammy M
Medlock, Samantha
Nally, Kevin J
Navarro, Donna M
Nelson, Jason L
Nolan, Connie L
Ocker, Ronald J
Padilla, Kenneth
Palmer, David J
Payne, Matthew
Peters, Jenna R
Quinn, Timothy J
Rezmovic, Jeffrey M
Roddini Ariana M
Roncone, Stephen A
Rowe Jr., Ronald L
Scanlon, Julie A
Scott, Kika M
Short, Victoria D
Sjoberg-Radway, Cynthia
Smith, David M
Smith, Frederick B
Spillars, Andrea K
Stainsby, Leiloni
Stiefel, Nathaniel I
Stuntz, Shelby
Tierney, MaryAnn
Torres, David M
Travis, Alexandra
Valverde, Michael
Venture, Veronica
Vitello, Caleb
Walker Hall, Delisa D
Watkins, Tracey L
Wilson, Miltom D
Windham, Nicole

Dated: October 28, 2024.

Greg Ruocco,

Director, Executive Resources, Office of the Chief Human Capital Officer.

[FR Doc. 2024–25363 Filed 10–28–24; 4:15 pm]

BILLING CODE 9112–FC–P

DEPARTMENT OF HOMELAND SECURITY**[Docket No. CISA-2024-0027]****Agency Information Collection Activities: Vulnerability Reporting Submission Form**

AGENCY: Cybersecurity and Infrastructure Security Agency (CISA), Department of Homeland Security (DHS).

ACTION: 60-Day notice and request for comments; new information collection request and OMB 1670-NEW.

SUMMARY: The Vulnerability Management (VM) subdivision within Cybersecurity and Infrastructure Security Agency (CISA) submits the following Information Collection Request (ICR) to the Office of Management and Budget (OMB) for review and clearance in accordance with the Paperwork Reduction Act of 1995.

DATES: Comments are encouraged and will be accepted until December 30, 2024.

ADDRESSES: You may submit comments, identified by docket number Docket # CISA-2024-0027, by following the instructions below for submitting comment via the Federal eRulemaking Portal at <http://www.regulations.gov>.

Instructions: All comments received must include the agency name and docket number Docket # CISA-2024-0027. All comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided.

Docket: For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: Kevin Donovan, 202-505-6441, kevin.donovan@mail.cisa.dhs.gov.

SUPPLEMENTARY INFORMATION: The Cybersecurity and Infrastructure Security Agency (CISA) operates Coordinated Vulnerability Disclosure (CVD) in partnership with industry stakeholders and community researchers alike. Through this collaboration, CISA provides technical assistance and guidance on detecting and handling security Vulnerability Disclosures, compiles, and analyzes incident information that may threaten information security. 6 U.S.C. 659(c)(1), see also 6 U.S.C. 659(c)(6) (providing for information sharing capabilities as the federal civilian interface for sharing of cybersecurity information and providing technical assistance and risk

management support for both Federal Government and non-Federal Government entities). CISA is also authorized to carry out these CVD functions by 6 U.S.C. 659(n) on Coordinated Vulnerability Disclosure, which authorizes CISA to, in coordination with industry and other stakeholders, may develop and adhere to DHS policies and procedures for coordinating vulnerability disclosures.

CISA is responsible for performing Coordinated Vulnerability Disclosure, which may originate outside the United States Government (USG) network/ community and affect users within the USG and/or broader community, or originate within the USG community and affect users both within and outside of it. Often, therefore, the effective handling of security incidents relies on information sharing among individual users, industry, and the USG, which may be facilitated by and through CISA. A dedicated form on the CISA website will allow for reporting of vulnerabilities that the reporting entity believe to be CISA Coordinated Vulnerability Disclosure (CVD) eligible. Upon submission, CISA will evaluate the information provided, and then will triage through the CVD process, if all CISA scoped CVD requirements are met.

For the developmental digital copy of this information collection for review, please contact the POC listed above in this notice request.

The Office of Management and Budget is particularly interested in comments which:

1. Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
2. Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
3. Enhance the quality, utility, and clarity of the information to be collected; and
4. Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submissions of responses.

Analysis

Agency: Cybersecurity and Infrastructure Security Agency (CISA), Department of Homeland Security (DHS).

Title: Vulnerability Disclosure Submission Form.

OMB Number: 1670-NEW.

Frequency: Per report on a voluntary basis.

Affected Public: State, Local, Territorial, and Tribal, International, Private sector partners.

Number of Respondents: 2,725.

Estimated Time per Respondent: 0.167 Hours.

Total Burden Hours: 454 Hours.

Annualized Respondent Cost:

\$39,536.

Total Annualized Respondent Out-of-Pocket Cost: \$0.

Total Annualized Government Cost: \$63,447.

Robert J. Costello,

Chief Information Officer, Department of Homeland Security, Cybersecurity and Infrastructure Security Agency.

[FR Doc. 2024-25130 Filed 10-29-24; 8:45 am]

BILLING CODE 9111-LF-P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT**[Docket No. FR-7092-N-39]****Privacy Act of 1974; System of Records**

AGENCY: Office of Administration, HUD.

ACTION: Notice of a new system of records.

SUMMARY: Pursuant to the provisions of the Privacy Act of 1974, as amended, the Department of the Housing and Urban Development (HUD), proposes a new Privacy Act System of Records titled, Customer Relationship Management, to include all "Customer Relationship Management" systems in use by HUD. This notice incorporates the One Stop Customer Service, HUD Central, and Microsoft Dynamics systems. HUD's Customer Relationship Management systems are designed to track, organize, rout, and respond to HUD's customer, which includes members of the public, individuals or organizations doing business with HUD, and other stakeholders who have an interest in how HUD operates.

DATES: Comments will be accepted on or before November 29, 2024. This proposed action will be effective on the date following the end of the comment period unless comments are received which result in a contrary determination.

ADDRESSES: Interested persons may submit comments, identified by docket number or by one of the following methods:

Federal e-Rulemaking Portal: <http://www.regulations.gov>. Follow the instructions provided on that site to submit comments electronically.

Fax: 202-619-8365.

Email: www.privacy@hud.gov.

Mail: Attention: Privacy Office; LaDonne White, Chief Privacy Officer; Office of the Executive Secretariat, 451 Seventh Street SW, Room 10139; Washington, DC 20410-0001.

Instructions: All submissions received must include the agency name and docket number for this rulemaking. All comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided.

Docket: For access to the docket to read background documents or comments received go to <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT:

LaDonne White; 451 Seventh Street, SW, Room 10139; Washington, DC 20410-0001; telephone number (202) 708-3054 (this is not a toll-free number). HUD welcomes and is prepared to receive calls from individuals who are deaf or hard of hearing, as well as individuals with speech or communication disabilities. To learn more about how to make an accessible telephone call, please visit <https://www.fcc.gov/consumers/guides/telecommunications-relay-service-trs>.

SUPPLEMENTARY INFORMATION: This Customer Relationship Management Systems SORN, combines The One Stop Customer Service, Microsoft Dynamics CRM, and HUD Central documenting the use of Customer Relationship Management systems to manage, track, route, and respond to interactions with all customers, stakeholders, partners, and organizations who initiate a customer service interaction with the Department. These customer relationship management systems are being combined as one system of record notification because they serve the same purpose, have the same authorization language, and function to provide customer service to HUD's customers. The Office of Field Policy and Management, used Microsoft Dynamics, and interacts with all of HUD's customers as they are the main presence in every HUD field office. The Federal Housing Administration, using HUD Central, focuses on Single-family FHA lenders and borrowers, HUD subsidized multifamily residents, and Hospital Skilled Nursing, Assisted Living developers and lenders. One Stop Customer Service, in the Office of Public and Indian Housing's Real Estate Assessment Center, focuses on technical

assistance and program protocols for inspectors of HUD funded assets.

SYSTEM NAME AND NUMBER:

Customer Relationship Management Systems HUD/FPM-01.

SECURITY CLASSIFICATION:

Unclassified.

SYSTEM LOCATION:

The files are maintained at the following locations: Microsoft Dynamics CRM—Microsoft AzureGov Virginia datacenter, 101 Herbert Drive, Boydton, VA, 23917; HUD Central—HUD Salesforce General Support System (GSS) in the Salesforce Government Cloud environment; One Stop Customer Service—Department of Housing and Urban Development, 451 Seventh Street SW, Washington, DC 20410.

SYSTEM MANAGER(S):

Microsoft Dynamics CRM, Office of Field Policy and Management, Tony Hebert, Director of Data, Technology, and CX, (678) 732-2075, 77 Forsyth Street SW, Atlanta GA, 30303.

HUDCentral, Federal Housing Administration, Walter Ouzts, (202) 402-2286, U.S Department of Housing and Urban Development, 451 7th Street SW, Washington, DC 20410-0001.

One Stop Customer Service, Office of Public and Indian Housing (PIH), Ashley Leia Sheriff, Deputy Assistant Secretary, Real Estate Assessment Center, 202-402-4162, 550 12th Street SW, Suite 100, Washington, DC 20410-0001.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Section 2 of The Department of Housing and Urban Development Act of 1965, 42 U.S.C. 3531, Executive Order 12160 and the Housing and Community Development Act of 1974, Public Law 93-383.; Executive Order 14058; Executive Order 13571 Executive Order 12862

PURPOSE(S) OF THE SYSTEM:

The purpose of these systems is to manage, track, route, and respond to interactions the Department has with the public, stakeholders, partners, and other organizations interested in how HUD does business, such as advocacy groups, professional organizations, congress, and the media.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

For all three systems Individuals, public stakeholders, partners, and other organizations interested in how HUD does business.

CATEGORIES OF RECORDS IN THE SYSTEM:

Microsoft Dynamics CRM collects name, phone number, secondary phone number, email, secondary email and address.

HUD Central collects name, phone number, secondary phone number, email address, secondary email address, account number and taxpayer ID number.

One Stop Customer Service collects name, phone number, secondary phone number, email secondary email, address, and account number.

RECORD SOURCE CATEGORIES:

Members of the public for all three systems.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND PURPOSES OF SUCH USES:

(1) To public and private counseling agencies; building associations; developers; financial institutions holding HUD-insured mortgages; Federal, State and local government offices; Consumer Protection agencies; Public Housing Agencies; and State and local real estate and planning Commissions for the purpose of assisting in the resolution of a complaint.

(2) To the National Archives and Records Administration, Office of Government Information Services (OGIS), to the extent necessary to fulfill its responsibilities in 5 U.S.C. 552(h), to review administrative agency policies, procedures and compliance with the Freedom of Information Act (FOIA), and to facilitate OGIS' offering of mediation services to resolve disputes between persons making FOIA requests and administrative agencies.

(3) To a congressional office from the record of an individual, in response to an inquiry from the congressional office made at the request of that individual.

(4) To contractors, grantees, experts, consultants, Federal agencies, and non-Federal entities, including, but not limited to, State and local governments and other research institutions or their parties, and entities and their agents with whom HUD has a contract, service agreement, grant, cooperative agreement, or other agreement for the purposes of statistical analysis and research in support of program operations, management, performance monitoring, evaluation, risk management, and policy development, to otherwise support the Department's mission, or for other research and statistical purposes not otherwise prohibited by law or regulation. Records under this routine use may not be used in whole or in part to make decisions

that affect the rights, benefits, or privileges of specific individuals. The results of the matched information may not be disclosed in identifiable form.

(5) To contractors, grantees, experts, consultants and their agents, or others performing or working under a contract, service, grant, cooperative agreement, or other agreement with HUD, when necessary to accomplish an agency function related to a system of records. Disclosure requirements are limited to only those data elements considered relevant to accomplishing an agency function.

(6) To contractors, experts and consultants with whom HUD has a contract, service agreement, assignment or other agreement with the Department, when necessary to utilize relevant data for the purpose of testing new technology and systems designed to enhance program operations and performance.

(7) To appropriate agencies, entities, and persons when: (1) HUD suspects or has confirmed that there has been a breach of the system of records; (2) HUD has determined that as a result of the suspected or confirmed breach there is a risk of harm to individuals, HUD (including its information systems, programs, and operations), the Federal Government, or national security; and (3) the disclosure made to such agencies, entities, and persons is reasonably necessary to assist in connection with HUD's efforts to respond to the suspected or confirmed breach or to prevent, minimize, or remedy such harm..

(8) To another Federal agency or Federal entity, when HUD determines that information from this system of records is reasonably necessary to assist the recipient agency or entity in (1) responding to suspected or confirmed breach, or (2) preventing, minimizing, or remedying the risk of harm to individuals, the recipient agency or entity (including its information systems, programs, and operations), the Federal Government, or national security, resulting from a suspected or confirmed breach.

(9) To appropriate Federal, State, local, Tribal, or other governmental agencies or multilateral governmental organizations responsible for investigating or prosecuting the violations of, or for enforcing or implementing, a statute, rule, regulation, order, or license, where HUD determines that the information would assist in the enforcement of civil or criminal laws and when such records, either alone or in conjunction with other information, indicate a violation or potential violation of law.

(10) To a court, magistrate, administrative tribunal, or arbitrator in the course of presenting evidence, including disclosures to opposing counsel or witnesses in the course of civil discovery, litigation, mediation, or settlement negotiations, or in connection with criminal law proceedings; when HUD determines that use of such records is relevant and necessary to the litigation and when any of the following is a party to the litigation or have an interest in such litigation: (1) HUD, or any component thereof; or (2) any HUD employee in his or her official capacity; or (3) any HUD employee in his or her individual capacity where HUD has agreed to represent the employee; or (4) the United States, or any agency thereof, where HUD determines that litigation is likely to affect HUD or any of its components. 8

(11) To any component of the Department of Justice or other Federal agency conducting litigation or in proceedings before any court, adjudicative, or administrative body, when HUD determines that the use of such records is relevant and necessary to the litigation and when any of the following is a party to the litigation or have an interest in such litigation: (1) HUD, or any component thereof; or (2) any HUD employee in his or her official capacity; or (3) any HUD employee in his or her individual capacity where the Department of Justice or agency conducting the litigation has agreed to represent the employee; or (4) the United States, or any agency thereof, where HUD determines that litigation is likely to affect HUD or any of its components.

POLICIES AND PRACTICES FOR STORAGE OF RECORDS:

Electronic.

POLICIES AND PRACTICES FOR RETRIEVAL OF RECORDS:

Individual records for all three systems can be retrieved by name, phone number, or email address.

POLICIES AND PRACTICES FOR RETENTION AND DISPOSAL OF RECORDS:

Public Customer Service records. The system's disposition instructions: destroy 1 year after resolved, or when no longer needed for business use, whichever is appropriate.

ADMINISTRATIVE, TECHNICAL, AND PHYSICAL SAFEGUARDS:

The systems can only be accessed through HUD's Office 365 environment, using all the security safeguards the Department uses for its current operating system. Users must have a

HUD authorized account, which HUD authorizes with employment and deactivates once the employee leaves the Department. Customer Relationship Management data is available to employees on a need-to-know basis and systems use role-based security to restrict access to these data. Access to data is granted by an Administrative Security Officer through the Department's secure application access system. Role-based security limits the amount of accessible data to only that permissible by the security role.

RECORD ACCESS PROCEDURES:

Individuals requesting records of themselves should address written inquiries to the Department of Housing Urban and Development 451 7th Street SW, Washington, DC 20410-0001. For verification, individuals should provide their full name, current address, and telephone number. In addition, the requester must provide either a notarized statement or an unsworn declaration made under 24 CFR 16.4.

CONTESTING RECORD PROCEDURES:

The HUD rule for contesting the content of any record pertaining to the individual by the individual concerned is published in 24 CFR 16.8 or may be obtained from the system manager.

NOTIFICATION PROCEDURES:

Individuals requesting notification of records of themselves should address written inquiries to the Department of Housing Urban Development, 451 7th Street SW, Washington, DC 20410-0001. For verification purposes, individuals should provide their full name, office or organization where assigned, if applicable, and current address and telephone number. In addition, the requester must provide either a notarized statement or an unsworn declaration made under 24 CFR 16.4.

EXEMPTIONS PROMULGATED FOR THE SYSTEM:

None.

HISTORY:

None.

Ladonne White,

Chief Privacy Officer, Office of Administration.

[FR Doc. 2024-25137 Filed 10-29-24; 8:45 am]

BILLING CODE 4210-67-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS-R1-ES-2024-0159; ES1114010000-245-FF01E0000]

Receipt of Enhancement of Survival Permit Application and Proposed Conservation Benefit Agreement for Introduction of the Endangered Orangeblack Hawaiian Damselfly to a Conservation Area on the Island of Lānaʻi; Categorical Exclusion**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Notice of availability; request for comments.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), have received an application from Pūlama Lānaʻi for an enhancement of survival permit (permit) pursuant to the Endangered Species Act. If approved, the permit would authorize take of the orangeblack Hawaiian damselfly, aeʻo (Hawaiian stilt), ʻālae keʻokeʻo (Hawaiian coot) and assimulans yellow-faced bee (the “covered species”). The application includes a draft conservation benefit agreement, describing the actions the applicant will take to create new habitat for the covered species, facilitate reintroduction of the orangeblack Hawaiian damselfly to Lānaʻi, and achieve a net conservation benefit for each of the covered species. We have also prepared a draft environmental action statement for our preliminary determination that the permit decision may be eligible for categorical exclusion under the National Environmental Policy Act. We invite the public and local, State, Tribal, Native Hawaiian, and Federal agencies to comment on these documents.

DATES: Submit written comments no later than November 29, 2024.**ADDRESSES:**

Obtaining documents: The application, application supporting materials, and any comments and other materials that we receive will be available for public inspection at <https://www.regulations.gov> in Docket No. FWS-R1-ES-2024-0159.

Submitting comments: To submit written comments, please use one of the following methods:

- *Online:* <https://www.regulations.gov>. Search for and submit comments on Docket No. FWS-R1-ES-2024-0159.

- *U.S. Mail:* Attn: Docket No. FWS-R1-ES-2024-0159; U.S. Fish and Wildlife Service Headquarters, MS: PRB/3W; 5275 Leesburg Pike, Falls Church, VA 22041-3803.

For more information, see Public Availability of Comments under **SUPPLEMENTARY INFORMATION.**

FOR FURTHER INFORMATION CONTACT:

Chelsie Javar-Salas, via telephone at 808-210-6131, or via email at Chelsie.Javar-Salas@fws.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION: We, the U.S. Fish and Wildlife Service (Service), have received an enhancement of survival permit (permit) application pursuant to section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*). The applicant is Lānaʻi Resorts, LLC, dba Pūlama Lānaʻi on the island of Lānaʻi, Hawaiʻi. If issued, the permit would authorize take of the orangeblack Hawaiian damselfly (*Megalagrion xanthomelas*), aeʻo (Hawaiian stilt, *Himantopus mexicanus knudseni*), ʻālae keʻokeʻo (Hawaiian coot, *Fulica americana alai*) and assimulans yellow-faced bee (*Hylaeus assimulans*), all federally listed as endangered. The take would be caused by implementation of conservation measures to create and maintain new habitat and facilitate reestablishment of a self-sustaining orangeblack Hawaiian damselfly population on Lānaʻi. The reestablishment of the orangeblack Hawaiian damselfly on Lānaʻi would contribute to the species’ recovery by increasing the number of extant populations, their distribution, and resiliency of the species to stochastic events. Conservation measures include constructing a water source, creating orangeblack Hawaiian damselfly habitat, and implementing stewardship of a 3-acre (1.2-hectare) area on degraded land. The created habitat would also benefit the aeʻo, ʻālae keʻokeʻo, and assimulans yellow-faced bee. The conservation measures described in the conservation benefit agreement (CBA) are intended to provide a net conservation benefit to each species. We have also prepared a draft environmental action statement (EAS) for our preliminary determination that the permit decision is eligible for categorical exclusion under the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*). We provide this notice to open a public comment period and invite comments from all interested

parties regarding the documents referenced above.

Background

On April 12, 2024, the Service published final revisions to the regulations for ESA section 10(a)(1)(A) and (B) (89 FR 26070), which went into effect on May 13, 2024. Among other changes and clarifications, the revised regulations simplify the requirements for enhancement of survival permits by combining two previous agreement types, safe harbor agreements and candidate conservation agreements with assurances, into one agreement type, known as a conservation benefit agreement (CBA). Under a CBA, participating property owners undertake management activities on their property to enhance, restore, or maintain habitat conditions to an extent that is likely to result in a net conservation benefit for the covered species. A CBA and the associated enhancement of survival permit issued to participating property owners encourage private and other non-Federal property owners to implement conservation actions for federally listed species. Participating property owners are assured that they will not be subject to increased property use restrictions as a result of their efforts to attract listed species to their property, or to increase the numbers or distribution of listed species already on their property.

A CBA and an associated permit allow the property owner to alter or modify the enrolled property back to agreed-upon pre-permit baseline conditions at the end of the term of the permit, even if such alteration or modification results in take of a listed species. The baseline conditions must reflect the known biological and habitat characteristics that support existing levels of use of the enrolled property by the species covered in the CBA. The authorization to take listed species is contingent on the property owner complying with obligations in the CBA and the terms and conditions of the permit. The CBA must provide a net conservation benefit, which is defined at Code of Federal Regulations (CFR) at 50 CFR 17.3. Enrolled property owners may make lawful use of the enrolled property during the term of the permit and may take the listed species named on the permit in accordance with the terms and conditions of the permit.

Permit application requirements and issuance criteria for enhancement of survival permits for CBAs that involve species listed as threatened are found at 50 CFR 17.32(c); permit application requirements and issuance criteria for enhancement of survival permits for

CBAs that involve species listed as endangered are found at 50 CFR 17.22(c).

Proposed Project

Lānaʻi Resorts, LLC, dba Pūlama Lānaʻi has submitted an application for an ESA section 10(a)(1)(A) permit. The permit application includes a CBA that would be implemented on enrolled property if a permit is issued. The primary conservation measures provided in the CBA include:

- Creating new habitat for the covered species where none currently exists.
- Protecting the new breeding habitat for orangeblack Hawaiian damselflies by building and maintaining ungulate exclusion fencing.
- Managing the new aquatic habitat for orangeblack Hawaiian damselfly to be free of predatory fish.
- Reintroducing a new population of orangeblack Hawaiian damselflies.
- Establishing predator-controlled habitat within the fenced area containing surface water for Hawaiian coot and Hawaiian stilt.

• Establishing forage, cover, and potential nesting resources for assulans yellow-faced bees.

Net Conservation Benefits from the conservation measures include:

- Increasing the range of each covered species, thereby helping to protect against catastrophic loss of the species.
- Reintroducing a new population of orangeblack Hawaiian damselflies.
- Preventing ecological damage to the created habitat from ungulates and invasive plant species.

Additional benefits include:

- Increasing collaborative recovery efforts between the Service, the Hawaii Department of Land and Natural Resources, and Pūlama Lānaʻi.
- Increasing opportunity for environmental education and conservation public outreach.

Request for Public Comments

We invite public review and comment on the permit application package, including the CBA and draft EAS (see **ADDRESSES**). You may submit your comments and materials by one of the methods listed in the **ADDRESSES** section. We request data, comments, new information, or suggestions from the public, other concerned governmental agencies, the scientific community, Tribes, industry, or any other interested party on our proposed Federal action, including on the adequacy of the CBA, pursuant to the requirements for permits at 50 CFR parts 13 and 17.

Public Availability of Comments

All comments and materials we receive become part of the public record associated with this action. Before including your address, phone number, email address or other personal identifying information in your comments, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public disclosure in their entirety.

Next Steps

After the public comment period ends (see **DATES**), we will evaluate the permit application, associated documents, and any comments received to determine whether the permit application meets the requirements of section 10(a)(1)(A) of the ESA. We will also evaluate whether issuance of the requested permit would comply with section 7 of the ESA by conducting an intra-Service consultation under section 7(a)(2) of the ESA on the proposed action. The final NEPA and permit determinations will not be completed until after the end of the 30-day comment period and will fully consider all comments received during the comment period. If we determine that all requirements are met, we will issue an Enhancement of Survival Permit under section 10(a)(1)(A) of the ESA and associated implementing regulations found at 50 CFR 17.22(c).

Authority

We provide this notice in accordance with the requirements of section 10(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), and its implementing regulations (50 CFR 17.22 and 17.32), and the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*) and its implementing regulations (40 CFR 1501.9).

Bridget Fahey,

Deputy Regional Director, Pacific Region, U.S. Fish and Wildlife Service.

[FR Doc. 2024–25179 Filed 10–29–24; 8:45 am]

BILLING CODE 4333–15–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–WASO–NAGPRA–NPS0038957; PPWOCRADN0–PCU00RP14.R50000]

Notice of Proposed Transfer or Reinterment: Wesleyan University, Archaeology & Anthropology Collections, Middletown, CT

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), Wesleyan University proposes to transfer human remains listed in a notice of inventory completion published in the **Federal Register** on August 12, 2024.

DATES: Repatriation, transfer, or reinterment of the human remains in this notice may occur on or after November 29, 2024.

FOR FURTHER INFORMATION CONTACT:

Wendi Field Murray, Wesleyan University (Archaeology & Anthropology Collections), Middletown, CT 06459, telephone (860) 685–2085, email wmurray01@wesleyan.edu. Individuals who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service's administrative responsibilities under NAGPRA. The determinations in this notice are the sole responsibility of Wesleyan University and additional information on the determinations in this notice, including the results of consultation, can be found in its inventory or related records. The National Park Service is not responsible for the determinations in this notice.

Abstract of Information Available

This notice follows publication of a Notice of Inventory Completion in the **Federal Register** (89 FR 65657–65658, August 12, 2024). Human remains representing, at least, 16 individuals have been identified. No associated funerary objects are present. The remains of these 16 individuals were once part of an osteological teaching collection, which included skeletal elements that had been prepared and used for anatomical instruction

sometime between the 19th and 20th centuries. In August 2013 any human remains in the osteological collection that showed evidence of having been disinterred (visible soil/staining, water damage, and weathering) rather than mechanically cleaned/prepared by a medical supply vendor or other entity were presumed to be Native American. Wesleyan has no records suggesting their geographic origin or acquisition history.

The presence of potentially hazardous substances (*i.e.*, pesticide residues) on these remains is unknown. In 2021, Wesleyan University discovered the presence of pesticide residue (arsenic) on one organic object from Samoa that was transferred from the Smithsonian in the 19th century, as well as several taxidermy specimens. While pesticides were not typically applied to human skeletal remains, they were managed together with organic objects in a large ethnographic teaching collection, so cross-contamination is a possibility.

There is one documented instance of pest fumigation relating to the collections that dates to 1972–1973. This was to treat a silverfish infestation in underground storage rooms that held the museum's objects after it closed. The proposal was for the application of dichlorodiphenyltrichloroethane (DDT) to the floors, the placement of open containers or paradichlorobenzene (PDB) around the room, and the placement of a mildew-retarding insecticide inside the wraps of museum specimens. The specific contents of the room in which the chemicals were applied, and to what extent they were shielded from them, is unknown.

Consultation

Invitations to consult were sent to the Mashantucket Pequot Indian Tribe; Mohegan Tribe of Indians of Connecticut; and the Narragansett Indian Tribe. Invitations to consult were also sent to the following non-federally recognized Indian groups: Brothertown Indian Nation, Eastern Pequot Tribal Nation; Golden Hill Paugussett Indian Nation; and the Schaghticoke Indian Nation. The Mashantucket Pequot Indian Tribe and the Mohegan Tribe of Indians of Connecticut responded to the invitation and participated in consultation. Other Indian Tribes and/or groups either chose to defer, participated in preliminary phone calls, or did not participate.

Cultural Affiliation

No information about the cultural affiliation of the human remains in this notice are available. The information,

including the results of consultation, identified:

1. No earlier group connected to the human remains.
2. No Indian Tribe or Native Hawaiian organization connected to the human remains.
3. No relationship of shared group identity between the earlier group and the Indian Tribe or Native Hawaiian organization that can be reasonably traced through time.

Determinations

Wesleyan University has determined that:

- The human remains described in this notice represent the physical remains of 16 individuals of Native American ancestry.
- No known lineal descendant who can trace ancestry to the human remains in this notice has been identified.
- No Indian Tribe or Native Hawaiian organization with cultural affiliation to the human remains in this notice has been clearly or reasonably identified.
- The Mashantucket Pequot Indian Tribe and the Mohegan Tribe of Indians of Connecticut have requested transfer of the human remains described in this notice.

Requests for Repatriation

Written requests for repatriation of the human remains in this notice must be sent to the authorized representative identified in this notice under **FOR FURTHER INFORMATION CONTACT**. Requests for repatriation may be submitted by any lineal descendant, Indian Tribe, or Native Hawaiian organization who shows, by a preponderance of the evidence, that the requestor is a lineal descendant or an Indian Tribe or Native Hawaiian organization with cultural affiliation.

Repatriation, transfer, or reinterment of the human remains described in this notice may occur on or after November 29, 2024. If requests for repatriation are received, Wesleyan University must evaluate the requests and respond in writing to the requestors. Wesleyan University is responsible for sending a copy of this notice to any consulting lineal descendant, Indian Tribe, or Native Hawaiian organization.

Authority: Native American Graves Protection and Repatriation Act, 25 U.S.C. 3003, and the implementing regulations, 43 CFR 10.10.

Dated: October 25, 2024.

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024–25189 Filed 10–29–24; 8:45 am]

BILLING CODE 4312–52–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–WASO–NAGPRA–NPS0038965;
PPWOCRADN0–PCU00RP14.R50000]

Notice of Intended Repatriation: University of Georgia, Laboratory of Archaeology, Athens, GA

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), the University of Georgia, Laboratory of Archaeology intends to repatriate certain cultural items that meet the definition of unassociated funerary objects and that have a cultural affiliation with the Indian Tribes or Native Hawaiian organizations in this notice.

DATES: Repatriation of the cultural items in this notice may occur on or after November 29, 2024.

ADDRESSES: Amanda Thompson, University of Georgia, Laboratory of Archaeology, 1125 Whitehall Road, Athens, GA 30605, telephone (706) 542–8737, email arobthom@uga.edu.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service's administrative responsibilities under NAGPRA. The determinations in this notice are the sole responsibility of the University of Georgia, Laboratory of Archaeology, and additional information on the determinations in this notice, including the results of consultation, can be found in the summary or related records. The National Park Service is not responsible for the determinations in this notice.

Abstract of Information Available

A total of 2,739 cultural items have been requested for repatriation. The 2,739 of unassociated funerary objects are a copper axe, pipe effigy fragment, lithics, indigenous ceramics, sherds, faunal remains including drum teeth, shell, unmodified slate fragment, mica, botanical shell bead, eroded garnet, burnt clay, glass, flotation samples.

In approximately the 1940s, one copper axe was removed from 9BR24 Shaw Mound, a burial mound, in Bartow County, Georgia. The collection was excavated by the landowner, Frank Shaw, in 1940. The object was given to the Department of Anthropology in 1994. This object was collected from the burial mound is considered an unassociated funerary object. No known research has been conducted on these objects. There is no record of any

potentially hazardous substances used to treat the unassociated funerary objects.

In 1984, Bill Kilmer collected 26 lithics and indigenous ceramics from 9BR26 in Bartow County, Georgia. The material currently housed at the University of Georgia Laboratory of Archaeology was collected by Bill Killmer in 1984. These objects were noted as being collected above the burial and are being considered unassociated funerary objects. No known research has been conducted on these objects. There is no record of any potentially hazardous substances used to treat the unassociated funerary objects.

In 1991, a collection that is believed to be from 9BR57, Garfield in Bartow County, Georgia was transferred to the University of Georgia, Laboratory of Archaeology. It is unclear who transferred the collection. James Chapman's name is associated with the material housed at the UGA Laboratory of Archaeology. The one lot (1983.9) faunal remains are included here as unassociated funerary objects for the proveniences that contain ancestral remains. It is not known what, if any additional research has been done on these objects. There is no record of any potentially hazardous substances used to treat the unassociated funerary objects.

In 1951, Mary Kellog surface collected five lithics, sherds, and unmodified slate fragment from 9BR195, in Bartow County, Georgia. Due to proximity of proveniences with ancestors, these objects are considered unassociated funerary objects. It is not known what, if any additional research has been done on these objects. There is no record of any potentially hazardous substances used to treat the unassociated funerary objects.

In 1951, Arthur Kelly and Mary Kellog excavated 59 indigenous ceramics, lithics, mica, faunal, botanical, shell bead, and eroded garnet from 9BR199, Cora Harris Cave in Bartow County, Georgia. Because of the nature of disturbance from looting at the site, these objects are considered unassociated funerary objects to the ancestors excavated at the site. It is not known what, if any additional research has been done on these objects. There is no record of any potentially hazardous substances used to treat the unassociated funerary objects.

In 1951, Arthur Kelly and Mary Kellog excavated 329 indigenous ceramics, lithics, faunal, glass, burnt clay, botanicals, faunal, and shell from 9BR201, Raines Cave No. 2 in Bartow County, Georgia. Because of the nature

of disturbance from looting at the site, these objects are considered unassociated funerary objects to the ancestors excavated at the site. It is not known what, if any additional research has been done on these objects. There is no record of any potentially hazardous substances used to treat the unassociated funerary objects.

From 1988–1990, one bird effigy pipe fragment was removed from 9BR2 Leake, a site in Bartow County. The collection including 31 burials were excavated by University of Georgia during those years and then housed at the University of Georgia, Laboratory of Archaeology. While much research has occurred at this site, it does not appear that any research has occurred on this pipe fragment. There is no record of any potentially hazardous substances used to treat the unassociated funerary objects.

From 1968 to 2009, 391 indigenous ceramics, lithics, soil, burnt clay, faunal including drum fish teeth, and flotation samples were collected from various periods of excavations and surface collections were made at 9GO4, Thompson, in Gordon County, Georgia. These objects are considered unassociated funerary objects due to their proximity to ancestor remains. There is no record of any potentially hazardous substances used to treat the unassociated funerary objects.

In 1968, WW Scheppler surface collected 1,813 indigenous ceramics, lithics, faunal, and shell at 9GO8, Baxter, in Gordon County, Georgia. These objects are considered unassociated funerary objects due to their proximity to ancestor remains. There is no record of any potentially hazardous substances used to treat the unassociated funerary objects.

Determinations

Pursuant to NAGPRA and its implementing regulations, and after consultation with the appropriate Indian Tribes and Native Hawaiian organizations, University of Georgia, Laboratory of Archaeology has determined that:

- The 2,739 cultural items described above are reasonably believed to have been placed with or near individual human remains at the time of death or later as part of the death rite or ceremony and are believed, by a preponderance of the evidence, to have been removed from a specific burial site of a Native American individual.
- There is a relationship of shared group identity that can be reasonably traced between the cultural items and The Muscogee (Creek) Nation.

Requests for Repatriation

Additional, written requests for repatriation of the cultural items in this notice must be sent to the authorized representative identified in this notice under **ADDRESSES**. Requests for repatriation may be submitted by any lineal descendant, Indian Tribe, or Native Hawaiian organization not identified in this notice who shows, by a preponderance of the evidence, that the requestor is a lineal descendant or a culturally affiliated Indian Tribe or Native Hawaiian organization.

Repatriation of the cultural items in this notice to a requestor may occur on or after November 29, 2024. If competing requests for repatriation are received, the University of Georgia, Laboratory of Archaeology must determine the most appropriate requestor prior to repatriation. Requests for joint repatriation of the cultural items are considered a single request and not competing requests. The University of Georgia, Laboratory of Archaeology is responsible for sending a copy of this notice to the Indian Tribes and Native Hawaiian organizations identified in this notice and to any other consulting parties.

Authority: Native American Graves Protection and Repatriation Act, 25 U.S.C. 3004 and the implementing regulations, 43 CFR 10.9.

Dated: October 25, 2024.

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024–25194 Filed 10–29–24; 8:45 am]

BILLING CODE 4312–52–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–WASO–NAGPRA–NPS0038956; PPWOCRADN0–PCU00RP14.R50000]

Notice of Inventory Completion: The San Diego Archaeological Center, San Diego, CA

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), the San Diego Archaeological Center has completed an inventory of human remains and associated funerary objects and has determined that there is a cultural affiliation between the human remains and associated funerary objects and Indian Tribes or Native Hawaiian organizations in this notice.

DATES: Repatriation of the human remains and associated funerary objects

in this notice may occur on or after November 29, 2024.

ADDRESSES: Stephanie Sandoval, Executive Director, The San Diego Archaeological Center, 16666 San Pasqual Valley Rd., Escondido, CA 92027, telephone (760) 291-0370, email sjsandoval@sandiegoarchaeology.org.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service's administrative responsibilities under NAGPRA. The determinations in this notice are the sole responsibility of the San Diego Archaeological Center, and additional information on the determinations in this notice, including the results of consultation, can be found in the inventory or related records. The National Park Service is not responsible for the determinations in this notice.

Abstract of Information Available

Based on the information available, human remains representing at least three individuals have been identified from three archaeological sites. The approximately 17,056 associated funerary objects include lithic tools, faunal bone and shell tools and ecofacts, shell beads/pendants, post-contact historic materials, samples: charcoal, seeds, vegetal materials, ceramics and pipe fragments, and crystals were removed from 13 archaeological sites. The human remains were removed from sites in San Diego County near the Cities of Julian (CA-SDI-4586), Poway (CA-SDI-6669), and Santee (CA-SDI-20778). The associated funerary objects were removed from sites throughout San Diego County, including near the Cities of Alpine (CA-SDI-14283), Campo (CA-SDI-15908), Del Mar (CA-SDI-4609), Julian (CA-SDI-4586), Poway (CA-SDI-525; CA-SDI-4606; CA-SDI-6669), San Diego (CA-SDI-39; CA-SDI-14152), and Santee (CA-SDI-20778). These collections were brought to the San Diego Archaeological Center between 1998 and 2015 for long-term curation. The human remains and associated funerary objects were unknown at the time of delivery. They were identified while preparing the collection for permanent curation. The human remains and associated funerary objects were placed in the Center's secure NAGPRA Vault, awaiting Tribal notification, consultation, and repatriation. The project reports state that these sites fall within the traditional Kumeyaay territory. No known potentially hazardous substances have been used to treat any of the human remains nor associated funerary objects.

Cultural Affiliation

Based on the information available and the results of consultation, cultural affiliation is reasonably identified by the geographical location or acquisition history of the human remains and associated funerary objects described in this notice.

Determinations

The San Diego Archaeological Center has determined that:

- The human remains described in this notice represent the physical remains of at least three individuals of Native American ancestry.
- After consultation with the Kumeyaay Cultural Repatriation Committee (KCRC) it was determined that the approximately 17,056 associated funerary objects described in this notice are reasonably believed to have been placed intentionally with or near individual Human Remains at the time of death or later as part of the death rite or ceremony.
- There is a connection between the human remains and associated funerary objects described in this notice and the Campo Band of Diegueno Mission Indians of the Campo Indian Reservation, California; Capitan Grande Band of Diegueno Mission Indians of California (Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation, California; Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians of the Viejas Reservation, California); Ewiiapaayp Band of Kumeyaay Indians, California; Iipay Nation of Santa Ysabel, California; Inaja Band of Diegueno Mission Indians of the Inaja and Cosmit Reservation, California; Jamul Indian Village of California; La Posta Band of Diegueno Mission Indians of the La Posta Indian Reservation, California; Manzanita Band of Diegueno Mission Indians of the Manzanita Reservation, California; Mesa Grande Band of Diegueno Mission Indians of the Mesa Grande Reservation, California; San Pasqual Band of Diegueno Mission Indians of California; and the Sycuan Band of the Kumeyaay Nation.

Requests for Repatriation

Written requests for repatriation of the human remains and associated funerary objects in this notice must be sent to the authorized representative identified in this notice under **ADDRESSES**. Requests for repatriation may be submitted by:

1. Any one or more of the Indian Tribes or Native Hawaiian organizations identified in this notice.
2. Any lineal descendant, Indian Tribe, or Native Hawaiian organization

not identified in this notice who shows, by a preponderance of the evidence, that the requestor is a lineal descendant or a culturally affiliated Indian Tribe or Native Hawaiian organization.

Repatriation of the human remains and associated funerary objects in this notice to a requestor may occur on or after November 29, 2024. If competing requests for repatriation are received, the San Diego Archaeological Center must determine the most appropriate requestor prior to repatriation. Requests for joint repatriation of the human remains and associated funerary objects are considered a single request and not competing requests. The San Diego Archaeological Center is responsible for sending a copy of this notice to the Indian Tribes and Native Hawaiian organizations identified in this notice.

Authority: Native American Graves Protection and Repatriation Act, 25 U.S.C. 3003, and the implementing regulations, 43 CFR 10.10.

Dated: October 25, 2024.

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024-25188 Filed 10-29-24; 8:45 am]

BILLING CODE 4312-52-P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS-WASO-NAGPRA-NPS0038963; PPWOCRADNO-PCU00RP14.R500000]

Notice of Inventory Completion: The San Diego Archaeological Center, San Diego, CA

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), the San Diego Archaeological Center has completed an inventory of human remains and has determined that there is a cultural affiliation between the human remains and Indian Tribes or Native Hawaiian organizations in this notice.

DATES: Repatriation of the human remains in this notice may occur on or after November 29, 2024.

ADDRESSES: Stephanie Sandoval, Executive Director, The San Diego Archaeological Center, 16666 San Pasqual Valley Road, Escondido, CA 92027, telephone (760) 291-0370, email sjsandoval@sandiegoarchaeology.org.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service's administrative responsibilities under NAGPRA. The

determinations in this notice are the sole responsibility of the San Diego Archaeological Center, and additional information on the determinations in this notice, including the results of consultation, can be found in the inventory or related records. The National Park Service is not responsible for the determinations in this notice.

Abstract of Information Available

Based on the information available, human remains representing at least one individual has been reasonably identified. No associated funerary objects have been identified. This site is in the northwest part of San Diego County near the City of Vista. The site (CA-SDI-5775) is on a property located at N3668457 E476305 and was surveyed 06/06/1978. The site was tested in June 1980 by CRM firms Mooney, Jones, and Stokes and in 1978 by RECON (M.J. Hatley and Carol Walker) as part of a cultural assessment program before development of the property. The report described the site as measuring about 50 meters north-south and 40 meters east-west, consisting of dark midden of at least 12–18 inches in depth with flaked lithic tools, flakes and debitage, faunal shell and bone, and ceramics. The collection was brought to the San Diego Archaeological Center on 08/26/2006 for curation. The human remains were identified while preparing the collection for permanent curation. To confirm that it was human, the bone was inspected by the San Diego County Office of the Medical Examiner. The items were removed from the collection and placed in the Center's NAGPRA Vault awaiting Tribal notification and possible repatriation following their determination that they were human.

Cultural Affiliation

Based on the information available and the results of consultation, cultural affiliation is reasonably identified by the geographical location or acquisition history of the human remains described in this notice.

Determinations

The San Diego Archaeological Center has determined that:

- The human remains described in this notice represent the physical remains of at least one individual of Native American ancestry.
- There is a reasonable connection between the human remains described in this notice and the La Jolla Band of Luiseno Indians; Pala Band of Mission Indians; Pauma Band of Luiseno Mission Indians of the Pauma & Yuima Reservation, California; Pechanga Band of Indians (*previously* listed as Pechanga

Band of Luiseno Mission Indians of the Pechanga Reservation, California); Rincon Band of Luiseno Mission Indians of the Rincon Reservation, California; and the Soboba Band of Luiseno Indians, California.

Requests for Repatriation

Written requests for repatriation of the human remains in this notice must be sent to the authorized representative identified in this notice under **ADDRESSES**. Requests for repatriation may be submitted by:

1. Any one or more of the Indian Tribes or Native Hawaiian organizations identified in this notice.
2. Any lineal descendant, Indian Tribe, or Native Hawaiian organization not identified in this notice who shows, by a preponderance of the evidence, that the requestor is a lineal descendant or a culturally affiliated Indian Tribe or Native Hawaiian organization.

Repatriation of the human remains in this notice to a requestor may occur on or after November 29, 2024. If competing requests for repatriation are received, the San Diego Archaeological Center must determine the most appropriate requestor prior to repatriation. Requests for joint repatriation of the human remains are considered a single request and not competing requests. The San Diego Archaeological Center is responsible for sending a copy of this notice to the Indian Tribes and Native Hawaiian organizations identified in this notice.

Authority: Native American Graves Protection and Repatriation Act, 25 U.S.C. 3003, and the implementing regulations, 43 CFR 10.10.

Dated: October 25, 2024

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024-25192 Filed 10-29-24; 8:45 am]

BILLING CODE 4312-52-P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS-WASO-NAGPRA-NPS0038953; PPWOCRADNO-PCU00RP14.R50000]

Notice of Intended Repatriation: South Dakota State Archaeological Research Center, Rapid City, SD, and South Dakota State Historical Society Pierre, SD

AGENCY: National Park Service, Interior.
ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), the South Dakota State Historical Society's

divisions of the Archaeological Research Center (ARC) and the State's Museum (SDSHM) intend to repatriate a certain cultural item that meets the definition of an unassociated funerary object and that has a cultural affiliation with the Indian Tribes or Native Hawaiian organizations in this notice.

DATES: Repatriation of the cultural item in this notice may occur on or after November 29, 2024.

ADDRESSES: Dustin Lloyd, South Dakota State Historical Society Archaeological Research Center, 937 East North Street, Suite 201, Rapid City, SD 57701, telephone (605) 391-2928, email dustin.lloyd@state.sd.us.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service's administrative responsibilities under NAGPRA. The determinations in this notice are the sole responsibility of the South Dakota State Historical Society (SDSHS), and additional information on the determinations in this notice, including the results of consultation, can be found in the summary or related records. The National Park Service is not responsible for the determinations in this notice.

Abstract of Information Available

A total of one cultural item has been requested for repatriation. The one unassociated funerary object is a political peace medal, a Jefferson Peace Medal.

Based on the information available from both the SDSHS donor records, collector's notes, historical accounts, and oral tradition, this Jefferson Peace medal was removed from its burial context in a Sahnish (Arikara) village in 1935 by a teenager. The political medal in question is reasonably believed to have been presented to the Arikara chief Lightning Crow in 1804 by Lewis and Clark. Upon their return to the village in 1806, the medal had been transferred to another Arikara chief, Grey Eyes. Chief Grey Eyes was known to have the medal in his possession at or around the time of this death.

The medal was retained by the family of the teenage boy until its donation to the SDSHS on September 17, 2004. Recently, the family provided additional information on the medal's origins, which confirmed its original provenience from a burial context.

Despite establishing a reasonable owner of the unassociated funerary object, no lineal descendant was located. At this time, SDSHS staff have not identified any known lineal descendant(s).

Additionally, the above-described unassociated funerary object was not

treated with any type of hazardous chemicals/substances nor treated with any type of preservation agent or chemical while in the care and custody of the SDSHS. It is reasonably believed that the previously mentioned private citizens did not treat the medal with any type of hazardous or preservative chemical, substance, or agent.

Determinations

The SDSHS have determined that:

- The one unassociated funerary object described in this notice is reasonably believed to have been placed intentionally with or near human remains, and is connected, either at the time of death or later as part of the death rite or ceremony of a Native American culture according to the Native American traditional knowledge of a lineal descendant, Indian Tribe, or Native Hawaiian organization. The unassociated funerary object has been identified by a preponderance of the evidence as related to human remains, specific individuals, or families, or removed from a specific burial site or burial area of an individual or individuals with cultural affiliation to an Indian Tribe or Native Hawaiian organization.

- There is a reasonable connection between the cultural item described in this notice and the Three Affiliated Tribes of the Fort Berthold Reservation, North Dakota.

Requests for Repatriation

Additional, written requests for repatriation of the cultural item in this notice must be sent to the authorized representative identified in this notice under **ADDRESSES**. Requests for repatriation may be submitted by any lineal descendant, Indian Tribe, or Native Hawaiian organization not identified in this notice who shows, by a preponderance of the evidence, that the requestor is a lineal descendant or a culturally affiliated Indian Tribe or Native Hawaiian organization.

Repatriation of the cultural item in this notice to a requestor may occur on or after November 29, 2024. If competing requests for repatriation are received, the SDSHS must determine the most appropriate requestor prior to repatriation. Requests for joint repatriation of the cultural item are considered a single request and not competing requests. The SDSHS is responsible for sending a copy of this notice to the Indian Tribes and Native Hawaiian organizations identified in this notice and to any other consulting parties.

Authority: Native American Graves Protection and Repatriation Act, 25

U.S.C. 3004 and the implementing regulations, 43 CFR 10.9.

Dated: October 22, 2024.

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024–25178 Filed 10–29–24; 8:45 am]

BILLING CODE 4312–52–P

DEPARTMENT OF THE INTERIOR

National Park Service

**[NPS–WASO–NAGPRA–NPS0038962;
PPWOCRADNO–PCU00RP14.R50000]**

Notice of Intended Repatriation: Oakland Museum of California, Oakland, CA

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), the Oakland Museum of California intends to repatriate certain cultural items that meet the definition of sacred objects and objects of cultural patrimony and that have a cultural affiliation with the Indian Tribes or Native Hawaiian organizations in this notice.

DATES: Repatriation of the cultural items in this notice may occur on or after November 29, 2024.

ADDRESSES: Anna Bunting, NAGPRA Coordinator, Oakland Museum of California, 1000 Oak Street, Oakland, CA 94607, telephone (510) 318–8493, email nagpra@museumca.org.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service's administrative responsibilities under NAGPRA. The determinations in this notice are the sole responsibility of the Oakland Museum of California, and additional information on the determinations in this notice, including the results of consultation, can be found in the summary or related records. The National Park Service is not responsible for the determinations in this notice.

Abstract of Information Available

A total of 332 cultural items have been requested for repatriation. The 332 sacred objects/objects of cultural patrimony are listed below.

The majority of the items requested for repatriation were acquired by the Oakland Public Museum. The Oakland Public Museum (OPM) and its collections were merged into the Oakland Museum of California (OMCA) in 1969. Unless otherwise noted below, there are no known dates or circumstances related to when any of

the items on this claim were originally removed from their source communities. Unless otherwise noted below, all items included on the claim were described by OPM/OMCA as “Klamath River Indian” at the time of acquisition.

One hundred and twenty-four items (H16.10A–H16.249) representing two smoking pipes, three stirring paddles, 10 spoons, three dishes, one model boat, one lot of net gauges, two nets, nine lots of lithics (*i.e.*, spear, arrow, and drill points, knife), one deer snare, six arrows, one quiver, one lot of woodpecker scalps, one lot of iris fiber, 20 regalia items (necklace, hair ornament, headdress, mantle, dance skirts), one deerskin, one dance wand, and 61 baskets (basket bowls, basket hats, basket trays, basket cradle, tobacco basket, basket plaque, burden basket) were purchased by the Oakland Public Museum on April 6, 1909 from John Dagget. The three dishes were later described as “lower Klamath.” Larry Dawson (Senior Museum Anthropologist at UC Berkeley) attributed the four basket plaques as Yurok. Ron Johnson (Clarke Museum) attributed one basket hat as Karuk. The Pulikla Tribe of Yurok People (formerly Resighini Rancheria) attributes the basket hat as Yurok. The Yurok Tribe attributed smoking pipes, dishes, dance skirts, and headbands as Yurok.

One storage basket (H16.576) was purchased by the Oakland Public Museum on April 6, 1909.

Twenty-seven items (H16.984–H16.1046) representing one fox skin, 20 regalia items (head roll, headdress, plume, headband, skirts, necklace), two spoons, one eel skinner, and three basket bowls, were purchased from Paul A. Brizard whose family owned and operated A. Brizard, Inc. Department Store in Arcata, California by the Oakland Public Museum, January 22, 1910. Researchers Lynn Risling and Julian Lang attributed one dance skirt as Karuk. Information provided by the Pulikla Tribe of Yurok People (formerly Resighini Rancheria) attributes the dance skirt as Yurok.

Five items (H16.1903–1909) representing three basket bowls and two basket hats were gifted to the Oakland Public Museum on January 28, 1913 by Mrs. William B. Pringle. Museum records show Mrs. T.R. Hutchinson as the collector.

One baby carrier (H16.3039) was gifted to the Oakland Public Museum on October 31, 1919 by Amelia Sellander.

One dance apron (H16.3050) was gifted to the Oakland Public Museum, June 10, 1920 by Mrs. R.L. Rowley.

Thirteen items (H16.3251–H16.3265) representing 11 basket hats and two trinket baskets were gifted to the Oakland Public Museum, October 19, 1922 by Sarah W. Deming.

One basket hat (H16.3418) was gifted to the Oakland Public Museum, October 26, 1922 by Mrs. F.P. Cutting. Past museum records attributed the item to Modoc Indians or Hupa. Both the Yurok Tribe and the Pulikla Tribe of Yurok People (formerly Resighini Rancheria) attributed the basket hat as Yurok.

One basket hat (H16.3418) was gifted to the Oakland Public Museum, June 18, 1925, by Mrs. C.H. King. The basket hat was described as Lower Klamath River and Yurok.

Seven baskets (H16.3529–H16.3551 and H16.4355–H16.4365) were gifted to the Oakland Public Museum, July 17, 1927 by Mrs. Henry Weatherbee.

One smoking pipe (H16.3683) was gifted to the Oakland Public Museum, September 7, 1927 by Mrs. Philip E. Bowles.

One model basket cradle (H16.3720) was gifted to the Oakland Public Museum, December 27, 1927 by Mrs. W.P. Winchester.

Eleven items (H16.3764–H16.3784) representing 10 baskets and one bow, were gifted to the Oakland Public Museum, 12/13/1928 by Dr. Hayward G. Thomas. Larry Dawson (Senior Museum Anthropologist at UC Berkeley) attributed two basket trays as Yurok. Both the Yurok Tribe and the Pulikla Tribe of Yurok People (formerly Resighini Rancheria) attributed the bow as Yurok.

Three items (H16.3945, H16.4061, H16.4073) representing one basket bowl and two necklaces were purchased by the Oakland Public Museum, May 14, 1932 from Mrs. Viola Roseberry. The two necklaces were described as “Northwest California Indian.” The Pulikla Tribe of Yurok People (formerly Resighini Rancheria) has attributed the necklaces as Yurok.

Two items (H16.4125 and H16.4516) representing one necklace and one basket hat were gifted to the Oakland Public Museum, May 20, 1942 by Sue Shoemaker. Ron Johnson (Clarke Museum) attributed the basket hat as Yurok.

One basket hat (H16.4164) was gifted to the Oakland Museum, July 2, 1933 by Lily Cole. Ron Johnson (Clarke Museum) attributed the hat as Karuk or Yurok. The Pulikla Tribe of Yurok People (formerly Resighini Rancheria) attributes the basket hat as Yurok.

Eight baskets (H16.4203–H16.4216) were gifted to the Oakland Public Museum, October 5, 1936 by Mona Crellin.

Three baskets (H16.4243–H16.4247) were gifted to the Oakland Public Museum, April 5, 1938 by Mrs. Nettie Caveney.

One model basket cradle (H16.4299) was gifted to the Oakland Public Museum, April 26, 1943 by an anonymous donor.

Six baskets (H16.4333–H16.4340) were gifted to the Oakland Public Museum, November 19, 1938 by Mrs. L.G. Wolfe.

One fish drying tray (H16.4452) was loaned to the Oakland Public Museum in 1923 and gifted April 30, 1947 by Lillie S.B. Swain.

One basket hat (H16.4498) was gifted to the Oakland Public Museum, March 10, 1941 by Mrs. Charles H. Jurgens.

Three baskets (H16.4686–H16.4694) were gifted to the Oakland Public Museum, May 2, 1956 by Herbert A. Bruntsch.

Nineteen baskets (H16.4741–H16.4824) including basket hats, basket cradles and basket bowls were gifted to Oakland Public Museum, November 11, 1961 by Florence A. Chown. Museum files show the collector as Alfred Henry Mason Seal. Seal traveled on business trips up and down Northern California and Oregon in the late 1800s and early 1900s and he acquired the baskets during these travels. Ron Johnson (Clarke Museum) attributes one basket as Yurok.

One basket (H16.4870) was gifted to the Oakland Public Museum as part of the bequest of Laetitia Meyer, October 1961.

One basket (H4099.3) was gifted to the Oakland Public Museum, February 8, 1963 by Mrs. Haughton Sawyer.

Three miniature basket cradles (H4153.10A, B, F) were gifted to the Oakland Public Museum, December 2, 1959 by Dorothy Haberman. Notes in the donor files state that items were collected circa 1897–1899. The objects came from the collections of F.W. Carlyon and his sister, Anna E. Vaughan.

Two baskets (H4364.93 and H4364.113) were originally received by the Oakland Public Museum in 1920 as a loan from Mrs. E. Shanklin. The loan was converted to a gift in 1934.

Three baskets (H4422.5–.7) were gifted to the Oakland Public Museum, July 1966 by Bernice Baxter.

Three baskets (H4575.6A–B, H4575.7) were gifted to the Oakland Public Museum, April 24, 1967 by Mrs. Julius E. Lisbon.

One basket (H68.52.4) was gifted to the Oakland Public Museum, March 21, 1968 by Mr. and Mrs. Chester Zinn.

Four baskets (H68.57.3–.5, .7) were gifted to the Oakland Public Museum,

March 20, 1968 by Mr. and Mrs. W.R. McGary. Note in the donor file says “the pieces were gathered by Micah Chrisman, San Francisco, California.”

One basket (H68.154.21G) was gifted to the Oakland Public Museum, August 19, 1968 by Mrs. George Werkley.

One basket hat (H68.192.4) was gifted to the Oakland Public Museum, October 25, 1968 by Jessie Calder.

Five baskets (H69.279.1A, .6, .32, .33, .56) were gifted to the Oakland Museum, August 11, 1969 by Mrs. W.J. Gardner.

Two baskets (H79.9.1 and .2) were gifted to the Oakland Museum, January 28, 1970 by Eleanor Jahn. Notes in the donor file say the items were “purchased at auction by [the] donor’s father.” Larry Dawson (Senior Museum Anthropologist at UC Berkeley) described the basket bowl as “Karuk type.” The Resighini Rancheria of Yurok People attributes it as Yurok.

Thirty-five items (H74.639.2057–.2983 and H90.0.215, .218, .241, .243, .244) representing 28 baskets (including basket hats, baskets, cooking basket, burden baskets, hopper basket, mush dipper); four necklaces, one apron, one quiver, one deer dew claw, have no known acquisition information. These catalog numbers were assigned in 1974 and 1990 for use with objects of unknown origin encountered during inventories of the collections. A few items have some information attached to them: H74.639.2086, basket hat: piece of tape stuck to basket reads: “Hat—N. Calif., Mrs. Cain’s (?) donation, Oakland, Park Dept.” H74.639.2230, basket: “Purchased from Rev. Leo Brown Plateau/Lower Klamath River”. H74.639.2231, basket: “From Mrs. Grant Hunt, 1121 Mandana Blvd. Oakland, CA.” H74.639.2982–.2983, basket hat: “Possible connection to Alice Eakin Collection.” Basket (H74.639.2057) is described as Yurok. Necklace (H74.639.2211) is described as Northwest CA. Indian. The Resighini Rancheria attributes this as Yurok. Researchers Lynn Risling and Julian Lang attribute apron (H74.639.2218) as Karuk. The Resighini Rancheria attributes the apron as Yurok.

Eight baskets (H74.703.18, .32, .40, .145, .149, .151, .153, .169) were gifted to the Oakland Museum, February 26, 1975 by the Pardee Sisters. Notes in the donor file state “objects probably collected between late 1890s and 1920s by their parents George and Helen Pardee who visited Klamath lumber mills between 1903–1907.

Five baskets (H79.75.5, .12, .20, .23, .28) including a basket water bottle, basket hats and basket bowls, were gifted to the Snow Museum in August,

1939, by Clark A. Bowen. Notes in the donor file say the items were “collected between 1900–1920. Collected by Frank A. Bowen during the building of wireless stations from Nome to San Diego and while traveling.” The basket water bottle, and two basket bowls are described in museum records as “Lower Klamath River, Yurok.” Basket hat (H79.75.12) is described in museum records as “Hupa.” The Resighini Rancheria attributes this basket hat as Yurok.

One meal sifter basket (H80.85.8) was gifted to the Oakland Museum, August 15, 1980 by Rhona Williams. Museum records describe this basket as Yurok.

Four baskets (H83.157.1–.5) were gifted to the Oakland Museum, December 22, 1983 by Oraville Jane Tuttle.

One basket hat (H84.64.3) was gifted to the Oakland Museum, June 18, 1984 by Mrs. Raymond Crichton.

One basket (H98.8.56) received by the Oakland Museum, March 26, 1998 as part of the bequest from the will of Lois Chambers Stone.

One basket hat (2002.10.8) gifted to the Oakland Museum, May 17, 2002 by Bernice M. Mayer.

Two baskets (2004.108.1–.2) gifted to the Oakland Museum, December 9, 2004 as part of the estate of Fred A Countryman.

Two baskets (2007.22.3 and .12) gifted to the Oakland Museum, February 8, 2007 as part of the estate of Donald V. Hemphill. Former OMCA curator Christiaan Kliger described these baskets as Yurok or possibly Hupa.

Three basket hats (2007.91.1, .2, .3) received by the Oakland Museum, February 9, 2000 as part of a bequest from the Ann Proctor Trust. Former OMCA curator Christiaan Kliger described these baskets as “Lower Klamath River, possibly Hupa.” Both the Yurok Tribe and the Resighini Rancheria attribute these as Yurok.

In 2007, random testing of OMCA’s basket collection was conducted using pXRF technology. Eight baskets included in this request for repatriation were tested at that time with negative results for both mercury and arsenic.

Determinations

The Oakland Museum of California has determined that:

- The 332 sacred objects/objects of cultural patrimony described in this notice are, according to the Native American traditional knowledge of an Indian Tribe or Native Hawaiian organization, specific ceremonial objects needed by a traditional Native American religious leader for present-day adherents to practice traditional Native

American religion, and have ongoing historical, traditional, or cultural importance central to the Native American group, including any constituent sub-group (such as a band, clan, lineage, ceremonial society, or other subdivision).

- There is a reasonable connection between the cultural items described in this notice and the Resighini Rancheria, California.

Requests for Repatriation

Additional, written requests for repatriation of the cultural items in this notice must be sent to the authorized representative identified in this notice under **ADDRESSES**. Requests for repatriation may be submitted by any lineal descendant, Indian Tribe, or Native Hawaiian organization not identified in this notice who shows, by a preponderance of the evidence, that the requestor is a lineal descendant or a culturally affiliated Indian Tribe or Native Hawaiian organization.

Repatriation of the cultural items in this notice to a requestor may occur on or after November 29, 2024. If competing requests for repatriation are received, the Oakland Museum of California must determine the most appropriate requestor prior to repatriation. Requests for joint repatriation of the cultural items are considered a single request and not competing requests. The Oakland Museum of California is responsible for sending a copy of this notice to the Indian Tribes and Native Hawaiian organizations identified in this notice and to any other consulting parties.

Authority: Native American Graves Protection and Repatriation Act, 25 U.S.C. 3004 and the implementing regulations, 43 CFR 10.9.

Dated: October 25, 2024.

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024–25191 Filed 10–29–24; 8:45 am]

BILLING CODE 4312–52–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–WASO–NAGPRA–NPS0038966;
PPWOCRADNO–PCU00RP14.R50000]

Notice of Intended Repatriation: Corning Museum of Glass, Corning, NY

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), the

Corning Museum of Glass (CMOG) intends to repatriate a certain cultural item that meets the definition of a sacred object and that has a cultural affiliation with the Indian Tribes or Native Hawaiian organizations in this notice.

DATES: Repatriation of the cultural item in this notice may occur on or after November 29, 2024.

ADDRESSES: Katherine Larson, Corning Museum of Glass, One Museum Way, Corning, NY 14830, telephone (607) 438–5147, email larsonka@cmog.org.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service’s administrative responsibilities under NAGPRA. The determinations in this notice are the sole responsibility of the CMOG, and additional information on the determinations in this notice, including the results of consultation, can be found in the summary or related records. The National Park Service is not responsible for the determinations in this notice.

Abstract of Information Available

A total of one cultural item has been requested for repatriation. The one sacred object is an obsidian bifaced blade. This object is a ceremonial dance blade considered sacred by the Wiyot Tribe. It entered the CMOG collection in 1965 as a gift from a New York City-based dealer. XRF analysis conducted in 2020 identified the obsidian source as Cascade Mountains. No hazardous substances used to treat the object are known.

Determinations

The Corning Museum of Glass has determined that:

- The one sacred object described in this notice is a specific ceremonial object needed by a traditional Native American religious leader for present-day adherents to practice traditional Native American religion, according to the Native American traditional knowledge of a lineal descendant, Indian Tribe, or Native Hawaiian organization.

- There is a reasonable connection between the cultural items described in this notice and the Wiyot Tribe, California.

Requests for Repatriation

Additional, written requests for repatriation of the cultural item in this notice must be sent to the authorized representative identified in this notice under **ADDRESSES**. Requests for repatriation may be submitted by any lineal descendant, Indian Tribe, or Native Hawaiian organization not

identified in this notice who shows, by a preponderance of the evidence, that the requestor is a lineal descendant or a culturally affiliated Indian Tribe or Native Hawaiian organization.

Repatriation of the cultural item in this notice to a requestor may occur on or after November 29, 2024. If competing requests for repatriation are received, the Corning Museum of Glass must determine the most appropriate requestor prior to repatriation. Requests for joint repatriation of the cultural item are considered a single request and not competing requests. The Corning Museum of Glass is responsible for sending a copy of this notice to the Indian Tribes and Native Hawaiian organizations identified in this notice and to any other consulting parties.

Authority: Native American Graves Protection and Repatriation Act, 25 U.S.C. 3004 and the implementing regulations, 43 CFR 10.9.

Dated: October 25, 2024.

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024-25195 Filed 10-29-24; 8:45 am]

BILLING CODE 4312-52-P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS-WASO-NAGPRA-NPS0038964;
PPWOCRADN0-PCU00RP14.R50000]

Notice of Inventory Completion: The San Diego Archaeological Center, San Diego, CA

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), the San Diego Archaeological Center has completed an inventory of human remains and associated funerary objects and has determined that there is a cultural affiliation between the human remains and associated funerary objects and Indian Tribes or Native Hawaiian organizations in this notice.

DATES: Repatriation of the human remains and associated funerary objects in this notice may occur on or after November 29, 2024.

ADDRESSES: Stephanie Sandoval, Executive Director, The San Diego Archaeological Center, 16666 San Pasqual Valley Road, Escondido, CA 92027, telephone (760) 291-0370, email sjsandoval@sandiegoarchaeology.org.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service's administrative

responsibilities under NAGPRA. The determinations in this notice are the sole responsibility of the San Diego Archaeological Center, and additional information on the determinations in this notice, including the results of consultation, can be found in the inventory or related records. The National Park Service is not responsible for the determinations in this notice.

Abstract of Information Available

Based on the information available, human remains representing at least one individual has been reasonably identified. The associated funerary objects are currently zero/undetermined, awaiting consultation results. This site (CA-SDI-16502) is in the north part of San Diego County near the City of Vista. The site boundaries are north of W Vista Way, near Buena Vista Creek. Archaeological testing was performed at CA-SDI-16,502 on October 26, 29, and November 1, 2004. The purpose of archaeological testing was to determine the horizontal and vertical extent of any intact cultural deposits within the proposed project limits of the American Medical Center complex. The collection was delivered to the San Diego Archaeological Center on May 23, 2005. The human remains were identified in the collection upon curation and sent back to the CRM firm for confirmation by the medical examiner. The medical examiner assessed the remains and determined them to be possibly human. The Native American Heritage Commission named the Pauma Band of Luiseno Indians to be Most Likely Descendant, on behalf of the San Luis Rey (non-Federally recognized) Band. No known potentially hazardous substances have been used to treat any of the human remains nor associated funerary objects.

Cultural Affiliation

Based on the information available, cultural affiliation is reasonably identified by the geographical location or acquisition history of the human remains and associated funerary objects described in this notice.

Determinations

The San Diego Archaeological Center has determined that:

- The human remains described in this notice represent the physical remains of at least one individual of Native American ancestry.
- The associated funerary objects related to the Human Remains described in this notice are unknown, awaiting consultation results.
- There is a reasonable connection between the human remains and

associated funerary objects described in this notice and the Pauma Band of Luiseno Mission Indians of the Pauma & Yuima Reservation, California.

Requests for Repatriation

Written requests for repatriation of the human remains and associated funerary objects in this notice must be sent to the authorized representative identified in this notice under **ADDRESSES**. Requests for repatriation may be submitted by:

1. Any one or more of the Indian Tribes or Native Hawaiian organizations identified in this notice.
2. Any lineal descendant, Indian Tribe, or Native Hawaiian organization not identified in this notice who shows, by a preponderance of the evidence, that the requestor is a lineal descendant or a culturally affiliated Indian Tribe or Native Hawaiian organization.

Repatriation of the human remains and associated funerary objects in this notice to a requestor may occur on or after November 29, 2024. If competing requests for repatriation are received, the San Diego Archaeological Center must determine the most appropriate requestor prior to repatriation. Requests for joint repatriation of the human remains and associated funerary objects are considered a single request and not competing requests. The San Diego Archaeological Center is responsible for sending a copy of this notice to the Indian Tribes and Native Hawaiian organizations identified in this notice.

Authority: Native American Graves Protection and Repatriation Act, 25 U.S.C. 3003, and the implementing regulations, 43 CFR 10.10.

Dated: October 25, 2024

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024-25193 Filed 10-29-24; 8:45 am]

BILLING CODE 4312-52-P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS-WASO-NAGPRA-NPS0038959;
PPWOCRADN0-PCU00RP14.R50000]

Notice of Intended Disposition: U.S. Department of the Interior, Bureau of Reclamation, Region 10: California-Great Basin, Sacramento, CA

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), the U.S. Department of the Interior, Bureau of Reclamation, Region 10 (BLM Region 10) intends to carry out the disposition

of human remains and associated funerary objects, removed from Federal or Tribal lands to the lineal descendants, Indian Tribe, or Native Hawaiian organization with priority for disposition in this notice.

DATES: Disposition of the human remains and associated funerary objects in this notice may occur on or after November 29, 2024. If no claim for disposition is received by October 30, 2025, the human remains and associated funerary objects in this notice will become unclaimed human remains and associated funerary objects.

ADDRESSES: Dr. Melanie Ryan, Bureau of Reclamation, Region 10: California-Great Basin, 2800 Cottage Way, Sacramento, CA 95825, telephone (916) 978-5526, email emryan@usbr.gov.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service's administrative responsibilities under NAGPRA. The determinations in this notice are the sole responsibility of the BLM Region 10, and additional information on the human remains and associated funerary objects in this notice, including the results of consultation, can be found in the related records. The National Park Service is not responsible for the identifications in this notice.

Abstract of Information Available

Based on the information available, human remains representing, at least, one individual of Native American ancestry, have been reasonably identified. The one associated funerary object is an obsidian flake.

The human remains were discovered on March 19, 2017, by the Bureau of Land Management, on the Bureau of Reclamation, Region 10 land at the San Joaquin River Gorge Management Area, Fresno County, California. The human remains and funerary object had been unearthed by natural erosion caused by extensive water drainage episodes over the winter 2016–2017 season.

Determinations

The BLM Region 10 has determined that:

- The human remains described in this notice represent the physical remains of at least one individual of Native American ancestry.
- The one object described in this notice is reasonably believed to have been placed intentionally with or near individual human remains at the time of death or later as part of the death rite or ceremony.
- The Northfork Rancheria of Mono Indians of California has priority for disposition of the human remains and

associated funerary objects described in this notice.

Claims for Disposition

Written claims for disposition of the human remains and associated funerary objects in this notice must be sent to the appropriate official identified in this notice under **ADDRESSES**. If no claim for disposition is received by October 30, 2025, the human remains and associated funerary objects in this notice will become unclaimed human remains and associated funerary objects. Claims for disposition may be submitted by:

1. Any lineal descendant, Indian Tribe, or Native Hawaiian organization identified in this notice.
2. Any lineal descendant, Indian Tribe, or Native Hawaiian organization not identified in this notice who shows, by a preponderance of the evidence, that they have priority for disposition.

Disposition of the human remains and associated funerary objects in this notice may occur on or after November 29, 2024. If competing claims for disposition are received, the BLM Region 10 must determine the most appropriate claimant prior to disposition. Requests for joint disposition of the human remains and associated funerary objects are considered a single request and not competing requests. The BLM Region 10 is responsible for sending a copy of this notice to the lineal descendants, Indian Tribes, and Native Hawaiian organizations identified in this notice and to any other consulting parties.

Authority: Native American Graves Protection and Repatriation Act, 25 U.S.C. 3002, and the implementing regulations, 43 CFR 10.7.

Dated: October 25, 2024.

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024–25190 Filed 10–29–24; 8:45 am]

BILLING CODE 4312–52–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–WASO–NAGPRA–NPS0038955;
PPWOCRADNO–PCU00RP14.R50000]

Notice of Inventory Completion:
Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, MA

AGENCY: National Park Service, Interior.
ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), the Peabody Museum of Archaeology and

Ethnology, Harvard University (PMAE) has completed an inventory of human remains and has determined that there is a cultural affiliation between the human remains and Indian Tribes or Native Hawaiian organizations in this notice. The human remains were collected at the Laboratory of Anthropology, Santa Fe County, NM.

DATES: Repatriation of the human remains in this notice may occur on or after November 29, 2024.

ADDRESSES: Jane Pickering, Peabody Museum of Archaeology and Ethnology, Harvard University, 11 Divinity Avenue, Cambridge, MA 02138, telephone (617) 496–2374, email jpickering@fas.harvard.edu.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service's administrative responsibilities under NAGPRA. The determinations in this notice are the sole responsibility of the PMAE, and additional information on the determinations in this notice, including the results of consultation, can be found in the inventory or related records. The National Park Service is not responsible for the determinations in this notice.

Abstract of Information Available

Based on the information available, human remains representing, at minimum, one individual was collected at the Laboratory of Anthropology, Santa Fe County, NM. The human remains are hair clippings collected from one individual who was recorded as being 32 years old and identified as “San Ildefonso.” An unknown collector took the hair clippings at the Laboratory of Anthropology between 1930 and 1933. They sent the hair clippings to George Woodbury, who donated the hair clippings to the PMAE in 1935. No associated funerary objects are present.

Cultural Affiliation

Based on the available information and the results of consultation, cultural affiliation is clearly identified by the information available about the human remains described in this notice.

Determinations

The PMAE has determined that:

- The human remains described in this notice represent the physical remains of one individual of Native American ancestry.
- There is a reasonable connection between the human remains described in this notice and the Pueblo of San Ildefonso, New Mexico.

Requests for Repatriation

Written requests for repatriation of the human remains in this notice must be

sent to the Responsible Official identified in **ADDRESSES**. Requests for repatriation may be submitted by:

1. Any one or more of the Indian Tribes or Native Hawaiian organizations identified in this notice.

2. Any lineal descendant, Indian Tribe, or Native Hawaiian organization not identified in this notice who shows, by a preponderance of the evidence, that the requestor is a lineal descendant or a culturally affiliated Indian Tribe or Native Hawaiian organization.

Repatriation of the human remains in this notice to a requestor may occur on or after November 29, 2024. If competing requests for repatriation are received, the PMAE must determine the most appropriate requestor prior to repatriation. Requests for joint repatriation of the human remains are considered a single request and not competing requests. The PMAE is responsible for sending a copy of this notice to the Indian Tribe identified in this notice.

Authority: Native American Graves Protection and Repatriation Act, 25 U.S.C. 3003, and the implementing regulations, 43 CFR 10.10.

Dated: October 25, 2024.

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024-25187 Filed 10-29-24; 8:45 am]

BILLING CODE 4312-52-P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS-WASO-NAGPRA-NPS0038954;
PPWOCRADNO-PCU00RP14.R50000]

Notice of Inventory Completion: Museum of Us, San Diego, CA

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), the Museum of Us has completed an inventory of human remains and associated funerary objects and has determined that there is a cultural affiliation between the human remains and associated funerary objects and Indian Tribes or Native Hawaiian organizations in this notice.

DATES: Repatriation of the human remains and associated funerary objects in this notice may occur on or after November 29, 2024.

ADDRESSES: Carmen Mosley, NAGPRA Repatriation Manager, Museum of Us, 1350 El Prado, Balboa Park, San Diego, CA 92101, telephone (619) 239-2001

Ext. 42, email cmosley@museumofus.org.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service's administrative responsibilities under NAGPRA. The determinations in this notice are the sole responsibility of the Museum of Us, and additional information on the determinations in this notice, including the results of consultation, can be found in the inventory or related records. The National Park Service is not responsible for the determinations in this notice.

Abstract of Information Available

Based on the information available, human remains representing, at least, four individuals have been reasonably identified from three archaeological sites. The 1,679 associated funerary objects are from five archaeology sites.

Human remains representing, at least, two individuals and 267 associated funerary objects removed from Rose Canyon (W-3; CA-SDI-4595) in La Jolla, San Diego County, CA, include 33 unmodified faunal bone, four bifaces, 15 core tools, 11 unworked flakes, eight utilized flakes, six manos, one stone pendant, one pestle, 11 ecofacts, five hammerstones, and 172 unmodified shells. The 53 associated funerary objects removed from C-5 (shore line of ancient Blake Sea) in Imperial County, CA include 16 decorated body sherds, 13 decorated rim sherds, one undecorated body sherd, 15 undecorated rim sherds, one biface, one chopper, four manos, one battered stone, and one ecofact. The 632 associated funerary objects removed from C-123 (CA-IMP-135) in East San Felipe Valley, Imperial County, CA include one unmodified faunal bone, two ceramic pipe fragments, 22 decorated body sherds, 22 decorated rim sherds, 103 undecorated body sherds, 372 undecorated rim sherds, seven bifaces, six choppers, one core tool, 17 projectile points, 16 scrapers, nine unworked flakes, 13 utilized flakes, four manos, one stone sucking tube, one shaft straightener, one historic metal material, five ecofacts, three modified shells, 23 unmodified shells, and three battered stones. Human remains representing, at least, one individual and 167 associated funerary objects removed from C-158/A in Granite Hill, East Central San Diego County, CA include one ball stone, one unmodified shell, 16 *Olivella* beads, one modified shell, one shell pendant, one bull roarer, three mescal chisels, one mano, eight unworked flakes, nine projectile points, three chipped stones, 30 undecorated mixed sherds, 26 undecorated body

sherds, three decorated rim sherds, one decorated body sherd, one ceramic disk, and 61 mixed sherds. Human remains representing, at least, one individual and 560 associated funerary objects removed from C-165 in Hawi-Vallecito, San Diego County, CA include one unmodified faunal bone, three ceramic pipe handles, one ceramic tinaja, two ceramic water ollas, five decorated body sherds, 31 decorated mixed sherds, three decorated rim sherds, 436 undecorated mixed sherds, one chipped stone axe preform, two chipped stone scrapers, one quartz scraper, 23 projectile points, two unworked flakes, three utilized flakes, one groundstone weight, three pestles, one shaft straightener, one *Olivella* bead, three ecofacts, 33 modified shells, three unmodified shells, and one modified groundstone.

Between the 1920s and 1950s, geologist and amateur archaeologist and collector, Malcolm J. Rogers, conducted surveys and excavations on behalf of the Museum of Man (now Museum of Us) at several sites, including the aforementioned, in east central San Diego County and Imperial County.

Cultural Affiliation

Based on the information available and the results of consultation, cultural affiliation is clearly identified by the information available about the human remains and associated funerary objects described in this notice.

Determinations

The Museum of Us has determined that:

- The human remains described in this notice represent the physical remains of four individuals of Native American ancestry.
- The 1,679 objects described in this notice are reasonably believed to have been placed intentionally with or near individual human remains at the time of death or later as part of the death rite or ceremony.
- There is a reasonable connection between the human remains and associated funerary objects described in this notice and the Campo Band of Diegueno Mission Indians of the Campo Indian Reservation, California; Capitan Grande Band of Diegueno Mission Indians of California (Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation, California; Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians of the Viejas Reservation, California); Ewiiapaayp Band of Kumeyaay Indians, California; Iipay Nation of Santa Ysabel, California; Inaja Band of Diegueno Mission Indians of the Inaja

and Cosmit Reservation, California; Jamul Indian Village of California; La Posta Band of Diegueno Mission Indians of the La Posta Indian Reservation, California; Manzanita Band of Diegueno Mission Indians of the Manzanita Reservation, California; Mesa Grande Band of Diegueno Mission Indians of the Mesa Grande Reservation, California; San Pasqual Band of Diegueno Mission Indians of California; and the Sycuan Band of the Kumeyaay Nation.

Requests for Repatriation

Written requests for repatriation of the human remains and associated funerary objects in this notice must be sent to the authorized representative identified in this notice under **ADDRESSES**. Requests for repatriation may be submitted by:

1. Any one or more of the Indian Tribes or Native Hawaiian organizations identified in this notice.

2. Any lineal descendant, Indian Tribe, or Native Hawaiian organization not identified in this notice who shows, by a preponderance of the evidence, that the requestor is a lineal descendant or a culturally affiliated Indian Tribe or Native Hawaiian organization.

Repatriation of the human remains and associated funerary objects in this notice to a requestor may occur on or after November 29, 2024. If competing requests for repatriation are received, the Museum of Us must determine the most appropriate requestor prior to repatriation. Requests for joint repatriation of the human remains and associated funerary objects are considered a single request and not competing requests. The Museum of Us is responsible for sending a copy of this notice to the Indian Tribes and Native Hawaiian organizations identified in this notice.

Authority: Native American Graves Protection and Repatriation Act, 25 U.S.C. 3003, and the implementing regulations, 43 CFR 10.10.

Dated: October 25, 2024.

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024-25186 Filed 10-29-24; 8:45 am]

BILLING CODE 4312-52-P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS-WASO-NAGPRA-NPS0038967;
PPWOCRADNO-PCU00RP14.R50000]

**Notice of Inventory Completion:
University of Nebraska State Museum,
Lincoln, NE**

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: In accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), the University of Nebraska State Museum has completed an inventory of human remains and has determined that there is a cultural affiliation between the human remains and Indian Tribes or Native Hawaiian organizations in this notice.

DATES: Repatriation of the human remains in this notice may occur on or after November 29, 2024.

ADDRESSES: Taylor Ronquillo, University of Nebraska State Museum, 645 N 14th Street, Lincoln, NE 68588, telephone (402) 472-6592, email Tronquillo2@unl.edu and Susan Weller, NAGPRA Coordinator, University of Nebraska State Museum, 645 N 14th Street, Lincoln, NE 68588, telephone (402) 472-0577, email sweller2@unl.edu.

SUPPLEMENTARY INFORMATION: This notice is published as part of the National Park Service's administrative responsibilities under NAGPRA. The determinations in this notice are the sole responsibility of the University of Nebraska State Museum, and additional information on the determinations in this notice, including the results of the consultation, can be found in the inventory or related records. The National Park Service is not responsible for the determinations in this notice.

Abstract of Information Available

Based on the information available, human remains representing, at least, four individuals have been reasonably identified. No associated funerary objects are present.

1. The mourning lock was donated to UNSM in 1909 by Major W.J. Turner

2. The 2 mourning locks were donated to UNSM at an unknown time and date

3. Patrick Ryan originally donated the scalp lock. He acquired the lock from the Manderson Indian Collection, which was in turn acquired by the Omaha Public Library (OPL). OPL loaned the item to the Joslyn Art Museum in 1949. The Joslyn then loaned the collection to the UNSM in 1974. The collection was transferred to the UNSM in May 2021.

4. The rattle with a scalp lock was donated to UNSM in 1909 by Major W. J. Turner

Cultural Affiliation

Based on the information available and the results of the consultation, cultural affiliation is reasonably identified by the geographical location or acquisition history of the human remains described in this notice.

Determinations

The University of Nebraska State Museum has determined that:

- The human remains described in this notice represent the physical remains of four individuals of Native American ancestry.

- There is a reasonable connection between the human remains described in this notice and the Standing Rock Sioux Tribe of North & South Dakota.

Requests for Repatriation

Written requests for repatriation of the human remains in this notice must be sent to the authorized representative identified in this notice under

ADDRESSES. Requests for repatriation may be submitted by:

1. Any one or more of the Indian Tribes or Native Hawaiian organizations identified in this notice.

2. Any lineal descendant, Indian Tribe, or Native Hawaiian organization not identified in this notice who shows, by a preponderance of the evidence, that the requestor is a lineal descendant or a culturally affiliated Indian Tribe or Native Hawaiian organization.

Repatriation of the human remains in this notice to a requestor may occur on or after November 29, 2024. If competing requests for repatriation are received, the University of Nebraska State Museum must determine the most appropriate requestor prior to repatriation. Requests for joint repatriation of the human remains are considered a single request and not competing requests. The University of Nebraska State Museum is responsible for sending a copy of this notice to the Indian Tribes and Native Hawaiian organizations identified in this notice.

Authority: Native American Graves Protection and Repatriation Act, 25 U.S.C. 3003, and the implementing regulations, 43 CFR 10.10.

Dated: October 25, 2024.

Melanie O'Brien,

Manager, National NAGPRA Program.

[FR Doc. 2024-25196 Filed 10-29-24; 8:45 am]

BILLING CODE 4312-52-P

DEPARTMENT OF THE INTERIOR**Office of Surface Mining Reclamation and Enforcement**

[S1D1S SS08011000 SX064A000
256S180110; S2D2S SS08011000
SX064A000 25XS501520; OMB Control
Number 1029-0080]

Submission to the Office of Management and Budget for Review and Approval; Permanent Regulatory Program Requirements—Standards for Certification of Blasters

AGENCY: Office of Surface Mining Reclamation and Enforcement, Interior.

ACTION: Notice of Information Collection; request for comment.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, we, the Office of Surface Mining Reclamation and Enforcement (OSMRE), are proposing to renew an information collection.

DATES: Interested persons are invited to submit comments on or before December 30, 2024.

ADDRESSES: Send your comments on this information collection request (ICR) by mail to Mark Gehlhar, Office of Surface Mining Reclamation and Enforcement, 1849 C Street NW, Room 1544-MIB, Washington, DC 20240, or by email to mgehlhar@osmre.gov. Please reference OMB Control Number 1029-0080 in the subject line of your comments.

FOR FURTHER INFORMATION CONTACT: To request additional information about this ICR, contact Mark Gehlhar by email at mgehlhar@osmre.gov, or by telephone at 202-208-2716. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States. You may also view the ICR at <http://www.reginfo.gov/public/do/PRAMain>.

SUPPLEMENTARY INFORMATION: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) and 5 CFR 1320.8(d)(1), we provide the general public and other Federal agencies with an opportunity to comment on new, proposed, revised, and continuing collections of information. This helps us assess the impact of our information collection requirements and minimize the public's reporting burden. It also helps the

public understand our information collection requirements and provide the requested data in the desired format.

We are soliciting comments on the proposed ICR that is described below. We are especially interested in public comment addressing the following issues: (1) is the collection necessary to the proper functions of the agency; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the agency enhance the quality, utility, and clarity of the information to be collected; and (5) how might the agency minimize the burden of this collection on the respondents, including through the use of information technology.

Comments that you submit in response to this notice are a matter of public record. We will include or summarize each comment in our request to OMB to approve this ICR. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Abstract: The information is used to identify and evaluate new blaster certification programs. Part 850 implements Section 719 of the Surface Mining Control and Reclamation Act (SMCRA). Section 719 requires the Secretary of the Interior to issue regulations which provide for each State regulatory authority to train, examine and certify persons for engaging in blasting or use of explosives in surface coal mining operations. Each State that wishes to certify blasters must submit a blasters certification program to OSMRE for approval.

Title of Collection: Permanent Regulatory Program Requirements—Standards for Certification of Blasters.

OMB Control Number: 1029-0080.

Form Number: None.

Type of Review: Extension of a currently approved collection.

Respondents/Affected Public: Businesses and State governments.

Total Estimated Number of Annual Respondents: 1.

Total Estimated Number of Annual Responses: 1.

Estimated Completion Time per Response: 320 hours.

Total Estimated Number of Annual Burden Hours: 320.

Respondent's Obligation: Required to obtain or retain a benefit.

Frequency of Collection: One time.

Total Estimated Annual Nonhour

Burden Cost: \$0.

An agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

The authority for this action is the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

Mark J. Gehlhar,

*Information Collection Clearance Officer,
Office of Surface Mining Reclamation and Enforcement.*

[FR Doc. 2024-25202 Filed 10-29-24; 8:45 am]

BILLING CODE 4310-05-P

DEPARTMENT OF THE INTERIOR**Office of Surface Mining Reclamation and Enforcement**

[S1D1S SS08011000 SX064A000
256S180110; S2D2S SS08011000
SX064A000 25XS501520; OMB Control
Number 1029-0027]

Submission to the Office of Management and Budget for Review and Approval; General Requirements for Surface Coal Mining and Reclamation Operations on Federal Lands

AGENCY: Office of Surface Mining Reclamation and Enforcement, Interior.

ACTION: Notice of information collection; request for comment.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, we, the Office of Surface Mining Reclamation and Enforcement (OSMRE), are proposing to renew an information collection.

DATES: Interested persons are invited to submit comments on or before December 30, 2024.

ADDRESSES: Send your comments on this information collection request (ICR) by mail to Mark Gehlhar, Office of Surface Mining Reclamation and Enforcement, 1849 C Street NW, Room 1544-MIB, Washington, DC 20240, or by email to mgehlhar@osmre.gov. Please reference OMB Control Number 1029-0027 in the subject line of your comments.

FOR FURTHER INFORMATION CONTACT: To request additional information about this ICR, contact Mark Gehlhar by email at mgehlhar@osmre.gov, or by telephone at 202-208-2716. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech

disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States. You may also view the ICR at <http://www.reginfo.gov/public/do/PRAMain>.

SUPPLEMENTARY INFORMATION: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) and 5 CFR 1320.8(d)(1), we provide the general public and other Federal agencies with an opportunity to comment on new, proposed, revised, and continuing collections of information. This helps us assess the impact of our information collection requirements and minimize the public's reporting burden. It also helps the public understand our information collection requirements and provide the requested data in the desired format.

We are soliciting comments on the proposed ICR that is described below. We are especially interested in public comment addressing the following issues: (1) is the collection necessary to the proper functions of the agency; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the agency enhance the quality, utility, and clarity of the information to be collected; and (5) how might the agency minimize the burden of this collection on the respondents, including through the use of information technology.

Comments that you submit in response to this notice are a matter of public record. We will include or summarize each comment in our request to OMB to approve this ICR. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Abstract: Section 523 of the Surface Mining Control and Reclamation Act of 1977 requires that a Federal lands program be established to govern surface coal mining and reclamation operations on Federal lands. The information is needed to assist the regulatory authority to determine the eligibility of an applicant to conduct coal mining on Federal lands.

Title of Collection: General Requirements for Surface Coal Mining and Reclamation Operations on Federal Lands.

OMB Control Number: 1029–0027.

Form Number: None.

Type of Review: Extension of a currently approved collection.

Respondents/Affected Public:

Businesses and State governments.

Total Estimated Number of Annual Respondents: 10.

Total Estimated Number of Annual Responses: 10.

Estimated Completion Time per Response: Varies from 1 hour to 244 hours, depending on activity.

Total Estimated Number of Annual Burden Hours: 2,121.

Respondent's Obligation: Required to obtain or retain a benefit.

Frequency of Collection: One time.

Total Estimated Annual Nonhour Burden Cost: \$0.

An agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

The authority for this action is the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

Mark J. Gehlhar,

*Information Collection Clearance Officer,
Office of Surface Mining Reclamation and
Enforcement.*

[FR Doc. 2024–25207 Filed 10–29–24; 8:45 am]

BILLING CODE 4310–05–P

INTERNATIONAL TRADE COMMISSION

Notice of Receipt of Complaint; Solicitation of Comments Relating to the Public Interest

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has received a complaint entitled *Certain TOPCon Solar Cells, Modules, Panels, Components Thereof, and Products Containing Same, DN 3779*; the Commission is soliciting comments on any public interest issues raised by the complaint or complainant's filing pursuant to the Commission's Rules of Practice and Procedure.

FOR FURTHER INFORMATION CONTACT: Lisa R. Barton, Secretary to the Commission, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436, telephone (202) 205–2000. The

public version of the complaint can be accessed on the Commission's Electronic Document Information System (EDIS) at <https://edis.usitc.gov>. For help accessing EDIS, please email EDIS3Help@usitc.gov.

General information concerning the Commission may also be obtained by accessing its internet server at United States International Trade Commission (USITC) at <https://www.usitc.gov>. The public record for this investigation may be viewed on the Commission's Electronic Document Information System (EDIS) at <https://edis.usitc.gov>. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205–1810.

SUPPLEMENTARY INFORMATION: The Commission has received a complaint and a submission pursuant to § 210.8(b) of the Commission's Rules of Practice and Procedure filed on behalf of Trina Solar (U.S.), Inc., Trina Solar US Manufacturing Module 1, LLC, and Trina Solar Co., Ltd. on October 23, 2024. The complaint alleges violations of section 337 of the Tariff Act of 1930 (19 U.S.C. 1337) in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain TOPCon solar cells, modules, panels, components thereof, and products containing same. The complaint names as respondents: CSI Solar Co., Ltd. of China; Canadian Solar Inc. of Canada; Canadian Solar (USA) Inc. of Walnut Creek, CA; Canadian Solar Manufacturing (Thailand) Co., Ltd. of Thailand; Canadian Solar US Module Manufacturing Corporation of Mesquite, Texas; and Recurrent Energy Development Holdings, LLC of Austin, TX. The complainant requests that the Commission issue a limited exclusion order, cease and desist orders, and impose a bond upon respondents' alleged infringing articles during the 60-day Presidential review period pursuant to 19 U.S.C. 1337(e)(1) and (j)(3).

Proposed respondents, other interested parties, members of the public, and interested government agencies are invited to file comments on any public interest issues raised by the complaint or § 210.8(b) filing. Comments should address whether issuance of the relief specifically requested by the complainant in this investigation would affect the public health and welfare in the United States, competitive conditions in the United States economy, the production of like or directly competitive articles in the

United States, or United States consumers.

In particular, the Commission is interested in comments that:

(i) explain how the articles potentially subject to the requested remedial orders are used in the United States;

(ii) identify any public health, safety, or welfare concerns in the United States relating to the requested remedial orders;

(iii) identify like or directly competitive articles that complainant, its licensees, or third parties make in the United States which could replace the subject articles if they were to be excluded;

(iv) indicate whether complainant, complainant's licensees, and/or third party suppliers have the capacity to replace the volume of articles potentially subject to the requested exclusion order and/or a cease and desist order within a commercially reasonable time; and

(v) explain how the requested remedial orders would impact United States consumers.

Written submissions on the public interest must be filed no later than by close of business, eight calendar days after the date of publication of this notice in the **Federal Register**. There will be further opportunities for comment on the public interest after the issuance of any final initial determination in this investigation. Any written submissions on other issues must also be filed by no later than the close of business, eight calendar days after publication of this notice in the **Federal Register**. Complainant may file replies to any written submissions no later than three calendar days after the date on which any initial submissions were due, notwithstanding § 201.14(a) of the Commission's Rules of Practice and Procedure. No other submissions will be accepted, unless requested by the Commission. Any submissions and replies filed in response to this Notice are limited to five (5) pages in length, inclusive of attachments.

Persons filing written submissions must file the original document electronically on or before the deadlines stated above. Submissions should refer to the docket number ("Docket No. 3779") in a prominent place on the cover page and/or the first page. (See Handbook for Electronic Filing Procedures, Electronic Filing Procedures¹). Please note the Secretary's Office will accept only electronic filings during this time.

Filings must be made through the Commission's Electronic Document Information System (EDIS, <https://edis.usitc.gov>.) No in-person paper-based filings or paper copies of any electronic filings will be accepted until further notice. Persons with questions regarding filing should contact the Secretary at EDIS3Help@usitc.gov.

Any person desiring to submit a document to the Commission in confidence must request confidential treatment. All such requests should be directed to the Secretary to the Commission and must include a full statement of the reasons why the Commission should grant such treatment. See 19 CFR 201.6. Documents for which confidential treatment by the Commission is properly sought will be treated accordingly. All information, including confidential business information and documents for which confidential treatment is properly sought, submitted to the Commission for purposes of this Investigation may be disclosed to and used: (i) by the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records of this or a related proceeding, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. appendix 3; or (ii) by U.S. Government employees and contract personnel,² solely for cybersecurity purposes. All nonconfidential written submissions will be available for public inspection at the Office of the Secretary and on EDIS.³

This action is taken under the authority of section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), and of §§ 201.10 and 210.8(c) of the Commission's Rules of Practice and Procedure (19 CFR 201.10, 210.8(c)).

By order of the Commission.

Issued: October 24, 2024.

Lisa Barton,

Secretary to the Commission.

[FR Doc. 2024–25128 Filed 10–29–24; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 701–TA–742–745 and 731–TA–1720–1723 (Preliminary)]

Hard Empty Capsules From Brazil, China, India, and Vietnam; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations

AGENCY: United States International Trade Commission.

ACTION: Notice.

SUMMARY: The Commission hereby gives notice of the institution of investigations and commencement of preliminary phase antidumping and countervailing duty investigations Nos. 701–TA–742–745 and 731–TA–1720–1723 (Preliminary) pursuant to the Tariff Act of 1930 ("the Act") to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of hard empty capsules from Brazil, China, India, and Vietnam, provided for in subheadings 9602.00.10 and 9602.00.50 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value and alleged to be subsidized by the Governments of Brazil, China, India, and Vietnam. Unless the Department of Commerce ("Commerce") extends the time for initiation, the Commission must reach a preliminary determination in antidumping and countervailing duty investigations in 45 days, or in this case by December 9, 2024. The Commission's views must be transmitted to Commerce within five business days thereafter, or by December 16, 2024.

DATES: October 24, 2024.

FOR FURTHER INFORMATION CONTACT: Julie Duffy (202) 708–2579, Office of Investigations, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (<https://www.usitc.gov>). The public record for these investigations may be viewed on the Commission's electronic docket (EDIS) at <https://edis.usitc.gov>.

¹ Handbook for Electronic Filing Procedures: https://www.usitc.gov/documents/handbook_on_filing_procedures.pdf.

² All contract personnel will sign appropriate nondisclosure agreements.

³ Electronic Document Information System (EDIS): <https://edis.usitc.gov>.

SUPPLEMENTARY INFORMATION:

Background.—These investigations are being instituted, pursuant to sections 703(a) and 733(a) of the Tariff Act of 1930 (19 U.S.C. 1671b(a) and 1673b(a)), in response to a petition filed on October 24, 2024, by Lonza Greenwood LLC, Greenwood, South Carolina.

For further information concerning the conduct of these investigations and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A and B (19 CFR part 201), and part 207, subparts A and B (19 CFR part 207).

Participation in the investigations and public service list.—Persons (other than petitioners) wishing to participate in the investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in §§ 201.11 and 207.10 of the Commission's rules, not later than seven days after publication of this notice in the **Federal Register**. Industrial users and (if the merchandise under investigation is sold at the retail level) representative consumer organizations have the right to appear as parties in Commission antidumping duty and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.—Pursuant to § 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these investigations available to authorized applicants representing interested parties (as defined in 19 U.S.C. 1677(9)) who are parties to the investigations under the APO issued in the investigations, provided that the application is made not later than seven days after the publication of this notice in the **Federal Register**. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Conference.—The Office of Investigations will hold a staff conference in connection with the preliminary phase of these investigations beginning at 9:30 a.m. on Thursday, November 14, 2024. Requests to appear at the conference should be emailed to preliminaryconferences@usitc.gov (DO NOT FILE ON EDIS) on or before Tuesday, November 12, 2024. Please provide an email address for each conference participant in the email. Information on conference procedures,

format, and participation, including guidance for requests to appear as a witness via videoconference, will be available on the Commission's Public Calendar (Calendar (USITC) | United States International Trade Commission). A nonparty who has testimony that may aid the Commission's deliberations may request permission to participate by submitting a short statement.

Please note the Secretary's Office will accept only electronic filings during this time. Filings must be made through the Commission's Electronic Document Information System (EDIS, <https://edis.usitc.gov>). No in-person paper-based filings or paper copies of any electronic filings will be accepted until further notice.

Written submissions.—As provided in §§ 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before 5:15 p.m. on November 19, 2024, a written brief containing information and arguments pertinent to the subject matter of the investigations. Parties shall file written testimony and supplementary material in connection with their presentation at the conference no later than 4:00 p.m. on Wednesday, November 13. All written submissions must conform with the provisions of § 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of §§ 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's *Handbook on Filing Procedures*, available on the Commission's website at https://www.usitc.gov/documents/handbook_on_filing_procedures.pdf, elaborates upon the Commission's procedures with respect to filings.

In accordance with §§ 201.16(c) and 207.3 of the rules, each document filed by a party to the investigations must be served on all other parties to the investigations (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Certification.—Pursuant to § 207.3 of the Commission's rules, any person submitting information to the Commission in connection with these investigations must certify that the information is accurate and complete to the best of the submitter's knowledge. In making the certification, the submitter will acknowledge that any information that it submits to the Commission during these investigations may be disclosed to and used: (i) by the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records

of these or related investigations or reviews, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. appendix 3; or (ii) by U.S. government employees and contract personnel, solely for cybersecurity purposes. All contract personnel will sign appropriate nondisclosure agreements.

Authority: These investigations are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to § 207.12 of the Commission's rules.

By order of the Commission.

Issued: October 24, 2024.

Lisa Barton,

Secretary to the Commission.

[FR Doc. 2024–25161 Filed 10–29–24; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE**Notice of Lodging of Proposed Consent Decree Under the Clean Air Act**

On October 24, 2024, the Department of Justice lodged a proposed Consent Decree with the United States District Court for the Western District of Pennsylvania in the lawsuit entitled *United States and Commonwealth of Pennsylvania v. XTO Energy Inc.*, Civil Action No. 2:24–cv–01467–RJC.

The lawsuit seeks injunctive relief and civil penalties for violations of the Clean Air Act and the Standards of Performance for Crude Oil and Natural Gas Facilities at well pads owned and operated by XTO Energy Inc. (“XTO”) in Butler County, Pennsylvania. The violations relate to alleged failures to adequately design, operate, and maintain storage tank vapor control systems, resulting in emissions of volatile organic compounds (“VOC”) and other pollutants to the atmosphere.

The proposed consent decree covers 30 XTO well pads in Butler County, Pennsylvania. The proposed decree requires XTO to perform injunctive relief, including conducting engineering evaluations of the vapor control systems at each of the controlled well pads to ensure that they are adequately sized and designed. XTO must also complete one environmental mitigation project, at a cost of at least \$1,400,000, and pay a \$4,000,000 civil penalty. Entering into and fully complying with the proposed consent decree would release XTO from past civil liability for violations of Title V and the New Source Performance Standards applicable to new and

modified storage vessels and related state law at the 30 well pads subject to the proposed consent decree.

The publication of this notice opens a period for public comment on the proposed Consent Decree. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and should refer to *United States and Commonwealth of Pennsylvania v. XTO Energy Inc.*, D.J. Ref. No. 90–5–2–1–12373. All comments must be submitted no later than thirty (30) days after the publication date of this notice. Comments may be submitted either by email or by mail:

To submit comments:	Send them to:
By email	pubcomment-ees.enrd@usdoj.gov .
By mail	Assistant Attorney General, U.S. DOJ—ENRD, P.O. Box 7611, Washington, DC 20044–7611.

During the public comment period, the proposed Consent Decree may be examined and downloaded at this Justice Department website: <https://www.justice.gov/enrd/consent-decrees>. If you require assistance accessing the proposed Consent Decree, you may request assistance by email or by mail to the addresses provided above for submitting comments.

Jason A. Dunn,
Assistant Section Chief, Environmental Enforcement Section, Environment and Natural Resources Division.
[FR Doc. 2024–25225 Filed 10–29–24; 8:45 am]
BILLING CODE 4410–15–P

DEPARTMENT OF LABOR

Agency Information Collection Activities; Submission for OMB

Review; Comment Request; Occupational Noise Exposure

ACTION: Notice of availability; request for comments.

SUMMARY: The Department of Labor (DOL) is submitting this Mine Safety and Health Administration (MSHA)-sponsored information collection request (ICR) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995 (PRA). Public comments on the ICR are invited.

DATES: The OMB will consider all written comments that the agency

receives on or before November 29, 2024.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting “Currently under 30-day Review—Open for Public Comments” or by using the search function.

FOR FURTHER INFORMATION CONTACT: Michael Howell by telephone at 202–693–6782, or by email at DOL_PRA_PUBLIC@dol.gov.

SUPPLEMENTARY INFORMATION: Noise is a harmful physical agent and one of the most pervasive health hazards in mining. Repeated exposure to high levels of sound over time causes occupational noise-induced hearing loss (NIHL). NIHL is a serious, often profound physical impairment for miners, with far-reaching psychological and social effects. NIHL can be distinguished from aging and other factors that can contribute to hearing loss and it can be prevented. According to the National Institute for Occupational Safety and Health (NIOSH), NIHL is among the “top ten” leading occupational illnesses and injuries.

For many years, NIHL was regarded as an inevitable consequence of working in a mine. Mining, an intensely mechanized industry, relies on drills, crushers, compressors, conveyors, trucks, loaders, and other heavy-duty equipment for the excavation, haulage, and processing of material. This equipment creates high sound levels, exposing machine operators as well as miners working nearby to occupational noise that can contribute to hearing loss. MSHA, the Occupational Safety and Health Administration, the military, and other organizations around the world have established and enforced standards to reduce the loss of hearing. Quieter equipment, isolation of workers from noise sources, and limiting the time workers are exposed to noise are among the many well-accepted methods that will prevent NIHL.

Records of miners’ exposures to noise are necessary so that mine operators and MSHA can evaluate the need for and effectiveness of engineering controls, administrative controls, and personal protective equipment to protect miners from harmful levels of noise that can result in hearing loss. However, the Agency believes that extensive records for this purpose are not needed. Instead, the requirements are a performance-oriented approach to monitoring.

Records of miners’ hearing examinations enable mine operators and MSHA to ensure that the controls are effective in preventing NIHL for individual miners. Records of training are needed to confirm that miners receive the information they need to become active participants in hearing conservation efforts. For additional substantive information about this ICR, see the related notice published in the **Federal Register** on April 9, 2024 (89 FR 24866).

Comments are invited on: (1) whether the collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; (2) the accuracy of the agency’s estimates of the burden and cost of the collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility and clarity of the information collection; and (4) ways to minimize the burden of the collection of information on those who are to respond, including the use of automated collection techniques or other forms of information technology.

This information collection is subject to the PRA. A Federal agency generally cannot conduct or sponsor a collection of information, and the public is generally not required to respond to an information collection, unless the OMB approves it and displays a currently valid OMB Control Number. In addition, notwithstanding any other provisions of law, no person shall generally be subject to penalty for failing to comply with a collection of information that does not display a valid OMB Control Number. See 5 CFR 1320.5(a) and 1320.6.

Agency: DOL–MSHA.

Title of Collection: Occupational Noise Exposure.

OMB Control Number: 1219–0120.

Affected Public: Businesses or other for-profits.

Number of Respondents: 12,530.

Frequency: On occasion.

Number of Responses: 186,252.

Annual Burden Hours: 14,273 hours.

Total Estimated Annual Other Costs Burden: \$127,648.

(Authority: 44 U.S.C. 3507(a)(1)(D))

Michael Howell,
Senior Paperwork Reduction Act Analyst.
[FR Doc. 2024–25175 Filed 10–29–24; 8:45 am]
BILLING CODE 4510–43–P

DEPARTMENT OF LABOR**Agency Information Collection Activities; Submission for OMB Review; Comment Request; Asbestos in Construction Standard**

ACTION: Notice of availability; request for comments.

SUMMARY: The Department of Labor (DOL) is submitting this Occupational Safety & Health Administration (OSHA)-sponsored information collection request (ICR) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995 (PRA). Public comments on the ICR are invited.

DATES: The OMB will consider all written comments that the agency receives on or before November 29, 2024.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting “Currently under 30-day Review—Open for Public Comments” or by using the search function.

FOR FURTHER INFORMATION CONTACT: Nicole Bouchet by telephone at 202–693–0213, or by email at DOL_PRA_PUBLIC@dol.gov.

SUPPLEMENTARY INFORMATION: This standard requires employers to train workers about the hazards of asbestos, monitor worker exposure, provide medical surveillance, and maintain accurate records of worker exposure to asbestos. These records are used by employers, workers, and the Government to ensure that workers are not harmed by exposure to asbestos in the workplace. For additional substantive information about this ICR, see the related notice published in the **Federal Register** on August 12, 2024 (89 FR 65676).

Comments are invited on: (1) whether the collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; (2) the accuracy of the agency’s estimates of the burden and cost of the collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility and clarity of the information collection; and (4) ways to minimize the burden of the collection of information on those who are to respond, including the use of

automated collection techniques or other forms of information technology.

This information collection is subject to the PRA. A Federal agency generally cannot conduct or sponsor a collection of information, and the public is generally not required to respond to an information collection, unless the OMB approves it and displays a currently valid OMB Control Number. In addition, notwithstanding any other provisions of law, no person shall generally be subject to penalty for failing to comply with a collection of information that does not display a valid OMB Control Number. See 5 CFR 1320.5(a) and 1320.6.

DOL seeks PRA authorization for this information collection for three (3) years. OMB authorization for an ICR cannot be for more than three (3) years without renewal. The DOL notes that information collection requirements submitted to the OMB for existing ICRs receive a month-to-month extension while they undergo review.

Agency: DOL–OSHA.

Title of Collection: Asbestos in Construction Standard.

OMB Control Number: 1218–0134.

Affected Public: Private Sector—Businesses or other for-profits.

Total Estimated Number of Respondents: 1,075,579.

Total Estimated Number of Responses: 40,412,178.

Total Estimated Annual Time Burden: 4,059,934 hours.

Total Estimated Annual Other Costs Burden: \$62,460,240.

(Authority: 44 U.S.C. 3507(a)(1)(D))

Nicole Bouchet,

Senior Paperwork Reduction Act Analyst.

[FR Doc. 2024–25174 Filed 10–29–24; 8:45 am]

BILLING CODE 4510–26–P

DEPARTMENT OF LABOR**Bureau of Labor Statistics****Information Collection Activities; Comment Request**

AGENCY: Bureau of Labor Statistics, Department of Labor.

ACTION: Notice of information collection; request for comment.

SUMMARY: The Department of Labor, as part of its continuing effort to reduce paperwork and respondent burden, conducts a pre-clearance consultation program to provide the general public and Federal agencies with an opportunity to comment on proposed and/or continuing collections of information in accordance with the Paperwork Reduction Act of 1995. This program helps to ensure that requested

data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed. The Bureau of Labor Statistics (BLS) is soliciting comments concerning the proposed extension of the “Consumer Price Index Housing Survey.” A copy of the proposed information collection request can be obtained by contacting the individual listed below in the **ADDRESSES** section of this notice.

DATES: Written comments must be submitted to the office listed in the **ADDRESSES** section of this notice on or before December 30, 2024.

ADDRESSES: Send comments to Nora Kincaid, BLS Clearance Officer, Division of Management Systems, Bureau of Labor Statistics, Room G225, 2 Massachusetts Avenue NE, Washington, DC 20212. Written comments also may be transmitted by email to BLS_PRA_Public@bls.gov.

FOR FURTHER INFORMATION CONTACT: Nora Kincaid, BLS Clearance Officer, at 202–691–7628 (this is not a toll free number). (See **ADDRESSES** section.)

SUPPLEMENTARY INFORMATION:**I. Background**

Under the direction of the Secretary of Labor, the Bureau of Labor Statistics (BLS) is directed by law to collect, collate, and report full and complete statistics on the conditions of labor and the products and distribution of the products of the same; the Consumer Price Index (CPI) is one of these statistics. The collection of data from a wide spectrum of housing units is essential for the timely and accurate calculation of the Housing component of the CPI.

The Consumer Price Index (CPI) is the only index compiled by the U.S. Government that is designed to measure changes in the purchasing power of the consumer’s dollar. The CPI is a measure of the average change in prices over time in a market basket of goods and services. It is calculated monthly for two population groups, one consisting of all urban consumers (CPI–U), and the other consisting of urban wage earners and clerical workers (CPI–W). The CPI–U represents the buying habits of over 90 percent of the population of the United States, while the CPI–W represents approximately 30 percent of the population of the United States.

First, the CPI is used most widely as a measure of inflation and serves as an indicator of the effectiveness of government economic policy. Second, it

is also used as a deflator of other economic series, that is, to adjust other series for price changes and to translate these series into inflation-free dollars. Examples include retail sales, hourly and weekly earnings, and components of the Gross Domestic Product.

A third major use of the CPI is to adjust dollar values. Over 2 million workers are covered by collective bargaining contracts, which provide for increases in wage rates based on increases in the CPI. At least nineteen states and the District of Columbia have laws that link the adjustment in State minimum wage to the changes in the CPI. The index affects the income of more than 108 million people as a result of statutory action: over 67 million Social Security beneficiaries and over 41 million Supplemental Nutrition Assistance Program (SNAP) recipients, among other programs. Changes in the CPI also affect the cost of lunches for over 30 million children who eat lunch at school as part of the National School Lunch Program (NSLP). Under the National School Lunch Act and Child Nutrition Act, national average payments for those lunches and breakfasts are adjusted annually by the Secretary of Agriculture on the basis of the change in the CPI series, "Food away from Home." Many private firms

and individuals use the CPI to keep rents, royalties, alimony payments, and child support payments in line with changing prices. Since 1985, the CPI has been used to adjust the Federal income tax structure to prevent inflation-induced tax rate increases.

II. Current Action

Office of Management and Budget clearance is being sought for the Consumer Price Index Housing Survey. The CPI is the nation's chief source of information on retail price changes. The BLS has made extensive efforts to identify, from other government agencies and the scientific literature, other sources of data. To the BLS's knowledge, there is no duplication of indexes and there is no other series available which performs the function of the CPI.

The CPI Housing Survey is the nation's primary source of information on residential rent change. In addition, the CPI Housing data must be timely and available monthly. No other survey is both as timely and geographically comprehensive. The information provided by the American Housing Survey (AHS), Current Population Survey (CPS) or American Community Survey (ACS) does not meet the CPI's timeliness or geographic requirements.

III. Desired Focus of Comments

The Bureau of Labor Statistics is particularly interested in comments that:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility.
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used.
- Enhance the quality, utility, and clarity of the information to be collected.
- Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submissions of responses.

Title of Collection: Consumer Price Index Housing Survey.
OMB Number: 1220–0163.
Type of Review: Extension.
Affected Public: Individuals or Households, Business or other for-profit.

	Annual number of respondents	Number of responses per respondent	Total annual responses	Average burden (hours)	Estimated total burden (hours)
Screening	26,286	1	26,286	6/60	2,629
Initiation	* 6,103	1	6,103	9/60	915
Long Pricing	6,924	1	6,924	7/60	808
Short Pricing	32,681	2	65,362	5/60	5,447
Quality Reinterviews	** 2,648	1	2,648	4/60	177
Unduplicated Total	74,642		107,323		9,976

* Initiation activity of 6,103 is included in the Screening number.
** Reinterview activity of 2,648 is included in the Pricing numbers.

Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval of the information collection request; they also will become a matter of public record.

Signed at Washington, DC, on October 23, 2024.

Eric Molina,
*Chief, Division of Management Systems,
Branch of Policy Analysis.*

[FR Doc. 2024–25172 Filed 10–29–24; 8:45 am]

BILLING CODE 4510–24–P

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

[Docket No. OSHA–2011–0860]

The 13 Carcinogens Standard; Extension of the Office of Management and Budget’s (OMB) Approval of Information Collection (Paperwork) Requirements

AGENCY: Occupational Safety and Health Administration, Labor.

ACTION: Request for public comment.

SUMMARY: OSHA solicits public comments concerning the proposal to extend the Office of Management and Budget’s (OMB) approval of the

information collection requirements specified in the 13 Carcinogens Standard.

DATES: Comments must be submitted (postmarked, sent, or received) by December 30, 2024.

ADDRESSES:

Electronically: You may submit comments, including attachments, electronically at <https://www.regulations.gov>, which is the Federal eRulemaking Portal. Follow the instructions online for submitting comments.

Docket: To read or download comments or other material in the docket, go to <https://www.regulations.gov>. Documents in the docket are listed in the <https://>

www.regulations.gov index; however, some information (e.g., copyrighted material) is not publicly available to read or download through the website. All submissions, including copyrighted material, are available for inspection through the OSHA Docket Office. Contact the OSHA Docket Office at (202) 693-2350 (TTY (877) 889-5627) for assistance in locating docket submissions.

Instructions: All submissions must include the agency name and the OSHA docket number (OSHA-2011-0860) for the Information Collection Request (ICR). OSHA will place comments, including personal information, in the public docket, which may be available online. Therefore, OSHA cautions interested parties about submitting personal information such as social security number and date of birth.

For further information on submitting comments, see the "Public Participation" heading in the section of this notice titled **SUPPLEMENTARY INFORMATION**.

FOR FURTHER INFORMATION CONTACT: Seleda Perryman, Directorate of Standards and Guidance, OSHA, U.S. Department of Labor, telephone (202) 693-2222.

SUPPLEMENTARY INFORMATION:

I. Background

The Department of Labor, as part of the continuing effort to reduce paperwork and respondent (*i.e.*, employer) burden, conducts a preclearance consultation program to provide the public with an opportunity to comment on proposed and continuing information collection requirements in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)). This program ensures that information is in the desired format, reporting burden (time and costs) is minimal, collection instruments are clearly understood, and OSHA's estimate of the information collection burden is accurate. The Occupational Safety and Health Act of 1970 (OSH Act) (29 U.S.C. 651 *et seq.*) authorizes information collection by employers as necessary or appropriate for enforcement of the OSH Act or for developing information regarding the causes and prevention of occupational injuries, illnesses, and accidents (29 U.S.C. 657). The OSH Act also requires that OSHA obtain such information with minimum burden upon employers, especially those operating small businesses, and to reduce to the maximum extent feasible unnecessary duplication of effort in obtaining information (29 U.S.C. 657).

The 13 Carcinogens Standard (29 CFR 1910.1003) specifies several paperwork requirements. The following is a brief description of the collection of information requirements contained in the 13 Carcinogens Standard: establishing and implementing a medical surveillance program for workers assigned to enter regulated areas; informing workers of their medical examination results; and providing workers with access to their medical records. Further, employers must retain worker medical records for specified time periods and make them available upon request to OSHA and NIOSH.

II. Special Issues for Comment

OSHA has a particular interest in comments on the following issues:

- Whether the proposed information collection requirements are necessary for the proper performance of the agency's functions, including whether the information is useful;
- The accuracy of OSHA's estimate of the burden (time and costs) of the information collection requirements, including the validity of the methodology and assumptions used;
- The quality, utility, and clarity of the information collected; and
- Ways to minimize the burden on employers who must comply; for example, by using automated or other technological information, and transmission techniques.

III. Proposed Actions

OSHA is requesting that OMB extend the approval of the information collection requirements contained in the 13 Carcinogens Standard (29 CFR 1910.1003). The agency is requesting an adjustment increase in the burden hours from 1,609 hours to 1,740 hours, a difference of 131 hours. This increase is due to a slight increase in the number of establishments effected by the standard. The agency is also requesting an adjustment cost increase of \$34,716 from \$307,164 to \$341,880. The increase results from an increase in the number of workers receiving medical examinations, and an increase in costs for medical examinations.

OSHA will summarize the comments submitted in response to this notice and will include this summary in the request to OMB to extend the approval of the information collection requirements.

Type of Review: Extension of currently approved collection.

Title: 13 Carcinogens Standard.

OMB Control Number: 1218-0085.

Affected Public: Business or other for-profits.

Number of Respondents: 770.

Number of Responses: 2,536.

Frequency of Responses: On occasion.

Average Time per Response: Varies from five minutes (for employers to maintain records) to two hours (for worker medical surveillance).

Estimated Total Burden Hours: 1,740.

Estimated Cost (Operation and Maintenance): \$341,880.

IV. Public Participation—Submission of Comments on This Notice and Internet Access to Comments and Submissions

You may submit comments in response to this document as follows: (1) electronically at <https://www.regulations.gov>, which is the Federal eRulemaking Portal; (2) by facsimile (fax) to the OSHA docket, if your comments including attachments, are not longer than 10 page, at (202) 693-1948. or (3) by hard copy. All comments, attachments, and other materials must identify the agency name and the OSHA docket number for the ICR (Docket No. OSHA-2011-0860). You may supplement electronic submissions by uploading document files electronically.

Comments and submissions are posted without change at <https://www.regulations.gov>. Therefore, OSHA cautions commenters about submitting personal information such as social security numbers and date of birth.

Although all submissions are listed in the <https://www.regulations.gov> index, some information (e.g., copyrighted material) is not publicly available to read or download through this website. All submissions, including copyrighted material, are available for inspection and copying at the OSHA Docket Office. Information on using the <https://www.regulations.gov> website to submit comments and access the docket is available at the website's "User Tips" link.

Contact the OSHA Docket Office for information about materials not available through the website, and for assistance in using the internet to locate docket submissions.

V. Authority and Signature

James S. Frederick, Deputy Assistant Secretary of Labor for Occupational Safety and Health, directed the preparation of this notice. The authority for this notice is the Paperwork Reduction Act of 1995 (44 U.S.C. 3506 *et seq.*) and Secretary of Labor's Order No 8-2020 (85 FR 58393).

Signed at Washington, DC, on October 24, 2024.

James S. Frederick,

Deputy Assistant Secretary of Labor for
Occupational Safety and Health.

[FR Doc. 2024–25173 Filed 10–29–24; 8:45 am]

BILLING CODE 4510–26–P

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

[NARA–24–0023; NARA–2025–003]

Records Schedules; Availability and Request for Comments

AGENCY: National Archives and Records Administration (NARA).

ACTION: Notice of availability of proposed records schedules; request for comments.

SUMMARY: The National Archives and Records Administration (NARA) publishes notice of certain Federal agency requests for records disposition authority (records schedules). We publish notice in the **Federal Register** and on *regulations.gov* for records schedules in which agencies propose to dispose of records they no longer need to conduct agency business. We invite public comments on such records schedules.

DATES: We must receive responses on the schedules listed in this notice by December 16, 2024.

ADDRESSES: To view a records schedule in this notice, or submit a comment on one, use the following address: <https://www.regulations.gov/docket/NARA-24-0023/document>. This is a direct link to the schedules posted in the docket for this notice on *regulations.gov*. You may submit comments by the following method:

- **Federal eRulemaking Portal:** <https://www.regulations.gov>. On the website, enter either of the numbers cited at the top of this notice into the search field. This will bring you to the docket for this notice, in which we have posted the records schedules open for comment. Each schedule has a ‘comment’ button so you can comment on that specific schedule. For more information on *regulations.gov* and on submitting comments, see their FAQs at <https://www.regulations.gov/faq>.

If you are unable to comment via *regulations.gov*, you may email us at request.schedule@nara.gov for instructions on submitting your comment. You must cite the control number of the schedule you wish to comment on. You can find the control number for each schedule in parentheses at the end of each

schedule’s entry in the list at the end of this notice.

FOR FURTHER INFORMATION CONTACT:

Eddie Germino, Strategy and Performance Division, by email at regulation_comments@nara.gov or at 301–837–3758. For information about records schedules, contact Records Management Operations by email at request.schedule@nara.gov or by phone at 301–837–1799.

SUPPLEMENTARY INFORMATION:

Public Comment Procedures

We are publishing notice of records schedules in which agencies propose to dispose of records they no longer need to conduct agency business. We invite public comments on these records schedules, as required by 44 U.S.C. 3303a(a), and list the schedules at the end of this notice by agency and subdivision requesting disposition authority.

In addition, this notice lists the organizational unit(s) accumulating the records or states that the schedule has agency-wide applicability. It also provides the control number assigned to each schedule, which you will need if you submit comments on that schedule.

We have uploaded the records schedules and accompanying appraisal memoranda to the *regulations.gov* docket for this notice as “other” documents. Each records schedule contains a full description of the records at the file unit level as well as their proposed disposition. The appraisal memorandum for the schedule includes information about the records.

We will post comments, including any personal information and attachments, to the public docket unchanged. Because comments are public, you are responsible for ensuring that you do not include any confidential or other information that you or a third party may not wish to be publicly posted. If you want to submit a comment with confidential information or cannot otherwise use the *regulations.gov* portal, you may contact request.schedule@nara.gov for instructions on submitting your comment.

We will consider all comments submitted by the posted deadline and consult as needed with the Federal agency seeking the disposition authority. After considering comments, we may or may not make changes to the proposed records schedule. The schedule is then sent for final approval by the Archivist of the United States. After the schedule is approved, we will post on *regulations.gov* a “Consolidated Reply” summarizing the comments,

responding to them, and noting any changes we made to the proposed schedule. You may elect at *regulations.gov* to receive updates on the docket, including an alert when we post the Consolidated Reply, whether or not you submit a comment. If you have a question, you can submit it as a comment, and can also submit any concerns or comments you would have to a possible response to the question. We will address these items in consolidated replies along with any other comments submitted on that schedule.

We will post schedules on our website in the Records Control Schedule (RCS) Repository, at <https://www.archives.gov/records-mgmt/rcs>, after the Archivist approves them. The RCS contains all schedules approved since 1973.

Background

Each year, Federal agencies create billions of records. To control this accumulation, agency records managers prepare schedules proposing retention periods for records and submit these schedules for NARA’s approval. Once approved by NARA, records schedules provide mandatory instructions on what happens to records when no longer needed for current Government business. The records schedules authorize agencies to preserve records of continuing value in the National Archives or to destroy, after a specified period, records lacking continuing administrative, legal, research, or other value. Some schedules are comprehensive and cover all the records of an agency or one of its major subdivisions. Most schedules, however, cover records of only one office or program or a few series of records. Many of these update previously approved schedules, and some include records proposed as permanent.

Agencies may not destroy Federal records without the approval of the Archivist of the United States. The Archivist grants this approval only after thorough consideration of the records’ administrative use by the agency of origin, the rights of the Government and of private people directly affected by the Government’s activities, and whether or not the records have historical or other value. Public review and comment on these records schedules is part of the Archivist’s consideration process.

Schedules Pending

1. Department of Energy, Southeastern Power Administration, Environmental Retention Program (DAA–0388–2024–0007).

2. Department of Health and Human Services, Administration for Strategic Preparedness and Response, Medical Countermeasures (DAA-0611-2023-0003).

3. Department of Justice, Office of the Deputy Attorney General, Justice Manual Records (DAA-0060-2024-0016).

4. Department of the Treasury, Internal Revenue Service, Statistics of Income Division Records (DAA-0058-2017-0019).

5. Equal Employment Opportunity Commission, Agency-wide, Legal Records (DAA-0403-2023-0001).

6. Export-Import Bank of the United States, Agency-wide, Records of the Office of the Inspector General (DAA-0275-2024-0001).

7. Library of Congress, Agency-wide, Library Archives and Research 2024 updates (DAA-0297-2024-0008).

8. Library of Congress, Agency-wide, Outreach 2024 Updates (DAA-0297-2024-0009).

9. Peace Corps, Agency-wide, Site History Documentation (DAA-0490-2023-0005).

William P. Fischer,

Acting Chief Records Officer for the U.S. Government.

[FR Doc. 2024-25182 Filed 10-29-24; 8:45 am]

BILLING CODE 7515-01-P

NATIONAL SCIENCE FOUNDATION

Agency Information Collection Activities: Comment Request; Grantee Reporting Requirements for NSF Regional Innovation Engines (NSF Engines) Program

AGENCY: National Science Foundation (NSF).

ACTION: Submission for OMB review; comment request.

SUMMARY: The National Science Foundation has submitted the following information collection requirement to OMB for review and clearance under the Paperwork Reduction Act of 1995. This is the second notice for public comment; the first was published in the **Federal Register**, and no comments were received. NSF is forwarding the proposed submission to the Office of Management and Budget (OMB) for clearance simultaneously with the publication of this second notice.

DATES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain. Find this particular

information collection by selecting “Currently under 30-day Review—Open for Public Comments” or by using the search function.

FOR FURTHER INFORMATION CONTACT:

Suzanne H. Plimpton, Reports Clearance Officer, National Science Foundation, 2415 Eisenhower Avenue, Alexandria, Virginia 22314; telephone (703) 292-7556; or send email to splimpto@nsf.gov. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339, which is accessible 24 hours a day, 7 days a week, 365 days a year (including Federal holidays).

SUPPLEMENTARY INFORMATION:

Comments: Comments regarding (a) whether the proposed collection of information is necessary for the proper performance of the functions of the NSF, including whether the information shall have practical utility; (b) the accuracy of the NSF’s estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, use, and clarity of the information on respondents; and (d) ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology should be addressed to the points of contact in the **FOR FURTHER INFORMATION CONTACT** section.

Copies of the submission may be obtained by calling 703-292-7556. NSF may not conduct or sponsor a collection of information unless the collection of information displays a currently valid OMB control number, and the agency informs potential persons who are to respond to the collection of information that such persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

Title of Collection: Grantee Reporting Requirements for the NSF Regional Innovation Engines (NSF Engines) Program.

OMB Number: 3145-NEW.

Expiration Date of Approval: Not Applicable.

Type of Request: Intent to seek approval to establish an information collection.

Proposed Project:

The CHIPS and Science Act of 2022 codified the National Science Foundation’s cross-cutting Directorate for Technology, Innovation and Partnerships (TIP), NSF’s first new directorate in more than 30 years, and

charged it with the critical mission of advancing U.S. competitiveness through investments that accelerate the development of key technologies and address pressing national, societal, and geostrategic challenges.

The NSF Engines program was authorized in the CHIPS and Science Act of 2022 (section 10388) to (1) advance multidisciplinary, collaborative, use-inspired and translational research, technology development, in key technology focus areas; (2) address regional, national, societal, or geostrategic challenges; (3) leverage the expertise of multidisciplinary and multi-sector partners, including partners from private industry, nonprofit organizations, and civil society organizations; and (4) support the development of scientific, innovation, entrepreneurial, and STEM educational capacity within the region of the Regional Innovation Engine to grow and sustain regional innovation. The NSF Engines program serves as a flagship funding program of the TIP directorate, with the goal of expanding and accelerating scientific and technological innovation within the United States by catalyzing regional innovation ecosystems throughout every region of our nation.

In January 2024, NSF established 10 inaugural NSF Engine awards across 18 states, uniquely placing science and technology leadership as the central driver for regional economic competitiveness. By way of example, the NSF Engines: Colorado—Wyoming Climate Resilience Engine, led by Rocky Mountain Innovation Initiative Inc., aims to advance the region’s research and commercialization efforts focused on sensing, monitoring and predictive analytic technologies for climate resiliency spanning methane emissions, soil carbon capture, earth sensing, water scarcity, wildfires and extreme weather. The focus on climate resiliency derives from several climate emergencies that have hit the area from unprecedented wildfires to devastating droughts and heatwaves, and will leverage the region’s robust startup ecosystem and research capacity. This Engine includes a large ecosystem of core partners that are essential to its success: large corporations; universities (including four- and two-year academic institutions, Tribal Colleges, and Hispanic-Serving Institutions); economic and workforce development organizations; non-profits; and investment firms. This diverse coalition of partners will be central to R&D, translation of technology to

commercialization, and workforce development efforts.

Each Engine is focused on addressing specific aspects of a major national, societal and/or geostrategic challenge that are of significant interest in the NSF Engine's defined "region of service." The NSF Engines program envisions a future in which all sectors of the American population can participate in, and benefit from, advancements in scientific research and development equitably to advance U.S. global competitiveness and leadership. The program's mission is to establish sustainable regional innovation ecosystems that address pressing regional, national, societal, or geostrategic challenges by advancing use-inspired and translational research and development in key technology focus areas. The programmatic level goals of NSF Engines are to:

Goal 1: Establish self-sustaining innovation ecosystems;

Goal 2: Establish nationally recognized regional ecosystems for key industries;

Goal 3: Broaden participation in inclusive innovation ecosystems;

Goal 4: Advance technologies relevant to national competitiveness;

Goal 5: Catalyze regions with nascent innovation ecosystems;

Goal 6: Increase economic growth;

Goal 7: Increase job creation.

To achieve these goals, each Engine will carry out an integrated and comprehensive set of activities spanning use-inspired research, translation-to practice, entrepreneurship, and workforce development to nurture and accelerate regional industries. In addition, each Engine is expected to embody a culture of innovation and have a demonstrated, intense, and meaningful focus on improving diversity throughout its regional science and technology ecosystem.

This request is to seek approval from OMB in establishing a new data collection pertaining to grantee reporting requirements for the NSF Engines program. The reporting requirements consist of: (1) Quarterly Reports; (2) a 5-year Strategic and Implementation Plan; and (3) Annual Evaluation Reports.

The *Quarterly Reports* will be required quarterly (every three months) with initial report due at month three (3); and the others at subsequent intervals of six (6) and nine (9). The report at month twelve (12) will cover the activities and outcomes for the entire year including the last quarter. The reporting will follow the same cadence until the end date of the project or the life of the award. NSF will use the

collective Engine inputs from the reports in addition to the results of NSF's formal review of the required plans to determine eligibility for receiving the subsequent increment of NSF Engines funding. The *Quarterly Reports* contains 11 items, and grantees are required to include a brief description of the status with highlights of changes since the previous report and/or deviations from original plans outlined in the proposal. If there are no activities or outcomes to report for a certain item, the report shall note so for that item.

* i. *Governance and Management.* The staffing, activities, and effort associated with Governance and Management, e.g., hiring, restructuring.

* ii. *Progress on the Engine's Five-year Strategic and Implementation Plan's component plans.* Activities undertaken toward developing and/or modifying the required component plans should be described, in addition to implementation and notable outcomes for each.

* iii. *Budget Expenditures.* Summary of budget expenditures for the specified quarterly reporting period(s). The report should include the above information at the six-month and one-year mark, each covering the two preceding quarters. This should include any rebudgeting in excess of 15% of the original plan or \$100,000, whichever is greater, by the awardee or sub-awardee organized by programmatic core functions, i.e., use-inspired R&D, workforce development, translation innovations to practice and subcategorized by NSF budget category (NSF form 1030). The cumulative amount should be compared against the planned budget for each reporting period. Variances from plans, positive or negative, and mitigation steps if needed, should be discussed.

* iv. *Research Security.* Research security efforts of the lead organization and sub-awardee organizations pertinent to the activities on the Engine award, if any.

* v. *Cybersecurity Incidents.* Description of all reportable cybersecurity incidents pertinent to the activities on the Engine award.

* vi. *Infrastructure construction, operations and maintenance (O&M), and sustainability plan.* Includes all costs and activities related to building construction, design and engineering services, and on-site costs, e.g., prep costs including cleanup, legal services, etc. This also covers the development of shared research facilities, i.e., any facility that will not be used exclusively for Engine activities. The O&M and sustainability plan for infrastructure should be included in the third

quarterly report, and changes reported routinely in subsequent ones.

* vii. *R&D, Translation and Workforce Development Projects.* This section should provide a status update of all Engine-funded projects and initiatives, reported against the initial project milestones and/or objectives as outlined in approved strategic and implementation plans, including any Project Funding Competition Plans. Include notable outcomes from these activities. This section should cover the selection and termination of projects during the reporting period.

* viii. *Risk Assessment and Monitoring.* Within sixty (60) days of the award start date, a comprehensive formal risk assessment should be performed of the Engine using widely accepted standards with detail captured in a risk register, specifically any key risks identified and how those risks plan to be addressed, e.g., mitigate, transfer, eliminate, accept. Status reporting of the identified risks shall be included in the quarterly reports to NSF.

* ix. *Core partners.* This section should document the changes to the set of core partners and any changes in the nature of the core partners' activities and commitments to the Engine.

* x. *Commitments and Resources.* This section should describe changes in commitments and resources made available to Engine activities by non-NSF sources. Include new commitments of cash and in-kind resources by such sources during this period, and the quantitative impact of these commitments to the three Engine core functions (use-inspired R&D, Translation, and Workforce Development).

* xi. *Progress of Meeting Award-Specific Terms and Conditions.* Each Engine award has a list of terms and conditions that are specific to the given award. In this section, Engines will describe progress on these items since the last reporting period.

The *Five (5)-year Strategic and Implementation Plan* shall be comprised of component plans (7) listed below. Each shall be tailored to the Engine's mission, operating structure, and region of service and cover the specified topical areas. Component plans must be submitted for NSF approval. The Component Plans should only be submitted once they are in a final form and ready for approval. After a plan has been submitted, NSF may review and provide feedback on the plan document, typically within sixty (60) days of submission. The awardee may be requested by NSF to revise and resubmit the plan, incorporating such feedback.

NSF reserves the right to potentially continue this iterative process until 16-months post award start date, at which point the last submitted component plan will be deemed as the final version of the document that NSF shall consider for approval in line with the program goals. A more detailed set of expectations for each deliverable will be provided by the Program Officer post award.

- i. Engine Vision and Mission Statements (month 4)
- ii. Governance and Management
 - Governance and Management Plan (month 4)
 - Partnership Agreement (month 4)
 - Workforce Development Agreement (month 16)
 - IP Management Plan (month 4)
 - Financial and Resource Sustainability Plan (month 16)
- iii. Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analyses for R&D and Translation, Workforce Development, and Inclusive Engagement (month 4)
- iv. Strategic Plans
 - For R&D and Translation (month 9)
 - For Workforce Development (month 16)
 - For Inclusive Engagement (month 12)

- v. Implementation Plans
 - For R&D and Translation (month 12)
 - For Workforce Development (month 16)
 - For Inclusive Engagement (month 12)
- vi. Evaluation Plan (month 9)
- vii. IP Agreements (month 10)
- viii. Benchmarks; Baselines; Specific, Measurable, Achievable, Relevant, and Timely (SMART) Objectives and Targets
 - For R&D and Translation (month 12)
 - For Workforce Development (month 16)
 - For Inclusive Engagement (month 16)

Engines awardees will publicly disseminate the following within 1 month of approval by NSF: a public version of their SWOT analyses; strategic plans; and implementation plans.

The first *annual evaluation report* is expected at month 18 from the award start date, and then annually thereafter for the life of the award. The report is prepared and submitted to NSF by an external evaluation team required of each Engine award. The report discusses

progress relative to the milestones, baselines, benchmarks, objectives, and targets as listed in the corresponding 5-year strategic and implementation plan. The evaluation reports provide an objective and independent assessment of how each Engine is performing relative to their goals and milestones, and are not subject to approval by Engine awardees.

Information gathered will be used for the dual and interrelated purposes of disseminating information about the NSF Engines program and using this information to make programmatic improvements, efficiencies, and enhanced program monitoring for NSF Engines. Feedback collected under this clearance provides useful information for the continued evolution of the NSF Engines program. The collective reporting requirements will help TIP monitor the progress of individual Engines, identify trends over time, assess overall program performance.

Burden on the Public

For each Engine award, we anticipate the following number of responses and response burden by reporting requirement:

Reporting requirements	Number of responses per year	Minimum burden per response (hours)	Maximum burden per response (hours)	Annual burden (hours) per engine
<i>Quarterly Reports</i>	4	10	20	40–80.
<i>A Five (5)-year Strategic and Implementation Plan</i>	1	Year 1: 200 Year 1: 400 200–400	Year 2: 80 Year 2: 160 80–160	Year 3: 80. Year 3: 80. 80–160.
Total	5			120–480.

We estimated that, on average, each of the twenty components of the Five-year Strategic and Implementation Plan could take up to 520 hours to complete, hence the upper bound estimate of 10,400 hours per Engine. We also anticipate that each component of the Plan will be developed and completed by multiple and various team members within an Engine.

In addition, the upper bound estimate for the annual evaluation report reflects not only the effort for writing the report but also account for data cleaning, data analysis, and data visualization. We anticipate that the burden for subsequent years to be lower as workflow and cadence will be established after the first year.

A total of 10 Engine teams were awarded. For the first year, the total amount of burden estimated is between

1,280 and 11,520 hours per Engine. For subsequent years, 320 and 1,280 hours.

Dated: October 24, 2024.

Suzanne H. Plimpton,
Reports Clearance Officer, National Science Foundation.

[FR Doc. 2024–25125 Filed 10–29–24; 8:45 am]

BILLING CODE 7555–01–P

NATIONAL SCIENCE FOUNDATION

Request for Public Comment: Request for Information on the CHIPS and Science Act, Section 10343

AGENCY: National Science Foundation.

ACTION: Request for public comment; Extension of comment period.

SUMMARY: On August 27, 2024, the National Science Foundation (NSF) published in the **Federal Register** a document entitled “Request for

Information on the CHIPS and Science Act, Section 10343.” In response to requests by prospective commenters that they would benefit from additional time to adequately consider and respond to the RFI, NSF has determined that an extension of the comment period until Friday, December 13, 2024, at 11:59 p.m. (eastern), is appropriate.

DATES: The end of the comment period for the document entitled “Request for Information” published on August 27, 2024 (89 FR 68657), is extended from November 15, 2024, until December 13, 2024.

ADDRESSES: To respond to this Request for Information, please use the official submission form available at: <https://www.surveymonkey.com/r/ResearchEthicsRFI>.

Respondents only need to provide feedback on one or more questions of interest or relevance to them. Each

question is voluntary and optional. The response to each question has a 4,000-character limit including spaces.

FOR FURTHER INFORMATION CONTACT: For further information, please direct questions to Jason Borenstein through email: CHIPSethicsRFI@nsf.gov, phone: 703-292-4207, or mail: 2415 Eisenhower Avenue, Alexandria, VA 22314, USA.

SUPPLEMENTARY INFORMATION: Section 10343 (“Research Ethics”) of the CHIPS and Science Act of 2022 (Pub. L. 117–167) directs NSF to incorporate ethical, social, safety, and security considerations into the merit review process that is used to evaluate research projects or other activities for funding. Section 10343 notes that “a number of emerging areas of research have potential ethical, social, safety, and security implications that might be apparent as early as the basic research stage.” In addition, Section 10343 states that “the incorporation of ethical, social, safety, and security considerations into the research design and review process for Federal awards may help mitigate potential harms before they happen.” Moreover, Section 10343 states that “The Foundation should continue to work with stakeholders to promote best practices for governance of research in emerging technologies at every stage of research.”

Through this Request for Information, NSF seeks input on ways to incorporate ethical, social, safety, and security considerations into the agency’s merit review process and to develop strategies for mitigating the potential harms of scientific research and amplifying societal benefits from such research. Responses to one or more of the questions listed below can be sent to NSF by using the official submission form.

Ethical, Social, Safety, and Security Considerations

Question 1: Describe ethical, social, safety, and/or security risks from current or emerging research activities that you believe might be of concern to the community, profession, or organization with which you are connected.

Question 2: Which products, technologies, and/or other outcomes from research do you think could cause significant harm to the public in the foreseeable future?

Question 3: Describe one or more approaches for identifying ethical, social, safety, and/or security risks from research activities and balancing such risks against potential benefits.

Question 4: Describe one or more strategies for encouraging research

teams to incorporate ethical, social, safety, and/or security considerations into the design of their research approach. Also, how might the strategy vary depending on research type (for example, basic vs. applied) or setting (for example, academia or industry)?

NSF’s Approach to Ethical, Social, Safety, and Security Considerations

Question 5: How might NSF work with stakeholders to promote best practices for governance of research in emerging technologies at every stage of research?

Question 6: How could ethical, social, safety, and/or security considerations be incorporated into the instructions for proposers or into NSF’s merit review process? Also, what challenges could arise if the merit review process is modified to include such considerations?

Question 7: What other measures could NSF consider as it seeks to identify and mitigate ethical, social, safety, and/or security risks from research projects or other activities that the agency supports?

NSF, at its discretion, will use the information submitted in response to this RFI to help inform future program directions, new initiatives, and potential funding opportunities. The information provided will be analyzed, may appear in reports, and may be shared publicly on agency websites. Respondents are advised that the government is under no obligation to acknowledge receipt of the information or provide feedback to respondents with respect to any information submitted. *No proprietary, classified, confidential, or sensitive information should be included in your response submission.* The government reserves the right to use any non-proprietary technical information in any resultant solicitations, policies, or procedures.

Authority: Public Law 117–167.

Dated: October 25, 2024.

Suzanne H. Plimpton,
Reports Clearance Officer, National Science Foundation.

[FR Doc. 2024–25183 Filed 10–29–24; 8:45 am]

BILLING CODE 7555–01–P

NATIONAL TRANSPORTATION SAFETY BOARD

Sunshine Act Meetings

TIME AND DATE: 9:30 a.m. EDT, November 19, 2024.

PLACE: NTSB Conference Center, 429 L’Enfant Plaza SW, Washington, DC 20594.

STATUS: The one item is open to the public.

MATTER TO BE CONSIDERED:

72737 Highway Investigation Report—Box Truck Centerline Crossover Collision With Bus, Louisville, NY, January 28, 2023

CONTACT PERSON FOR MORE INFORMATION:

Candi Bing at (202) 590–8384 or by email at bingc@ntsb.gov.

Media Information Contact: Sarah Sulick by email at sarah.sulick@ntsb.gov or at (202) 314–6100.

The public may view it through a live or archived webcast by accessing a link under “Upcoming Events” on the NTSB home page at www.nts.gov.

Schedule updates, including weather-related cancellations, are also available at www.nts.gov.

The National Transportation Safety Board is holding this meeting under the Government in the Sunshine Act, 5 U.S.C. 552(b).

Dated: October 28, 2024.

LaSean R. McCray,
Assistant Federal Register Liaison Officer.

[FR Doc. 2024–25376 Filed 10–28–24; 4:15 pm]

BILLING CODE 7533–01–P

POSTAL REGULATORY COMMISSION

[Docket Nos. RM2024–9 and N2024–1; Order Nos. 7793 and 7794]

RIN 3211–AA39

Service Performance Measurement Systems for Market Dominant Products

AGENCY: Postal Regulatory Commission.
ACTION: Notice.

SUMMARY: The Commission is acknowledging that the Postal Service’s proposed revisions to its Service Performance Measurement (SPM) Plan for Market Dominant products from Docket No. N2024–1 will be considered as part of Docket No. RM2024–9. This document invites public comments and takes other administrative steps.

DATES: *Comments are due:* November 20, 2024.

ADDRESSES: Submit comments electronically via the Commission’s Filing Online system at <https://www.prc.gov>. Those who cannot submit comments electronically should contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section by telephone for advice on filing alternatives.

FOR FURTHER INFORMATION CONTACT: David A. Trissell, General Counsel, at 202–789–6820.

SUPPLEMENTARY INFORMATION: Notices filed in Docket No. RM2024–9 (Order No. 7793) and Docket No. N2024–1 (Order No. 7794) state that certain proposed revisions to the Postal Service’s Service Performance Measurement (SPM) Plan and a related SPM design document, which were filed by the Postal Service pursuant to 39 CFR 3055.5 in pending Docket No. N2024–1, will be considered by the Commission in pending Docket No. RM2024–9. Comments on the proposed revisions should be filed in Docket No. RM2024–9 by November 20, 2024. Any further proposed revisions to the SPM Plan or the SPM design documentation related to the changes in service proposed by the Postal Service in Docket No. N2024–1 should be filed in both Docket No. N2024–1 and Docket No. RM2024–9.

By the Commission.

Jennie L. Jbara,
Primary Certifying Official.

[FR Doc. 2024–25152 Filed 10–29–24; 8:45 am]

BILLING CODE 7710–FW–P

POSTAL REGULATORY COMMISSION

[Docket Nos. CP2023–1; MC2025–143 and K2025–141; MC2025–144 and K2025–142; MC2025–145 and K2025–143; MC2025–146 and K2025–144; MC2025–147 and K2025–145; MC2025–148 and K2025–146; MC2025–149 and K2025–147; MC2025–150 and K2025–148]

New Postal Products

AGENCY: Postal Regulatory Commission.

ACTION: Notice.

SUMMARY: The Commission is noticing a recent Postal Service filing for the Commission’s consideration concerning a negotiated service agreement. This notice informs the public of the filing, invites public comment, and takes other administrative steps.

DATES: *Comments are due:* October 31, 2024.

ADDRESSES: Submit comments electronically via the Commission’s Filing Online system at <http://www.prc.gov>. Those who cannot submit comments electronically should contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section by telephone for advice on filing alternatives.

FOR FURTHER INFORMATION CONTACT: David A. Trissell, General Counsel, at 202–789–6820.

SUPPLEMENTARY INFORMATION:

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I. Introduction

II. Public Proceeding(s) III. Summary Proceeding(s)

I. Introduction

Pursuant to 39 CFR 3041.405, the Commission gives notice that the Postal Service filed request(s) for the Commission to consider matters related to Competitive negotiated service agreement(s). The request(s) may propose the addition of a negotiated service agreement from the Competitive product list or the modification of an existing product currently appearing on the Competitive product list.

The public portions of the Postal Service’s request(s) can be accessed via the Commission’s website (<http://www.prc.gov>). Non-public portions of the Postal Service’s request(s), if any, can be accessed through compliance with the requirements of 39 CFR 3011.301.¹

Section II identifies the docket number(s) associated with each Postal Service request, if any, that will be reviewed in a public proceeding as defined by 39 CFR 3010.101(p), the title of each such request, the request’s acceptance date, and the authority cited by the Postal Service for each request. For each such request, the Commission appoints an officer of the Commission to represent the interests of the general public in the proceeding, pursuant to 39 U.S.C. 505 and 39 CFR 3000.114 (Public Representative). Section II also establishes comment deadline(s) pertaining to each such request.

The Commission invites comments on whether the Postal Service’s request(s) identified in Section II, if any, are consistent with the policies of title 39. Applicable statutory and regulatory requirements include 39 U.S.C. 3632, 39 U.S.C. 3633, 39 U.S.C. 3642, 39 CFR part 3035, and 39 CFR part 3041.

Comment deadline(s) for each such request, if any, appear in Section II.

Section III identifies the docket number(s) associated with each Postal Service request, if any, to add a standardized distinct product to the Competitive product list or to amend a standardized distinct product, the title of each such request, the request’s acceptance date, and the authority cited by the Postal Service for each request. Standardized distinct products are negotiated service agreements that are variations of one or more Competitive products, and for which financial models, minimum rates, and classification criteria have undergone advance Commission review. *See* 39

CFR 3041.110(n); 39 CFR 3041.205(a). Such requests are reviewed in summary proceedings pursuant to 39 CFR 3041.325(c)(2) and 39 CFR 3041.505(f)(1). Pursuant to 39 CFR 3041.405(c)–(d), the Commission does not appoint a Public Representative or request public comment in proceedings to review such requests.

II. Public Proceeding(s)

1. *Docket No(s).*: CP2023–1; *Filing Title:* Request of the United States Postal Service Concerning Modification Two to Priority Mail Express International, Priority Mail International & First-Class Package International Service Contract 6, Which Includes an Extension of that Agreement; *Filing Acceptance Date:* October 23, 2024; *Filing Authority:* 39 CFR 3035.105, 39 CFR 3041.310, 39 CFR 3041.505, and 39 CFR 3041.515; *Public Representative:* Maxine Bradley; *Comments Due:* October 31, 2024.

2. *Docket No(s).*: MC2025–143 and K2025–141; *Filing Title:* USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 521 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date:* October 23, 2024; *Filing Authority:* 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative:* Samuel Robinson; *Comments Due:* October 31, 2024.

3. *Docket No(s).*: MC2025–144 and K2025–142; *Filing Title:* USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 522 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date:* October 23, 2024; *Filing Authority:* 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative:* Samuel Robinson; *Comments Due:* October 31, 2024.

4. *Docket No(s).*: MC2025–145 and K2025–143; *Filing Title:* USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 523 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date:* October 23, 2024; *Filing Authority:* 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative:* Samuel Robinson; *Comments Due:* October 31, 2024.

5. *Docket No(s).*: MC2025–146 and K2025–144; *Filing Title:* USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 524 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date:* October 23, 2024; *Filing Authority:* 39 U.S.C. 3642, 39 CFR 3035.105, and 39

¹ See Docket No. RM2018–3, Order Adopting Final Rules Relating to Non-Public Information, June 27, 2018, Attachment A at 19–22 (Order No. 4679).

CFR 3041.310; *Public Representative*: Arif Hafiz; *Comments Due*: October 31, 2024.

6. *Docket No(s)*: MC2025–147 and K2025–145; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 525 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: October 23, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Maxine Bradley; *Comments Due*: October 31, 2024.

7. *Docket No(s)*: MC2025–148 and K2025–146; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 526 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: October 23, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Maxine Bradley; *Comments Due*: October 31, 2024.

8. *Docket No(s)*: MC2025–149 and K2025–147; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 527 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: October 23, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Jennaca D. Upperman; *Comments Due*: October 31, 2024.

9. *Docket No(s)*: MC2025–150 and K2025–148; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 528 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: October 23, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Anaswar Jayakumar; *Comments Due*: October 31, 2024.

III. Summary Proceeding(s)

None. See Section II for public proceedings.

This Notice will be published in the **Federal Register**.

Jennie L. Jbara,
Primary Certifying Official.

[FR Doc. 2024–25151 Filed 10–29–24; 8:45 am]

BILLING CODE 7710–FW–P

POSTAL REGULATORY COMMISSION

[Docket No. C2024–13; Presiding Officer's Ruling No. 3]

Complaint

AGENCY: Postal Regulatory Commission.
ACTION: Notice.

SUMMARY: The Commission is providing notice that a prehearing videoconference is being rescheduled. This notice informs the public of the videoconference rescheduled date and time.

DATES: *Live WebEx Videoconference*: October 30, 2024, at 10:00 p.m., eastern daylight time, virtual.

ADDRESSES: Submit notices of intervention electronically via the Commission's Filing Online system at <https://www.prc.gov>. Persons interested in intervening who cannot submit their views electronically should contact the person identified in the **FOR FURTHER INFORMATION CONTACT**: David A. Trissell, General Counsel, at 202–789–6820.

FOR FURTHER INFORMATION CONTACT: David A. Trissell, General Counsel, at 202–789–6820.

SUPPLEMENTARY INFORMATION:

- I. Background
- II. Ruling

I. Background

Due to the inability of one of the participants to attend, the prehearing videoconference scheduled for Thursday, October 24, 2024 must be rescheduled. The prehearing videoconference is hereby rescheduled for Wednesday, October 30, 2024, at 10:00 a.m.¹ If either party seeks a continuance of the videoconference date or an extension of time to complete activities related to the videoconference, the parties must make a good faith effort to find a mutually agreeable new date before contacting the Presiding Officer to request a scheduling change. This “good faith effort” requires the requesting party to place at least one telephone call or send one email message to the other party.

II. Ruling

1. The prehearing videoconference, scheduled for Thursday, October 24, 2024, is hereby rescheduled to Wednesday, October 30, 2024, at 10:00 a.m.

2. The Secretary shall arrange for publication of this ruling in the **Federal Register**.

Jennie L. Jbara,
Primary Certifying Official.

[FR Doc. 2024–25149 Filed 10–29–24; 8:45 am]

BILLING CODE 7710–FW–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–101430; File No. SR–MEMX–2024–41]

Self-Regulatory Organizations; MEMX LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend the Short Term Options Series Program in Rule 19.5, Interpretation and Policy .05

October 24, 2024.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”) ¹ and Rule 19b–4 thereunder, ² notice is hereby given that on October 23, 2024, MEMX, LLC (“Exchange”) filed with the Securities and Exchange Commission (“Commission”) a proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Exchange filed the proposal as a “non-controversial” proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act ³ and Rule 19b–4(f)(6) thereunder. ⁴ The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange is filing with the Commission a proposed rule change to amend the Short Term Options Series Program in Rule 19.5, Interpretation and Policy .05. The text of the proposed rule change is provided in Exhibit 5.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b–4.

³ 15 U.S.C. 78s(b)(3)(A).

⁴ 17 CFR 240.19b–4.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend Rule 19.5, Interpretation and Policy .05 (Series of Options Contracts Open for Trading) to permit the expansion of Monday expirations in Exchange Traded Products ("ETPs"). Specifically, the Exchange proposes to expand the Short Term Option Series Program to permit the listing of two Monday expirations for options on SPDR Gold Shares ("GLD"), iShares Silver Trust ("SLV"), and iShares 20+ Year Treasury Bond ETF ("TLT").⁵ This is a competitive filing that is based on a proposal submitted from Nasdaq ISE, LLC ("Nasdaq ISE") and recently approved by the Commission.⁶

Currently, as set forth in Exchange Rule 19.5, Interpretation and Policy .05, after an option class has been approved for listing and trading on the Exchange as a Short Term Option Series,⁷ the Exchange may open for trading on any Thursday or Friday that is a business day ("Short Term Option Opening Date") series of options on that class that expire at the close of business on each of the next five Fridays that are business days and are not Fridays in which standard expiration options series, Monthly Options Series, or Quarterly Options Series expire ("Friday Short Term Option Expiration Dates"). The Exchange may have no more than a total of five Short Term Option Friday Expiration Dates ("Short Term Option Weekly Expirations"). Further, if the Exchange is not open for business on the respective Thursday or Friday, the Short Term Option Opening

Date for Short Term Option Weekly Expirations will be the first business day immediately prior to that respective Thursday or Friday. Similarly, if the Exchange is not open for business on a Friday, the Short Term Option Expiration Date for Short Term Option Weekly Expirations will be the first business day immediately prior to that Friday.

Additionally, the Exchange may open for trading series of options on the symbols provided in Table 1 of Exchange Rule 19.5, Interpretation and Policy .05(h) that expire at the close of business on each of the next two Mondays, Tuesdays, Wednesdays, and Thursdays, respectively, that are business days beyond the current week and are not business days in which standard expiration options series, Monthly Options Series, or Quarterly Options Series expire ("Short Term Option Daily Expirations").⁸ For those symbols listed in Table 1, the Exchange may have no more than a total of two Short Term Option Daily Expirations beyond the current week for each of Monday, Tuesday, Wednesday, and Thursday expirations, as applicable, at one time.

At this time, the Exchange proposes to expand the Short Term Option Daily Expirations to permit the listing and trading of options on GLD, SLV, and TLT expiring on Mondays. The Exchange proposes to permit two Short Term Option Expiration Dates beyond the current week for each Monday expiration at one time, and would update Table 1 in Exchange Rule 19.5, Interpretation and Policy .05(h) for each of those symbols accordingly.

The proposed Monday GLD, SLV, and TLT expirations will be similar to the current Monday SPY, QQQ, and IWM Short Term Option Daily Expirations set forth in Exchange Rule 19.5, Interpretation and Policy .05(h) such that the Exchange may open for trading on any Friday or Monday that is a business day (beyond the current week) series of options on GLD, SLV, and TLT to expire on any Monday of the month that is a business day and is not a Monday in which standard expiration options series, Monthly Options Series, or Quarterly Options Series expire, provided that Monday expirations that are listed on a Friday must be listed at least one business week and one business day prior to the expiration ("Monday GLD Expirations," "Monday SLV Expirations," and "Monday TLT

Expirations") (collectively, "Monday ETP Expirations").⁹ In the event Short Term Option Daily Expirations expire on a Monday and that Monday is the same day that a standard expiration options series, Monthly Options Series, or Quarterly Options Series expires, the Exchange would skip that week's listing and instead list the following week; the two weeks would therefore not be consecutive. Today, Monday expirations in SPY, QQQ, and IWM similarly skip the weekly listing in the event the weekly listing expires on the same day in the same class as a standard expiration options series, Monthly Options Series, or Quarterly Options Series.

The interval between strike prices for the proposed Monday ETP Expirations will be the same as those currently applicable to the Short Term Option Series Program.¹⁰ Specifically, the Monday ETP Expirations will have a strike interval of (i) \$0.50 or greater for strike prices below \$100, and \$1 or greater for strike prices between \$100 and \$150 for all option classes that participate in the Short Term Option Series Program, (ii) \$0.50 for option classes that trade in one dollar increments and are in the Short Term Option Series Program, or (iii) \$2.50 or greater for strike prices above \$150.¹¹ As is the case with other equity options series listed pursuant to the Short Term Option Series Program, the Monday ETP Expirations series will be P.M.-settled.

Pursuant to the Exchange's definition of the Short Term Option Series Program, if a Monday is not a business day, the series shall expire on the first business day immediately following that Monday.¹²

Currently, for each option class eligible for participation in the Short Term Option Series Program, the Exchange is limited to opening thirty (30) series for each expiration date for the specific class.¹³ The thirty (30) series restriction does not include series that are open by other securities exchanges under their respective weekly rules; the Exchange may list these additional series that are listed by other options exchanges.¹⁴ With the proposed changes, this thirty (30) series restriction would apply to Monday GLD, SLV, and TLT Short Term Option Daily Expirations as well. In addition, the

⁵ Today, the Exchange permits the listing of two Wednesday expirations for options on GLD, SLV, and TLT. See Securities Exchange Act Release No. 99211 (December 20, 2023), 88 FR 89481 (December 27, 2023) (SR-MEMX-2023-35).

⁶ See Securities Exchange Act Release No. 100837 (August 27, 2024) 89 FR 71770 (September 3, 2024) (Order approving SR-ISE-2024-21).

⁷ The term "Short Term Option Series" is a series in an option class that is approved for listing and trading on the Exchange in which the series is opened for trading on any Monday, Tuesday, Wednesday, Thursday or Friday that is a business day and that expires on the Monday, Tuesday, Wednesday, Thursday, or Friday of the next business week, or, in the case of a series that is listed on a Friday and expires on a Monday, is listed one business week and one business day prior to that expiration. If a Tuesday, Wednesday, Thursday or Friday is not a business day, the series may be opened (or shall expire) on the first business day immediately prior to that Tuesday, Wednesday, Thursday or Friday, respectively. For a series listed pursuant to this section for Monday expiration, if a Monday is not a business day, the series shall expire on the first business day immediately following that Monday. See Exchange Rule 16.1.

⁸ As set forth in Table 1 in Rule 19.5, Interpretation and Policy .05(h), the Exchange currently only permits Wednesday expirations for USO, UNG, GLD, SLV and TLT.

⁹ Today, GLV, SLV and TLT may trade on Wednesdays. See *supra* note 5. They may also trade on Fridays, as is the case for all options series in the Short Term Option Series Program.

¹⁰ See Rule 19.5, Interpretation and Policy .05(e).

¹¹ *Id.*

¹² See *supra* note 7.

¹³ See Rule 19.5, Interpretation and Policy .05(a).

¹⁴ *Id.*

Exchange will be able to list series that are listed by other exchanges, assuming they file similar rules with the Commission to list Monday ETP Expirations.

With this proposal, Monday ETP Expirations would be treated similarly to existing Monday SPY, QQQ, and IWM Expirations. With respect to standard expiration option series, Short Term Option Daily Expirations will be permitted to expire in the same week in which standard expiration option series on the same class expire.¹⁵ Not listing Short Term Option Daily Expirations for one week every month because there was a standard options series on that same class on the Friday of that week would create investor confusion.

Further, as with Monday SPY, QQQ, and IWM Expirations, the Exchange would not permit Monday ETP Expirations to expire on a business day in which standard expiration option series, Monthly Options Series, or Quarterly Options Series expire.¹⁶ Therefore, all Short Term Option Daily Expirations would expire at the close of business on each of the next two Mondays, Tuesdays, Wednesdays, and Thursdays, respectively, that are business days and are not business days in which standard expiration option series, Monthly Options Series, or Quarterly Options Series expire. The Exchange believes that it is reasonable to not permit two expirations on the same day in which a standard expiration option series, Monthly Options Series, a Quarterly Options Series would expire because those options would be duplicative of each other.

The Exchange does not believe that any market disruptions will be encountered with the introduction of Monday ETP Expirations. The Exchange currently trades P.M.-settled Short Term Option Series that expire Monday for SPY, QQQ and IWM and has not experienced any market disruptions nor issues with capacity. In addition, the Exchange has not experienced any market disruptions or issues with capacity in expanding the three ETPs to the Wednesday expirations.¹⁷ Today, the Exchange has surveillance programs in place to support and properly monitor trading in Short Term Option Series that expire Monday for SPY, QQQ and IWM. Further, the Exchange has the necessary capacity and surveillance programs in place to

support and properly monitor trading in the proposed Monday ETP Expirations.

2. Statutory Basis

The Exchange believes that the proposal is consistent with the requirements of Section 6(b) of the Securities Exchange Act of 1934 (the “Act”),¹⁸ in general, and Section 6(b)(5) of the Act,¹⁹ in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general to protect investors and the public interest.

Similar to Monday expirations in SPY, QQQ, and IWM, the proposal to permit Monday ETP Expirations, subject to the proposed limitation of two expirations beyond the current week, would protect investors and the public interest by providing the investing public and other market participants more choice and flexibility to closely tailor their investment and hedging decisions in these options and allow for a reduced premium cost of buying portfolio protection, thus allowing them to better manage their risk exposure.

The Exchange represents that it has an adequate surveillance program in place to detect manipulative trading in the proposed option expirations, in the same way that it monitors trading in the current Short Term Option Series for Monday SPY, QQQ and IWM expirations. The Exchange also represents that it has the necessary system capacity to support the new expirations. Finally, the Exchange does not believe that any market disruptions will be encountered with the introduction of these option expirations. As discussed above, the Exchange believes that its proposal is a modest expansion of weekly expiration dates for GLD, SLV, and TLT given that it will be limited to two Monday expirations beyond the current week. Lastly, the Exchange believes that its proposal will not be a strain on liquidity providers because of the multi-class nature of GLD, SLV and TLT and the available hedges in highly correlated instruments.

The Exchange believes that the proposal is consistent with the Act as the proposal would overall add a small number of Monday ETP Expirations by limiting the addition of two Monday expirations beyond the current week.

The addition of Monday ETP Expirations would remove impediments to and perfect the mechanism of a free and open market by encouraging Market Makers to continue to deploy capital more efficiently and improve displayed market quality.²⁰ The Exchange believes that the proposal will allow Participants to expand hedging tools and tailor their investment and hedging needs more effectively in GLD, SLV, and TLT as these funds are most likely to be utilized by market participants to hedge the underlying asset classes.

Similar to Monday SPY, QQQ, and IWM expirations, the introduction of Monday ETP Expirations is consistent with the Act as it will, among other things, expand hedging tools available to market participants and allow for a reduced premium cost of buying portfolio protection. The Exchange believes that Monday ETP Expirations will allow market participants to purchase options on GLD, SLV, and TLT based on their timing as needed and allow them to tailor their investment and hedging needs more effectively, thus allowing them to better manage their risk exposure. Today, the Exchange lists Monday SPY, QQQ, and IWM Expirations.²¹

The Exchange believes the Short Term Option Series Program has been successful to date and that Monday ETP Expirations should simply expand the ability of investors to hedge risk against market movements stemming from economic releases or market events that occur throughout the month in the same way that the Short Term Option Series Program has expanded the landscape of hedging.

There are no material differences in the treatment of Monday SPY, QQQ and IWM expirations compared to the proposed Monday ETP Expirations. Given the similarities between Monday SPY, QQQ and IWM expirations and the proposed Monday ETP Expirations, the Exchange believes that applying the provisions in Rule 19.5, Interpretation and Policy .05 that currently apply to Monday SPY, QQQ and IWM expirations is justified. For example, the Exchange believes that allowing Monday ETP Expirations and monthly Exchange Traded Product expirations in the same week will benefit investors and minimize investor confusion by providing Monday ETP Expirations in a continuous and uniform manner.

¹⁵ See Rule 19.5, Interpretation and Policy .05(b).

¹⁶ See Rule 19.5, Interpretation and Policy .05.

¹⁷ See *supra* note 5.

¹⁸ 15 U.S.C. 78f(b).

¹⁹ 15 U.S.C. 78f(b)(5).

²⁰ Today, Market Makers are required to quote a specified time in their assigned options series. See Exchange Rule 22.5.

²¹ See Rule 19.5, Interpretation and Policy .05.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. In this regard and as indicated above, the Exchange notes that the rule change is being proposed as a competitive response to a filing submitted by Nasdaq ISE that was recently approved by the Commission.²²

While the proposal will expand the Short Term Options Expirations to allow Monday ETP Expirations to be listed on the Exchange, the Exchange believes that this limited expansion for Monday expirations for options on GLD, SLV, and TLT will not impose an undue burden on competition; rather, it will meet customer demand. The Exchange believes that Participants will continue to be able to expand hedging tools and tailor their investment and hedging needs more effectively in GLD, SLV, and TLT.

Similar to Monday SPY, QQQ and IWM expirations, the introduction of Monday ETP Expirations does not impose an undue burden on competition. The Exchange believes that it will, among other things, expand hedging tools available to market participants and allow for a reduced premium cost of buying portfolio protection. The Exchange believes that Monday ETP Expirations will allow market participants to purchase options on GLD, SLV, and TLT based on their timing as needed and allow them to tailor their investment and hedging needs more effectively.

The Exchange does not believe the proposal will impose any burden on intermarket competition, as nothing prevents the other options exchanges from proposing similar rules to list and trade Monday ETP Expirations. Further, the Exchange does not believe the proposal will impose any burden on intra-market competition, as all market participants will be treated in the same manner under this proposal.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The Exchange has filed the proposed rule change pursuant to Section

19(b)(3)(A)(iii) of the Act²³ and Rule 19b-4(f)(6) thereunder.²⁴ Because the foregoing proposed rule change does not: (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A)(iii) of the Act²⁵ and subparagraph (f)(6) of Rule 19b-4 thereunder.²⁶

A proposed rule change filed pursuant to Rule 19b-4(f)(6) under the Act²⁷ normally does not become operative for 30 days after the date of its filing. However, Rule 19b-4(f)(6)(iii)²⁸ permits the Commission to designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has requested that the Commission waive the 30-day operative delay to permit the Exchange to implement the proposal at the same time as its competitors. The Exchange states that its proposal is substantively identical in all material respects to a proposal submitted by Nasdaq ISE that was recently approved by the Commission.²⁹ The Commission believes that the proposed rule change presents no novel issues and that waiver of the 30-day operative delay is consistent with the protection of investors and the public interest. Accordingly, the Commission hereby waives the operative delay and designates the proposed rule change operative upon filing.³⁰

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the

²³ 15 U.S.C. 78s(b)(3)(A)(iii).

²⁴ 17 CFR 240.19b-4(f)(6).

²⁵ 15 U.S.C. 78s(b)(3)(A)(iii).

²⁶ 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6)(iii) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change, along with a brief description and text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

²⁷ 17 CFR 240.19b-4(f)(6).

²⁸ 17 CFR 240.19b-4(f)(6)(iii).

²⁹ See *supra* note 6 and accompanying text.

³⁰ For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-MEMX-2024-41 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090.

All submissions should refer to file number SR-MEMX-2024-41. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-MEMX-2024-41 and should be submitted on or before November 20, 2024.

²² See *supra* note 6.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.³¹

Sherry R. Haywood,

Assistant Secretary.

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–101423; File No. SR–MRX–2024–40]

Self-Regulatory Organizations; Nasdaq MRX, LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Allow Unlimited External Distribution of Derived Data From MRX Options Trade Outline

October 23, 2024.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”),¹ and Rule 19b–4 thereunder,² notice is hereby given that on October 9, 2024, Nasdaq MRX, LLC (“MRX” or “Exchange”) filed with the Securities and Exchange Commission (“SEC” or “Commission”) a proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to allow unlimited external distribution of Derived Data from MRX Options Trade Outline.

The text of the proposed rule change is available on the Exchange’s website at <https://listingcenter.nasdaq.com/rulebook/mrx/rules>, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of

the most significant aspects of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of the proposed rule change is to allow unlimited external distribution of Derived Data from MRX Options Trade Outline for a monthly fee of \$3,000.³

MRX Options Trade Outline

MRX Options Trade Outline provides aggregate quantity and volume information for trades on the Exchange for all series⁴ during a trading session.⁵

Information is provided on an End of Day, Intra-Day, and historical basis in the following categories: (i) total exchange volume for Intra-Day information and total exchange and industry volume for End of Day information for each reported series; (ii) open interest for the series; (iii) aggregate quantity of trades and aggregate trade volume effected to open a position,⁶ characterized by origin type (Priority Customers,⁷ Broker-Dealers,⁸ Market Makers,⁹ Firm Proprietary,¹⁰ and

³ This proposal was initially filed on September 27, 2024, as SR–MRX–2024–038. On October 9, 2024, that filing was withdrawn and replaced with the instant filing to provide further clarification.

⁴ Every options series trades as a distinct symbol; the terms “series” and “symbol” are therefore synonyms.

⁵ See Securities Exchange Act Release No. 100789 (August 21, 2024), 89 FR 68680 (August 27, 2024) (SR–MRX–2024–31).

⁶ This includes the aggregate number of “opening purchase transactions,” defined as an Exchange Transaction that will create or increase a long position in an options contract, *see* Options 1, Section 1(a)(27), and the aggregate number of “opening writing transactions,” defined as an Exchange Transaction that will create or increase a short position in an options contract. *See* Options 1, Section 1(a)(28).

⁷ The term “Priority Customer” means a person or entity that (i) is not a broker or dealer in securities, and (ii) does not place more than 390 orders in listed options per day on average during a calendar month for its own beneficial account(s). *See* Options 1 § 1(a)(36).

⁸ A “Broker-Dealer” order is an order submitted by a Member for a broker-dealer account that is not its own proprietary account. *See* Options 7 § 1(c).

⁹ The term “Market Makers” refers to “Competitive Market Makers” and “Primary Market Makers” collectively. *See* Options 1 § 1(a)(21). The term “Competitive Market Maker” means a Member that is approved to exercise trading privileges associated with CMM Rights. *See* Options 1 § 1(a)(12). The term “Primary Market Maker” means a Member that is approved to exercise trading privileges associated with PMM Rights. *See* Options 1 Section 1(a)(35).

¹⁰ A “Firm Proprietary” order is an order submitted by a Member for its own proprietary account. *See* Options 7 Section 1(c).

Professional Customers¹¹); and (iv) aggregate quantity of trades and aggregate trade volume effected to close a position,¹² characterized by origin type (Priority Customers, Broker-Dealers, Market Makers, Firm Proprietary, and Professional Customers).¹³

End of Day Information

The MRX Trade Outline End of Day file provides opening buy, closing buy, opening sell and closing sell information, including option first trade price, option high trade price, option low trade price, and option last trade price. The End of Day file is updated during an overnight process with additional fields¹⁴ and will be available the following morning, providing aggregate data for the entire trading session.

Intra-Day Information

Intra-Day information will be released in scheduled “snapshots” available every 10 minutes for all options series over the course of the trading day. These snapshots will be updated to reflect whatever activity occurred, or to indicate that no activity occurred.¹⁵

Historical Information

Historical data will be available through ad hoc requests for information in both End of Day and Intra-Day formats for all option series traded for every calendar month after September 2017, based on specific request.¹⁶

¹¹ A “Professional Customer” is a person or entity that is not a broker/dealer and is not a Priority Customer. *See* Options 7 Section 1(c).

¹² This includes the aggregate number of “closing purchase transactions” in the affected series, defined as an Exchange Transaction that will reduce or eliminate a short position in an options contract, *see* Options 1, Section 1(a)(9), and the aggregate number of “closing writing transactions,” defined as an Exchange Transaction that will reduce or eliminate a long position in an options contract. *See* Options 1, Section 1(a)(10).

¹³ These are the same types of information available on PHOTO, and the other trade outline products offered by Nasdaq exchanges.

¹⁴ The additional fields are: First Trade Price, High Trade Price, Low Trade Price, Last Trade Price, Underlying Close, Moneyness, Total Exchange volume, Total Industry Volume for the Series, and Open Interest.

¹⁵ Subscribers will receive the first snapshot at 9:42 a.m. ET, representing data captured from 9:30 a.m. to 9:40 a.m., and the second calculation at 9:52 a.m., representing data from both the most recent snapshot and previous snapshots, and continuing over the course of the trading day. The final Intra-Day snapshot will be distributed at 4:15 p.m.

¹⁶ Market participants generally use historical files for model testing and research, and the period of time required by a particular market participant will depend on its unique testing and research needs as well as whether it is using End of Day or Intra-Day information. Some customers, for example, may request years of data, while others only months, or even a single month. The same

³¹ 17 CFR 200.30–3(a)(12), (59).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b–4.

MRX Options Trade Outline includes proprietary Exchange trading data and does not disseminate any intra-day trading data from any other exchange.¹⁷

The information provided, both in End of Day and Intra-Day formats, will not be a real-time data feed.

MRX Options Trade Outline is a completely voluntary product in that the Exchange is not required by any rule or regulation to make this data available and potential subscribers may purchase it only if they voluntarily choose to do so.

Nasdaq's experience is that investment banks, market makers, asset managers and other buy-side investors purchase trade outline products.

Proposed Fees

The Exchange proposes to allow unlimited external distribution of Derived Data from MRX Options Trade Outline for a monthly fee of \$3,000. This will encourage Distributors to create and sell analytic products to the general investing public. External distribution of Derived Data is not currently permitted. The same Derived Data license is also offered by the Nasdaq PHLX, LLC ("Phlx"),¹⁸ Nasdaq ISE, LLC ("ISE"),¹⁹ and Nasdaq GEMX, LLC ("GEMX")²⁰ exchanges and the Nasdaq Stock Market LLC ("Nasdaq Options Market" or "NOM").²¹ A Derived Data license is also being proposed for the BX exchange concurrently with this proposal.

Derived Data is "any information generated in whole or in part from Exchange Information"²² such that the information generated cannot be reverse engineered to recreate Exchange Information, or be used to create other data that is recognizable as a reasonable substitute for such Exchange Information."

Fees for external distribution of Derived Data from MRX Options Trade

principle applies to End of Day vs. Intra-Day information.

¹⁷ The End of Day report includes a field that presents Total Industry Volume for the Series.

¹⁸ See Securities Exchange Act Release No. 93293 (October 12, 2021), 86 FR 57716 (October 18, 2021) (SR-Phlx-2021-58).

¹⁹ See ISE Options 7, Section 10(A).

²⁰ See GEMX Options 7, Section 7(D).

²¹ See Nasdaq Options 7, Section 4.

²² "Exchange Information" is any data or information that has been collected, validated, processed and/or recorded by the Exchange and made available for transmission relating to: (i) eligible securities or other financial instruments, markets, products, vehicles, indicators, or devices; (ii) activities of the Exchange; or (iii) other information or data from the Exchange. Information includes, but is not limited to, any element of information used or processed in such a way that Exchange Information or a substitute for such Information can be identified, recalculated or re-engineered from the processed information.

Outline are in addition to fees for the End of Day product or the Intraday product, or both, as applicable.

The proposal is designed to promote the dissemination of a variety of analytical insights—generally used only by investment banks, market makers, asset managers and other buy-side investors—to the general investing public by creating an incentive for market data vendors to identify, develop, and sell sentiment indicators and other products. The proposal will spur competition among not only exchanges, but vendors as well, thereby promoting innovation and improving the dissemination of information to the general investing public.

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,²³ in general, and furthers the objectives of Sections 6(b)(4) and 6(b)(5) of the Act,²⁴ in particular, in that it provides for the equitable allocation of reasonable dues, fees, and other charges among members and issuers and other persons using any facility, and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

Equitable Allocation of Reasonable Dues, Fees and Other Charges

The proposed changes are an equitable allocation of reasonable dues, fees and other charges because: (i) the trade profile products offered by multiple exchanges are substitutes, and customers are free to choose which product they purchase; and (ii) the proposed fees are comparable to the fees charged by other exchanges, and customers are free to purchase other products if the Exchange has mistaken the value of its product.

Substitution

Products similar to Trade Outline are offered by many exchanges, including Nasdaq affiliates such as Phlx,²⁵ ISE,²⁶ GEMX,²⁷ and NOM,²⁸ and options markets not affiliated with Nasdaq such

as Cboe Options Exchange ("Cboe"),²⁹ NYSE American Options ("NYSE American"),³⁰ NYSE Arca Options ("NYSE Arca"),³¹ BOX Options Market LLC ("BOX"),³² and MIAx Pearl Options Exchange ("Pearl").³³

All of the trade outline products offered by the Nasdaq-affiliated exchanges include a license for the unlimited external distribution of Derived Data.³⁴ As noted above, BX will be proposing the same license together with this proposal. All of these Derived Data licenses are direct substitutes.

The underlying trade outline data provided by one exchange is generally similar to that provided by other exchanges because order flow can move from one exchange to another, and market sentiment trends that appear on one exchange are likely to be similar to the sentiment trends on other exchanges. The key differentiator among trade outline products depends on the volume of transactions on a given exchange; the greater the volume of transactions, the greater the value of the data. Customers generally purchase sufficient data to provide a view of the market, but not more, as the value of data from each additional exchange yields diminishing returns. Because customers can substitute trade outline products among exchanges, customers can also substitute the proposed Derived Data license for MRX with the Derived Data licenses of any of its affiliates.

The proposed Derived Data license is also subject to potential competition from exchanges not affiliated with Nasdaq. Although the Exchange is not

²⁹ See, e.g., Securities Exchange Act Release No. 94913 (May 13, 2022), 87 FR 30534 (May 19, 2022) (SR-Cboe-2022-023) (describing End of Day and Intra-Day Open-Close Data as a summary of trading activity on the exchange at the option level by origin, side of the market, price, and transaction type).

³⁰ See, e.g., Securities Exchange Act Release No. 93803 (December 16, 2021), 86 FR 72647 (December 22, 2021) (SR-NYSEAMER-2021-46) (describing the NYSE Options Open-Close Volume Summary as a volume summary of trading activity on the exchange at the option level by origin, side of the market, contract volume and transaction type).

³¹ See, e.g., Securities Exchange Act Release No. 93132 (September 27, 2021), 86 FR 54499 (October 1, 2021) (SR-NYSEArca-2021-82) (describing the NYSE Options Open-Close Volume Summary as a volume summary of trading activity on the exchange at the option level by origin, side of the market, contract volume and transaction type).

³² See, e.g., Securities Exchange Act Release No. 97174 (March 21, 2023), 88 FR 18201 (March 27, 2023) (SR-BOX-2023-09) (describing the BOX exchange Open-Close Data report as providing volume by origin, buying/selling, and opening/closing criteria).

³³ See, e.g., Securities Exchange Act Release No. 91964 (May 21, 2021), 86 FR 28667 (May 27, 2021) (SR-PEARL-2021-24) (introducing the Open-Close Report).

³⁴ See *supra* notes 24–27.

²³ 15 U.S.C. 78f(b).

²⁴ 15 U.S.C. 78f(b)(4) and (5).

²⁵ See Securities Exchange Act Release No. 62887 (September 10, 2010), 75 FR 57092 (September 17, 2010) (SR-Phlx-2010-121) (introducing PHOTO on September 1, 2010).

²⁶ See Nasdaq ISE Rules, Options 7, Section 10(A) and (B) (Nasdaq ISE Open/Close Trade Profile End of Day; Nasdaq ISE Open/Close Trade Profile Intraday).

²⁷ See Nasdaq GEMX Rules, Options 7, Sections 7(D) (Nasdaq GEMX Open/Close End of Day Trade Profile) and 7(E) (Nasdaq GEMX Open/Close Intraday Trade Profile).

²⁸ See Nasdaq Rules, Options 7, Section 4 (Nasdaq Options Trade Outline ("NOTO")).

aware of any exchanges offering a Derived Data license for trade outline other than its own affiliates, any exchange that wishes to allow distribution of a Derived Data product based on options trading information would be able to do so with an immediately effective fee filing similar to this proposal.

All trade outline products are optional. Customers can, and do, choose to forego the information from Trade Outline or any of its competitor products when making a trade, and the same holds for Derived Data from trade outline products.

As the Commission and courts³⁵ have recognized, “[i]f competitive forces are operative, the self-interest of the exchanges themselves will work powerfully to constrain unreasonable or unfair behavior.”³⁶ Accordingly, “the existence of significant competition provides a substantial basis for finding that the terms of an exchange’s fee proposal are equitable, fair, reasonable, and not unreasonably or unfairly discriminatory.”³⁷ The Commission and the courts have repeatedly expressed their preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. In Regulation NMS, while adopting a series of steps to improve the current market model, the Commission highlighted the importance of market forces in determining prices and SRO revenues, and also recognized that current regulation of the market system “has been remarkably successful in promoting market competition in its

broader forms that are most important to investors and listed companies.”³⁸

Because the proposed Derived Data license is currently subject to competition from other Nasdaq exchanges, and potentially subject to competition from other exchanges, the Exchange will be limited in what it is able to charge for the license, and the proposed fee is therefore a reasonable allocation of dues, fees and other charges.

Comparability

The proposed fees for the Derived Data license are comparable to the fees charged by similarly situated exchanges for the same license.

All of the Nasdaq-affiliated exchanges offer a Derived Data license for their trade outline products. As explained above, the value of any trade outline product is determined in part by the number of underlying transactions reflected in the data.

The proposed fees for the Derived Data license are the same as the fees charged by similarly situated exchanges. MRX has a market share of approximately 4 percent, similar to that of GEMX (at approximately 3 percent).³⁹ The proposed monthly fee of \$3,000 for the unlimited external distribution of Derived Data is identical to the fee charged by GEMX.⁴⁰

The volume of trading on the MRX exchange is also similar to that on the BX exchange, which has a market share of approximately 2 percent.⁴¹ Together with this filing, BX will propose the same monthly fee of \$3,000 as MRX for the unlimited external distribution of Derived Data.

The Nasdaq-affiliated exchanges with larger market shares have comparably higher fees for the unlimited external distribution of Derived Data. Nasdaq Options Market, with a market share of approximately 5 percent,⁴² has a fee of \$4,000 per month for the unlimited external distribution of Derived Data.⁴³ ISE, with a market share of approximately 7 percent,⁴⁴ has a fee of \$4,500 per month for the unlimited external distribution of Derived Data.⁴⁵ PHLX, with a market share of

approximately 9 percent,⁴⁶ has a fee of \$5,000 per month for the unlimited external distribution of Derived Data.⁴⁷

The proposed fees are therefore comparable to those charged by similarly situated exchanges and consistent with the fees for Derived Data licenses in the market overall. If the Exchange is wrong in its assessment of fees, it will lose sales as a result.

The Proposal Does Not Permit Unfair Discrimination

The proposed Derived Data license is available to all market participants, including members and non-members, and all current and potential distributors, on the same terms. Nothing in the proposal treats any category of market participant any differently from any other category.

It is reasonable and not unfair discrimination to charge an external distributor of Derived Data a \$3,000 licensing fee that is not charged for internal usage. External distribution is fundamentally different than internal use. Vendors ordinarily charge a fee to their downstream customers for this service, and, even if the vendor is not charging a specific fee for this particular service, Derived Data products from the Exchange will be part of a suite of offerings that generally promote sales. It is not unfair discrimination to charge a licensing fee for a product that generates downstream revenue.

It is also not unfair discrimination to allow the redistribution of Derived Data, but not the underlying information. Neither exchanges nor vendors ordinarily allow redistribution of analytic products—such products are typically designed solely for the use of direct customers, not for redistribution to the customers of customers in the manner of a data feed.

The proposed licensing structure provides an incentive for vendors to innovate with new compelling and varied analytic products for the general investing public that will provide access to market sentiment insights currently available only to sophisticated investors.

B. Self-Regulatory Organization’s Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. In terms of inter-market competition, the Exchange notes that it operates in a highly competitive market in which market

³⁵ The decision of the United States Court of Appeals for the District of Columbia Circuit in *NetCoalition v. SEC*, 615 F.3d 525 (D.C. Cir. 2010) upheld the Commission’s reliance upon competitive markets to set reasonable and equitably allocated fees for market data. “In fact, the legislative history indicates that the Congress intended that the market system evolve through the interplay of competitive forces as unnecessary regulatory restrictions are removed and that the SEC wield its regulatory power in those situations where competition may not be sufficient, such as in the creation of a consolidated transactional reporting system.” *NetCoalition I* at 535 (quoting H.R. Rep. No. 94–229, at 92 (1975), as reprinted in 1975 U.S.C.C.A.N. 321, 323) (internal quotation marks omitted). The court agreed with the Commission’s conclusion that “Congress intended that competitive forces should dictate the services and practices that constitute the U.S. national market system for trading equity securities.” *Id.* (quoting Securities Exchange Act Release No. 59039 (December 2, 2008), 73 FR 74770, 74771 (December 9, 2008) (SR–NYSEArca–2006–21)).

³⁶ See Securities Exchange Act Release No. 59039 (December 2, 2008), 73 FR 74770 (December 9, 2008) (SR–NYSEArca–2006–21).

³⁷ See *id.*

³⁸ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, 37499 (June 29, 2005) (“Regulation NMS Adopting Release”).

³⁹ See *NasdaqTrader.com*, “Options Market Statistics,” available at <https://www.nasdaqtrader.com/Trader.aspx?id=OptionsVolumeSummary>.

⁴⁰ See GEMX Options 7, Section 7(D).

⁴¹ See *supra* note 38.

⁴² See *id.*

⁴³ See Nasdaq Options 7, Section 4.

⁴⁴ See *supra* note 38.

⁴⁵ See ISE Options 7, Section 10(A).

⁴⁶ See *supra* note 38.

⁴⁷ See PHLX Options 7, Section 10.

participants can readily favor competing venues if they deem fee levels at a particular venue to be excessive, or rebate opportunities available at other venues to be more favorable. In such an environment, the Exchange must continually adjust its fees to remain competitive with other exchanges and with alternative trading systems that have been exempted from compliance with the statutory standards applicable to exchanges. Because competitors are free to modify their own fees in response, and because market participants may readily adjust their order routing practices, the Exchange believes that the degree to which fee changes in this market may impose any burden on competition is extremely limited.

Intermarket Competition

Nothing in the proposal burdens inter-market competition (the competition among self-regulatory organizations). As discussed above, MRX Trade Outline is subject to direct competition from other options exchanges that offer similar products. Any of these exchanges can replicate this proposal in full or in part, and nothing in the proposal would interfere with the ability of any exchange to do so.

Intramarket Competition

Nothing in the proposal burdens intra-market competition (the competition among consumers of exchange data). Trade Outline is available to any customer under the same fee schedule as any other customer, and any market participant that wishes to purchase a license to distribute Derived Data can do so on a non-discriminatory basis.

Indeed, the proposal is designed to foster competition for vendors as well as exchanges by creating an incentive for market data vendors to identify, develop, and sell analytic indicators to help investors inform their investments strategies and analytic models.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act.⁴⁸ At any time

within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is: (i) necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-MRX-2024-40 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090.

All submissions should refer to file number SR-MRX-2024-40. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available

publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-MRX-2024-40 and should be submitted on or before November 20, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁴⁹

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2024-25061 Filed 10-29-24; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Investment Company Act Release No. 35370]

Deregistration Under Section 8(f) of the Investment Company Act of 1940

October 25, 2024.

AGENCY: Securities and Exchange Commission ("Commission" or "SEC").

ACTION: Notice of Applications for Deregistration under Section 8(f) of the Investment Company Act of 1940.

The following is a notice of applications for deregistration under section 8(f) of the Investment Company Act of 1940 for the month of October 2024. A copy of each application may be obtained via the Commission's website by searching for the applicable file number listed below, or for an applicant using the Company name search field, on the SEC's EDGAR system. The SEC's EDGAR system may be searched at <https://www.sec.gov/edgar/searchedgar/legacy/companysearch.html>. You may also call the SEC's Public Reference Room at (202) 551-8090. An order granting each application will be issued unless the SEC orders a hearing. Interested persons may request a hearing on any application by emailing the SEC's Secretary at Secretaries-Office@sec.gov and serving the relevant applicant with a copy of the request by email, if an email address is listed for the relevant applicant below, or personally or by mail, if a physical address is listed for the relevant applicant below. Hearing requests should be received by the SEC by 5:30 p.m. on November 19, 2024, and should be accompanied by proof of service on applicants, in the form of an affidavit or, for lawyers, a certificate of service. Pursuant to Rule 0-5 under the Act, hearing requests should state the nature of the writer's interest, any facts bearing

⁴⁸ 15 U.S.C. 78s(b)(3)(A)(ii).

⁴⁹ 17 CFR 200.30-3(a)(12).

upon the desirability of a hearing on the matter, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by writing to the Commission's Secretary at *Secretarys-Office@sec.gov*.

ADDRESSES: The Commission: *Secretarys-Office@sec.gov*.

FOR FURTHER INFORMATION CONTACT: Shawn Davis, Assistant Director, at (202) 551-6413 or Chief Counsel's Office at (202) 551-6821; SEC, Division of Investment Management, Chief Counsel's Office, 100 F Street NE, Washington, DC 20549-8010.

BNY Mellon New York Tax Exempt Bond Fund, Inc. [File No. 811-03726]

Summary: Applicant seeks an order declaring that it has ceased to be an investment company. The applicant has transferred its assets to BNY Mellon New York AMT-Free Municipal Bond Fund, and on May 17, 2024 made a final distribution to its shareholders based on net asset value. Expenses of \$262,765 incurred in connection with the reorganization were paid by the applicant.

Filing Date: The application was filed on October 17, 2024.

Applicant's Address: c/o BNY Mellon Investment Adviser, Inc., 240 Greenwich Street, New York, New York 10286.

Delaware Investments Dividend & Income Fund, Inc. [File No. 811-07460]

Summary: Applicant, a closed-end investment company, seeks an order declaring that it has ceased to be an investment company. The applicant has transferred its assets to abrdn Global Dynamic Dividend Fund, and on March 10, 2023 made a final distribution to its shareholders based on net asset value. Expenses of \$288,309 incurred in connection with the reorganization were paid by the applicant, the applicant's investment adviser, the acquiring fund, and the acquiring fund's investment adviser.

Filing Dates: The application was filed on October 27, 2023 and amended on October 22, 2024.

Applicant's Address: 100 Independence, 610 Market Street, Philadelphia, Pennsylvania 19106-2354.

Macquarie Global Infrastructure Total Return Fund Inc. [File No. 811-21765]

Summary: Applicant, a closed-end investment company, seeks an order declaring that it has ceased to be an investment company. The applicant has transferred its assets to abrdn Global Infrastructure Income Fund, and on

March 10, 2023 made a final distribution to its shareholders based on net asset value. Expenses of \$1,223,794 incurred in connection with the reorganization were paid by the applicant, the applicant's investment adviser, the acquiring fund, and the acquiring fund's investment adviser.

Filing Dates: The application was filed on October 27, 2023 and amended on October 22, 2024.

Applicant's Address: 100 Independence, 610 Market Street, Philadelphia, Pennsylvania 19106-2354.

Variable Annuity Account Ten [File No. 811-23649]

Summary: Applicant, a unit investment trust, seeks an order declaring that it has ceased to be an investment company. No expenses were incurred in connection with the liquidation.

Filing Dates: The application was filed on July 17, 2024 and amendments on September 6, 2024 and October 24, 2024.

Applicant's Address: 2727-A Allen Parkway, Houston, Texas 77019.

For the Commission, by the Division of Investment Management, pursuant to delegated authority.

J. Matthew DeLesDernier,
Deputy Secretary.

[FR Doc. 2024-25233 Filed 10-29-24; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101425; File No. SR-NYSE-2024-66]

Self-Regulatory Organizations; New York Stock Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend Its Price List Regarding the Gross FOCUS Fee

October 24, 2024.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on October 10, 2024, New York Stock Exchange LLC ("NYSE" or the "Exchange") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the

proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend its Price List regarding the gross FOCUS fee charged to member organizations, effective October 10, 2024.³ The proposed rule change is available on the Exchange's website at www.nyse.com, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of those statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend its Price List to (1) provide for a temporary waiver of the Gross FOCUS fee from October 1, 2024 through February 28, 2025 (the "Waiver Period"), and (2) delete a reference to a superseded fee.

The Exchange proposes to implement the fee changes effective October 10, 2024.

Background

NYSE Rule 129 provides that the Exchange's Board may, from time to time, impose such charge(s) on members and member organizations as it deems appropriate to reimburse the Exchange, in whole or in part, for regulatory oversight services provided to the membership by the Exchange. Generally, the Exchange may only use regulatory fees "to fund the legal, regulatory and surveillance operations" of the Exchange.⁴

³ The Exchange previously filed to amend the Price List on October 1, 2024 (SR-NYSE-2024-63) and withdrew such filing on October 10, 2024.

⁴ See Fourteenth Amended and Restated Operating Agreement of New York Stock Exchange LLC, Art. IV, Sec. 4.05, available at <https://www.nyse.com/publicdocs/nyse/regulation/nyse/>

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

Consistent with the foregoing, the Exchange currently charges each member organization a monthly regulatory fee of \$0.11 per \$1,000 of gross revenue reported on its FOCUS Report (“Gross FOCUS Fee”).⁵ Member organizations are subject to certain minimum annual Gross FOCUS Fees, which are \$500 for carrying firms and designated market makers, \$250 for introducing firms, and \$45 for member organizations who do not conduct a public business.

The revenue collected pursuant to the Gross FOCUS Fee funds the performance of the Exchange’s regulatory activities with respect to member organizations. More specifically, the Gross FOCUS Fee funds a material portion, but not all, of the Exchange’s expenses related to its regulatory program, including legal expenses associated with regulation, the costs related to in-house staff, third-party service providers, and technology that facilitates regulatory functions such as surveillance, investigation, examinations, and enforcement. Gross FOCUS Fee funds may also be used for indirect expenses such as human resources and other administrative costs (collectively, “Regulatory Costs”).

The Exchange monitors the amount of revenue collected from the Gross FOCUS Fee to ensure that these funds, in combination with its other regulatory fees and fines, do not exceed Regulatory Costs. The Exchange monitors Regulatory Costs and revenues on an annual basis, at a minimum. If the Exchange determines that regulatory revenues exceed or are projected to exceed Regulatory Costs, the Exchange will adjust the Gross FOCUS Fee downward or seek a partial waiver of the fee by submitting a filing to the Commission. As described below, the Exchange has determined that continued collection of Gross FOCUS Fees at the current rate for the proposed Waiver Period would exceed a material portion of the Exchange’s anticipated Regulatory Costs (as noted above), justifying the proposed waiver of the Gross FOCUS Fee for member organizations through the end of February 2025.

Proposed Rule Change

Based on the Exchange’s recent review of current and anticipated Regulatory Costs and Gross FOCUS Fee revenue, the Exchange proposes to waive the Gross FOCUS Fee from October 1, 2024 through February 28, 2025 in order to help ensure that the amounts collected from the Gross FOCUS Fee, in combination with other regulatory fees and fines, do not exceed the Exchange’s total projected Regulatory Costs. The Exchange proposes to reduce the Gross FOCUS Fee because it believes that if the fee is not adjusted, Gross FOCUS Fee revenue to the Exchange year-over-year could exceed a material portion of the Exchange’s Regulatory Costs. The Exchange’s position is based on its periodic analysis of actual and anticipated costs to fund its regulatory program and revenue to offset those costs, including the Gross FOCUS Fee, and takes into consideration both that the last Gross FOCUS Fee adjustment was more than three years ago, and the projected regulatory spending landscape going forward. Moreover, the Exchange believes that a five-month waiver rather than adjusting the fee would most efficiently accomplish the goal of reasonably ensuring that Gross FOCUS Fee collection does not exceed anticipated Regulatory Costs, and allow for further consideration of the appropriate Gross FOCUS Fee rate going forward.

The Exchange would announce the proposed waiver of the Gross FOCUS Fee by Trader Update.

Finally, as noted above, the Exchange adopted the current Gross FOCUS Fee of \$0.11 per \$1,000 Gross FOCUS Revenue in October 2020, effective January 1, 2021. Given that the new rate was not proposed to be implemented until January 1, 2021, both rates were reflected in the Price List. The Exchange proposes to delete as obsolete the old rate and the language following the current \$0.11 rate that reads “as of January 1, 2021.”

The proposed change is not otherwise intended to address other issues, and the Exchange is not aware of any significant problems that market participants would have in complying with the proposed changes.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,⁶ in general, and furthers the objectives of Sections 6(b)(4) and (5) of the Act,⁷ in particular,

because it provides for the equitable allocation of reasonable dues, fees, and other charges among its members, issuers and other persons using its facilities and does not unfairly discriminate between customers, issuers, brokers or dealers.

The Proposed Change Is Reasonable

The Exchange believes the proposed fee change is reasonable because it would help ensure that revenue collected from the Gross FOCUS Fee does not exceed a material portion of the Exchange’s projected Regulatory Costs. The Exchange has targeted the Gross FOCUS Fee to generate revenues that would be less than or equal to the Exchange’s regulatory costs, which is consistent with both Rule 129 and the Commission’s view that regulatory fees be used for regulatory purposes. As noted above, the principle that the Exchange may only use regulatory fees “to fund the legal, regulatory, and surveillance operations” of the Exchange is reflected in the Exchange’s operating agreement.⁸ In this regard, the Gross FOCUS Fee has been calculated to recover a material portion, but not all, of the Exchange’s Regulatory Costs. As also noted above, based on the Exchange’s recent review of current and projected regulatory costs and Gross FOCUS Fee collections, a five-month waiver of the Gross FOCUS Fee, which was last adjusted more than three years ago, would be the most efficient way to lessen the potential for generating excess funds that may otherwise occur using the current rate and allow for further consideration of the appropriate Gross FOCUS Fee rate going forward. The Exchange thus believes that the proposed waiver would be a fair and reasonable method for ensuring that the amounts collected from the Gross FOCUS Fee, in combination with other regulatory fees and fines, do not potentially exceed Regulatory Costs. The Exchange further believes that resuming the current rate as of March 1, 2025 would be reasonable because it would permit the Exchange to resume assessing the Gross FOCUS Fee in a way that is designed to recover a material portion, but not all, of the Exchange’s projected Regulatory Costs. The Exchange would continue monitoring Regulatory Costs in advance of the fee resumption next year and, if the Exchange determines that the rate should be further modified to help ensure that Gross FOCUS Fee collections would not exceed a material portion of Regulatory Costs, would

Fourteenth Amended and Restated Operating Agreement of New York Stock Exchange.pdf.

⁵ The current Gross FOCUS fee of \$0.11 per \$1,000 Gross FOCUS Revenue was adopted in October 2020, effective January 1, 2021. Given that the new rate was not proposed to be implemented until January 1, 2021, both rates were reflected in the Price List. As discussed below, the Exchange proposes to delete as obsolete the old rate and the language following the current \$0.11 rate.

⁶ 15 U.S.C. 78f(b).

⁷ 15 U.S.C. 78f(b)(4) & (5).

⁸ See note 4, *supra*.

make an appropriate rule filing with the Commission.

The Exchange further believes that the proposed deletion of references to a superseded Gross FOCUS Fee would increase the clarity and transparency of the Exchange's rules and remove impediments to and perfect the mechanism of a free and open market by ensuring that persons subject to the Exchange's jurisdiction, regulators, and the investing public could more easily navigate and understand the Exchange rules. The Exchange further believes that the proposed change would not be inconsistent with the public interest and the protection of investors because investors will not be harmed and in fact would benefit from increased clarity, thereby reducing potential confusion.

The Proposal Is an Equitable Allocation of Fees

The Exchange believes its proposal is an equitable allocation of fees among its market participants. The Exchange further believes that the proposed Gross FOCUS Fee waiver would benefit all member organizations because all member organizations would be eligible for the waiver, and would benefit from the waiver, on full and equal terms. For the same reasons, the proposed waiver neither targets nor will it have a disparate impact on any particular category of market participant. All member organizations would qualify for the waiver of the Gross FOCUS Fee on an equal and non-discriminatory basis. The Exchange also believes that recommencing the Gross FOCUS Fee effective March 1, 2025, at the current rate, unless the Exchange determines it would be necessary to further adjust the fee, is equitable because the Gross FOCUS Fee would resume applying to all member organizations on an equal basis.

The Exchange further believes the proposed change supports an equitable allocation of fees and credits among its market participants because it would eliminate obsolete text from the Price List describing pricing that is no longer applicable to any market participants. Accordingly, the Exchange believes the proposal would impact all similarly situated member organizations on an equal basis. The Exchange also believes that the proposed change would promote investor protection and the public interest because the deletion of superseded fees from the Price List would enhance the clarity of the Price List and reduce confusion regarding fees and credits currently applicable to market participants who transact on the Exchange.

The Proposal Is Not Unfairly Discriminatory

The Exchange believes that the proposal is not unfairly discriminatory. The proposed waiver of the Gross FOCUS Fee would benefit all similarly-situated market participants on an equal and non-discriminatory basis. Moreover, the proposal neither targets nor will it have a disparate impact on any particular category of market participant. The proposed fee change is designed to pause collection of a fee that applies to member organizations on an equal and non-discriminatory basis, waiver of which would apply to and benefit all member organizations equally. The Exchange also believes that recommencing the Gross FOCUS Fee on March 1, 2025 at the current rate, unless the Exchange determines it would be necessary to further adjust the rate to ensure that collections do not exceed a material portion of its Regulatory Costs, is not unfairly discriminatory because the resumed fee would apply equally to all member organizations.

In addition, the proposed elimination of obsolete pricing would affect all market participants on an equal and non-discriminatory basis, as the fee with which such pricing is associated is no longer available to any market participants. The Exchange also believes that the proposed change would protect investors and the public interest because the deletion of superseded pricing programs would facilitate market participants' understanding of the pricing currently applicable on the Exchange.

For the foregoing reasons, the Exchange believes that the proposal is consistent with the Act.

B. Self-Regulatory Organization's Statement on Burden on Competition

In accordance with Section 6(b)(8) of the Act,⁹ the Exchange believes that the proposed rule change would not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

Intramarket Competition. The Exchange believes the proposed fee change would not impose an undue burden on competition as the fee waiver would apply to all member organizations on an equal and non-discriminatory basis. The Exchange believes that the proposed waiver would also not place certain market participants at an unfair disadvantage because all member organizations would be eligible for the same waiver. For the same reasons, the proposed fee

waiver neither targets nor will it have a disparate impact on any particular category of market participant. All similarly-situated member organizations would be eligible for the proposed waiver. The Exchange also believes recommencing the Gross FOCUS Fee on March 1, 2025 at the same current rate (unless the Exchange determines it necessary at that time to adjust the fee to ensure that collections do not exceed a material portion of its Regulatory Costs) would not impose an undue burden on competition because the proposed rate would apply equally to all member organizations subject to the Gross FOCUS Fee and would permit the Exchange to resume assessing a fee that is designed to recover a material portion, but not all, of the Exchange's projected Regulatory Costs.

Intermarket Competition. The proposed fee change is not designed to address any competitive issues. Rather, the proposed change is designed to help the Exchange adequately fund its regulatory activities while seeking to ensure that total collections from regulatory fees do not exceed total Regulatory Costs.

Finally, that portion of the proposal that relates to elimination of a reference to a superseded fee would not have any impact on intra- or inter-market competition because the proposed change is solely designed to enhance the clarity and transparency of the Price List and alleviate possible customer confusion that may arise from inclusion of a reference to a superseded fee.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Pursuant to Section 19(b)(3)(A)(ii) of the Act,¹⁰ and Rule 19b-4(f)(2) thereunder¹¹ the Exchange has designated this proposal as establishing or changing a due, fee, or other charge imposed on any person, whether or not the person is a member of the self-regulatory organization, which renders the proposed rule change effective upon filing. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such

¹⁰ 15 U.S.C. 78s(b)(3)(A)(ii).

¹¹ 17 CFR 240.19b-4.

⁹ 15 U.S.C. 78f(b)(8).

action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-NYSE-2024-66 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090.

All submissions should refer to file number SR-NYSE-2024-66. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549 on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-NYSE-2024-66, and should be submitted on or before November 20, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹²

Sherry R. Haywood,
Assistant Secretary.

[FR Doc. 2024-25142 Filed 10-29-24; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101422; File No. SR-CboeBZX-2024-026]

Self-Regulatory Organizations; Cboe BZX Exchange, Inc.; Notice of Designation of a Longer Period for Commission Action on Proceedings To Determine Whether To Approve or Disapprove a Proposed Rule Change To Permit the Generic Listing and Trading of Multi-Class ETF Shares

October 23, 2024.

On April 15, 2024, Cboe BZX Exchange, Inc. ("BZX") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² a proposed rule change to amend BZX Rule 14.11(l) to permit the generic listing and trading of Multi-Class ETF Shares. The proposed rule change was published for comment in the **Federal Register** on May 1, 2024.³

On May 30, 2024, pursuant to Section 19(b)(2) of the Act,⁴ the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change.⁵ On July 12, 2024, the Commission instituted proceedings pursuant to Section 19(b)(2)(B) of the Act⁶ to determine whether to approve or disapprove the proposed rule change.⁷

Section 19(b)(2) of the Act⁸ provides that, after initiating disapproval proceedings, the Commission shall issue an order approving or disapproving the proposed rule change not later than 180 days after the date of publication of

¹² 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ See Securities Exchange Act Release No. 100034 (April 25, 2024), 89 FR 35255. Comments on the proposed rule change are available at: <https://www.sec.gov/comments/sr-cboebzx-2024-026/srcboebzx2024026.htm>.

⁴ 15 U.S.C. 78s(b)(2).

⁵ See Securities Exchange Act Release No. 100248, 89 FR 48202 (June 5, 2024).

⁶ 15 U.S.C. 78s(b)(2)(B).

⁷ See Securities Exchange Act Release No. 100522, 89 FR 58463 (July 18, 2024).

⁸ 15 U.S.C. 78s(b)(2).

notice of filing of the proposed rule change. The Commission may extend the period for issuing an order approving or disapproving the proposed rule change, however, by not more than 60 days if the Commission determines that a longer period is appropriate and publishes the reasons for such determination. The proposed rule change was published for notice and comment in the **Federal Register** on May 1, 2024. October 28, 2024 is 180 days from that date, and December 27, 2024 is 240 days from that date.

The Commission finds it appropriate to designate a longer period within which to issue an order approving or disapproving the proposed rule change so that it has sufficient time to consider the proposed rule change. Accordingly, the Commission, pursuant to Section 19(b)(2) of the Act,⁹ designates December 27, 2024 as the date by which the Commission shall either approve or disapprove the proposed rule change (File No. SR-CboeBZX-2024-026).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁰

Sherry R. Haywood,
Assistant Secretary.

[FR Doc. 2024-25060 Filed 10-29-24; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101428; File No. SR-CBOE-2024-047]

Self-Regulatory Organizations; Cboe Exchange, Inc.; Notice of Filing of a Proposed Rule Change To Amend Its Rules Regarding the Types of Complex Orders Available for Flexible Exchange Options ("FLEX") Trading at the Exchange

October 24, 2024.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on October 11, 2024, Cboe Exchange, Inc. (the "Exchange" or "Cboe Options") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, II, and III, below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the

⁹ *Id.*

¹⁰ 17 CFR 200.30-3(a)(57).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

Cboe Exchange, Inc. (the "Exchange" or "Cboe Options") proposes to amend its Rules regarding the types of complex orders available for flexible exchange options ("FLEX") trading at the Exchange. The text of the proposed rule change is provided in Exhibit 5.

The text of the proposed rule change is also available on the Exchange's website (<http://www.cboe.com/AboutCBOE/CBOELegalRegulatoryHome.aspx>), at the Exchange's Office of the Secretary, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to adopt rules to govern a new type of complex FLEX Order. Specifically, the Exchange proposes to amend Rules 4.21 (Series of FLEX Options), 5.70 (Availability of Orders), 5.72 (FLEX Trading), and 6.5 (Nullification and Adjustment of Options Transactions Including Obvious Errors).

FLEX Options are customized equity or index option contracts that allow investors to tailor contract terms for exchange-listed equity and index options. The Exchange may make simple FLEX Orders and complex FLEX Orders (see Rule 5.70(b)), including security future-option orders and stock-option orders, available for FLEX trading. Currently, the legs of a complex FLEX Order are limited to FLEX Option series only. An investor wishing to trade a complex strategy containing both FLEX Option series and non-FLEX Option series must execute such strategy using two or more separate

orders. The Exchange now proposes to amend its rules to allow for the legs of a complex FLEX Order to include a combination of FLEX Option series and non-FLEX Option series ("FLEX v. Non-FLEX Order").

The Exchange notes that, with exception of the rules proposed in this rule filing, FLEX v. Non-FLEX Orders will be subject to the same trading rules and procedures that currently govern the trading of other complex FLEX Orders on the Exchange. There are no changes in regards to complex FLEX Orders with FLEX Option legs only as a result of the proposed rule change. To permit the trading of FLEX v. Non-FLEX Orders, the Exchange proposes to amend its rules as follows.

First, the Exchange proposes to amend Rule 5.70 (Availability of Orders) to add FLEX v. Non-FLEX Orders to the types of complex orders available for FLEX trading.³ Specifically, the Exchange proposes to amend Rule 5.70(b) to state that the legs of a complex FLEX Order may be for FLEX Option series only or a combination of FLEX Option series and non-FLEX Option series ("FLEX v. Non-FLEX Order").⁴ As noted above, FLEX v. Non-FLEX Orders will be considered complex FLEX instruments, which will be subject to the same trading rules and procedures that govern the trading of other FLEX Orders on the Exchange (unless otherwise noted herein). The Exchange also proposes to amend Rule 5.70(b) to remove the requirement that each leg(s) of a complex FLEX Order must be for a FLEX Option series authorized for FLEX trading with the same underlying equity security or index and must have the same exercise style. The proposed change will allow for the trading of the proposed FLEX v. Non-FLEX Orders and will, in general, provide FLEX Traders with more

³ As part of the proposed rule change, the Exchange proposes to amend Rule 5.70(b) to add a cite to the definition of complex order in Rule 1.1; this is not a substantive change, but rather merely adds a cross-reference to the defined term for purposes of clarity. Per Rule 1.1, the term "complex order" means an order involving the concurrent execution of two or more different series in the same underlying security or index (the "legs" or "components" of the complex order), for the same account, occurring at or near the same time and for the purpose of executing a particular investment strategy with no more than the applicable number of legs (which number the Exchange determines on a class-by-class basis).

⁴ Under the proposed rule change, complex FLEX Orders could include both listed instruments as well as FLEX instruments (if at least one leg is for a FLEX Option series), with an optional stock leg. Per the definition of complex order, the legs of all complex FLEX Orders (including FLEX v. Non-FLEX options) must have the same underlying security or index. See Rule 1.1 (definition of complex order).

flexibility and opportunities for customization via FLEX trading.

The Exchange also proposes to add Rule 5.70(d), which states that, in classes determined by the Exchange, a nonconforming FLEX v. Non-FLEX Order is not eligible for electronic processing, in which case the nonconforming FLEX v. Non-FLEX Order may only be submitted for manual handling and open outcry trading. For reference, a "nonconforming complex order" is defined as a complex order with a ratio on the options legs less than one-to-three (.333) or greater than three-to-one (3.00).⁵ The proposed language is the same as language currently included in the definition of "complex order" in Rule 5.33(a), the intent of which is to permit the Exchange to determine in which classes nonconforming complex orders (including stock-option orders) may be submitted for electronic processing on the Exchange pursuant to Rule 5.33.

The Exchange also proposes to add Rule 5.70(e), which states that the non-FLEX Option leg(s) of a FLEX v. Non-FLEX Order may not Leg into the Simple Book, to provide for more efficient execution and processing of FLEX v. Non-FLEX Orders. The series that would comprise a FLEX v. Non-FLEX Order are parts of different classes and thus are subject to different trading setting and parameters pursuant to the Rules. Currently, electronic trading is not possible "across" classes given these different settings. Non-FLEX classes also have separate market data inputs, as the System must read market data for each class in connection with potential executions in non-FLEX classes. If the System receives a FLEX v. Non-FLEX Order, it would need to trade the Non-FLEX leg against the appropriate leg in the book; however, there is no book with resting simple FLEX orders against which the FLEX leg could execute. If this were to occur, execution opportunities for FLEX v. Non-FLEX Orders may be prevented. As discussed below, the Non-FLEX legs of FLEX v. Non-FLEX Orders will protect Priority Customer orders in the simple book for the Non-FLEX classes.⁶

The Exchange proposes to amend Rule 5.72 (FLEX Trading) to distinguish criteria for a complex order with only FLEX Option legs and to add criteria for FLEX and non-FLEX Option legs of a FLEX v. Non-FLEX Order. First, the

⁵ See Rule 1.1.

⁶ This proposed change is consistent with current Rules that do not permit legging of complex orders consisting of legs in different groups of series in a class, as the System handles groups of series as different classes. See Rule 5.33(g)(6).

Exchange proposes to amend Rule 5.72(b)(2) to specify that each FLEX Option leg of the FLEX Option complex strategy must include all terms for a FLEX Option series set forth in Rule 4.21 (including that a non-FLEX Option series with identical terms is not listed for trading), subject to the order entry requirements set forth in Rule 5.7.

Additionally, the Exchange proposes changes to distinguish the criteria for a complex order with only FLEX Option leg(s) from that proposed for FLEX v. Non-FLEX Orders, noting that there are no changes to the criteria to those FLEX Orders containing only FLEX Option leg(s) as a result of the proposed rule change. The Exchange proposes to amend Rule 5.72(b)(2)(A) to specifically reference the pricing requirements for complex FLEX Orders with FLEX Option legs only. As proposed Rule 5.72(b)(2)(A)(i) contains the requirements for a complex FLEX Order with only FLEX Option legs submitted into the System for an electronic FLEX Auction pursuant to Rule 5.72(c) or Rules 5.73 or 5.74, which must include a bid or offer price for each leg, which leg prices must add together to equal the net price. Proposed Rule 5.72(b)(2)(A)(ii) sets forth the requirements for a complex FLEX Order with only FLEX Option legs submitted

into the System prior to representation in an open outcry FLEX Auction pursuant to Rule 5.72 (d), namely that the order may include a bid or offer price on one or more of the legs (subject to a FLEX Trader's responsibilities pursuant to Rule 5.91 and Chapter 9). The execution leg prices must be entered or modified, as necessary, via PAR following execution of the order, which prices must add together to equal the net execution price.

The Exchange proposes to add Rule 5.72(b)(2)(B) containing certain requirements for a FLEX v. Non-FLEX Order. Under the proposed rule, a FLEX v. Non-FLEX Order submitted in the System for an electronic FLEX Auction pursuant to Rule 5.72(c) must include a bid or offer price for each FLEX Option leg but no bid or offer price for each non-FLEX Option leg, and a net price. By allowing the System the ability to adjust the price of the legs, FLEX Traders may achieve their desired net price for the order, while ensuring the non-FLEX Option legs fit within pricing requirements of the non-FLEX markets. A FLEX v. Non-FLEX Order submitted into the System prior to representation in an open outcry FLEX Auction pursuant to Rule 5.72(d) below [sic] may include a bid or offer price for any FLEX Option leg but no bid or offer price for

each non-FLEX Option leg, and a net price. By allowing flexibility in open outcry trading, FLEX Traders may achieve their desired net price for the order.

To achieve the desired net execution price for a FLEX v. Non-FLEX Order (1) the execution leg price of each non-FLEX Option leg may not be worse than the NBBO,⁷ worse than the BBO,⁸ or equal to the BBO if there is a Priority Customer order(s) on the Simple Book; and (2) the execution leg price of each FLEX Option leg(s) may be adjusted so that the prices of the FLEX Option legs combined with the prices of the non-FLEX Option legs add together to equal the net price. If a non-FLEX Option leg of a FLEX v. Non-FLEX Order cannot execute at a price permissible that meets the requirements set forth in proposed Rule 5.72(b)(2)(B)(i), the entire FLEX v. Non-FLEX Order will be cancelled.

The below examples are designed to illustrate the pricing of a FLEX v. Non-FLEX Order. Assume for each example a FLEX Trader wishes to execute a complex FLEX Order with two legs (one FLEX Option leg and one non-FLEX Option leg).

Example 1: Listed (i.e., non-FLEX) legs are adjusted to their NBBO first, FLEX Option leg is then adjusted residually to meet net execution price.

Instrument ID	Legs	Symbol	Side	Ratio	Expiration	Strike	Type
CI0001	Leg 1	XYZ	Buy	1	December	10	Call.
	Leg 2	1XYZ	Sell	1	November	10.01	Call.

FLEX Order Auction ("FOA"): Buy 10 CI0001 @1.25.

Leg 1 (Non-FLEX Option Leg) Price: N/A

Leg 1 Market: (Exchange Market-Maker) 2.20 × 2.30 (Exchange Market-Maker)

Leg 2 (FLEX Option Leg) Price: 1.00

Response 1: Sell 5 @1.19

Response 2: Sell 5 @1.25

FOA trades 5 with Response 1 at 1.19. The legs print at 2.20 and 1.01.

FOA trades 5 with Response 2 at 1.25. The legs print at 2.25 and 1.00.

Example 2: Listed (i.e., Non-FLEX) legs are adjusted up/down to their NBBO first, FLEX Option leg retains specified price, as no further adjustment is needed to meet net price.

Instrument ID	Legs	Symbol	Side	Ratio	Expiration	Strike	Type
CI0001	Leg 1	XYZ	Buy	1	December	10	Call.
	Leg 2	1XYZ	Sell	1	November	10.01	Call.

FOA: Buy 10 CI0001 @1.25.

Leg 1 (Non-FLEX Option Leg) Price: N/A

Leg 1 Market: (Exchange Market-Maker) 2.15 × 2.30 (Exchange Market-Maker)

Leg 2 (FLEX Option Leg) Price: 1.00

Response 1: Sell 5 @1.19

Response 2: Sell 5 @1.25

FOA trades 5 with Response 1 at 1.19. The legs print at 2.19 and 1.00.

FOA trades 5 with Response 2 at 1.25. The legs print at 2.25 and 1.00.

The Exchange proposes to amend Rule 4.21 (Series of FLEX Options).⁹ The Exchange proposes to add Rule 4.21(a)(4) to state that the Exchange may halt trading in a FLEX complex strategy

(whether comprised of all FLEX Option legs or FLEX and non-FLEX Option legs) if any leg of the strategy is halted. The System does not accept a FLEX complex order for a series while trading in the class is halted. A FLEX complex strategy may not execute until all legs are no longer halted.

⁷ See Rule 1.1. The term "NBBO" means the national best bid or offer the Exchange calculates based on market information it receives from OPRA.

⁸ See Rule 1.1. The term "BBO" means the best bid or offer disseminated on the Exchange.

⁹ As part of the proposed changes, the Exchange proposes to add a "FLEX Option series" as a defined term in Rule 4.21(a). Further, to enhance comprehension, the Exchange proposes to amend Rule 4.21(a)(2) to add a missing word ("be"), as

well as clarify that a FLEX Order for a new FLEX Option series may be submitted on any trading day prior to the expiration date. Such changes are non-substantive, clarifying changes.

Finally, the Exchange proposes to amend Rule 6.5 (Nullification and Adjustment of Option Transactions Including Obvious Errors), Interpretation and Policy .07. Specifically, the Exchange proposes to add Rule 6.5, Interpretation and Policy. 07(d), to state that if a non-FLEX Option leg of a FLEX v. Non-FLEX Order qualifies as an Obvious Error under Rule 6.5(c)(1) or a Catastrophic Error under Rule 6.5(d)(1), then the non-FLEX Option leg that is an Obvious or Catastrophic Error will be adjusted in accordance with Rules 6.5(c)(4)(A) or (d)(3), respectively, regardless of whether one of the parties is a Customer. However, the non-FLEX Option leg of any Customer order subject to proposed Rule 6.5, Interpretation and Policy. 07(d) will be nullified if the adjustment would result in an execution price higher (for buy transactions) or lower (for sell transactions) than the Customer's net execution price of the non-FLEX Option leg. If any leg of a FLEX v. Non-FLEX Order is nullified, the entire transaction is nullified. This is consistent with the Exchange's handling of other complex orders, including stock-option orders, and ensures protections in the event of an Obvious or Catastrophic error.

The Exchange believes that its existing surveillance and reporting safeguards in place are adequate to deter and detect possible manipulative behavior which might arise from trading FLEX v. Non-FLEX Orders and will support the protection of investors and the public interest. The Exchange also represents that it has the necessary system capacity to support the new complex FLEX Order type. Finally, the Exchange does not believe that any market disruptions will be encountered with the introduction of this complex FLEX Order type.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the "Act") and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.¹⁰ Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)¹¹ requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling,

processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)¹² requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

Specifically, the Exchange believes the proposed rule change will benefit investors by expanding investors' choices and flexibility with respect to the trading of FLEX Options. The Exchange believes that introducing FLEX v. Non-FLEX Orders will increase order flow to the Exchange, increase the variety of options products available for trading, and provide a valuable tool for investors to manage risk.

The Exchange believes that the proposed rule change would remove impediments to and perfect the mechanism of a free and open market as FLEX v. Non-FLEX Orders would enable market participants to execute a complex strategy including a combination of FLEX Option series and non-FLEX Option series, which would, in turn, provide greater opportunities for market participants to manage risk through the use of a complex FLEX Order to the benefit of investors and the public interest. The proposed rule change will benefit TPHs by providing a more efficient mechanism for TPHs to provide and seek liquidity for customized or complex FLEX strategies which include a non-FLEX Option leg(s).

Further, trading FLEX Options, including FLEX v. Non-FLEX Orders, on an exchange is an alternative to trading customized options in OTC markets and carries with it the advantages of exchange markets such as transparency, parameters and procedures for clearance and settlement, and a centralized counterparty clearing agency. Therefore, the Exchange believes the proposed rule change will promote these same benefits for the market as a whole by providing an additional venue for market participants to seek liquidity for customized, large-sized, or complex FLEX option orders, including those with a non-FLEX Option leg(s). The Exchange believes that providing an additional venue for these FLEX orders, rather than potentially splitting the orders across OTC and exchange markets, will benefit investors by increasing competition for order flow

and executions, and thereby potentially result in more competitive pricing related to FLEX Options.

The Exchange believes that the proposed changes to Rule 5.70(b), to add FLEX v. Non-FLEX Orders to the list of complex orders available for FLEX trading, are consistent with the Act and remove impediments to and perfect the mechanism of a free and open market and a national market system because the changes will allow investors to trade in a more efficient manner, allowing investors to better customize their trading strategies and implement more precise trading strategies which are not available under current rules. Currently, a market participant is unable to trade a FLEX Option and a listed option as part of the same complex strategy; such user must submit an order containing the FLEX Option(s) and an order containing the listed option. This may introduce additional complexities such as price and legging risk, which would be eliminated under the proposed rule change. These complexities may unnecessarily limit market participants' ability to trade in an exchange environment that offers the added benefits of transparency, price discovery, liquidity, and financial stability. These investors may have improved capability under the proposed rule change to execute strategies to meet their specific investment objectives by using a single order with customized FLEX Option legs with non-FLEX Option legs.

Similarly, the Exchange also believes the proposed changes to Rule 5.70(b), to remove the requirements that each leg of a complex FLEX Order must be for a FLEX Option series authorized for FLEX trading with the same underlying equity security or index and have the same exercise style, will remove impediments to and perfect the mechanism of a free and open market and benefit investors, because it will provide TPHs with additional flexibility and precision in their investment strategies, by allowing TPHs to trade complex strategies that would otherwise be required to split into multiple, separate orders.

The proposed change to Rule 5.70(b) to add a cite to Rule 1.1 for the definition of complex orders provides further clarity within the Rules, to the benefit of investors.

The Exchange believes the proposed changes to Rule 4.21(a), which address when the Exchange may halt trading in a FLEX complex strategy (whether comprised of all FLEX Option legs or FLEX and non-FLEX Option legs), are consistent with the Act and promotes the public interest and the protection of investors by clarifying the Exchange's

¹⁰ 15 U.S.C. 78f(b).

¹¹ 15 U.S.C. 78f(b)(5).

¹² *Id.*

authority with respect to FLEX complex strategies comprised of all FLEX Option legs and providing a consistent and transparent procedure with respect to FLEX complex strategies comprised of FLEX and non-FLEX Option legs, that would be applied by the Exchange, similar to trading halt authority under current rules.¹³ Further, the proposed change to add the defined term “FLEX Option series” provides further clarity within the Rules and eliminates potential confusion by providing a definition of “FLEX Option series” to the benefit of investors.

The Exchange believes the proposed changes to Rule 5.72(b)(2)(A), which provide clarity with respect to the criteria required for complex FLEX Orders with FLEX Option legs only, helps [sic] will help promote a fair and orderly national options market system. As noted above, there are no changes in regards to complex FLEX Orders with FLEX Option legs only as a result of the proposed rule changes. As such, the changes proposed under Rule 5.72(b)(2)(A), to separate out the requirements for complex FLEX Orders with FLEX Option legs only, provide clarity regarding the requirements for complex FLEX Orders with FLEX Option legs only, as compared to the proposed requirements for complex FLEX Orders with FLEX and non-FLEX Option legs.

Additionally, the Exchange believes the proposed rule change to add Rule 5.70(d) will remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest, because it will provide market participants with the same flexibility with respect to all their complex trading strategies. The proposed rule change eliminates confusion regarding what types of FLEX v. Non-FLEX Orders are permissible for electronic processing. As noted above, the proposed rule changes regarding execution of nonconforming FLEX v. Non-FLEX Orders are consistent with the Exchange’s previously adopted rules regarding execution of other nonconforming complex orders.

The Exchange believes the proposed pricing requirements for FLEX v. Non-FLEX Orders, set forth in proposed Rule 5.72(b)(2)(B), would remove impediments to and perfect the mechanism of a free and open market, as the proposed trading process for FLEX v. Non-FLEX Orders will provide the ability for investors to achieve the desired net package price for those

orders while protecting customers with resting interest in the non-FLEX Simple Book. By requiring a FLEX v. Non-FLEX Order submitted into a FLEX Auction (whether electronically or in open outcry) to include a bid or offer price for each FLEX Option leg, but no bid or offer for each non-FLEX Option leg, and a net price, the requirements ensure that the non-FLEX Option leg will be subject to the same pricing requirements as they would if not part of a FLEX v. Non-FLEX Order. Specifically, the price of any non-FLEX Option leg that is part of a FLEX v. Non-FLEX Order may not be outside of the BBO or NBBO. The Exchange’s proposal will continue to protect Priority Customer interest on the Exchange, as the non-FLEX Option legs of a FLEX v. Non-FLEX Order will always trade at a price better than BBO if there is a customer on a leg.

The Exchange believes this proposed trading process will ensure user who chooses to submit a listed (*i.e.*, Non-FLEX) leg as part of a FLEX v. Non-FLEX Order is subject to the same pricing requirements as they would be if the listed leg was not submitted with FLEX Option legs for execution. Ultimately, FLEX v. Non-FLEX Orders will trade in the same manner as FLEX complex orders do today, and execution of the non-FLEX Option legs of these orders will continue to comply with linkage requirements (by not permitting trade-throughs of the NBBO) and protect resting customer interest in the Simple Book. Further, the Exchange believes that the proposal to not permit the non-FLEX Option legs of a FLEX v. Non-FLEX Order to leg into the Simple Book is consistent with the Act and promotes the public interest and the protection of investors, because it will provide for more efficient execution and processing of FLEX v. Non-FLEX Orders, as legging would prevent execution opportunities for these orders (as discussed above).

Finally, the Exchange believes that the proposed rule change is designed to not permit unfair discrimination among market participants as all TPHs may, but are not required to, trade FLEX v. Non-FLEX Orders.

B. Self-Regulatory Organization’s Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange does not believe that the proposed rule change will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act, as all TPHs that are registered as FLEX

Traders in accordance with the Exchange’s Rules will be able to trade FLEX v. Non-FLEX Orders in the same manner.

The Exchange does not believe that the proposed rule change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act, as the proposal is designed to increase competition for order flow on the Exchange in a manner that is beneficial to investors because it is designed to provide investors seeking to execute both a FLEX Option(s) and a listed option(s) with a more effective method of executing the trades, which may result in trade efficiencies (*i.e.*, pricing or reporting efficiencies) and reduced risk (*i.e.*, pricing and legging risk). The Exchange believes the proposed rule change will encourage competition, as it may broaden the base of investors that use FLEX Options to manage their trading and investment risk, including investors that currently trade in the OTC market for customized options. The Exchange believes the proposed rule change may increase competition as it may lead to the migration of options currently trading in the OTC market to trading on the Exchange. Also, any migration to the Exchange from the OTC market would result in increased market transparency and thus increased price competition.

The Exchange further notes that it operates in a highly competitive market in which market participants can readily direct order flow to competing venues who offer similar functionality. All TPHs may, but are not required to, trade FLEX v. Non-FLEX Orders at the Exchange.

C. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the **Federal Register** or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission will:

(A) by order approve or disapprove such proposed rule change, or

¹³ See, e.g., Rule 4.21(a)(3).

(B) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-CBOE-2024-047 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090.

All submissions should refer to file number SR-CBOE-2024-047. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-CBOE-2024-047 and should be submitted on or before November 20, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁴

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2024-25145 Filed 10-29-24; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101426; File No. SR-CboeEDGX-2024-068]

Self-Regulatory Organizations; Cboe EDGX Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Its Fee Schedule

October 24, 2024.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on October 18, 2024, Cboe EDGX Exchange, Inc. (the "Exchange" or "EDGX") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

Cboe EDGX Exchange, Inc. (the "Exchange" or "EDGX") proposes to amend its Fee Schedule. The text of the proposed rule change is provided in Exhibit 5.

The text of the proposed rule change is also available on the Exchange's website (http://markets.cboe.com/us/options/regulation/rule_filings/edgx/), at the Exchange's Office of the Secretary, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The

Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to update its Fee Schedule to provide a temporary 20% discount on fees assessed to EDGX Members ("Members")³ and non-Members that purchase \$20,000 or more of ad hoc purchases of EDGX Historical Depth Data ("Historical Depth Reports"), effective October 18, 2024 through December 31, 2024.

By way of background, the Exchange currently makes available for purchase Depth Data, which is a daily archive of the Exchange's depth of book real-time feed, which provides depth-of-book quotations and execution information based on equity orders entered into the System. The Exchange also offers Historical Depth Data, which offers such data on a historical basis, *i.e.* T+1 or later. The Historical Depth Report is a completely voluntary product, in that the Exchange is not required by any rule or regulation to make this data available and that potential customers may purchase it on an ad-hoc basis only if they voluntarily choose to do so.

Cboe LiveVol, LLC ("LiveVol"), a wholly owned subsidiary of the Exchange's parent company, Cboe Global Markets, Inc., makes the Historical Depth Report available for purchase to Users on the LiveVol DataShop website (data.shop.cboe.com). The Historical Depth Data is available for purchase to Members and Non-Members; the Exchange charges a fee per month of historical data of \$1,000. The Historical Depth Report provided on a historical basis is only provided to data recipients for internal use only, and thus, no redistribution will be permitted. The Exchange notes that the Historical Depth Report is subject to direct competition from other exchanges, as other exchanges offer similar products for a fee.⁴

³ See Rule 1.5(n) ("Member"). The term "Member" shall mean any registered broker or dealer that has been admitted to membership in the Exchange. A Member will have the status of a "member" of the Exchange as that term is defined in Section 3(a)(3) of the Act. Membership may be granted to a sole proprietor, partnership, corporation, limited liability company or other organization which is a registered broker or dealer pursuant to Section 15 of the Act, and which has been approved by the Exchange.

⁴ See, e.g., <https://www.nasdaqtrader.com/Trader.aspx?id=DPPriceListOptions#nom>; and

¹⁴ 17 CFR 200.30-3(a)(12).

¹⁵ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

The Exchange's options platform ("EDGX Options") and affiliated equities and options exchanges (*i.e.*, Cboe BZX Exchange, Inc. ("BZX"), Cboe Exchange, Inc. ("Cboe Options"), Cboe C2 Exchange, Inc. ("C2 Options"), Cboe EDGA Exchange, Inc. ("EDGA"), and Cboe BYX Exchange, Inc. ("BYX") (collectively, "Affiliates") also offer similar data products.⁵ Particularly, each of the Exchange's Affiliates offer a daily and historical archive of their depth of book real-time feed with execution information based on their trading activity that is substantially similar to the information provided by the Exchange through its Depth Data products.

The Exchange proposes to provide a temporary pricing incentive program in which Members or Non-Members that purchase Historical Depth Reports will receive a percentage fee discount where specific purchase thresholds are met. Specifically, the Exchange proposes to provide a 20% discount for ad-hoc purchases of Historical Depth Data of \$20,000 or more.⁶ The proposed program will apply to all market participants irrespective of whether the market participant is a new or current purchaser; however, the discount cannot be combined with any other discounts offered by the Exchange. The Exchange intends to introduce the discount program beginning October 18, 2024, with the program remaining in effect through December 31, 2024. The Exchange also notes that it previously adopted similar discount programs for other historical data products offered by the Exchange.⁷

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the "Act") and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.⁸ Specifically, the Exchange believes the proposed rule change is consistent with the Section

6(b)(5)⁹ requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)¹⁰ requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers. The Exchange also believes the proposed rule change is consistent with Section 6(b)(4) of the Act,¹¹ which requires that Exchange rules provide for the equitable allocation of reasonable dues, fees, and other charges among its Members and other persons using its facilities.

In adopting Regulation NMS, the Commission granted self-regulatory organizations ("SROs") and broker-dealers increased authority and flexibility to offer new and unique market data to the public. It was believed that this authority would expand the amount of data available to consumers, and also spur innovation and competition for the provision of market data. The Exchange believes that the proposed fee changes will further broaden the availability of U.S. equity market data to investors consistent with the principles of Regulation NMS. The Exchange believes the dissemination of historical depth of book data via Historical Depth Reports benefits investors through increased transparency and may promote better informed trading, as well as research and studies of the equities industry. Nevertheless, the Exchange notes that such data is not necessary for trading and as noted above, is entirely optional. Moreover, several other exchanges offer a similar data product which offer the same type of data content through similar reports.¹²

The Exchange operates in a highly competitive environment. Indeed, there are currently 16 registered equities exchanges that trade equities. Based on publicly available information, no single equities exchange has more than 13% of

the equity market share.¹³ The Commission has repeatedly expressed its preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. Particularly, in Regulation NMS, the Commission highlighted the importance of market forces in determining prices and SRO revenues and, also, recognized that current regulation of the market system "has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies."¹⁴ Making similar data products available to market participants fosters competition in the marketplace, and constrains the ability of exchanges to charge supercompetitive fees. In the event that a market participant views one exchange's data product as more attractive than the competition, that market participant can, and often does, switch between similar products. The proposed fees are a result of the competitive environment of the U.S. equities industry as the Exchange seeks to adopt fees to attract purchasers of Historical Depth Reports.

The Exchange believes that the proposed incentive program for any Member or non-Member who purchases Historical Depth Reports is reasonable because such purchasers would receive a 20% discount for purchasing \$20,000 or more worth of Historical Depth Reports. The Exchange believes the proposed discount is reasonable as it will give purchasers the ability to use and test the Historical Depth Reports at a discounted rate, prior to purchasing additional months or a monthly subscription, and will therefore encourage users to purchase Historical Depth Reports. Further, the proposed discount is intended to promote increased use of the Exchange's Historical Depth Reports by defraying some of the costs a purchaser would ordinarily have to expend before using the data product. The Exchange believes that the proposed discount is equitable and not unfairly discriminatory because it will apply equally to all Members and non-Members who purchase Historical Depth Reports. Lastly, the purchase of this data product is discretionary and not compulsory. Indeed, no market participant is required to purchase the Historical Depth Reports, and the Exchange is not required to make

⁵ https://www.nyse.com/publicdocs/nyse/data/NYSE_Market_Data_Fee_Schedule.pdf.

⁶ See, for example, EDGA Fee Schedule, BYX Fee Schedule, BZX Fee Schedule.

⁷ The discount will apply on an order-by-order basis. The discount will apply to the total purchase price, once the \$20,000 minimum purchase is satisfied (for example, a qualifying order of \$25,000 would be discounted to \$20,000, *i.e.* receive a 20% discount of \$5,000).

⁸ See Securities Exchange Act Release No. 99185 (December 14, 2023), 88 FR 88182 (December 20, 2023) (SR-CboeEDGX-2023-072) and Securities Exchange Act Release No. 100333 (June 14, 2024), 89 FR 52115 (June 21, 2024) (SR-CboeEDGX-2024-034).

⁹ 15 U.S.C. 78f(b).

¹⁰ 15 U.S.C. 78f(b)(5).

¹¹ *Id.*

¹² 15 U.S.C. 78f(b)(4).

¹³ See *supra* note 4.

¹⁴ See Cboe Global Markets, U.S. Equities Market Volume Summary, Month-to-Date (October 3, 2024), available at https://www.cboe.com/us/equities/market_statistics/.

¹⁵ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, 37499 (June 29, 2005) ("Regulation NMS Adopting Release").

Historical Depth Reports available to all investors. Potential purchasers may request the data at any time if they believe it to be valuable or may decline to purchase such data. As noted above, the Exchange previously adopted similar discount programs for other historical data products offered by the Exchange.¹⁵

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange operates in a highly competitive environment in which the Exchange must continually adjust its fees to remain competitive. Because competitors are free to modify their own fees in response, including the adoption of similar discount to those fees, the Exchange believes that the degree to which fee changes (including discounts and rebates) in this market may impose any burden on competition is extremely limited. As discussed above, the Exchange's Historical Depth Reports offering is subject to direct competition from several other options exchanges that offer similar data products. Moreover, purchase of Historical Depth Reports is optional. It is designed to help investors understand underlying market trends to improve the quality of investment decisions, but is not necessary to execute a trade.

The proposed rule changes are grounded in the Exchange's efforts to compete more effectively. In this competitive environment, potential purchasers are free to choose which, if any, similar product to purchase to satisfy their need for market information. As a result, the Exchange believes this proposed rule change permits fair competition among national securities exchanges. Further, the Exchange believes that these changes will not cause any unnecessary or inappropriate burden on intermarket competition, as the proposed incentive program applies uniformly to any purchaser of Historical Depth Reports.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A) of the Act¹⁶ and paragraph (f) of Rule 19b-4¹⁷ thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission will institute proceedings to determine whether the proposed rule change should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-CboeEDGX-2024-068 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090. All submissions should refer to file number SR-CboeEDGX-2024-068. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the

Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-CboeEDGX-2024-068 and should be submitted on or before November 20, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁸

Sherry R. Haywood,
Assistant Secretary.

[FR Doc. 2024-25143 Filed 10-29-24; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release 34-101431; File No. 10-242]

24X National Exchange LLC; Notice of Filing of Amendment No. 2 to an Application for Registration as a National Securities Exchange Under Section 6 of the Securities Exchange Act of 1934

October 24, 2024.

On February 6, 2024, 24X National Exchange LLC ("24X") filed with the Securities and Exchange Commission ("Commission") a Form 1 application under the Securities Exchange Act of 1934 ("Act") seeking registration as a national securities exchange under Section 6 of the Act.¹ Notice of the application was published for comment in the **Federal Register** on March 4, 2024.² The Commission received comments on the Form 1³ and a letter

¹⁸ 17 CFR 200.30-3(a)(12).

¹⁵ 15 U.S.C. 78f.

² See Securities Exchange Act Release No. 99614 (Feb. 27, 2024), 89 FR 15621 ("Notice").

³ The public comment file for 24X's Form 1 (File No. 10-242) is available on the Commission's website at: <https://www.sec.gov/comments/10-242/10-242.htm>.

¹⁵ See Securities Exchange Act Release No. 99185 (December 14, 2023), 88 FR 88182 (December 20, 2023) (SR-CboeEDGX-2023-072) and Securities Exchange Act Release No. 100333 (June 14, 2024), 89 FR 52115 (June 21, 2024) (SR-CboeEDGX-2024-034).

¹⁶ 15 U.S.C. 78s(b)(3)(A).

¹⁷ 17 CFR 240.19b-4(f).

responding to the comments from 24X.⁴ On May 31, 2024, the Commission instituted proceedings pursuant to Section 19(a)(1)(B) of the Act⁵ to determine whether to grant or deny 24X's application for registration as a national securities exchange under Section 6 of the Act (the "OIP").⁶ After issuance of the OIP, Commission received six comment letters⁷ and a letter responding to the OIP and comments from 24X.⁸ On August 21, 2024, 24X filed an amendment to its Form 1 application ("Amendment No. 1"),⁹ which was published for comment in the **Federal Register** on September 3, 2024.¹⁰ On August 30, 2024, the Commission extended, pursuant to Section 19(a)(1)(B) of the Exchange Act,¹¹ the time period for granting or denying 24X's Form 1 application for an additional 90 days, until November 29, 2024.¹² The Commission subsequently received three comment letters.¹³ On October 23, 2024, 24X filed a second amendment to its Form 1 application ("Amendment No. 2").¹⁴ The Commission is publishing this notice in order to solicit views of interested persons on 24X's Form 1, as amended by Amendment No. 2.

I. Description of 24X's Proposed Trading System

As described in the Notice, 24X proposes to operate as a national securities exchange with expanded

hours of trading that are outside of regular trading hours.¹⁵

II. Amendment No. 2 to 24X's Form 1

In Amendment No. 2, 24X proposes to revise Exhibit B-1 to: (1) modify the definition of "24X Trading Day" in 24X Rule 1.5(b) to reflect trading over 5 days, rather than the 7 days initially proposed, and make corresponding changes to 24X Rule 11.1;¹⁶ (2) modify the definition of "24X Market Session" in 24X Rule 1.5(c) to revise the hours of, and to expressly condition the operation of, the 24X Market Session;¹⁷ (3) add

¹⁵ "Regular trading hours" is defined in Commission Rule 600(b)(88) as "the time between 9:30 a.m. and 4:00 p.m. Eastern Time." 17 CFR 242.600(b)(88).

¹⁶ In Amendment No. 2, 24X proposes to revise the 24X Rule 1.5(b) definition of "24X Trading Day" to mean, "the 23-hour period commencing at 8:00 p.m. Eastern Time on one calendar day and ending at 7:00 p.m. Eastern Time on the next calendar day for the period from Sunday at 8 p.m. Eastern Time through Friday at 7:00 p.m. Eastern Time. Subject to any trading pauses, halts or suspensions as described in these Rules, including the pause in trading described in the next sentence, trading will be continuous during this period, despite the designation of specified times for the Pre-Market Session, Core Market Session, Post-Market Session and 24X Market Session. For RHO Orders entered outside the Core Market Session, or during the Core Market Session but prior to the commencement of trading, trading for such RHO Orders will commence once the security has begun trading on the primary listing market on or after 9:30:00 a.m. Eastern Time; for all orders eligible to trade in the Core Market Session other than such RHO Orders, trading will be continuous in the Core Market Session, with no pause in trading related to the commencement of trading on the primary listing market."

¹⁷ Specifically, 24X proposes in Amendment No. 2 to revise the definition of "24X Market Session" in 24X Rule 1.5(c) to read, "(i) the time between 8:00 p.m. Eastern Time on Sunday and 4:00 a.m. Eastern Time on Monday, unless Monday is not a U.S. Business Day, (ii) the time between 8:00 p.m. Eastern Time on Monday and 4:00 a.m. Eastern Time on Tuesday, unless Tuesday is not a U.S. Business Day, (iii) the time between 8:00 p.m. Eastern Time on Tuesday and 4:00 a.m. Eastern Time on Wednesday, unless Wednesday is not a U.S. Business Day, (iv) the time between 8:00 p.m. Eastern Time on Wednesday and 4:00 a.m. Eastern Time on Thursday, unless Thursday is not a U.S. Business Day, and (v) the time between 8:00 p.m. Eastern Time on Thursday and 4:00 a.m. Eastern Time on Friday, unless Friday is not a U.S. Business Day; provided, however, it shall not include any trading pauses as described in Rule 11.15(c). For the avoidance of doubt, notwithstanding anything to the contrary in these Rules, the Exchange shall not commence operation of the 24X Market Session unless the Equity Data Plans (1) have established a mechanism to collect, consolidate, process and disseminate quotation and transaction information at all times during the 24X Market Session that is equivalent to the mechanism established for Exchange Trading Hours other than the 24X Market Session, and (2) have provided the Exchange with notification that they are prepared to collect, consolidate, process and disseminate quotation and transaction information to accommodate the 24X Market Session. Prior to commencing operation during the 24X Market Session, the Exchange will file a proposed rule change pursuant to Section 19(b) of the Exchange

subparagraph (o) to 24X Rule 1.5 to define the term, "Equity Data Plans";¹⁸ (4) revise 24X Rule 3.21(i) ("Customer Disclosures") to reflect the proposed amendment to the 24X Market Session;¹⁹ (5) revise the Time-in-Force instructions in 24X Rule 11.6(o)(4) to reflect the new operating hours; (6) make corresponding changes to 24X Rule 11.15(c), governing trading pauses, consistent with the new operating hours; and (7) modify 24X Rule 11.16 to clarify that the Exchange will not operate the 24X Market Session until the 24X Market Session Proposed Rule Change as required under 24X Rule 1.5(c) has been approved or otherwise become effective under Section 19(b) of the Act.²⁰

In Amendment No. 2, 24X also proposes to revise Exhibit E and Exhibit E-1 to make conforming changes to reflect the new operating hours of the Exchange, and in particular, the operating hours of, and conditions for commencement of operations of, the 24X Market Session.

III. Request for Written Comment

The Commission requests that interested persons provide written views and data with respect to 24X's

Act and the rules thereunder to amend its rules confirming that the Exchange is able to comply with its obligations under the Exchange Act and the rules thereunder during the 24X Market Session and that such Equity Data Plans are prepared to collect, consolidate, process and disseminate quotation and transaction information at all times during the 24X Market Session ("24X Market Session Proposed Rule Change"). The 24X Market Session Proposed Rule Change must be filed with the SEC within 18 months of the SEC's approval of the Exchange's application for registration as a national securities exchange. If the 24X Market Session Proposed Rule Change is not filed within 18 months of the SEC's approval of the Exchange's application for registration as a national securities exchange, the Exchange will promptly file a proposed rule change to remove the rules that apply to the 24X Market Session."

¹⁸ 24X proposes to define "Equity Data Plans" in 24X Rule 1.5(o) as "the effective national market system plan(s) that govern the collection, consolidation, processing and dissemination of consolidated equity market data via the exclusive securities information processors ("SIPs"), including (1) Consolidated Tape Association Plan ("CTA Plan"), (2) Consolidated Quotation Plan ("CQ Plan"), (3) the Joint Self-Regulatory Organization Plan Governing the Collection, Consolidation and Dissemination of Quotation and Transaction Information for Nasdaq-Listed Securities Traded on Exchanges on an Unlisted Trading Privileges Basis ("UTP Plan"), and (4) any successor thereto to the named Plan(s)."

¹⁹ In particular, in Amendment No. 2, 24X proposes to remove subparagraph (2) to 24X Rule 3.21(i).

²⁰ Specifically, 24X proposes in Amendment No. 2 to add language to 24X Rule 11.16 to read, "[t]he Exchange will not commence operation of the 24X Market Session until a proposed rule change as required under 24X Rule 1.5(c) has been approved or become otherwise effective under Section 19(b) of the Exchange Act and the rules thereunder."

⁴ See letter to Secretary, Commission, from David Sassoon, General Counsel, 24X, dated May 30, 2024 ("24X Letter").

⁵ 15 U.S.C. 78s(a)(1)(B).

⁶ See Securities Exchange Act Release No. 100254 (May 31, 2024), 89 FR 48466 (Jun. 6, 2024).

⁷ The public comment file for 24X's Form 1 (File No. 10-242) is available on the Commission's website at: <https://www.sec.gov/comments/10-242/10-242.htm>.

⁸ See letter to Secretary, Commission, from David Sassoon, General Counsel, 24X, dated Aug. 21, 2024 ("24X OIP Letter").

⁹ Amendment No. 1 is available on the Commission's website at: <https://www.sec.gov/rules-regulations/other-commission-orders-notices-information/24x-form-1>.

¹⁰ See Securities Exchange Act Release No. 100839 (Aug. 27, 2024), 89 FR 71471 (Sept. 3, 2024).

¹¹ 15 U.S.C. 78s(a)(1)(B).

¹² See Securities Exchange Act Release No. 100884 (Aug. 30, 2024), 89 FR 72917 (Sept. 6, 2024).

¹³ See letters from Patrick Blonien, Instructor of Finance, Carnegie Mellon University, and Alexander Ober, Ph.D. Candidate in Finance, Rice University, undated; John Ramsay, Chief Market Policy Officer, Investors' Exchange LLC, dated Oct. 9, 2024; Joanna Mallers, Secretary, FIA Principal Traders Group, dated Oct. 11, 2024.

¹⁴ Amendment No. 2 is available on the Commission's website at: <https://www.sec.gov/rules-regulations/other-commission-orders-notices-information/24x-form-1>.

Form 1, as amended by Amendment No. 2. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number 10–242 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549–1090.

All submissions should refer to File Number 10–242. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<http://www.sec.gov/rules/other.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to 24X's Form 1, as amended, filed with the Commission, and all written communications relating to the application between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from submissions. You should submit only information that you wish to make publicly available.

All submissions should refer to File Number 10–242 and should be submitted on or before November 14, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.²¹

J. Matthew DeLesDernier,
Deputy Secretary.

[FR Doc. 2024–25170 Filed 10–29–24; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–101427; File No. SR–CboeEDGA–2024–041]

Self-Regulatory Organizations; Cboe EDGA Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Its Fee Schedule

October 24, 2024.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”),¹ and Rule 19b–4 thereunder,² notice is hereby given that on October 18, 2024, Cboe EDGA Exchange, Inc. (the “Exchange” or “EDGA”) filed with the Securities and Exchange Commission (the “Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

Cboe EDGA Exchange, Inc. (the “Exchange” or “EDGA”) proposes to amend its Fee Schedule. The text of the proposed rule change is provided in Exhibit 5.

The text of the proposed rule change is also available on the Exchange's website (http://markets.cboe.com/us/equities/regulation/rule_filings/edga/), at the Exchange's Office of the Secretary, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to update its Fee Schedule to provide a temporary 20% discount on fees assessed to EDGA Members (“Members”)³ and non-Members that purchase \$20,000 or more of or more of ad hoc purchases of EDGA Historical Depth Data (“Historical Depth Reports”), effective October 18, 2024 through December 31, 2024.

By way of background, the Exchange currently makes available for purchase Depth Data, which is a daily archive of the Exchange's depth of book real-time feed, which provides depth-of-book quotations and execution information based on equity orders entered into the System. The Exchange also offers Historical Depth Data, which offers such data on a historical basis, *i.e.*, T+1 or later. The Historical Depth Report is a completely voluntary product, in that the Exchange is not required by any rule or regulation to make this data available and that potential customers may purchase it on an ad-hoc basis only if they voluntarily choose to do so.

Cboe LiveVol, LLC (“LiveVol”), a wholly owned subsidiary of the Exchange's parent company, Cboe Global Markets, Inc., makes the Historical Depth Report available for purchase to Users on the LiveVol DataShop website (datashop.cboe.com). The Historical Depth Data is available for purchase to Members and Non-Members; the Exchange charges a fee per month of historical data of \$1,000. The Historical Depth Report provided on a historical basis is only provided to data recipients for internal use only, and thus, no redistribution will be permitted. The Exchange notes that the Historical Depth Report is subject to direct competition from other exchanges, as other exchanges offer similar products for a fee.⁴

The Exchange's affiliated equities and options exchanges (*i.e.*, Cboe Exchange, Inc. (“Cboe Options”), Cboe C2 Exchange, Inc. (“C2 Options”), Cboe

³ See Rule 1.5(n) (“Member”). The term “Member” shall mean any registered broker or dealer that has been admitted to membership in the Exchange. A Member will have the status of a “member” of the Exchange as that term is defined in Section 3(a)(3) of the Act. Membership may be granted to a sole proprietor, partnership, corporation, limited liability company or other organization which is a registered broker or dealer pursuant to Section 15 of the Act, and which has been approved by the Exchange.

⁴ See, *e.g.*, <https://www.nasdaqtrader.com/Trader.aspx?id=DPPriceListOptions#nom>; and https://www.nyse.com/publicdocs/nyse/data/NYSE_Market_Data_Fee_Schedule.pdf.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b–4.

²¹ 17 CFR 200.30–3(a)(71)(ii).

EDGX Exchange, Inc. (“EDGX”), Cboe BZX Exchange, Inc. (“BZX”), and Cboe BYX Exchange, Inc. (“BYX”), collectively, “Affiliates”) also offer similar data products.⁵ Particularly, each of the Exchange’s Affiliates offer a daily and historical archive of their depth of book real-time feed with execution information based on their trading activity that is substantially similar to the information provided by the Exchange through its Depth Data products.

The Exchange proposes to provide a temporary pricing incentive program in which Members or Non-Members that purchase Historical Depth Reports will receive a percentage fee discount where specific purchase thresholds are met. Specifically, the Exchange proposes to provide a 20% discount for ad-hoc purchases of Historical Depth Data of \$20,000 or more.⁶ The proposed program will apply to all market participants irrespective of whether the market participant is a new or current purchaser; however, the discount cannot be combined with any other discounts offered by the Exchange. The Exchange intends to introduce the discount program beginning October 18, 2024, with the program remaining in effect through December 31, 2024. The Exchange also notes that it previously adopted similar discount programs for other historical data products offered by the Exchange.⁷

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the “Act”) and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.⁸ Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)⁹ requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged

in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)¹⁰ requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers. The Exchange also believes the proposed rule change is consistent with Section 6(b)(4) of the Act,¹¹ which requires that Exchange rules provide for the equitable allocation of reasonable dues, fees, and other charges among its Members and other persons using its facilities.

In adopting Regulation NMS, the Commission granted self-regulatory organizations (“SROs”) and broker-dealers increased authority and flexibility to offer new and unique market data to the public. It was believed that this authority would expand the amount of data available to consumers, and also spur innovation and competition for the provision of market data. The Exchange believes that the proposed fee changes will further broaden the availability of U.S. equity market data to investors consistent with the principles of Regulation NMS. The Exchange believes the dissemination of historical depth of book data via Historical Depth Reports benefits investors through increased transparency and may promote better informed trading, as well as research and studies of the equities industry. Nevertheless, the Exchange notes that such data is not necessary for trading and as noted above, is entirely optional. Moreover, several other exchanges offer a similar data product which offer the same type of data content through similar reports.¹²

The Exchange operates in a highly competitive environment. Indeed, there are currently 16 registered equities exchanges that trade equities. Based on publicly available information, no single equities exchange has more than 13% of the equity market share.¹³ The Commission has repeatedly expressed its preference for competition over regulatory intervention in determining prices, products, and services in the

securities markets. Particularly, in Regulation NMS, the Commission highlighted the importance of market forces in determining prices and SRO revenues and, also, recognized that current regulation of the market system “has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies.”¹⁴ Making similar data products available to market participants fosters competition in the marketplace, and constrains the ability of exchanges to charge supercompetitive fees. In the event that a market participant views one exchange’s data product as more attractive than the competition, that market participant can, and often does, switch between similar products. The proposed fees are a result of the competitive environment of the U.S. equities industry as the Exchange seeks to adopt fees to attract purchasers of Historical Depth Reports.

The Exchange believes that the proposed incentive program for any Member or non-Member who purchases Historical Depth Reports is reasonable because such purchasers would receive a 20% discount for purchasing \$20,000 or more worth of Historical Depth Reports. The Exchange believes the proposed discount is reasonable as it will give purchasers the ability to use and test the Historical Depth Reports at a discounted rate, prior to purchasing additional months or a monthly subscription, and will therefore encourage users to purchase Historical Depth Reports. Further, the proposed discount is intended to promote increased use of the Exchange’s Historical Depth Reports by defraying some of the costs a purchaser would ordinarily have to expend before using the data product. The Exchange believes that the proposed discount is equitable and not unfairly discriminatory because it will apply equally to all Members and non-Members who purchase Historical Depth Reports. Lastly, the purchase of this data product is discretionary and not compulsory. Indeed, no market participant is required to purchase the Historical Depth Reports, and the Exchange is not required to make Historical Depth Reports available to all investors. Potential purchasers may request the data at any time if they believe it to be valuable or may decline to purchase such data. As noted above, the Exchange previously adopted similar discount programs for other

⁵ See, for example, EDGX Fee Schedule, BZX Fee Schedule, BYX Fee Schedule.

⁶ The discount will apply on an order-by-order basis. The discount will apply to the total purchase price, once the \$20,000 minimum purchase is satisfied (for example, a qualifying order of \$25,000 would be discounted to \$20,000, i.e. receive a 20% discount of \$5,000).

⁷ See Securities Exchange Act Release No. 88195 (December 14, 2023), 88 FR 88193 (December 20, 2023) (SR–CboeEDGA–2023–021) and Securities Exchange Act Release No. 100334 (June 14, 2024), 89 FR 52161 (June 21, 2024) (SR–CboeEDGA–2024–024).

⁸ 15 U.S.C. 78f(b).

⁹ 15 U.S.C. 78f(b)(5).

¹⁰ *Id.*

¹¹ 15 U.S.C. 78f(b)(4).

¹² See *supra* note 4.

¹³ See Cboe Global Markets, U.S. Equities Market Volume Summary, Month-to-Date (October 3, 2024), available at https://www.cboe.com/us/equities/market_statistics/.

¹⁴ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, 37499 (June 29, 2005) (“Regulation NMS Adopting Release”).

historical data products offered by the Exchange.¹⁵

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange operates in a highly competitive environment in which the Exchange must continually adjust its fees to remain competitive. Because competitors are free to modify their own fees in response, including the adoption of similar discounts to those fees, the Exchange believes that the degree to which fee changes (including discounts and rebates) in this market may impose any burden on competition is extremely limited. As discussed above, the Exchange's Historical Depth Reports offering is subject to direct competition from several other options exchanges that offer similar data products. Moreover, purchase of Historical Depth Reports is optional. It is designed to help investors understand underlying market trends to improve the quality of investment decisions, but is not necessary to execute a trade.

The proposed rule changes are grounded in the Exchange's efforts to compete more effectively. In this competitive environment, potential purchasers are free to choose which, if any, similar product to purchase to satisfy their need for market information. As a result, the Exchange believes this proposed rule change permits fair competition among national securities exchanges. Further, the Exchange believes that these changes will not cause any unnecessary or inappropriate burden on intermarket competition, as the proposed incentive program applies uniformly to any purchaser of Historical Depth Reports.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)

of the Act¹⁶ and paragraph (f) of Rule 19b-4¹⁷ thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission will institute proceedings to determine whether the proposed rule change should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-CboeEDGA-2024-041 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090. All submissions should refer to file number SR-CboeEDGA-2024-041. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also

will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-CboeEDGA-2024-041 and should be submitted on or before November 20, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁸

Sherry R. Haywood,

Assistant Secretary.

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101429; File No. SR-CboeBZX-2024-101]

Self-Regulatory Organizations; Cboe BZX Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend the Short Term Option Series Program in Rule 19.6, Interpretation and Policy .05

October 24, 2024.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on October 16, 2024, Cboe BZX Exchange, Inc. (the "Exchange" or "BZX") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Exchange filed the proposal as a "non-controversial" proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act³ and Rule 19b-4(f)(6) thereunder.⁴ The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

BZX Exchange, Inc. (the "Exchange" or "BZX Options") proposes to amend the Short Term Option Series Program in Rule 19.6, Interpretation and Policy

¹⁵ See Securities Exchange Act Release No. 88195 (December 14, 2023), 88 FR 88193 (December 20, 2023) (SR-CboeEDGA-2023-021) and Securities Exchange Act Release No. 100334 (June 14, 2024), 89 FR 52161 (June 21, 2024) (SR-CboeEDGA-2024-024).

¹⁶ 15 U.S.C. 78s(b)(3)(A).

¹⁷ 17 CFR 240.19b-4(f).

¹⁸ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ 15 U.S.C. 78s(b)(3)(A)(iii).

⁴ 17 CFR 240.19b-4(f)(6).

.05. The text of the proposed rule change is provided in Exhibit 5.

The text of the proposed rule change is also available on the Exchange's website (http://markets.cboe.com/us/equities/regulation/rule_filings/bzx/), at the Exchange's Office of the Secretary, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend the Short Term Option Series Program in Rule 19.6, Interpretation and Policy .05 (Series of Options Contracts Open for Trading). Specifically, the Exchange proposes to expand the Short Term Option Series Program to permit the listing of two Monday expirations for options on SPDR Gold Shares ("GLD"), iShares Silver Trust ("SLV"), and iShares 20+ Year Treasury Bond ETF ("TLT") (collectively "Exchange Traded Products" or "ETPs").⁵ This is a competitive filing that is based on a proposal submitted by Nasdaq ISE, LLC ("Nasdaq ISE") and recently approved by the Commission.⁶

Currently, as set forth in Rule 19.6, Interpretation and Policy .05, after an

option class has been approved for listing and trading on the Exchange as a Short Term Option Series, the Exchange may open for trading on any Thursday or Friday that is a business day ("Short Term Option Opening Date") series of options on that class that expire at the close of business on each of the next five Fridays that are business days and are not Fridays in which standard expiration options series, Monthly Options Series, or Quarterly Options Series expire ("Friday Short Term Option Expiration Dates"). The Exchange may have no more than a total of five Short Term Option Expiration Dates. Further, if the Exchange is not open for business on the respective Thursday or Friday, the Short Term Option Opening Date for Short Term Option Weekly Expirations will be the first business day immediately prior to that respective Thursday or Friday. Similarly, if the Exchange is not open for business on a Friday, the Short Term Option Expiration Date for Short Term Option Weekly Expirations will be the first business day immediately prior to that Friday.

Additionally, the Exchange may open for trading series of options on the symbols provided in Table 1 of Rule 19.6, Interpretation and Policy .05(h) that expire at the close of business on each of the next two Mondays, Tuesdays, Wednesdays, and Thursdays, respectively, that are business days and are not business days in which monthly options series or Quarterly Options Series expire ("Short Term Option Daily Expirations").⁷ For those symbols listed in Table 1, the Exchange may have no more than a total of two Short Term Option Daily Expirations beyond the current week for each of Monday, Tuesday, Wednesday, and Thursday expirations, as applicable, at one time.

Proposal

At this time, the Exchange proposes to expand the Short Term Option Daily Expirations to permit the listing and trading of options on GLD, SLV, and TLT expiring on Mondays. The Exchange proposes to permit two Short Term Option Expiration Dates beyond the current week for each Monday expiration at one time, and would update Table 1 in Rule 19.6, Interpretation and Policy .05(h) for each of those symbols accordingly.

The proposed Monday GLD, SLV, and TLT expirations will be similar to the current Monday SPY, QQQ, and IWM

Short Term Option Daily Expirations set forth in Rule 19.6, Interpretation and Policy .05(h) such that the Exchange may open for trading on any Friday or Monday that is a business day (beyond the current week) series of options on GLD, SLV, and TLT to expire on any Monday of the month that is a business day and is not a Monday in which standard expiration options series, Monthly Options Series, or Quarterly Options Series expire, provided that Monday expirations that are listed on a Friday must be listed at least one business week and one business day prior to the expiration ("Monday GLD Expirations," "Monday SLV Expirations," and "Monday TLT Expirations") (collectively, "Monday ETP Expirations").⁸ In the event Short Term Option Daily Expirations expire on a Monday and that Monday is the same day that a standard expiration options series, Monthly Options Series, or Quarterly Options Series expires, the Exchange would skip that week's listing and instead list the following week; the two weeks would therefore not be consecutive. Today, Monday expirations in SPY, QQQ, and IWM similarly skip the weekly listing in the event the weekly listing expires on the same day in the same class as a standard expiration options series, Monthly Options Series, or Quarterly Options Series.

The interval between strike prices for the proposed Monday ETP Expirations will be the same as those currently applicable for SPY, QQQ, and IWM Monday expirations in the Short Term Option Series Program.⁹ Specifically, the Monday ETP Expirations will have a strike interval of (i) \$0.50 or greater for strike prices below \$100, and \$1 or greater for strike prices between \$100 and \$150 for all option classes that participate in the Short Term Option Series Program, (ii) \$0.50 for option classes that trade in one dollar increments and are in the Short Term Option Series Program, or (iii) \$2.50 or greater for strike prices above \$150.¹⁰ As is the case with other equity options series listed pursuant to the Short Term Option Series Program, the Monday ETP Expirations series will be P.M.-settled.

Pursuant to Rule 19.6, Interpretation and Policy .05(h), with respect to the Short Term Option Series Program, if a Monday is not a business day, the series shall expire on the first business day immediately following that Monday.

⁸ Today, USO, UNG, GLD, SLV, and TLT may trade on Wednesdays. *See id.* They may also trade on Fridays, as is the case for all options series in the Short Term Option Series Program.

⁹ *See* Rule 19.6, Interpretation and Policy .05(e).
¹⁰ *Id.*

⁵ Today, the Exchange permits the listing of two Wednesday expirations for options on United States Oil Fund, LP ("USO"), United States Natural Gas Fund, LP ("UNG"), GLD, SLV, and TLT. *See* Securities Exchange Act Release No. 99036 (November 29, 2023), 88 FR 84383 (December 5, 2023) (SR-CboeBZX-2023-096) ("Wednesday Notice"). The Exchange began listing Wednesday expirations on these five symbols on November 21, 2023. *See* Exchange Notice, Reference ID: C2023111702.

⁶ *See* Securities Exchange Act Release No. 100837 (August 27, 2024) (SR-ISE-2024-21) (Notice of Filing of Amendment No. 1 and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 1, to Adopt Rules to Permit the Listing of Two Monday Expirations for Options on SPDR Gold Shares, iShares Silver Trust, and iShares 20+ Year Treasury Bond ETF) ("Nasdaq ISE Approval").

⁷ As set forth in Table 1, the Exchange currently only permits Wednesday expirations for USO, UNG, GLD, SLV, and TLT.

Currently, for each option class eligible for participation in the Short Term Option Series Program, the Exchange is limited to opening thirty (30) series for each expiration date for the specific class.¹¹ The thirty (30) series restriction does not include series that are open by other securities exchanges under their respective weekly rules; the Exchange may list these additional series that are listed by other options exchanges.¹² With the proposed changes, this thirty (30) series restriction would apply to Monday GLD, SLV, and TLT Short Term Option Daily Expirations as well. In addition, the Exchange will be able to list series that are listed by other exchanges, assuming they file similar rules with the Commission to list Monday ETP Expirations.

With this proposal, Monday ETP Expirations would be treated similarly to existing Monday SPY, QQQ, and IWM Expirations. With respect to standard expiration option series, Short Term Option Daily Expirations will be permitted to expire in the same week in which standard expiration option series on the same class expire.¹³ Not listing Short Term Option Daily Expirations for one week every month because there was a standard options series on that same class on the Friday of that week would create investor confusion.

Further, as with Monday SPY, QQQ, and IWM Expirations, the Exchange would not permit Monday ETP Expirations to expire on a business day in which standard expiration option series, Monthly Options Series, or Quarterly Options Series expire.¹⁴ Therefore, all Short Term Option Daily Expirations would expire at the close of business on each of the next two Mondays, Tuesdays, Wednesdays, and Thursdays, respectively, that are business days beyond the current week and are not business days in which standard expiration option series, Monthly Options Series, or Quarterly Options Series expire. The Exchange believes that it is reasonable to not permit two expirations on the same day in which a standard expiration option series, Monthly Options Series, a Quarterly Options Series would expire because those options would be duplicative of each other.

The Exchange does not believe that any market disruptions will be encountered with the introduction of Monday ETP Expirations. The Exchange currently trades P.M.-settled Short Term

Option Series that expire Monday for SPY, QQQ and IWM and has not experienced any market disruptions nor issues with capacity. In addition, the Exchange has not experienced any market disruptions or issues with capacity in expanding the five ETPs to the Wednesday expirations.¹⁵ Today, the Exchange has surveillance programs in place to support and properly monitor trading in Short Term Option Series that expire Monday for SPY, QQQ and IWM. Further, the Exchange has the necessary capacity and surveillance programs in place to support and properly monitor trading in the proposed Monday ETP Expirations.

Because the Exchange proposes to limit the number of Monday Expirations for options on GLD, SLV, and TLT to two expirations beyond the current week, the Exchange believes that the addition of these Monday ETP Expirations should encourage Market-Makers to continue to deploy capital more efficiently and improve displayed market quality. Similar to SPY, QQQ and IWM Monday Expirations, the introduction of Monday ETP Expirations will, among other things, expand hedging tools available to market participants and allow for a reduced premium cost of buying portfolio protection. The Exchange believes that Monday ETP Expirations will allow market participants to hedge their portfolios with options on commodities (gold and silver) as well as treasury securities, and tailor their investment and hedging needs more effectively.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the “Act”) and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.¹⁶ Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)¹⁷ requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in

securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)¹⁸ requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

Similar to Monday expirations in SPY, QQQ, and IWM, the proposal to permit Monday ETP Expirations, subject to the proposed limitation of two expirations beyond the current week, would protect investors and the public interest by providing the investing public and other market participants more choice and flexibility to closely tailor their investment and hedging decisions in these options and allow for a reduced premium cost of buying portfolio protection, thus allowing them to better manage their risk exposure. The Exchange believes that there is general demand for alternative expirations in these symbols.

The Exchange represents that it has an adequate surveillance program in place to detect manipulative trading in the proposed option expirations, in the same way that it monitors trading in the current Short Term Option Series for Monday SPY, QQQ and IWM expirations. The Exchange also represents that it has the necessary system capacity to support the new expirations. Finally, the Exchange does not believe that any market disruptions will be encountered with the introduction of these option expirations. As discussed above, the Exchange believes that its proposal is a modest expansion of weekly expiration dates for GLD, SLV, and TLT given that it will be limited to two Monday expirations beyond the current week.

The Exchange believes that the proposal is consistent with the Act as the proposal would overall add a small number of Monday ETP Expirations by limiting the addition of two Monday expirations beyond the current week. The addition of Monday ETP Expirations would remove impediments to and perfect the mechanism of a free and open market by encouraging Market Makers to continue to deploy capital more efficiently and improve displayed market quality. The Exchange believes that the proposal will allow Members to expand hedging tools and tailor their investment and hedging needs more effectively in GLD, SLV, and TLT as these funds are most likely to be utilized by market participants to hedge the

¹¹ See Rule 19.6, Interpretation and Policy .05(a).

¹² See Rule 19.6, Interpretation and Policy .05(a).

¹³ See Rule 19.6, Interpretation and Policy .05(b).

¹⁴ See Rule 19.6, Interpretation and Policy .05(h).

¹⁵ Today, the Exchange permits the listing of two Wednesday expirations for options on USO, UNG, GLD, SLV, and TLT. See Wednesday Notice. The Exchange began listing Wednesday expirations on these five symbols on November 21, 2023. See Exchange Notice, Reference ID: C2023111702.

¹⁶ 15 U.S.C. 78f(b).

¹⁷ 15 U.S.C. 78f(b)(5).

¹⁸ *Id.*

underlying asset classes. The ETPs currently trade within “complexes” where, in addition to the underlying security, there are multiple instruments available for hedging. Given the multi-asset class nature of these products and available hedges in highly correlated instruments, the Exchange believes that its proposal to add Monday expirations on these products will provide market participants with additional useful hedging tools for the underlying asset classes.

Similar to Monday SPY, QQQ, and IWM expirations, the introduction of Monday ETP Expirations is consistent with the Act as it will, among other things, expand hedging tools available to market participants and allow for a reduced premium cost of buying portfolio protection. The Exchange believes that Monday ETP Expirations will allow market participants to purchase options on GLD, SLV, and TLT based on their timing as needed and allow them to tailor their investment and hedging needs more effectively, thus allowing them to better manage their risk exposure. Today, the Exchange lists Monday SPY, QQQ, and IWM Expirations.¹⁹

In particular, the Exchange believes the Short Term Option Series Program has been successful to date and that Monday ETP Expirations should simply expand the ability of investors to hedge risk against market movements stemming from economic releases or market events that occur throughout the month in the same way that the Short Term Option Series Program has expanded the landscape of hedging.

There are no material differences in the treatment of Monday SPY, QQQ and IWM expirations compared to the proposed Monday ETP Expirations. Given the similarities between Monday SPY, QQQ and IWM expirations and the proposed Monday ETP Expirations, the Exchange believes that applying the provisions in Rule 19.6, Interpretation and Policy .05 that currently apply to Monday SPY, QQQ and IWM expirations is justified. For example, the Exchange believes that allowing Monday ETP Expirations and monthly ETP expirations in the same week will benefit investors and minimize investor confusion by providing Monday ETP Expirations in a continuous and uniform manner.

Finally, the Exchange notes the proposed rule change is substantively the same as a rule change proposed by ISE, which the Commission recently approved.²⁰

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

While the proposal will expand the Short Term Options Expirations to allow Monday ETP Expirations to be listed on the Exchange, the Exchange believes that this limited expansion for Monday expirations for options on GLD, SLV, and TLT will not impose an undue burden on competition; rather, it will meet customer demand. The Exchange believes that Members will continue to be able to expand hedging tools and tailor their investment and hedging needs more effectively in GLD, SLV, and TLT.

Similar to Monday SPY, QQQ and IWM expirations, the introduction of Monday ETP Expirations does not impose an undue burden on competition. The Exchange believes that it will, among other things, expand hedging tools available to market participants and allow for a reduced premium cost of buying portfolio protection. The Exchange believes that Monday ETP Expirations will allow market participants to purchase options on GLD, SLV, and TLT based on their timing as needed and allow them to tailor their investment and hedging needs more effectively.

The Exchange does not believe the proposal will impose any burden on inter-market competition, as nothing prevents the other options exchanges from proposing similar rules to list and trade Monday ETP Expirations. As noted above, the Commission recently approved a substantively identical proposal of another exchange.²¹ Further, the Exchange does not believe the proposal will impose any burden on intramarket competition, as all market participants will be treated in the same manner under this proposal.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The Exchange has filed the proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act²² and Rule

19b-4(f)(6) thereunder.²³ Because the foregoing proposed rule change does not: (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A)(iii) of the Act²⁴ and subparagraph (f)(6) of Rule 19b-4 thereunder.²⁵

A proposed rule change filed under Rule 19b-4(f)(6)²⁶ normally does not become operative prior to 30 days after the date of the filing. However, pursuant to Rule 19b-4(f)(6)(iii),²⁷ the Commission may designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has requested that the Commission waive the 30-day operative delay so that the proposal may become operative immediately upon filing. According to the Exchange, the proposed rule change is a competitive response to a substantively identical filing submitted by Nasdaq ISE that was recently approved by the Commission.²⁸ The Commission believes that the proposed rule change presents no novel issues and that waiver of the 30-day operative delay is consistent with the protection of investors and the public interest. Accordingly, the Commission hereby waives the operative delay and designates the proposed rule change as operative upon filing.²⁹

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

²³ 17 CFR 240.19b-4(f)(6).

²⁴ 15 U.S.C. 78s(b)(3)(A)(iii).

²⁵ 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6)(iii) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change, along with a brief description and text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

²⁶ 17 CFR 240.19b-4(f)(6).

²⁷ 17 CFR 240.19b-4(f)(6)(iii).

²⁸ See *supra* note 6.

²⁹ For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

¹⁹ See Rule 19.6, Interpretation and Policy .05(h).

²⁰ See Nasdaq ISE Approval.

²¹ See Nasdaq ISE Approval.

²² 15 U.S.C. 78s(b)(3)(A)(iii).

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-CboeBZX-2024-101 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090.

All submissions should refer to file number SR-CboeBZX-2024-101. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-CboeBZX-2024-101 and should be submitted on or before November 20, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.³⁰

Sherry R. Haywood,
Assistant Secretary.

[FR Doc. 2024-25146 Filed 10-29-24; 8:45 am]

BILLING CODE 8011-01-P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #20699 and #20700; FLORIDA Disaster Number FL-20012]

Presidential Declaration Amendment of a Major Disaster for the State of Florida

AGENCY: U.S. Small Business Administration.

ACTION: Amendment 4.

SUMMARY: This is an amendment of the Presidential declaration of a major disaster for the State of Florida (FEMA-4828-DR), dated September 28, 2024.

Incident: Hurricane Helene.

DATES: Issued on October 23, 2024.

Incident Period: September 23, 2024, and continuing.

Physical Loan Application Deadline Date: November 27, 2024.

Economic Injury (EIDL) Loan Application Deadline Date: June 30, 2025.

ADDRESSES: Visit the MySBA Loan Portal at <https://lending.sba.gov> to apply for a disaster assistance loan.

FOR FURTHER INFORMATION CONTACT:

Alan Escobar, Office of Disaster Recovery & Resilience, U.S. Small Business Administration, 409 3rd Street SW, Suite 6050, Washington, DC 20416, (202) 205-6734.

SUPPLEMENTARY INFORMATION: The notice of the President's major disaster declaration for the State of Florida, dated September 28, 2024, is hereby amended to include the following areas as adversely affected by the disaster:

Primary Counties (Physical Damage and Economic Injury Loans): DeSoto
Contiguous Counties (Economic Injury Loans Only): The contiguous counties to DeSoto were previously declared.

All other information in the original declaration remains unchanged.

(Catalog of Federal Domestic Assistance Number 59008)

Rafaela Monchek,

Deputy Associate Administrator, Office of Disaster Recovery & Resilience.

[FR Doc. 2024-25133 Filed 10-29-24; 8:45 am]

BILLING CODE 8026-09-P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #20676 and #20677; CONFEDERATED TRIBES AND BANDS OF THE YAKAMA NATION Disaster Number WA-20012]

Presidential Declaration Amendment of a Major Disaster for Public Assistance Only for the Confederated Tribes and Bands of the Yakama Nation

AGENCY: U.S. Small Business Administration.

ACTION: Amendment 1.

SUMMARY: This is an amendment of the Presidential declaration of a major disaster for Public Assistance Only for the Confederated Tribes and Bands of the Yakama Nation (FEMA-4823-DR), dated September 24, 2024. Incident: Wildfires.

DATES: Issued on October 21, 2024.

Incident Period: June 22, 2024, through July 08, 2024.

Physical Loan Application Deadline Date: December 16, 2024.

Economic Injury (EIDL) Loan Application Deadline Date: June 24, 2025.

ADDRESSES: Visit the MySBA Loan Portal at <https://lending.sba.gov> to apply for a disaster assistance loan.

FOR FURTHER INFORMATION CONTACT:

Alan Escobar, Office of Disaster Recovery & Resilience, U.S. Small Business Administration, 409 3rd Street SW, Suite 6050, Washington, DC 20416, (202) 205-6734.

SUPPLEMENTARY INFORMATION: The notice of the President's major disaster declaration for Private Non-Profit organizations in the Confederated Tribes and Bands of the Yakama Nation, dated September 24, 2024, is hereby amended to extend the deadline for filing applications for physical damage as a result of this disaster to December 16, 2024.

All other information in the original declaration remains unchanged.

(Catalog of Federal Domestic Assistance Number 59008)

Rafaela Monchek,

Deputy Associate Administrator, Office of Disaster Recovery & Resilience.

[FR Doc. 2024-25134 Filed 10-29-24; 8:45 am]

BILLING CODE 8026-09-P

SURFACE TRANSPORTATION BOARD

[Docket No. FD 36770]

Township of Pilesgrove, N.J.—Petition for Declaratory Order

By decision issued on September 13, 2024, in response to a petition by

³⁰ 17 CFR 200.30-3(a)(12), (59).

Township of Pilesgrove, N.J. (Pilesgrove), the Board instituted a declaratory order proceeding to determine whether and to what extent 49 U.S.C. 10501(b) preempts certain local and state laws regarding land use and land development by SMS Rail Service, Inc. (SMS). *Twp. of Pilesgrove, N.J.—Pet. for Declaratory Ord.*, FD 36770 (STB served Sept. 13, 2024). The Board also granted a petition to intervene filed by the Township of Mannington, N.J. (Mannington), and directed Pilesgrove, Mannington, and SMS to confer and jointly submit by October 8, 2024, a proposed procedural schedule to govern this proceeding. *Id.* at 2, 3. The decision also ordered that, if the parties failed to agree on a procedural schedule, each must file its own proposed schedule by that date. *Id.*

Counsel for the parties conferred but were unable to reach agreement on a proposed schedule. Consequently, each party submitted its own proposal. On October 4, SMS proposed the following procedural schedule: (1) opening statements by all parties due by November 29, 2024; (2) comments from other interested persons due by December 30, 2024; and (3) replies by all parties due by January 20, 2024. (SMS Req. 4.) SMS asserts that its proposed schedule will ensure a full and complete factual record. (*Id.* at 3.) According to SMS, there have been developments on the subject rail line since the townships' petitions were filed—including state court proceedings—and there is additional information about the line from the last two years related to preemption that should be provided to the Board. (*Id.* at 3–4.) SMS also asserts the townships have not adequately supported the allegations in their petitions and expresses concern that both townships may seek to introduce untimely evidence or argument on reply if they are not afforded an opportunity to submit opening statements. (*Id.* at 3–4, 3 n.2 (citing Mannington Pet. 8–9).)

On October 7, 2024, Pilesgrove and Mannington each submitted a request for the following proposed schedule: (1) SMS's reply brief due by November 15, 2024; (2) Pilesgrove's and Mannington's rebuttal briefs due by December 20, 2024. (Pilesgrove Req. 1; Mannington Req. 2.) Pilesgrove and Mannington each ask the Board to consider its previously filed petition as its opening statement. (Pilesgrove Req. 1; Mannington Req. 2.) Mannington asserts that the facts have been fully described and explained in the townships' petitions and contends that SMS should present any additional facts or clarifications before each of the parties

files its legal analyses. (Mannington Req. 1.) In addition, Pilesgrove argues that the procedural schedule should provide for submissions from Pilesgrove, Mannington, and SMS only. (Pilesgrove Req. 2.)

On October 7, 2024, SMS replied to Pilesgrove's and Mannington's requests. First, counsel for SMS states that his trial/arbitration schedule cannot accommodate the November 15 deadline proposed by Pilesgrove and Mannington. (SMS Reply 2.) SMS also asserts that Salem County (Salem) should be provided an opportunity to participate, noting that Salem may provide support for SMS's positions and reiterating its position that other interested persons should have an opportunity to file comments. (*Id.* at 2, 4.)¹

No party requests discovery and Mannington explicitly states it believes discovery in this case would be unnecessary. (Mannington Req. 2.) The Board typically does not provide for discovery in declaratory order proceedings, *see, e.g., Metro Council—Pet. for Declaratory Ord.*, FD 36178, slip op. at 4 (STB served May 22, 2018), and, as no party has requested it, a discovery period will not be included in the procedural schedule adopted here. However, to ensure that the Board has a sufficient record, Pilesgrove and Mannington will be provided an opportunity to supplement the record with additional evidence and argument before SMS's reply is due, and submissions by other interested persons will be accepted, as provided below.

Based on the forgoing considerations, the following procedural schedule will be adopted: Pilesgrove and Mannington may file supplemental evidence and argument by November 8, 2024; SMS's reply evidence and argument, and submissions by other interested persons, will be due by December 9, 2024; rebuttal statements by Pilesgrove and Mannington, and SMS's response to submissions by other interested persons, will be due by January 7, 2025.

It is ordered:

1. The following procedural schedule is adopted:

- Pilesgrove and Mannington may file supplemental evidence and argument by November 8, 2024;

¹ SMS asserts that Mannington's petition to intervene "joins" Salem County but notes that Salem County is not on the Board's service list. (*Id.* at 2.) However, neither Mannington's petition to intervene nor the Board's decision granting it includes Salem County, and Salem County has not itself petitioned to intervene. In any event, the procedural schedule adopted here provides an opportunity for other interested persons to participate.

- SMS's reply evidence and argument, and submissions by other interested persons, are due by December 9, 2024; and

- Rebuttal statements by Pilesgrove and Mannington, and SMS's response to submissions by other interested persons, are due by January 7, 2025.

2. Notice of this decision will be published in the **Federal Register**.

3. This decision is effective on its service date.

Decided: October 24, 2024.

By the Board, Scott M. Zimmerman, Acting Director, Office of Proceedings.

Jeffrey Herzig,
Clearance Clerk.

[FR Doc. 2024–25135 Filed 10–29–24; 8:45 am]

BILLING CODE 4915–01–P

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

[Docket No. PHMSA–2024–0011]

Rockies Express Pipeline, LLC; Pipeline Safety: Request for Special Permit

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA); U.S. Department of Transportation (DOT).

ACTION: Notice.

SUMMARY: PHMSA is publishing this notice to solicit public comments on a request for special permit received from Rockies Express Pipeline, LLC (REX). The special permit request is seeking relief from compliance with Federal regulations in one segment of its Class 1 pipeline that exceeds the valve spacing requirement by 924 feet. At the conclusion of the 30-day comment period, PHMSA will review the comments received from this notice as part of its evaluation to grant or deny the special permit request.

DATES: Submit any comments regarding this special permit request by November 29, 2024.

ADDRESSES: Comments should reference the docket number for this special permit request and may be submitted in the following ways:

- *E-Gov Website:* <http://www.Regulations.gov>. This site allows the public to enter comments on any **Federal Register** Notice issued by any agency.

- *Fax:* 1–202–493–2251.
- *Mail:* Docket Management System; U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140,

1200 New Jersey Avenue SE,
Washington, DC 20590.

• **Hand Delivery:** Docket Management System: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590, between 9:00 a.m. and 5:00 p.m., Monday through Friday, except federal holidays.

Instructions: You should identify the docket number for the special permit request you are commenting on at the beginning of your comments. If you submit your comments by mail, please submit two (2) copies. To receive confirmation that PHMSA has received your comments, please include a self-addressed stamped postcard.

Note: There is a privacy statement published on <http://www.Regulations.gov>. Comments, including any personal information provided, are posted without changes or edits to <http://www.Regulations.gov>.

Confidential Business Information: Confidential Business Information (CBI) is commercial or financial information that is both customarily and treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this notice contain commercial or financial information that is customarily treated as private, that you treat as private, and that is relevant or responsive to this notice, it is important that you clearly designate the submitted comments as CBI. Pursuant to 49 CFR 190.343, you may ask PHMSA to give confidential treatment to information you give to the agency by taking the following steps: (1) mark each page of the original document submission containing CBI as “Confidential;” (2) send PHMSA, along with the original document, a second copy of the original document with the CBI deleted; and (3) explain why the information you are submitting is CBI. Unless you are notified otherwise, PHMSA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this notice. Submissions containing CBI should be sent to Kay McIver, DOT, PHMSA-PHP-80, 1200 New Jersey Avenue SE, Washington, DC 20590-0001. Any commentary PHMSA receives that is not specifically designated as CBI will be placed in the public docket for this matter.

FOR FURTHER INFORMATION CONTACT:

General: Ms. Kay McIver by telephone at 202-366-0113, or by email at kay.mciver@dot.gov.

Technical: Ms. Mary McDaniel by telephone at 713-235-0035, or by email at mary.mcdaniel@dot.gov.

SUPPLEMENTARY INFORMATION: PHMSA received a special permit request from Rockies Express Pipeline, LLC (REX), a subsidiary Tallgrass Energy, on January 8, 2024, seeking a special permit to deviate from the Federal pipeline safety regulations in 49 CFR 192.179(a)(4), which requires transmission line valves to be placed no further than 10 miles apart in a Class 1 location. The special permit request is for a single segment where the valves are spaced 20.35 miles apart, exceeding the valve spacing requirement by 924 feet.

The proposed special permit would allow REX to continue to operate the single 20.35-mile segment of 42-inch diameter gas transmission pipeline without modifying the valve location. The 20.35-mile segment is in a Class 1 location in Monroe and Belmont Counties, Ohio.

The special permit request, proposed special permit with conditions, and Draft Environmental Assessment (DEA)/FONSI for the above listed REX pipeline segment are available for review and public comments in Docket Number PHMSA 2024-0011. PHMSA invites interested persons to review and submit comments on the special permit request and DEA/FONSI in the docket. Please submit comments on any potential safety, environmental, and other relevant considerations implicated by the special permit request. Comments may include relevant data.

Before issuing a decision on the special permit request, PHMSA will evaluate all comments received on or before the comments closing date. Comments received after the closing date will be evaluated if it is possible to do so without incurring additional expense or delay. PHMSA will consider each relevant comment it receives in making its decision to grant or deny this special permit request.

Issued in Washington, DC, on October 23, 2024, under authority delegated in 49 CFR 1.97.

Alan K. Mayberry,

Associate Administrator for Pipeline Safety.

[FR Doc. 2024-25129 Filed 10-29-24; 8:45 am]

BILLING CODE 4910-60-P

DEPARTMENT OF THE TREASURY

Proposed Collection; Comment Request

AGENCY: Departmental Offices; Department of the Treasury.

SUMMARY: The Department of the Treasury, as part of its continuing effort to reduce paperwork burdens, invites the general public and other Federal agencies to comment on an information collection that is due for extension approval by the Office of Management and Budget. The Office of International Affairs of the Department of the Treasury is soliciting comments concerning extension with minor changes of the following form: Treasury International Capital Form SHL/SHLA, “Survey of Foreign-Residents’ Holdings of U.S. Securities, including Selected Money Market Instruments”. The report is mandatory. The next such collection is the annual survey to be conducted as of End-June, 2025.

DATES: Written comments should be received on or before December 30, 2024 to be assured of consideration.

ADDRESSES: Direct all written comments to Dwight Wolkow, International Portfolio Investment Data Systems, Department of the Treasury, Room 1050 MT, 1500 Pennsylvania Avenue NW, Washington, DC 20220. In view of possible delays in mail delivery, please also notify Mr. Wolkow by email (comments2TIC@treasury.gov), or telephone (202-622-1276).

FOR FURTHER INFORMATION CONTACT:

Copies of the proposed forms and instructions are available on the Treasury’s TIC Forms web page at: <https://home.treasury.gov/data/treasury-international-capital-tic-system-home-page/tic-forms-instructions/forms-shl>. Requests for additional information should be directed to Mr. Wolkow (comments2TIC@treasury.gov or 202-622-1276).

SUPPLEMENTARY INFORMATION:

Title: Treasury International Capital Form SHL/SHLA, “Survey of Foreign-Residents’ Holdings of U.S. Securities, including Selected Money Market Instruments”.

OMB Control Number: 1505-0123.

Abstract: Form SHL/SHLA is part of the Treasury International Capital (TIC) reporting system, which is required by law (22 U.S.C. 3101 *et seq.*; E.O. 11961; 31 CFR 129) and is used to conduct annual surveys of foreign-residents’ holdings of U.S. securities for portfolio investment purposes. This information is used by the U.S. Government in the formulation of international financial and monetary policies and for the preparation of the U.S. balance of payments accounts and the U.S. international investment position. This information is also used to provide information to the public and to meet international reporting commitments.

The data collection includes large benchmark surveys (Form SHL) conducted every five years, and smaller annual surveys (Form SHLA) conducted in the non-benchmark years. The data collected under an annual survey are used in conjunction with the results of the preceding benchmark survey and of recent reporting on TIC form SLT (“Aggregate Holdings, Purchases and Sales, and Fair Value Changes of Long-Term Securities by U.S. and Foreign Residents”) to make economy-wide estimates for that non-benchmark year. Currently, the determination of who must report in the annual surveys is based primarily on the data submitted during the preceding benchmark survey and on data submitted on SLT reporting. The data requested in the annual survey will generally be the same as requested in the preceding benchmark report. Form SHL is used for the benchmark survey of all significant U.S.-resident custodians and U.S.-resident issuers of securities regarding foreign-residents’ holdings of U.S. securities. In non-benchmark years, Form SHLA is used for the annual surveys of primarily the largest U.S.-resident custodians and issuers.

Current Actions: No changes in the forms (schedules) are being proposed at this time. Some minor changes in the instructions are being proposed, primarily to include clarifications requested by respondents during their reporting for the 2022 and 2023 surveys. No changes in the forms (schedules) are being proposed at this time. Some minor changes in the instructions are being proposed, primarily to include clarifications requested by respondents during their reporting for the 2022 and 2023 surveys. The minor changes include: (1) necessary updates in the cover page, contact information, dates, links to information, and Appendix E, List of Currency Codes; (2) clarifications about the handling of securities involved in repurchase and securities lending arrangements in (i) the second paragraph of section III; in (ii) section III.B; and in (iii) section III.F; (3) clarifications about the security types mentioned in the form, such as in the beginning of section III.E and in item 12 of section V.B, where Type 4 is specified to include limited partners (“LPs”) and similar companies that do not meet the definition of funds; and (5) numerous other clarifications achieved through rewording and format changes to improve the instructions.

Type of Review: Extension, with minor changes, of a currently approved collection.

Affected Public: Business or other for-profit organizations.

Form: SHL/SHLA, Schedules 1 and 2 (1505–0123).

Estimated Number of Respondents: An annual average (over five years) of 317, but this varies widely from about 840 in benchmark years (once every five years) to about 185 in other years (four out of every five years).

Estimated Average Time per Respondent: An annual average (over five years) of about 133 hours, but this will vary widely from respondent to respondent. (a) In the year of a benchmark survey, which is conducted once every five years, it is estimated that exempt respondents will require an average of 17 hours; for custodians of securities, the estimate is a total of 321 hours on average, but this figure will vary widely for individual custodians; and for issuers of securities that have data to report and are not custodians, the estimate is 61 hours on average. (b) In a non-benchmark year, which occurs four years out of every five years, it is estimated that the largest custodians of securities will require a total of 486 hours on average; and for the largest issuers of securities that have data to report and are not custodians, the estimate is 110 hours on average. The exemption level for custodians and for end-investors, that applies only in benchmark years, is the holding of less than \$200 million in reportable U.S. securities owned by foreign residents.

Estimated Total Annual Burden Hours: An annual average (over five years) of 42,035 hours.

Frequency of Response: Annual.

Request for Comments: Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval. All comments will become a matter of public record. The public is invited to submit written comments concerning, inter alia: (a) Whether the Survey is necessary for the proper performance of the functions of the Office of International Affairs within the Department of the Treasury, including whether the information collected will have practical uses; (b) the accuracy of the above estimate of the burdens; (c) ways to enhance the quality, usefulness and clarity of the information to be collected; (d) ways to minimize the reporting and/or record keeping burdens on respondents, including the use of information technologies to automate the collection of the data requested; and (e) estimates of capital or start-up costs of operation,

maintenance and purchase of services to provide the information requested.

Dwight Wolkow,

Administrator, International Portfolio Investment Data Reporting Systems.

[FR Doc. 2024–25165 Filed 10–29–24; 8:45 am]

BILLING CODE 4810-AK-P

DEPARTMENT OF THE TREASURY

Proposed Collection; Comment Request

AGENCY: Departmental Offices; Department of the Treasury.

SUMMARY: The Department of the Treasury, as part of its continuing effort to reduce paperwork burdens, invites the general public and other Federal agencies to comment on an information collection that is due for extension approval by the Office of Management and Budget. The Office of International Affairs of the Department of the Treasury is soliciting comments concerning extension with minor changes of the following form: Treasury International Capital Form SHC/SHCA “Survey of U.S. Ownership of Foreign Securities including Selected Money Market Instruments.” The report is mandatory. The next such collection is the annual survey to be conducted as of December 31, 2024.

DATES: Written comments should be received on or before December 30, 2024 to be assured of consideration.

ADDRESSES: Direct all written comments to Dwight Wolkow, International Portfolio Investment Data Systems, Department of the Treasury, Room 1050 MT, 1500 Pennsylvania Avenue NW, Washington, DC 20220. In view of possible delays in mail delivery, please also notify Mr. Wolkow by email (comments2TIC@treasury.gov), or telephone (202–622–1276).

FOR FURTHER INFORMATION CONTACT:

Copies of the proposed form and instructions are available on the Treasury’s TIC Forms web page, <https://home.treasury.gov/data/treasury-international-capital-tic-system-home-page/tic-forms-instructions/forms-shc#shc>. Requests for additional information should be directed to Mr. Wolkow (comments2TIC@treasury.gov or 202–622–1276).

SUPPLEMENTARY INFORMATION:

Title: Treasury International Capital (TIC) Form SHC/SHCA “U.S. Ownership of Foreign Securities, including Selected Money Market Instruments.”

OMB Control Number: 1505–0146.

Abstract: Form SHC/SHCA is part of the Treasury International Capital (TIC)

reporting system, which is required by law (22 U.S.C. 3101 *et seq.*; E.O. 11961; 31 CFR 129) and is used to conduct annual surveys of U.S. residents' ownership of foreign securities for portfolio investment purposes. This information is used by the U.S. Government in the formulation of international financial and monetary policies and for the preparation of the U.S. balance of payments accounts and the U.S. international investment position. This information is also used to provide information to the public and to meet international reporting commitments. The SHC/SHCA survey contributes to an internationally coordinated effort under the auspices of the International Monetary Fund (IMF) to improve data on securities worldwide. More than 80 countries participate in the annual IMF Coordinated Portfolio Investment Survey.

The data collection includes large benchmark surveys (Form SHC) conducted every five years, and smaller annual surveys (Form SHCA) conducted in the non-benchmark years. The data collected under an annual survey are used in conjunction with the results of the preceding benchmark survey and of recent reporting on TIC form SLT ("Aggregate Holdings, Purchases and Sales, and Fair Value Changes of Long-Term Securities by U.S. and Foreign Residents") to make economy-wide estimates for non-benchmark years. Currently, the determination of who must report in the annual surveys is based primarily on the data submitted during the preceding benchmark survey and on data submitted on SLT reports in the survey year. The data requested in the annual survey will generally be the same as requested in the preceding benchmark report. Form SHC is used for the benchmark survey of all significant U.S.-resident custodians and end-investors regarding U.S. ownership of foreign securities. In non-benchmark years Form SHCA is used for the annual surveys of primarily the very largest U.S.-resident custodians and end-investors.

Current Actions: No changes in the forms (schedules) are being proposed at this time. Some minor changes in the instructions are being proposed, primarily to include clarifications requested by respondents during their reporting for the 2022 and 2023 surveys. The minor changes include: (1) necessary updates in the contact information, dates, links to information, and appendix E, List of Currency Codes; (2) clarifications about the handling of securities involved in repurchase and securities lending arrangements in (i)

section II.B; in (ii) the second paragraph of section III; and in (iii) the description of "Securities . . . temporarily received as collateral" in section III.B; (3) the clarification in item 6 of section IV.B that ISIN codes are strongly preferred; (4) clarifications about the security types mentioned in the form, such as in the beginning of section III.C and in item 12 of section IV.B, where Type 4 is specified to include limited partners ("LPs") and similar companies that do not meet the definition of funds; (5) the addition of "Annuities" in section III.B, Do Not Report; and (6) numerous other clarifications achieved through rewording and format changes to improve the instructions.

Type of Review: Extension, with minor changes, of a currently approved collection.

Affected Public: Business or other for-profit organizations.

Form: SHC/SHCA, Schedules 1, 2 and 3 (1505-0146).

Estimated Number of Respondents: An annual average (over five years) of 324, but this varies widely from about 760 in benchmark years (once every five years) to about 215 in other years (four out of every five years).

Estimated Average Time per Respondent: An annual average (over five years) of about 200 hours, but this will vary widely from respondent to respondent. (a) In the year of a benchmark survey, which is conducted once every five years, it is estimated that exempt respondents will require an average of 17 hours; custodians of securities providing security-by-security information will require an average of 361 hours, but this figure will vary widely for individual custodians; end-investors providing security-by-security information will require an average of 121 hours; and end-investors and custodians employing U.S. custodians will require an average of 41 hours. (b) In a non-benchmark year, which occurs four years out of every five years, it is estimated that custodians of securities providing security-by-security information will require an average of 546 hours (because only the largest U.S.-resident custodians will report), but this figure will vary widely for individual custodians; end-investors providing security-by-security information will require an average of 146 hours; and reporters entrusting their foreign securities to U.S. custodians will require an average of 49 hours. The exemption level for custodians and for end-investors, that applies only in benchmark years when filing schedules 2 or 3 or both, is the holding of less than \$200 million in reportable foreign securities owned by U.S. residents.

Estimated Total Annual Burden Hours: An annual average (over five years) of 64,700 hours.

Frequency of Response: Annual.

Request for Comments: Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval. All comments will become a matter of public record. The public is invited to submit written comments concerning, *inter alia*: (a) whether the Survey is necessary for the proper performance of the functions of the Office of International Affairs within the Department of the Treasury, including whether the information collected will have practical uses; (b) the accuracy of the above estimate of the burdens; (c) ways to enhance the quality, usefulness and clarity of the information to be collected; (d) ways to minimize the reporting and/or record keeping burdens on respondents, including the use of information technologies to automate the collection of the data requested; (e) estimates of capital or start-up costs of operation, maintenance and purchase of services to provide the information requested.

Dwight Wolkow,

Administrator, International Portfolio Investment Data Reporting Systems.

[FR Doc. 2024-25166 Filed 10-29-24; 8:45 am]

BILLING CODE 4810-AK-P

DEPARTMENT OF THE TREASURY

Agency Information Collection Activities; Submission for OMB Review; Comment Request; Multiple FinCEN Information Collection Requests

AGENCY: Departmental Offices, U.S. Department of the Treasury.

ACTION: Notice of Information Collection; request for comment.

SUMMARY: The Department of the Treasury will submit the following information collection requests to the Office of Management and Budget (OMB) for review and clearance in accordance with the Paperwork Reduction Act of 1995, on or after the date of publication of this notice. The public is invited to submit comments on these requests.

DATES: Comments should be received on or before November 29, 2024 to be assured of consideration.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/

PRAMain. Find this particular information collection by selecting “Currently under 30-day Review—Open for Public Comments” or by using the search function.

FOR FURTHER INFORMATION CONTACT:

Copies of the submissions may be obtained from Spencer W. Clark by emailing PRA@treasury.gov, calling (202) 927–5331, or viewing the entire information collection request at www.reginfo.gov.

SUPPLEMENTARY INFORMATION:

Financial Crimes Enforcement Network (FinCEN)

1. *Title:* Transactions of Exempt Persons Regulations, and FinCEN Form 110, Designation of Exempt Persons (DOEP) Report.

OMB Control Number: 1506–0012.

Type of Review: Extension without change of a currently approved collection.

Description: Under 31 U.S.C. 5313, the Secretary is authorized to require financial institutions to report certain currency transactions. Regulations implementing 31 U.S.C. 5313 are found at 31 CFR 1010.310 through 1010.314, 1021.311, and 1021.313. The Money Laundering Suppression Act of 1994 amended the BSA to create certain mandatory exemptions applicable to banks from the requirement for financial institutions to file currency transaction reports (CTRs), and to give the Secretary authority to create additional such exemptions. Regulations implementing this exemption authority, including by requiring the collection of information on FinCEN Form 110, Designation of Exempt Person (DOEP Report), are found at 31 CFR 1020.315.

Form: FinCEN Form 110.

Affected Public: Banks.

Estimated Number of Respondents: 10,062.

Frequency of Response: On occasion.

Estimated Total Number of Annual Responses: 15,105.

Estimated Time per Response: 1 hour.

Estimated Total Annual Burden Hours: 15,105.

2. *Title:* Anti-Money Laundering Program Requirements for Casinos.

OMB Control Number: 1506–0051.

Type of Review: Extension without change of a currently approved collection.

Description: Pursuant to 31 U.S.C. 5318(h)(1), financial institutions must establish AML/CFT programs to guard against money laundering and the financing of terrorism. Such programs must include, at a minimum: (a) the development of internal policies, procedures, and controls; (b) the

designation of a compliance officer; (c) an ongoing employee training program; and (d) an independent audit function to test programs. On March 12, 1993, FinCEN issued regulations, under separate statutory authority codified at 31 U.S.C. 5318(a)(2), requiring casinos to develop and implement written BSA compliance programs. FinCEN subsequently amended those regulations after passage of the USA PATRIOT Act to state that a casino would be “deemed to satisfy the requirements of 31 U.S.C. 5318(h)(1) if it implements and maintains” an AML program, as described in” 31 CFR 1021.210(b).

Form: None.

Affected Public: Casinos.

Estimated Number of Respondents: 1,277.

Frequency of Response: Annually.

Estimated Total Number of Annual Responses: 1,277.

Estimated Time per Response: 100 hours and 10 minutes.

Estimated Total Annual Burden Hours: 127,912.

3. *Title:* Regulations Requiring Additional Records to be Made and Retained by Dealers in Foreign Exchange (31 CFR 1022.410).

OMB Control Number: 1506–0052.

Type of Review: Extension without change of a currently approved collection.

Description: Pursuant to 31 CFR 1022.410(a), a dealer in foreign exchange must secure and maintain a record of the taxpayer identification number of certain persons for whom a transaction account is opened or a line of credit is extended. The taxpayer identification number must be obtained and recorded within 30 days of the date the account is opened or credit line extended, or longer if the person opening the account or seeking the line of credit needs to apply for a taxpayer identification or social security number. For non-resident aliens, a dealer in foreign exchange is required to record the person’s passport number or a description of some other government document used to verify his or her identity. Pursuant to 31 CFR 1022.410(b), a dealer in foreign exchange must also retain the original or a copy of nine types of documents as further detailed in the supporting statement.

Form: None.

Affected Public: Dealers in Foreign Exchange.

Estimated Number of Respondents: 3,623.

Frequency of Response: On occasion.

Estimated Total Number of Annual Responses: 3,623.

Estimated Time per Response: 16 hours.

Estimated Total Annual Burden Hours: 57,968 hours.

4. *Title:* Regulations Requiring Additional Records to be Made and Retained by Brokers or Dealers in Securities (31 CFR 1023.410).

OMB Control Number: 1506–0053.

Type of Review: Extension without change of a currently approved collection.

Description: Pursuant 31 CFR 1023.410(a), a broker or dealer in securities is required to secure and maintain a record of certain identifying information for persons who have opened brokerage accounts during the period from June 30, 1972 to October 1, 2003. The customer identification program (CIP) requirement for brokers or dealers in securities has effectively superseded that requirement, and CIP requirements are not considered in connection with this OMB control number renewal.

Pursuant to 31 CFR 1023.410(b), a broker or dealer in securities must retain an original or copy of: (1) each document granting signature or trading authority over each customer’s account; (2) a record of each remittance or transfer of funds, or of currency, checks, other monetary instruments, investment securities, or credit, of more than \$10,000 to a person, account, or place outside the United States; (3) a record of each receipt of currency, other monetary instruments, investment securities, or checks, and of each transfer of funds or credit, of more than \$10,000 on any one occasion, not through a domestic financial institution, from any person, account, or place outside the United States; and (4) each record described in 17 CFR 240.17a-3(a)(1) through (3) and (5) through (9). To the extent that these records include originals or copies of checks, drafts, monetary instruments, investment securities, or other similar instruments, copies of front and back of such instruments must generally be retained. If no record is made in the ordinary course of business of any transaction with respect to which records are required to be retained, then such a record shall be prepared in writing. Records must be maintained for five years.

Form: None.

Affected Public: Brokers or Dealers in Securities.

Estimated Number of Respondents: 3,478.

Frequency of Response: On occasion.
Estimated Total Number of Annual Responses: 3,478.

Estimated Time per Response: 100 hours.

Estimated Total Annual Burden Hours: 347,800.

5. *Title:* Records to be made and retained by financial institutions (31 CFR 1010.410 and 31 CFR 1022.420).

OMB Control Number: 1506–0058.

Type of Review: Extension without change of a currently approved collection.

Description: Each financial institution must retain an original or copy of records related to extensions of credit in excess of \$10,000 (other than those secured by real property), and records related to transfers of funds, currency, other monetary instruments, checks, investment securities, or credit of more than \$10,000 to or from the United States (31 CFR 1010.410(a) through (d)). Banks and non-bank financial institutions must also maintain records related to, and include certain information as part of, funds transfers or transmittals of funds involving more than \$3,000 (31 CFR 1010.410(e) and (f)).

In addition, under 31 CFR 1022.420, each provider or seller of prepaid access is required to maintain access to transactional records generated in the ordinary course of business that would be needed to reconstruct prepaid access activation, loads, reloads, purchases, withdrawals, transfers, or other prepaid-related transactions.

Form: None.

Affected Public: Financial Institutions.

Estimated Number of Respondents: 273,832.

Frequency of Response: On occasion.

Estimated Total Number of Annual Responses: 320,352.

Estimated Time per Response: Varies from 5 to 50 hours depending on requirement and type of institution.

Estimated Total Annual Burden Hours: 4,015,839.

6. *Title:* Additional Records to be Made and Retained by Banks (31 CFR 1020.410).

OMB Control Number: 1506–0059.

Type of Review: Extension without change of a currently approved collection.

Description: A bank must retain an original or copy of certain records, as specified in section 31 CFR 1020.410.

Form: None.

Affected Public: Banks.

Estimated Number of Respondents: 10,062.

Frequency of Response: On occasion.

Estimated Total Number of Annual Responses: 10,062.

Estimated Time per Response: 100 hours.

Estimated Total Annual Burden Hours: 1,006,200.

(Authority: 44 U.S.C. 3501 *et seq.*)

Spencer W. Clark,

Treasury PRA Clearance Officer.

[FR Doc. 2024–25231 Filed 10–29–24; 8:45 am]

BILLING CODE 4810–02–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0219]

Agency Information Collection Activity Under OMB Review: CHAMPVA Benefits—Application, Claim, Other Health Insurance, Potential Liability & Miscellaneous Expenses

AGENCY: Veterans Health Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995, this notice announces that the Veterans Health Administration (VHA), Department of Veterans Affairs (VA), will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden, and it includes the actual data collection instrument.

DATES: Comments and recommendations for the proposed information collection should be sent by November 29, 2024.

ADDRESSES: To submit comments and recommendations for the proposed information collection, please type the following link into your browser: www.reginfo.gov/public/do/PRAMain, select “Currently under Review—Open for Public Comments,” then search the list for the information collection by Title or “OMB Control No. 2900–0219.”

FOR FURTHER INFORMATION CONTACT: VA PRA information: Maribel Aponte, 202–461–8900, vacopaperworkreduact@va.gov.

SUPPLEMENTARY INFORMATION:

Title: CHAMPVA Benefits—Application, Claim, Other Health Insurance, Potential Liability & Miscellaneous Expenses.

OMB Control Number: 2900–0219. <https://www.reginfo.gov/public/do/PRAsearch>.

Type of Review: Revision of a currently approved collection.

Abstract: The information collection includes several forms, as well as a review and appeal process, which are used to administer the Civilian Health

And Medical Program of the Department of Veterans Affairs (CHAMPVA). The collection is revised to include an increase in burden hours based on program data that reflects an increase in claim submissions, OHI forms, appeals and clinical reviews due to increased enrollment. The collection also includes a portal for submission of the information in the 10–10d program application form, which is expected to be completed by the end of calendar year 2024. This portal will allow applicants to complete and submit VA Form 10–10d electronically rather than by submission of a hard copy form, which has been the standard application process prior to technological advancement allowing electronic submission and processing. This portal represents a separate avenue for applicants to submit VA Form 10–10d; however, it does not affect the burden of collection for applicants or VA. VA Form 10–10d: Application for CHAMPVA Benefits
VA Form 10–7959a: CHAMPVA Claim Form
VA Form 10–7959c: CHAMPVA Other Health Insurance (OHI) Certification
VA Form 10–7959d: CHAMPVA Potential Liability Claim
VA Form 10–7959e: VA Claim for Miscellaneous Expenses
Review and Appeal Process
Clinical Review

a. VA Form 10–10d, Application for CHAMPVA Benefits, is used to determine eligibility of persons applying for healthcare benefits under the CHAMPVA program in accordance with 38 U.S.C. 501 and 1781.

b. VA Form 10–7959a, CHAMPVA Claim Form, is used to adjudicate claims for CHAMPVA benefits in accordance with 38 U.S.C. 501 and 1781, and 10 U.S.C. 1079 and 1086. This information is required for accurate adjudication and processing of beneficiary submitted claims. The claim form is also instrumental in the detection and prosecution of fraud. In addition, the claim form is the only mechanism to obtain, on an interim basis, other health insurance (OHI) information.

c. VA Form 10–7959c, CHAMPVA Other Health Insurance (OHI) Certification, is used to systematically obtain OHI information and to correctly coordinate benefits among all liable parties. Except for Medicaid and health insurance policies that are purchased exclusively for the purpose of supplementing CHAMPVA benefits, CHAMPVA is always the secondary payer of healthcare benefits (38 U.S.C. 501 and 1781, and 10 U.S.C. 1086).

d. VA Form 10–7959d, CHAMPVA Potential Liability Claim, provides basic information from which potential third party liability can be assessed. The Federal Medical Care Recovery Act (42 U.S.C. 2651–2653) mandates recovery of costs associated with healthcare services related to an injury/illness caused by a third party. Additional authority includes 38 U.S.C. 501; 38 CFR 1.900 *et seq.*; 10 U.S.C. 1079 and 1086; 42 U.S.C. 2651–2653; and Executive Order 9397.

e. VA Form 10–7959e, VA Claim for Miscellaneous Expenses, is used to adjudicate claims for certain children of Korea, Vietnam, and Thailand veterans authorized under 38 U.S.C., chapter 18, as amended by section 401, Public Law 106–419 and section 102, Public Law 106–183. VA’s medical regulations 38 CFR part 17 (17.900 through 17.905) establish regulations regarding provision of health care for certain children of Korea, Vietnam, and Thailand veterans and women Vietnam veterans’ children born with spina bifida and certain other covered birth defects. These regulations also specify the information to be included in requests for preauthorization and claims from approved health care providers.

f. Review and Appeal Process pertains to the approval of health care, or approval for payment relating to the provision of health care, under the Veteran Family Member Programs. The provisions of the Veterans Appeals Improvement and Modernization Act of 2017 (AMA, Pub. L. 115–55), chapter 51 of 38 U.S.C., or legacy claims under 38 CFR 17.277 and 38 CFR 17.904 establish

a review process regarding disagreements by an eligible beneficiary of a Veteran Family Member Program, provider, veteran, or other representative of the veteran or beneficiary, with a determination concerning provision of health care or a health care provider’s disagreement with a determination regarding payment. The person or entity requesting reconsideration of such determination is required to submit such a request in writing (including electronic where available). If such person or entity remains dissatisfied with the determination, the person or entity is permitted to submit a written request for additional review (VHA Notice 2024–07).

g. Clinical Review pertains to the requirement of VHA to preauthorize certain medical services under 38 CFR 17.273 and 38 CFR 17.902. Clinical review determines if services are medically necessary and appropriate to allow under the Veteran Family Member Programs. The person requesting the services must submit medical documentation or applicable supporting material for review.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published at 89 FR 70692, August 30, 2024.

Affected Public: Individuals or Households.

Estimated Annual Burden: 37,867 total hours.

VA Form 10–10d—8,963 hours.

VA Form 10–7959a—12,486 hours.

VA Form 10–7959c—8,947 hours.

VA Form 10–7959d—239 hours.

VA Form 10–7959e—200 hours.

Review and Appeal Process—6,255 hours.

Clinical Review—777 hours.

Estimated Average Burden per Respondent:

VA Form 10–10d—10 minutes.

VA Form 10–7959a—10 minutes.

VA Form 10–7959c—10 minutes.

VA Form 10–7959d—7 minutes.

VA Form 10–7959e—15 minutes.

Review and Appeal Process—30 minutes.

Clinical Review—20 minutes.

Frequency of Response: Once annually.

Estimated Number of Respondents: 200,056 total.

VA Form 10–10d—53,775.

VA Form 10–7959a—74,914.

VA Form 10–7959c—53,680.

VA Form 10–7959d—2,045.

VA Form 10–7959e—800.

Review and Appeal Process—12,510.

Clinical Review—2,332.

Authority: 44 U.S.C. 3501 *et seq.*

Maribel Aponte,

VA PRA Clearance Officer, Office of Enterprise and Integration, Data Governance Analytics, Department of Veterans Affairs.

[FR Doc. 2024–24926 Filed 10–29–24; 8:45 am]

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Part II

Environmental Protection Agency

40 CFR Parts 141 and 142

National Primary Drinking Water Regulations for Lead and Copper:
Improvements (LCRI); Final Rule

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Parts 141 and 142**

[EPA-HQ-OW-2022-0801; FRL-5423.2-02-OW]

RIN 2040-AG16

National Primary Drinking Water Regulations for Lead and Copper: Improvements (LCRI)**AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule.

SUMMARY: In December 2023, the U.S. Environmental Protection Agency (EPA) requested comment on the proposed the Lead and Copper Rule Improvements (LCRI), which informed the revisions to the National Primary Drinking Water Regulation (NPDWR) for lead and copper. After consideration of public comment on the LCRI, and consistent with the provisions set forth under the Safe Drinking Water Act (SDWA), the EPA is finalizing revisions to the NPDWR for lead and copper. In this rule, the agency is finalizing requirements for drinking water systems to replace lead and certain galvanized service lines. The final rule also removes the lead trigger level, reduces the lead action level to 0.010 mg/L, and strengthens tap sampling procedures to improve public health protection and simplify implementation relative to the 2021 Lead and Copper Rule Revisions (LCRR). Further, this final rule strengthens corrosion control treatment, public education and consumer awareness, requirements for small systems, and sampling in schools and child care facilities. The final rule will significantly reduce the adverse human health impacts of exposure to toxic lead in drinking water.

DATES: *Effective date:* This final rule is effective on December 30, 2024.

Judicial review: For judicial review purposes, this final rule is promulgated as of October 30, 2024.

Compliance dates: The compliance date for the revisions to 40 CFR part 141, subpart I, is set forth in § 141.80(a). The compliance date for the revisions to 40 CFR 141.2 and 141.31 is November 1, 2027. The compliance date for the changes made to 40 CFR part 141, subpart O, is set forth in § 141.152(a). The compliance date for the changes to 40 CFR part 141, subpart Q (§ 141.202 and appendices A and B) is November 1, 2027.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-HQ-OW-2022-0801. All

documents in the docket are listed on the <https://www.regulations.gov> website. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through <https://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: Michael Goldberg, Office of Ground Water and Drinking Water, Standards and Risk Management Division (Mail Code 4607M), Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460; telephone number: 202-564-1379; email address: LCRI@epa.gov.

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I. Executive Summary

The United States Environmental Protection Agency's (EPA) mission is to protect human health and the environment. The EPA is finalizing the Lead and Copper Rule Improvements (LCRI) to significantly reduce the risk of exposure to lead through drinking water. There is no known safe level of lead in drinking water. Exposure to drinking water contaminated with lead can cause serious human health impacts including neurodevelopmental problems in children and heart disease in adults. Young children and pregnant people are especially susceptible to the

impacts of lead exposure. Reducing lead in drinking water will reduce the risk of negative neurodevelopmental outcomes for children as well as reduce a range of health risks to adults. This final rule builds on the 2021 Lead and Copper Rule Revisions (LCRR) and the pre-2021 Lead and Copper Rule (LCR), originally promulgated in 1991.

The EPA conducted a review of the 2021 LCRR in accordance with Executive Order 13990¹ and announced its intention to strengthen the 2021 LCRR with this new rulemaking, the LCRI, to address key issues and opportunities identified in the review. This final LCRI addresses the priorities the EPA identified in the 2021 LCRR review, including the equitable replacement of lead service lines (LSLs) in the nation, improving identification of where LSLs are located, and triggering action in communities most at risk of lead exposure, and streamlined and improved implementation of the rule relative to the 2021 LCRR. This final LCRI is the culmination of numerous meaningful consultations with stakeholders and the public during the 2021 LCRR review, engagements and consultations held to support the development of the LCRI, and public comments received on the proposed LCRI.

The LCRI makes important advancements in protecting children and adults from the significant and irreversible health effects of exposure to lead in drinking water. These advancements are scientifically based and incorporate drinking water system best practices. The final rule strengthens the lead and copper rule in five focus areas: (1) achieving lead pipe replacement within 10 years, (2) locating legacy lead pipes, (3) improving tap sampling, (4) lowering the lead action level, and (5) strengthening protections to reduce exposure. The final rule also includes compliance dates and an updated benefits and costs analysis. Each of these topics is summarized below, in sequential order.

Achieving Lead Pipe Replacement Within 10 Years

This final rule provides a fundamental shift to a more preventive approach to lead in drinking water. This is based on the EPA's experience in implementing the lead rule for many years. Specifically, based on over 30 years of implementing the 1991 LCR, the EPA has determined that requiring lead service line replacement (LSLR)

based on tap sampling and 90th percentile lead levels alone is insufficient to protect public health. LSLs are a source of lead exposure in drinking water, even when systems are optimized at or below the lead action level.

The science is clear that there is no known safe level of lead in drinking water, especially for children. Among other effects, lead exposure can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of the body. In children, even low levels of lead exposure can cause cognitive health effects like lower intelligence quotient (IQ) as well as learning and behavioral problems. In adults, health effects include elevated risk of heart disease, high blood pressure, kidney or nervous system problems, and cancer.

In the LCRI, the EPA is requiring water systems to replace all lead and certain galvanized service lines (specifically, galvanized requiring replacement (GRR) service lines) under their control no later than 10 years after the compliance date. The LCRI provides, in limited circumstances, additional time for some systems to complete systemwide full service line replacement. Water systems must replace lead and GRR service lines under their control regardless of the lead levels occurring in tap or other drinking water samples. Replacing lead and GRR service lines will significantly reduce lead releases into drinking water. In addition, while consistently well-operated and optimized corrosion control treatment (CCT) is generally effective at reducing lead to low levels, elimination of lead and GRR service lines will result in even greater public health protection by eliminating a significant lead exposure source and will minimize the impacts of CCT implementation errors that have been documented over the years.

Historically, lead service lines,² as well as lead-bearing fixtures and solder, were commonly used in water distribution systems as well as in home plumbing. While replacing LSLs does not eliminate all lead exposures from tap water because plumbing systems

inside homes and buildings (*i.e.*, premise plumbing) can also contain lead components, replacing LSLs removes a key source of lead in drinking water. Where present, LSLs represent the greatest lead exposure source through drinking water (Sandvig et al., 2008).³ Buildings and homes built before 1986 often have LSLs connecting their plumbing system to the main water supply line under the street. These LSLs can deteriorate or corrode, releasing lead particles into the drinking water (Sandvig et al., 2008). Modeling done as part of the LCRI economic analysis confirms that LSL presence significantly contributes to drinking water lead levels (USEPA, 2024a).

Locating Legacy Lead Pipes

Knowing where lead pipes are located is critical to replacing them efficiently and equitably, as well as for informing consumers (*i.e.*, persons served) so they can take actions to reduce their exposure to lead. The LCRI builds upon the 2021 LCRR's requirement for water systems to create an initial inventory, to regularly update their inventory, and to identify the material of all service lines by the mandatory service line replacement deadline. Under the final LCRI, all water systems are required to make their service line inventories publicly available. Water systems must use a validation process to ensure the service line inventory is accurate. Water systems are also required to track lead connectors in their inventories and replace them as they are encountered.

Improving Tap Sampling

The final LCRI makes key changes to the required protocol for tap sampling informed by best practices already being deployed at the local and State level. Under the LCRI, water systems are required to collect first- and fifth-liter tap samples at sites with LSLs and use the higher of the two values when determining compliance. This method will better represent water that has been stagnant both within the LSL and the premise plumbing. This will help water systems better understand the effectiveness of their CCT.

² The EPA does not believe that there are lead water mains in the United States and, if they do occur, it is extremely rare. The poor structural integrity of lead pipes that are more than two inches in diameter means that lead was primarily used in pipes of smaller diameter such as service lines. Conversely, the water mains that distribute water throughout a city or town tend to be six inches or larger in diameter. The common water main materials include ductile iron, PVC, asbestos cement, high-density polyethylene (HDPE), and concrete steel. The oldest water mains are cast iron and asbestos cement (Folkman, 2018).

³ Sandvig et al. (2008) found that LSLs contributed an average of approximately 50 to 75 percent of the total lead mass measured at the tap, while premise piping and the faucet contributed approximately 20 to 35 percent and 1 to 3 percent, respectively. At sites with no LSL, premise piping and the faucet contributed a greater percentage of lead mass to the total lead mass measured at the tap (approximately 55 percent and 12 percent, respectively), while main samples ranged from approximately 3 to 15 percent.

¹ Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis (86 FR 7037, January 20, 2021).

Lowering the Lead Action Level

The final LCRI lowers the lead action level from 0.015 mg/L to 0.010 mg/L. When a water system exceeds the lead action level, it is required to inform the public, take actions associated with CCT, and employ public education measures to reduce lead exposure. For example, a system may be required to install or adjust CCT to reduce lead that leaches into drinking water. Actions resulting from a lowered lead action level will improve public health benefits because they will require systems to take actions to reduce lead exposure sooner. The EPA also emphasizes the many final rule requirements that will result in additional public health benefits irrespective of systemwide lead levels, recognizing there is no safe level of lead in drinking water. For example, the final rule requires full service line replacement and public education provisions independent of a system's 90th percentile lead level.

Strengthening Protections To Reduce Exposure

The final LCRI requires water systems with continually high lead levels to conduct additional outreach to consumers and make filters certified to reduce lead in drinking water available to all consumers. These additional actions can reduce consumer exposure to higher levels of lead in drinking water while the water system works to reduce systemwide lead levels (*e.g.*, achieving 100 percent replacement of lead and GRR service lines, installing or re-optimizing optimal corrosion control treatment (OCCT)), which may take years to fully implement.

Benefits and Costs Analysis

As part of its Health Risk Reduction and Cost Analysis (HRRCA), the EPA evaluated quantifiable and nonquantifiable health risk reduction benefits and costs associated with the final LCRI. At a two percent discount rate, the EPA estimates the quantifiable annual benefits of the final rule will be \$13.49 to \$25.14 billion and the quantifiable annual costs of the rule will be \$1.47 to \$1.95 billion in 2022 dollars. The EPA Administrator confirms the determination made at proposal that the quantified and nonquantifiable benefits of the final LCRI justify the quantified and nonquantifiable costs.

To evaluate these benefits and costs, the EPA determined which entities would be affected by the LCRI, quantified costs using available data, and described nonquantifiable costs. The EPA quantified benefits by

estimating and monetizing avoided reductions in IQ, cases of attention-deficit/hyperactivity disorder (ADHD) in children, lower birth weights in children, and cases of cardiovascular disease premature mortality in adults associated with lead and GRR service line replacement, CCT installation and re-optimization, the use of point-of-use devices as a small system compliance option, and the temporary use of point-of-use devices and water filters in systems with multiple lead action level exceedances. Prior efforts to quantify benefits associated with reducing lead in drinking water have focused on neurodevelopmental outcomes in children because of the lifelong impact on their ability to thrive. The current benefits assessment also incorporates recent scientific analyses that allow better quantification of benefits to adults associated with reductions in lead exposure.

There are many additional benefits of the LCRI that the EPA assessed qualitatively. For example, the requirements for water systems to issue public education (including using languages of the communities where systems serve a large proportion of consumers with limited English proficiency), to make the inventory of service line and connector materials publicly available, and to make the service line replacement plan publicly available will promote the public's behaviors to reduce their exposure to lead in drinking water. Health benefits qualitatively evaluated include reduced incidence of renal effects, reproductive and developmental effects (apart from ADHD), immunological effects, neurological effects (apart from children's IQ), and cancer.

In addition, persons served by systems required to install or re-optimize OCCT under the final LCRI and living in homes with premise plumbing containing lead will receive health benefits from reduced lead exposure that were not quantified in the analysis of the final rule. Increased use of CCT resulting from the final LCRI's lower lead action level and improved tap sampling may have a beneficial secondary effect of reducing copper levels and avoiding certain negative health impacts of copper, such as acute gastrointestinal conditions and health effects associated with Wilson's Disease. Other nonquantifiable co-benefits associated with the increased use of corrosion inhibitors resulting from the LCRI's lower lead action level and improved tap sampling include extending the useful life of plumbing components and appliances (*e.g.*, water heaters), reduced plumbing

maintenance costs, reduced treated water loss from the distribution system due to leaks, and reduced potential liability and damages from broken pipes in buildings.

To support eliminating LSLs, the Infrastructure Investment and Jobs Act (Pub. L. 117–58), also referred to as the Bipartisan Infrastructure Law (BIL), included \$15 billion specifically appropriated for LSLR projects and associated activities directly connected to the identification and replacement of LSLs. The BIL also included over \$11.7 billion for the Drinking Water State Revolving Fund General Supplemental, which can also be used for lead service line replacement as well as other drinking water projects. The agency notes the costs cited above do not take into account this available funding source. The EPA is also providing significant technical assistance to communities through efforts such as the “Get the Lead Out Initiative” and “Lead Service Line Replacement Accelerators,” which assist efforts to conduct service line replacement.

Compliance and Public Process

Water systems must comply with the requirements of the LCRI starting three years after promulgation of this final rule. The EPA is requiring water systems to comply with select requirements introduced in the 2021 LCRR that the agency did not propose to change in the LCRI, starting on October 16, 2024. This includes the 2021 LCRR initial LSL inventory, notification of service line material, and associated reporting requirements. Water systems must also comply with the Tier 1 public notification (PN) requirement for a lead action level exceedance that was introduced under the 2021 LCRR starting October 16, 2024. Please see section V.B.3 of this preamble for a full discussion of the provisions with a compliance date of October 16, 2024. The final LCRI otherwise requires water systems to comply with the pre-2021 LCR (and not the 2021 LCRR) between October 16, 2024, and the LCRI compliance date so that water systems can directly transition from the regulatory scheme of the LCR to the LCRI.

II. General Information

The final Lead and Copper Rule Improvements (LCRI) builds upon the previous lead and copper rules. The LCRI revises the most recent lead and copper rule, the 2021 Lead and Copper Rule Revisions (LCRR), which was promulgated on January 15, 2021 (86 FR 4198, USEPA, 2021a). Key revisions in the LCRI address the opportunities for

improvement identified in the “Review of the National Primary Drinking Water Regulation: Lead and Copper Rule Revisions” (or LCRR review) including proactively and equitably replacing all lead service lines (LSLs), strengthening compliance with tap sampling to better identify communities most at risk of elevated lead in drinking water to better compel actions to reduce health risks, reducing the complexity of the regulation, and ensuring that the rule is more understandable (86 FR 71574, USEPA, 2021b). The United States Environmental Protection Agency (EPA) developed the LCRI considering the input received in numerous meaningful consultations and engagements over several years, including during the LCRR review and in stakeholder outreach conducted to inform the development of the proposed and final LCRI, along with almost 200,000 public comments submitted to the docket as well as oral comments provided to the EPA during the public hearing held January 16, 2024, for the proposed LCRI.

A. What does the final LCRI require?

The LCRI requires full service line replacement of lead and galvanized requiring replacement (GRR) service lines under the control of the water system, regardless of the system’s 90th percentile lead level. Water systems are required to complete replacements within 10 years of the LCRI compliance date. There is a limited exception for systems with a high proportion of service lines requiring replacement: they are eligible for a deferred deadline if they meet a specified threshold and receive State approval. Systems with deferred deadlines and States must regularly assess whether they can complete the replacement at a faster rate. Water systems must identify all service lines of unknown composition (“unknown service lines”) to replace all lead and GRR service lines by the replacement deadline. Systems must also track lead connectors in their inventories and replace them whenever encountered during normal operations. All water systems with non-lead service lines in their inventories must validate the methods used to categorize those service lines as non-lead with some exceptions. All water systems with known or potential lead or GRR service lines must prepare and make publicly accessible a service line replacement plan which can facilitate the equitable replacement of all lead or GRR service lines by the replacement deadline.

The final LCRI reduces the lead action level from 0.015 mg/L to 0.010 mg/L, which will result in more water systems installing and re-optimizing optimal corrosion control treatment (OCCT) and providing public education to reduce drinking water lead exposure. Systems that exceed the lead action level three or more times in a five-year period must take additional actions to provide public education and make filters available.

The rule updates the tap sampling protocol by requiring systems to collect a first-liter sample (in addition to the fifth-liter sample required by the 2021 LCRR) at structures with LSLs and then use the higher of the first- or fifth-liter sample values at the LSL sites when calculating the 90th percentile. The first- and fifth-liter sample values represent water that has been stagnant in premise plumbing (plumbing within buildings) and within the service line, respectively, and therefore, more accurately identify where higher lead levels might be present compared to sampling the first liter or the fifth liter alone. Systems must prioritize sampling at sites most likely to contain lead and use this data to calculate the 90th percentile. The LCRI requires most systems with lead and GRR service lines to start (or continue) standard monitoring. Additionally, any system with a 90th percentile lead level above the LCRI lead action level, based on the system’s results from the most recent tap monitoring period prior to the compliance date, will need to start (or continue) standard monitoring. The EPA updated the requirements for systems with insufficient Tier 1 and Tier 2 sites to meet their minimum required number of samples to use the highest sample results from Tiers 1, 2, and the next highest available tiers (equal to the minimum required number of samples) to calculate the 90th percentile. Sample site tiers are used to prioritize sampling locations and were first introduced in the 1991 LCR.

The LCRI requires States to set optimal water quality parameters (OWQPs) for medium systems (serving greater than 10,000 persons and fewer than or equal to 50,000 persons) that are required to optimize or re-optimize corrosion control treatment (CCT). These systems must meet those parameters to demonstrate that OCCT is being maintained. The rule allows all systems to defer OCCT or re-optimized OCCT (but maintain any existing CCT) if they can replace all lead and GRR service lines at a minimum percent

annual rate within five years or less. Water systems with lead and GRR services lines and OCCT that are meeting their OWQPs are not required to re-optimize their OCCT more than once following a lead action level exceedance after the compliance date. After systems remove all of their lead and GRR service lines, they must re-optimize again if they exceed the lead action level. In addition, water systems may be required to re-optimize by the State at any time. Systems not required to re-optimize under the final rule still have to meet other requirements, including for public education if there are multiple action level exceedances (see sections IV.J and IV.K of this preamble).

The LCRI updates public education requirements, instituting changes to content and delivery frequency for more proactive messaging about lead in drinking water and actions individuals can take to reduce their exposure. It includes requirements to make information about lead in drinking water more accessible to consumers including individuals with limited English proficiency. The LCRI also introduces new public education requirements for lead and copper.

The LCRI revises the small system compliance flexibility provision to eliminate LSLR as a compliance option, as all systems must conduct mandatory service line replacement regardless of their 90th percentile lead level. The eligibility threshold for the flexibility for community water systems (CWSs) is lowered to those serving 3,300 or fewer persons.

The LCRI retains the requirements from the 2021 LCRR for CWSs to conduct sampling and public education in schools and child care facilities but expands the available waivers to include sampling efforts conducted prior to the rule compliance date, including sampling conducted through the Water Infrastructure Improvements for the Nation (WIIN) Act grant program. The LCRI also restructures and clarifies areas of the rule that did not change to make the rule more implementable.

Exhibit 1 compares the major differences among the pre-2021 Lead and Copper Rule (LCR), 2021 LCRR, and the final LCRI. Asterisks (*) in the pre-2021 LCR and 2021 LCRR column denote requirements that are retained in the final LCRI, and these requirements are, therefore, not repeated in the final LCRI column.

EXHIBIT 1—COMPARISON OF THE 2021 LCRR, PROPOSED LCRI, AND FINAL LCRI REQUIREMENTS

Pre-2021 LCR	2021 LCRR	Final LCRI
Service Line Inventory		
- Systems were required to complete a materials evaluation by the time of initial sampling. - No requirement to regularly update materials evaluation.	- All systems must develop an initial lead service line (LSL) inventory by October 16, 2024, that includes all service lines, regardless of ownership, categorized as lead, non-lead, galvanized requiring replacement (GRR), and unknown.* - The inventory must be made publicly accessible and available online for systems serving >50,000 persons.* - The publicly available inventory must include a locational identifier for each lead and GRR service line. - The LSL inventory must be updated based on the system's tap sampling frequency but no more than annually.	- All systems must review specified information that describes connector materials and locations. - Systems must include each identified connector in their baseline inventory by the LCRI compliance date. - Connector material categories include lead, non-lead, unknown, and no connector present. - The inventory must include a street address with each service line and connector, if available. - The inventory must be updated annually. - Systems must include in their inventories the total number of each type of service line, the number of lead and unknown connectors, the number of full lead and GRR service line replacements, and the number of partial lead and GRR service line replacements. - Systems must respond to customer inquiries on incorrect material categorizations within 60 days. - Systems must validate the accuracy of their methods to categorize non-lead service lines in their inventory no later than 7 years after the compliance date by the end of the calendar year unless on a shortened or deferred deadline. - The validation pool includes all non-lead service lines except for those installed after the applicable Federal, State, or local lead ban; visually inspected at a minimum of two points on the pipe exterior; or previously replaced. - Systems may submit previous validation efforts in lieu of the LCRI requirements if they are at least as stringent as the requirements, and States must review and approve of these previous efforts. - Systems must identify all unknown service lines by their mandatory service line replacement deadline.
Service Line Replacement		
Replacement Plan No requirement.	Replacement Plan - All systems with at least one lead, GRR, or unknown service line must develop an LSLR plan by the compliance date. - The plan must include a strategy to prioritize service line replacement.*	Replacement Plan - All systems with at least one lead, GRR, or unknown service line must develop the service line replacement plan by the compliance date. The plan includes the elements from the LCRR as well as two new elements: (1) a strategy to inform customers and consumers (persons served) about the plan and replacement program and (2) an identification of any legal requirements or water tariff agreement provisions that affect a system's ability to gain access to conduct full service line replacement. - The service line replacement plan must include additional plan elements if the system has at least one lead-lined galvanized service line or if the system is eligible for a deferred deadline. - Service line replacement plan must be publicly accessible; and available online for systems serving >50,000 persons. - The plan must be updated annually to include any new or updated information and submitted to the State on an annual basis. - By the compliance date, systems eligible for and planning to use deferred deadlines must include in the plan information on what the system identifies as the earliest deadline and fastest feasible rate to replace lead and GRR service lines that is no slower than 39 annual replacements per 1,000 service connections.

EXHIBIT 1—COMPARISON OF THE 2021 LCRR, PROPOSED LCRI, AND FINAL LCRI REQUIREMENTS—Continued

Pre-2021 LCR	2021 LCRR	Final LCRI
LSLR • Replacement program requirements are based on the lead 90th percentile (P90) lead level, CCT installation, and/or source water treatment. • Systems conducting LSLR must annually replace at least 7 percent of LSLs in their distribution system. • Systems must replace the LSL portion they own and offer to replace the private portion. Systems are not required to bear the cost of replacing the private portion.^a • Full LSLR, partial LSLR, and LSLs with lead sample results ≤ 0.015 mg/L ("test-outs") count toward the 7 percent replacement rate. • Systems can discontinue LSLR after 2 consecutive 6-month monitoring periods at or below the lead action level. • Requires replacement of LSLs only (i.e., no GRR service lines).	LSLR • Replacement program requirements are dependent on P90 lead level for CWSs serving >10,000 persons: ○ If P90 > 0.015 mg/L: Must fully replace 3 percent of lead and GRR service lines per year based upon a 2-year rolling average (mandatory replacement) for at least 4 consecutive 6-month monitoring periods. ○ If P90 > 0.010 mg/L but ≤ 0.015 mg/L: Implement a goal-based LSLR program and consult the primacy agency (or State) on replacement goals for 2 consecutive 1-year monitoring periods. • CWSs serving $\leq 10,000$ persons and all non-transient, non-community water systems (NTNCWSs) that select LSLR as their compliance option must complete LSLR within 15 years if P90 > 0.015 mg/L. See the <i>Small System Flexibility</i> section of this exhibit. • Annual LSLR rate is applied to the number of lead and GRR service lines when the system first exceeds the trigger or action level plus the number of unknown service lines at the beginning of the year. • Only full LSLR (replacement of the entire length of the service line) counts toward mandatory rate* and goal-based rate. • All systems must replace their portion of an LSL if notified by consumer of private side replacement within 45 days of notification of the private replacement. If the system cannot replace the system's portion within 45 days, it must notify the State and replace the system's portion within 180 days.* • Following each service line replacement, systems must: ○ Provide pitcher filters or point-of-use devices and 6 months of replacement cartridges to each customer after replacement.* Provide pitcher filters and cartridges before the affected portion of the line or the fully replaced service line is returned to service.* ○ Offer to collect a lead tap sample at locations served by the replaced line within 3 to 6 months after replacement.* • Requires replacement of lead connectors when encountered.* • Systems must make 2 good faith efforts to engage customers about LSLR. • Systems conducting partial LSLR must offer to replace the remaining portion of the service line. • Systems must replace service lines by a shorter deadline if determined feasible by the State.*	• By the end of the second program year, the State is required to determine in writing whether a system with a deferred deadline is replacing lead and GRR service lines at the fastest feasible rate, either by approving the continued use of that deferred deadline or by setting the fastest feasible rate for the system. In addition to annual updates, systems with deferred deadlines must submit their plan every three years with updated information about why the replacement rate is still the fastest feasible. The State must review this information and determine in writing if the system with a deferred deadline is still replacing lead and GRR service lines at the fastest feasible rate, either by approving the continued use of that deferred deadline or by setting the fastest feasible rate. Service Line Replacement • Replacement program requirements are independent of systems' P90 lead levels. • All CWSs and NTNCWSs with one or more lead, GRR, or unknown service line in their inventory must replace lead and GRR service lines under their control within 10 years, unless subject to a shortened or deferred deadline. • Systems must replace service lines at a cumulative average annual rate of 10 percent, unless subject to a shortened or deferred deadline. • Cumulative average replacement rate is applied to the total number of unknown, lead, and GRR service lines in the baseline inventory minus the number of unknown service lines that have been determined to be non-lead since the baseline inventory. • Systems that would have to annually replace more than 39 service lines per 1,000 service connections are eligible for deferred deadlines longer than 10 years. • States are required to set a shorter deadline for a system where it determines that a shorter deadline is feasible. • Where property owner consent is required for a system to access the service line, systems must make a reasonable effort (at least 4 attempts) to engage property owners about full service line replacement. • Systems conducting partial service line replacement, if not prohibited by the rule, must make a reasonable effort (at least 4 attempts) to engage property owners about full service line replacements for infrastructure projects that impact service lines and offer to replace the remaining portion of the service line not under their control within 45 days if replaced in coordination with an emergency repair.^a

EXHIBIT 1—COMPARISON OF THE 2021 LCRR, PROPOSED LCRI, AND FINAL LCRI REQUIREMENTS—Continued

Pre-2021 LCR	2021 LCRR	Final LCRI
LSL-Related Outreach • If a system replaces its portion only: ◦ Provide notification to affected residences within 45 days prior to replacement on possible elevated short-term lead levels and measures to minimize exposure.* ◦ Include offer to collect lead tap sample within 72 hours of replacement. ◦ Provide test results within 3 business days after receiving results.	LSL-Related Outreach • Notify consumers annually if they are served by a lead, GRR, or unknown service line.* • Provide notice and educational materials to consumers during water-related work that could disturb LSLs. • Provide filters to consumers for disturbances to a lead, GRR, or unknown service line caused by replacement of an inline water meter, water meter setter, or connector. • Systems subject to goal-based program must: ◦ Conduct targeted outreach that encourages consumers with LSLs to participate in the LSLR program. ◦ Conduct an additional outreach activity if they fail to meet their goal. • Systems required to conduct LSLR must include information about the LSLR program in public education (PE) materials that are provided in response to P90 > action level.*	Service Line-Related Outreach • Provide notice and educational materials during water-related work that could disturb lead, GRR, or unknown service lines, including disturbances due to inventorying efforts, to consumers within 24 hours or before the service line is returned to service, and to customers within 30 days. • Provide filters to consumers for disturbances to a lead, GRR, or unknown service line caused by replacement of an inline water meter, water meter setter, connector, or water main. • If a CWS does not meet the mandatory service line replacement rate, the CWS must conduct additional public outreach activities to encourage customers with lead, GRR, and unknown service lines to participate in the service line replacement program. • Removes goal-based program outreach activities.
Action Level and Trigger Level		
• P90 level above lead action level of 0.015 mg/L or copper action level of 1.3 mg/L requires additional actions. • Lead action level exceedance requires 7 percent LSLR (includes partial replacements), CCT recommendation and possible study and installation, and PE within 60 days after the end of the monitoring period.	• P90 level above lead action level of 0.015 mg/L or copper action level of 1.3 mg/L requires more actions than the previous rule. • Defines lead trigger level as P90 > 0.010 mg/L and triggers additional planning, monitoring, and treatment requirements. • Lead action level exceedance requires 3 percent full LSLR, OCCT installation or re-optimization, PE, and public notification (PN) within 24 hours. • Trigger level exceedance requires goal-based LSLR and steps taken towards CCT installation or re-optimization.	• Removes the lead trigger level. • P90 level above lead action level of 0.010 mg/L or copper action level of 1.3 mg/L requires actions including installing or re-optimizing CCT, and PE as well as Tier 1 PN (for lead action level exceedances). • Mandatory full service line replacement of lead and GRR service lines is independent of P90 lead levels.
Lead and Copper Tap Sampling		
Sample Site Selection • Prioritizes collection of samples from sites with sources of lead in contact with drinking water. • Highest priority given to sites served by copper pipes with lead solder installed after 1982 or containing lead pipes and sites served by LSLs. • Systems must collect 50 percent of samples from LSLs, if available. Sample Collection and Inclusion in 90th Percentile Calculation • Requires collection of the first-liter sample after water has sat stagnant for a minimum of 6 hours.	Sample Site Selection • Prioritizes collecting samples from sites served by LSLs. All samples must be collected from sites served by LSLs, if available.* • Equal priority to copper pipes with lead solder, irrespective of installation date.* • Adds 2 tiers to prioritize sampling at lead and GRR service line sites above sites with copper with lead solder.* Sample Collection and Inclusion in 90th Percentile Calculation • Requires collection of the fifth-liter sample in homes with LSLs after water has sat stagnant for a minimum of 6 hours. • Requires first-liter sample collection in homes without LSLs.* • Requires systems with insufficient Tier 1 and 2 sites to meet the minimum number of samples required by calculating the P90 from all Tier 1 and 2 sites and the highest samples from the next highest tier to equal the minimum number required. • Prohibits inclusion of samples collected under find-and-fix in the P90 calculation.* • Adds requirement that samples must be collected in wide-mouth bottles.* • Prohibits sampling instructions that include recommendations for aerator cleaning/removal and pre-stagnation flushing prior to sample collection.*	Sample Site Selection • Combines the tap sample site selection tiering criteria for CWSs and NTNCWSs. • Removes galvanized service line or premise plumbing formerly downstream of a lead connector from Tier 3 sites. • Removes requirement for replacement sampling sites to be selected within reasonable proximity. • Clarifies that sites are considered no longer available for sampling after customer refusal or non-response after two outreach attempts. Sample Collection and Inclusion in 90th Percentile Calculation • Requires collection of the first- and fifth-liter samples in structures with LSLs after water has sat stagnant for a minimum of 6 hours. • Requires systems with insufficient Tier 1 and 2 sites to meet the minimum number of samples required by calculating the P90 from the highest sample values from the highest tiers sampled equal to the minimum number required. • Requires the higher value of the first- and fifth-liter lead concentration in structures with LSLs to be used to calculate the P90 value for lead. • Prohibits inclusion of samples following service line replacement in the P90 calculation. Prohibits the inclusion of more than one sample per site in each P90 calculation. • Revises the definition of a wide-mouth bottle.

EXHIBIT 1—COMPARISON OF THE 2021 LCRR, PROPOSED LCRI, AND FINAL LCRI REQUIREMENTS—Continued

Pre-2021 LCR	2021 LCRR	Final LCRI
Monitoring Frequency • Samples are analyzed for both lead and copper. • Systems must collect standard number of samples based on population; semi-annually unless they qualify for reduced monitoring. • Systems can qualify for annual or triennial monitoring at reduced number of sites. Monitoring schedule based on the number of consecutive years meeting the following criteria: ○ Serves ≤50,000 persons and P90 is at or below the lead and copper action levels. ○ Serves any population size, meets State-specified optimal water quality parameters (OWQPs), and P90 ≤ lead action level. • Triennial monitoring also applies to any system with lead P90 ≤ 0.005 mg/L and copper P90 ≤ 0.65 mg/L for 2 consecutive 6-month monitoring periods. • Based on rule criteria, systems serving ≤ 3,300 persons can apply for a 9-year monitoring waiver.*	Monitoring Frequency • Samples are analyzed for lead and copper, only copper, or only lead. This occurs when lead monitoring is conducted more frequently or at more sites than copper, and at LSL sites where a fifth-liter sample is only analyzed for lead.* • Lead monitoring schedule is based on the P90 level for all systems as follows: ○ P90 > 0.015 mg/L: Semi-annually at the standard number of sites. ○ P90 > 0.010 mg/L but ≤ 0.015 mg/L: Annually at the standard number of sites. ○ P90 ≤ 0.010 mg/L: Annually at the standard number of sites and triennially at reduced number of sites using same criteria as the LCR except copper P90 level is not considered. • Initial standard monitoring required for systems with lead and GRR service lines, and any system that does not sample under the requirements of the LCRR by the compliance date. • Systems must conduct standard monitoring if they exceed the action level, have a water quality parameter (WQP) excursion, and other criteria.	Monitoring Frequency • Monitoring schedule is based on both the P90 for lead and copper for all systems. Systems may retain or qualify for reduced monitoring based on the number of consecutive tap monitoring periods: ○ P90 ≤ action level for 2 consecutive 6-month periods: Annual monitoring at standard number of sites for lead and reduced number of sites for copper. ○ P90 < practical quantitation limit (PQL) for 2 consecutive periods: Triennial monitoring at the reduced number of sites for both lead and copper. • Initial standard monitoring schedule required for most systems with lead and/or GRR service lines in their inventory on the compliance date. • Additional criterion for when systems must start standard monitoring: Systems with no lead or GRR service lines in their inventory on the compliance date must start standard monitoring if they identify a lead or GRR service line in the future.
Corrosion Control Treatment (CCT) and Water Quality Parameters (WQPs)		
CCT • Systems serving > 50,000 persons were required to install treatment by January 1, 1997, with limited exception. • Systems serving ≤ 50,000 that exceed lead and/or copper action level(s) are subject to CCT requirements (e.g., CCT recommendation, study if required by the State, CCT installation). They can discontinue CCT steps if no longer exceed both action levels for 2 consecutive 6-month monitoring periods. • Systems must operate CCT to meet any OWQPs designated by the State that define optimal CCT. • There is no requirement for systems to re-optimize. CCT Options Includes alkalinity and pH adjustment, calcium hardness adjustment, and phosphate or silicate-based corrosion inhibitor. WQPs • No CCT: pH, alkalinity, calcium, conductivity, temperature, orthophosphate (if phosphate-based inhibitor is used), silica (if silica-based inhibitor is used). • With CCT: pH, alkalinity, and based on type of CCT either orthophosphate, silica, or calcium. WQP Monitoring • Systems serving >50,000 persons must conduct regular WQP monitoring at entry points and within the distribution system. • Systems serving ≤ 50,000 persons conduct monitoring only in those periods that exceed the lead or copper action level. • Contains provisions to sample at reduced number of sites in distribution system less frequently for all systems meeting their OWQPs. Sanitary Survey Review Treatment must be reviewed during sanitary surveys; no specific requirement to assess CCT or WQPs.	CCT • Specifies CCT requirements for systems with P90 lead level >0.010 mg/L but ≤ 0.015 mg/L: ○ No CCT: Must conduct a CCT study if required by the State. ○ With CCT: Must follow the steps for re-optimizing CCT, as specified in the rule. • Systems with P90 lead level >0.015 mg/L: ○ No CCT: Must complete CCT installation regardless of subsequent P90 levels if system has started to install CCT. ○ With CCT: Must re-optimize CCT. • CWSs serving ≤ 10,000 persons and all NTNCWSs can select an option other than CCT to address lead. See the <i>Small System Flexibility</i> section of this exhibit. CCT Options Removes calcium hardness as an option and specifies any phosphate inhibitor must be orthophosphate.* WQPs • Eliminates WQPs related to calcium hardness (i.e., calcium, conductivity, and temperature).* • All other parameters are the same as in the LCR.* WQP Monitoring • Systems serving >50,000 persons must conduct regular WQP monitoring at entry points and within the distribution system. • Systems serving ≤50,000 persons must continue WQP monitoring until they no longer exceed the lead and/or copper action level(s) for 2 consecutive 6-month monitoring periods. • To qualify for reduced WQP distribution monitoring, P90 lead level must be ≤ 0.010 mg/L and the system must meet its OWQPs.* Sanitary Survey Review CCT and WQP data must be reviewed during sanitary surveys against most recent CCT guidance issued by the EPA.*	CCT • Systems with P90 lead level >0.010 mg/L: ○ No CCT: Must install CCT regardless of their subsequent P90 levels if they have started to install CCT. ○ With CCT: Must re-optimize OCCT. • Systems with OCCT and lead and GRR service lines meeting OWQPs need only re-optimize OCCT once after the compliance date, unless required to do so by the State. • Systems with OCCT that exceed the lead action level after removing all lead and GRR service lines will need to re-optimize again. • CWSs serving ≤ 3,300 persons and all NTNCWSs can select an option other than CCT to address lead. See the <i>Small System Flexibility</i> section of this exhibit. • Deferred OCCT or re-optimized OCCT for systems that can complete removal of 100 percent of lead and GRR service lines within 5 years or less of the date they are triggered into CCT steps. Systems with CCT must maintain CCT during the 5-year-or-less service line replacement program. CCT Options No changes from the LCRR. WQPs No changes from the LCRR. WQP Monitoring • Systems with CCT (unless deemed optimized) serving >10,000 persons must conduct regular WQP monitoring at entry points and within the distribution system. • Systems serving ≤10,000 persons and systems without CCT serving >10,000 persons but ≤50,000 persons that exceed the lead and/or copper action level(s) must conduct WQP monitoring until they no longer exceed lead and/or copper action level(s) for 2 consecutive 6-month monitoring periods. • Systems without CCT serving >10,000 persons but ≤50,000 persons that exceed the lead action level that are required to install CCT, must continue to conduct WQP monitoring. Sanitary Survey Review No changes from the LCRR.

EXHIBIT 1—COMPARISON OF THE 2021 LCRR, PROPOSED LCRI, AND FINAL LCRI REQUIREMENTS—Continued

Pre-2021 LCR	2021 LCRR	Final LCRI
Find-and-Fix No required follow-up samples or additional actions if an individual sample exceeds the lead action level.	Find-and-Fix If individual tap samples >0.015 mg/L lead, find-and-fix steps include: • Conduct WQP monitoring at or near the site >0.015 mg/L. • Collect tap sample at the same tap sample site within 30 days.* ○ For LSL, collect any liter or sample volume.* • Perform needed corrective action.* • Document customer refusal or non-response after 2 attempts.* • Provide information to local and State health officials.*	Distribution System and Site Assessment (DSSA) • Changes the name from “Find-and-Fix” to “Distribution System and Site Assessment” to describe this requirement more precisely. • Requirements from the LCRR affect systems with individual tap samples >0.010 mg/L lead. • Clarifies that the distribution system sample location must be within a half mile radius of each site with a result >0.010 mg/L. • Water systems without CCT are not required to collect WQP samples for the DSSA CCT assessment.
Small System Flexibility		
No provisions for systems to elect an alternative treatment approach but sets specific requirements for CCT and LSLR.	Allows CWSs serving ≤10,000 persons and all NTNCWSs to implement an alternate compliance option to address lead with State approval: • Systems with lead P90 > 0.010 mg/L recommend CCT, LSLR, provision and maintenance of point-of-use (POU) devices, or replacement of all lead-bearing plumbing materials. • If the system's P90 lead level > 0.015 mg/L, the system must implement the compliance option.	Allows CWSs serving ≤ 3,300 persons and all NTNCWSs with P90 levels > lead action level and ≤ copper action level to conduct the following actions in lieu of CCT requirements to address lead with State approval: • Choose a compliance option: (1) provision and maintenance of POU devices or (2) replacement of all lead-bearing plumbing materials. • Removes the compliance option to conduct LSLR in 15 years. Maintains option for systems following CCT requirements: • With CCT: Collect WQPs and evaluate compliance options and OCCT. • No CCT: Evaluate compliance options and CCT.
Public Education and Outreach		
• Systems with P90 > lead action level must provide PE to customers about lead sources, health effects, measures to reduce lead exposure, and additional information sources. • Systems with P90 > lead action level must offer lead tap sampling to customers who request it. • Systems must provide lead consumer notice to individuals served at tested taps within 30 days of learning results. • For water systems serving a large proportion of consumers with limited English proficiency, PE materials must contain information in the appropriate language(s) regarding the importance of the materials or information on where consumers can get a translated copy or assistance in other languages.	• Water systems must provide updated lead health effects language in PN and PE materials. CWSs must provide updated health effects language in the Consumer Confidence Reports (CCR). • For water systems serving a large proportion of consumers with limited English proficiency, PE materials must contain information in the appropriate language(s) regarding the importance of the materials or information on where consumers can get a translated copy or assistance in other languages. • If P90 > lead action level: ○ LCRR PN and LCR PE requirements apply. ○ Water systems must offer to sample the tap for lead for any customer who requests it. • Water systems must provide the lead consumer notice to consumers whose individual tap sample is >0.015 mg/L lead as soon as practicable but no later than 3 calendar days. • CWSs must provide information to local and State health agencies.* Also see the <i>Public Notification, Consumer Confidence Report, and LSL-Related Outreach</i> sections of this exhibit.	• Revises the mandatory lead health effects language to improve completeness and clarity. • Water systems must provide the updated health effects language in PN and all PE materials. CWSs must provide updated health effects language in the CCR. • For water systems serving a large proportion of consumers with limited English proficiency, all PE materials must contain information in the appropriate language(s) regarding the importance of the materials and information on where consumers can get a translated copy or assistance in other languages. • Water systems must deliver consumer notice of lead and copper tap sampling results to consumers whenever their tap is sampled as soon as practicable but no later than 3 business days after receiving the results, regardless of the level. • If P90 > lead action level: ○ LCRR PN requirements apply. ○ Water systems must conduct PE no later than 60 days after the end of each tap sampling period until the system no longer exceeds the action level unless the State approves an extension. ○ Water systems must deliver PE materials to bill paying customers and every service connection address served. • Water systems with multiple lead action level exceedances (at least 3 action level exceedances in a 5-year period) must conduct additional public outreach activities and make filters available. Water systems must submit a filter distribution plan to the State within 60 days of the second action level exceedance, and the State will have 60 days to review. The State has discretion to allow the system to discontinue outreach activities and filter provision earlier if it completes actions to reduce lead levels. • Water systems must offer to sample the tap for lead for any consumer with a lead, GRR, or unknown service line who requests it. Also see the <i>Public Notification, Consumer Confidence Report, and Service Line Related Outreach</i> sections of this exhibit.

EXHIBIT 1—COMPARISON OF THE 2021 LCRR, PROPOSED LCRI, AND FINAL LCRI REQUIREMENTS—Continued

Pre-2021 LCR	2021 LCRR	Final LCRI
Public Notification		
- If P90 > action level: - No PN required for P90 > action level. - Tier 2 PN required for violations to §§ 141.80 through 141.85. - Tier 3 PN required for violations to §§ 141.86 through 141.89. Also see the <i>Public Education and Outreach</i> section of this exhibit.	- If P90 > lead action level: - Systems must notify consumers of P90 > action level within 24 hours (Tier 1 PN). Systems must comply by October 16, 2024. - Tier 2 PN required for violations to §§ 141.80 (except paragraph (c)) through 141.84, 141.85(a) through (c) and (h), and 141.93. - Tier 3 PN required for violations to §§ 141.86 through 141.90. Also see the <i>Public Education and Outreach</i> section of this exhibit.	- If P90 > lead action level of 0.010 mg/L: - LCRR Tier 1 PN requirements apply, but for the LCRI action level of 0.010 mg/L. - Tier 2 PN required for violations to §§ 141.80 (except paragraph (c)) through 141.84, 141.85(a) through (c) (except paragraph (c)(3)), (h), and (j), and 141.93. - Tier 3 PN required for violations to §§ 141.86 through 141.90 and 141.92. - Water systems must provide updated lead health effects language in PN. Also see the <i>Public Education and Outreach</i> section of this exhibit.
Consumer Confidence Report		
All CWSs must provide educational material in the annual CCR.	- CWSs must provide updated health effects language in the CCR. - All CWSs are required to include information on how to access the LSL inventory and how to access the results of all tap sampling in the CCR. - Revises the mandatory health effects language to improve accuracy and clarity.	- Revises the mandatory lead health effects language and informational statement as well as includes additional information about risk of lead exposure in the informational statement about lead in the CCR to improve completeness and clarity. - CWSs must provide updated health effects language in the CCR. - CWSs must include a statement in the CCR about the system sampling for lead in schools and child care facilities and direct the public to contact their school or child care facility for further information. - CWSs with lead, GRR, or unknown service lines must include a statement in the CCR about how to access the service line inventory and replacement plan. Also see the <i>Public Education and Outreach</i> section of this exhibit.
Change in Source or Treatment		
Systems on a reduced tap monitoring schedule must obtain prior State approval before changing their source or treatment.	Systems on any tap monitoring schedule must obtain prior State approval before changing their source or treatment. These systems must also resume a standard lead and copper tap monitoring schedule.*	No changes from the LCRR.
Source Water Monitoring and Treatment		
Periodic source water monitoring for lead and copper is required for systems with: - Source water treatment; or - P90 > action level and no source water treatment.	States can waive continued source water monitoring for lead and copper if the: - System has already conducted source water monitoring for a previous P90 > action level; - State has determined that source water treatment is not required; and - System has not added any new water sources.	Updated cross-reference to requirement for conducting standard monitoring when there is a source water addition.
Lead in Drinking Water at Schools and Child Care Facilities		
- Does not include separate testing and education program for CWSs at schools and child care facilities. - Schools and child care facilities that are classified as NTNCWSs must sample for lead and copper.*	- CWSs must provide annual public education materials to all schools and licensed child care facilities they serve. - CWSs must conduct sampling at 20 percent of elementary schools and 20 percent of licensed child care facilities they serve per year and conduct sampling at secondary schools on request for first testing cycle (5 years) and conduct sampling on request of all schools and child care facilities thereafter. - Sample results must be provided to each sampled school/child care facility, State, and local or State health department. - Excludes schools and licensed child care facilities constructed on or after January 1, 2014. - Waives sampling in schools and child care facilities that were sampled under a State or other program after October 16, 2024.	Expands on LCRR requirements to include: - Waivers for CWSs to sample in schools and licensed child care facilities they serve during the first 5-year testing cycle if the facility has been sampled between January 1, 2021, and the LCRI compliance date. - Requires CWSs to include a statement about the opportunity for schools and licensed child care facilities to be sampled in the CCR. - Excludes schools and licensed child care facilities constructed or that had full plumbing replacement on or after January 1, 2014 and that are also not served by a lead, GRR, or unknown service line. - Includes clarifications on the applicability of the requirements and on the content of public education material CWSs must provide to schools and licensed child care facilities.

EXHIBIT 1—COMPARISON OF THE 2021 LCRR, PROPOSED LCRI, AND FINAL LCRI REQUIREMENTS—Continued

Pre-2021 LCR	2021 LCRR	Final LCRI
Primacy Agency (or State) Requirements		
States must report information to the EPA that includes, but is not limited to: • All P90 lead levels for systems serving > 3,300 persons, and only levels > 0.015 mg/L for smaller systems. • Only copper P90 levels above the copper action level for all systems. • Systems that are required to initiate LSLR and the date replacement must begin. • Systems for which OCCT has been designated. States must keep records on information that includes, but is not limited to: • Records of the currently applicable or most recent State determinations, including all supporting information and an explanation of the technical basis for each decision. State primacy requirements include, but are not limited to: • Designating OCCT. • Designating source water treatment methods. • Verifying service line replacement schedules.	States must report information to the EPA that includes, but is not limited to: • All lead and copper P90 levels for all system sizes.* • The number of lead, GRR, and unknown service lines for every water system.* • The goal-based or mandatory replacement rate and the date each system must begin LSLR. • OCCT status of all systems including OWQPs specified by the State.* • For systems triggered into source water treatment, the State-designated date or determination for no treatment required.* States must keep records on information that includes, but is not limited to: • LSLR plans.* • Compliance sampling pools.* • Determinations related to source water treatment.* • Determinations related to compliance alternatives for small CWSs and NTNCWSs.* • LSL inventories.* State primacy requirements include, but are not limited to: • Reviewing service line inventory.* • Approving LSLR goals. • Determining if a faster LSLR rate is feasible.* • Defining school and child care program and determining if State or local testing program is at least as stringent as Federal requirements. • Verifying compliance with “Find-and-Fix” requirements.* • Reviewing any change in source water treatment.*	States must report information to the EPA that includes, but is not limited to: • The current numbers of lead, GRR, unknown, and non-lead service lines, lead connectors, and unknown connectors in each system’s inventory. • The numbers and types of service lines replaced and the replacement rate for every system conducting mandatory service line replacement. • The deadline for the system to complete replacement of all lead and GRR service lines. • The expected date of completion of service line replacement. • The lead P90 levels of systems with an action level exceedance within 15 days of the end of the monitoring period or, if earlier, within 24 hours of receiving the notice from the system. • The result of the State’s determination as to whether the deferred deadline is the fastest feasible, the deadline at the fastest feasible rate, and the reasons for the State’s decision. States must keep records on information that includes, but is not limited to: • Samples that do not meet the six-hour minimum stagnation time. • Determinations concerning systems eligible for deferred deadlines for service line replacement. State primacy requirements include, but are not limited to: • Identify State laws that pertain to a water system’s access to conduct full service line replacement. • Make determinations about systems eligible for service line replacement deferred deadlines. • Make determinations about which water systems serve a large proportion of consumers with limited English proficiency and provide technical assistance to those systems required to meet the requirements to provide translated PE or translation assistance to their consumers. • Review and approve inventory validations.

^a See section IV.B.4 of this preamble for further information on cost sharing.
Note: P90 means 90th percentile level.

B. Does this action apply to me?

The entities regulated by this action are CWSs and non-transient non-community water systems (NTNCWSs). A CWS, as defined in § 141.2, is “a

public water system which serves at least fifteen service connections used by year-round residents or regularly serves at least twenty-five year-round residents.” The definition in § 141.2 for a NTNCWS is “a public water system

that is not a [CWS] and that regularly serves at least 25 of the same persons over 6 months per year.” The following table provides examples of the regulated entities under this rule:

Category	Examples of potentially affected entities
Public water systems	CWSs; NTNCWSs.
State and Tribal government agencies	Agencies responsible for developing, ensuring compliance with, and enforcing National Primary Drinking Water Regulations (NPDWRs).

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities that could be affected by this action. This table includes the types of entities that the EPA is now aware could potentially be regulated by this action. To determine whether your entity is regulated by this action, this final rule should be carefully examined.

As part of this action for the LCRI, “State” refers to the agency of the State, Tribal, or territorial government that has jurisdiction over public water systems

consistent with the definition of “State” in 40 CFR 141.2. During any period when a State or Tribal government does not have primary enforcement responsibility pursuant to section 1413 of the Safe Drinking Water Act (SDWA), the term “State” means the relevant Regional Administrator of the EPA. For questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

C. Dates for Compliance

Water systems must begin to comply with the LCRI three years after promulgation of this final rule. In accordance with SDWA section 1412(b)(10), the Administrator, or a State (in the case of an individual system), may allow up to two additional years to comply with a treatment technique if the Administrator or State (in the case of an individual system) determines that additional time is necessary for capital improvements. Where a State, or the EPA where it has

primacy, chooses to provide such an extension, the system would have up to five years from the rule's promulgation date to begin compliance with the treatment technique. The EPA is not providing a two-year extension nationwide because the EPA has not determined that an additional two years is necessary for water systems nationwide to complete capital improvements to begin compliance with the LCRI. Starting on the compliance date, systems must begin mandatory service line replacement programs that must be completed within 10 years for the vast majority of systems. Systems must also begin conducting the improved tap sampling and if their tap sampling results show they exceeded the action level, systems may be required to install new or re-optimized corrosion control treatment.

Under SDWA section 1416, States may exempt water systems from any treatment technique requirement for no more than three years after the otherwise applicable compliance date. For a small system that does not serve more than 3,300 persons and which needs financial assistance for the necessary improvements, an exemption may be renewed for one or more two-year periods, but not to exceed a total of six years. No exemption may be granted without a finding that:

- Due to compelling factors (which may include economic factors, including qualification of the public water system as a system serving a disadvantaged community pursuant to SDWA section 1452(d)),⁴ the public water system is unable to comply with such contaminant level or treatment technique requirement, or to implement measures to develop an alternative source of water supply;
- The public water system was in operation on the effective date of such contaminant level or treatment technique requirement, or, for a system that was not in operation by that date, only if no reasonable alternative source of drinking water is available to such new system;
- The granting of the exemption will not result in an unreasonable risk to health; and
- Management or restructuring changes (or both) cannot reasonably be

made that will result in compliance with this title, or if compliance cannot be achieved, improve the quality of the drinking water.

III. Background

A. Overview of Lead and Lead Exposures Through Drinking Water

Lead is toxic to humans and animals, causing harmful health effects. Lead is a naturally occurring element found in small amounts in the Earth's crust. Lead and lead compounds have been used in a wide variety of products found in and around homes, including paint, ceramics, pipes and plumbing materials, solders, gasoline, batteries, ammunition, and cosmetics. Lead can enter drinking water when plumbing materials that contain lead corrode, especially where the water is highly acidic or has a low mineral content that is more likely to corrode pipes and fixtures. The most common sources of lead in drinking water are lead pipes, faucets, and fixtures. In homes with lead pipes that connect the home to the water main (or other conduit for distributing water to individual consumers or groups of consumers), also known as lead service lines or LSLs, these pipes are typically the most significant source of lead in water (Sandvig et al., 2008). Lead pipes are more likely to be found in older cities and homes built before 1986 (Laquatra, 2014). Among homes without LSLs, the most common source of lead in drinking water is from brass or chrome-plated brass faucets and plumbing with lead solder (Laquatra, 2014).

The LCRI regulates approximately 67,000 community water systems (CWSs) and non-transient non-community water systems (NTNCWSs) in the United States of varying sizes and containing varying numbers of LSLs in their service area. A CWS is a public water system that supplies water to the same population year-round. A NTNCWS is a public water system that regularly supplies water to at least 25 of the same people at least six months per year. Some examples are schools, factories, office buildings, and hospitals which have their own water systems.

B. Human Health Effects of Lead and Copper

1. Lead

Exposure to lead can cause harmful health effects for people of all ages, especially pregnant people, infants, and young children (Centers for Disease Control and Prevention (CDC), 2022a; CDC, 2022b; CDC, 2023). Lead has acute and chronic impacts on the body. Lead exposure causes damage to the brain

and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of the body (Agency for Toxic Substances and Disease Registry (ATSDR), 2020).

Developing fetuses, infants, and young children are most susceptible to the harmful health effects of lead (ATSDR, 2020). Exposure to lead is known to present serious health risks to the brain and nervous system of children (USEPA, 2013; USEPA, 2024b). Young children and infants are particularly vulnerable to the physical, cognitive, and behavioral effects of lead due to their sensitive developmental stages. There is no known safe level of exposure to lead. Scientific studies have demonstrated that there is an increased risk of health effects in children even when their blood lead levels are less than 3.5 micrograms per deciliter (CDC, 2022c) and in adults even when blood lead levels are less than 10 micrograms per deciliter (National Toxicology Program (NTP), 2012). Low-level lead exposure is of particular concern for children because their growing bodies absorb more lead per pound than adults do, and their developing brains and nervous systems are more sensitive to the damaging effects of lead (ATSDR, 2020).

The United States Environmental Protection Agency (EPA) estimates that drinking water can make up at least 20 percent of a person's total exposure to lead (56 FR 26548, USEPA, 1991). When a child is not routinely exposed to other sources of lead (e.g., dust from legacy lead paint or legacy contaminated soils), most of their exposure may come from drinking water. Infants who consume mostly formula mixed with tap water can, depending on the level of lead in the water and other sources of lead in the home, receive 40 to 60 percent of their exposure to lead from drinking water used in the formula (53 FR 31516, USEPA, 1988; Stanek et al., 2020). Scientists have linked lead's effects on the brain with lowered intelligence quotient (IQ) and attention disorders in children, among other health impacts (USEPA, 2024b; USEPA, 2013; Lanphear et al., 2019; Ji et al., 2018). In 1991, the EPA established a maximum contaminant level goal (MCLG) for lead of zero. The Safe Drinking Water Act (SDWA) requires the EPA to set MCLGs at the level at which no known or anticipated adverse effects on the health of persons would occur, allowing for a margin of safety. The EPA established the MCLG of zero in part due to lead being a probable carcinogen and due to there being no clear threshold below which there are no risks of some non-

⁴ The term "disadvantaged community" used in SDWA section 1416 here refers to the statutory definition of "disadvantaged community" provided at SDWA section 1452(d)(3): "[T]he term 'disadvantaged community' means the service area of a public water system that meets affordability criteria established after public review and comment by the State in which the public water system is located. The Administrator may publish information to assist States in establishing affordability criteria."

carcinogenic health effects (56 FR 26460, USEPA, 1991).

Blood lead levels are an indication of current exposure. Over time, lead can accumulate in the body. Lead is stored in a person's bones, binding to calcium, and it can be released later in life. For example, when calcium is mobilized in the pregnant person's body during pregnancy, lead is released from the pregnant person's bones and can pass to the fetus. Lead can also be passed through breastmilk to the nursing infant or child. Lead exposure can result in serious health effects to the developing fetus and infant. Studies document increased risk of miscarriage (Xu et al., 2012; Tolunay et al., 2016), low birth weight (Goto et al., 2021; Hu et al., 2021; Rodosthenous et al., 2017; Taylor et al., 2015), and preterm birth (USEPA, 2024b; Fisher et al., 2023). In utero and early childhood exposure to lead is associated with increased risk to the baby's brain and/or nervous system, manifesting as, for instance, an increased risk of learning or behavioral problems in life (USEPA, 2024b; USEPA, 2013).

As noted above, studies also have documented an association between adult blood lead levels and increased risk of cardiovascular disease, manifesting as an increase in risk of cardiovascular disease premature mortality. Occupational exposure to lead is associated with significant health effects in adults as well, particularly renal and gastrointestinal. The 2013 and 2024 Integrated Science Assessments for Lead (USEPA, 2013; USEPA, 2024b), the U.S. Department of Health and Human Services (HHS) National Toxicology Program (NTP) Monograph on Health Effects of Low-Level Lead (NTP, 2012), the Agency for Toxic Substances and Disease Registry (ATSDR) 2020 Toxicological Profile for Lead (ATSDR, 2020), and peer-reviewed studies have documented associations between lead and cancer (Wei and Zhu, 2020) as well as lead and adverse cardiovascular (Park and Han, 2021), renal (Harari et al., 2018), reproductive (Shi et al., 2021; Lee et al., 2020), immunological (Krueger and Wade, 2016), and neurological effects (Andrew et al., 2022). The EPA's Integrated Science Assessment for Lead (USEPA, 2024b) and Integrated Risk Information System (IRIS) Chemical Assessment Summary (USEPA, 2004a) provide additional health effects information on lead. For a more detailed explanation of the health effects associated with lead for children and adults, see appendix D of the final Lead and Copper Rule Improvements (LCRI) Economic Analysis (USEPA, 2024a).

2. Copper

Copper is an essential trace element required for several metabolic processes; however, excess copper intake is toxic and linked to various adverse health effects. Acute gastrointestinal conditions are the most common adverse health effects observed among adults and children. Chronic exposure to copper is particularly a concern for people with Wilson's disease, an autosomal recessive genetic disorder of copper metabolism affecting 1 in 30,000 individuals (Ala et al., 2007). These individuals are prone to copper accumulation in body tissue, which can lead to liver damage, neurological, and/or psychiatric symptoms (Dorsey and Ingeman, 2004). Additional information on the health effects associated with copper are available in appendix E of the Final LCRI Economic Analysis (USEPA, 2024a).

C. Regulatory History

Exercising its longstanding authority under SDWA, on June 7, 1991, the EPA promulgated the Lead and Copper Rule (LCR) with the goal of improving public health by reducing lead and copper levels at consumer taps (56 FR 26460, USEPA, 1991). The LCR established MCLGs of 0 mg/L for lead and 1.3 mg/L for copper. In addition, the LCR established a National Primary Drinking Water Regulation (NPDWR) consisting of treatment technique requirements that include lead service line replacement (LSLR), corrosion control treatment (CCT), source water treatment, and public education. The LCR established requirements for community water systems (CWSs) and non-transient non-community water systems (NTNCWSs) to conduct monitoring at consumer taps. The rule established action levels of 0.015 mg/L for lead and 1.3 mg/L for copper. If more than 10 percent of tap sample results (*i.e.*, the 90th percentile value of tap sample concentrations), collected during any monitoring period, exceed the action level, water systems must take actions including installing and/or optimizing CCT, conducting public education, treating source water if it contributes to lead and copper levels at the tap, and replacing LSLs if the system continues to exceed the action level after completing CCT steps and installing CCT. An action level exceedance is not a violation of the rule; however, failure to take the subsequent required actions (*e.g.*, LSLR, CCT, public education) results in a violation of the treatment technique or monitoring and reporting requirements.

On January 12, 2000, the EPA promulgated minor revisions to the LCR (LCRMR) (65 FR 1950, USEPA, 2000a). These minor revisions streamlined the LCR, promoted consistent national implementation, and reduced the reporting burden on affected entities. The LCRMR did not change the MCLGs or action levels for lead and copper nor change the rule's basic requirements. One of the provisions of the LCRMR required States to report the 90th percentile lead value for all water systems serving greater than 3,300 persons. States were required to report the 90th percentile lead value for water systems serving 3,300 or fewer persons only if the water system exceeds the action level. The new reporting requirements became effective in 2002.⁵

From 2000 to 2004, the District of Columbia experienced incidences of elevated drinking water lead levels, prompting the EPA to undertake a review of the LCR to determine “whether elevated drinking water lead levels were a national problem” and to identify actions to improve rule implementation (72 FR 57784, USEPA, 2007a; USEPA, 2007b; Brown et al., 2011). The EPA specifically considered the number of systems that failed to meet the lead action level, if a significant percentage of the population received water that exceeded the action level, how well the LCR worked to reduce drinking water lead levels, and if the rule was being effectively implemented, particularly with respect to monitoring and public education requirements. As part of the national review, the EPA held four expert workshops to discuss elements of the LCR, collected and evaluated lead concentration data and other information required under the LCR, and evaluated State implementation efforts to better understand challenges and needs experienced by States and water systems. In March 2005, the EPA released a Drinking Water Lead Reduction Plan, outlining a series of short- and long-term goals to improve implementation of the LCR, including revisions to the LCR (USEPA, 2005). On October 10, 2007, the EPA promulgated a set of short-term regulatory revisions and clarifications (72 FR 57782, USEPA, 2007a). The short-term revisions strengthened implementation of the LCR in the areas of monitoring, treatment, customer awareness, LSLR, and improving compliance with the public education requirements.

⁵ In 2004, the EPA published minor corrections to the LCR to reinstate text that was inadvertently removed from the rule during the previous revision (69 FR 38850, USEPA, 2004b).

Long-term issues, requiring additional research and input, were identified for a subsequent set of rule revisions. The EPA conducted extensive engagement with stakeholders to inform subsequent rule development, including a 2011 Scientific Advisory Board (SAB) consultation on the science of partial LSLR that found that partial LSLR does not reliably reduce drinking water lead levels in the long term and may cause short-term elevated drinking water lead levels following the replacement (USEPA, 2011a). The EPA specifically sought input from small entity stakeholders through the Small Business Advocacy Review Panel (SBAR) process under section 609(b) of the RFA, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA). The EPA also requested that the National Drinking Water Advisory Council (NDWAC) form a Working Group in 2014 to provide advice to the NDWAC as it develops recommendations for the revisions to the LCR (NDWAC, 2015). In 2016, the EPA released a white paper summarizing NDWAC recommendations and identifying key areas for rule development, noting that “lead crises in Washington, DC, and in Flint, Michigan, and the subsequent national attention focused on lead in drinking water in other communities, have underscored significant challenges in the implementation of the current rule, including a rule structure that for many systems only compels protective actions after public health threats have been identified” (USEPA, 2016a). Notably, the white paper discussed the issue of mandatory, proactive LSLR as an opportunity to eliminate a primary source of lead in drinking water rather than only replacing LSLs after a lead action level exceedance, and how to address lead exposure risks resulting from partial LSLR. The recommendations also emphasized the importance of enforceable goals for LSLR, recognizing the significant lead exposure risks that can accompany partial service line replacements. Other issues identified include the need for stronger CCT requirements, including re-evaluation after source water or treatment changes, improved tap sampling procedures to address concerns about practices used to avoid action level exceedances, and increased public transparency such as access to information about LSLs and sharing of data.

The EPA intended to address these long-term issues in the 2021 Lead and Copper Rule Revisions (LCRR), which was promulgated on January 15, 2021

(86 FR 4198, USEPA, 2021a). The 2021 LCRR focuses on six key areas for revision: identifying sites with significant sources of lead in drinking water, strengthening CCT requirements, closing loopholes in LSLR requirements, increasing sampling reliability, improving risk communication, and introducing a new lead sampling requirement at schools and child care facilities as part of public education. Specifically, the 2021 LCRR includes new requirements for water systems to develop, and make publicly accessible, LSL inventories and annually notify consumers if they are served by an LSL, GRR service line, or service line of unknown material. Additionally, the 2021 LCRR removes provisions allowing partial service line replacement or “test-outs” (*i.e.*, where a service line sample measures below the lead action level) to count towards LSLR requirements. The rule also revises monitoring requirements to prioritize sampling at sites most likely to contain lead sources, require a fifth-liter sample be taken at LSL sites, and prohibit the use of language in sampling instructions that may result in samples that underestimate lead levels.

The 2021 LCRR also establishes a lead trigger level at 0.010 mg/L to require systems to take actions before an action level exceedance, including taking steps to plan for CCT installation, re-optimizing CCT if the system already installed CCT, establishing a goal-based LSLR program, and increasing monitoring frequency. The 2021 LCRR makes several changes to the CCT requirements and establishes a requirement for water systems to conduct follow-up actions at sites with individual compliance sample concentrations exceeding 0.015 mg/L.

In the 2021 LCRR, the EPA also revised its Public Notification (PN) Rule in 40 CFR part 141, subpart Q, to make changes to the reporting requirements for action level exceedances. These changes implemented the 2016 amendments to section 1414 of SDWA that required public notification within 24 hours if the system exceeds the lead action level. In the 2021 LCRR, the EPA also revised the Consumer Confidence Report (CCR) Rule in 40 CFR part 141, subpart O, to require the report to include the range of lead and copper tap sampling results and information on how to access lead tap sampling results and the service line inventory. The EPA also revised the mandatory lead health effects language and informational statement about lead that must be included in the CCR.

The 2021 LCRR adds new public education requirements, including

requirements to notify persons served by a known or suspected LSL and timely (24 hour) notification of individuals when their lead tap sampling results exceed the lead action level of 0.015 mg/L. The 2021 LCRR also requires systems above the trigger level to conduct goal-based LSLR and also to conduct additional public outreach activities about lead in drinking water and opportunities to replace LSLs if the system fails to meet the goal replacement rate established after a trigger level exceedance.

The 2021 LCRR also adds a new small system flexibility provision for CWSs serving 10,000 or fewer persons and all NTNCWSs. Those systems that exceeded the trigger level can choose one out of four compliance options (*i.e.*, CCT, LSLR, point-of-use devices, replacement of lead-bearing plumbing) to implement if the system exceeds the lead action level.

On January 20, 2021, President Joseph R. Biden issued Executive Order 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis (86 FR 7037, January 20, 2021). Executive Order 13990 required Federal agencies to “review and . . . take action to address the promulgation of Federal regulations and other actions during the last 4 years that conflict[ed] with” the “national objectives,” as provided in the executive order, including to “be guided by the best science and be protected by processes that ensure the integrity of Federal decision-making” to promote and protect public health and advance environmental justice, among others. The EPA was required to review the LCRR because the EPA promulgated the LCRR within the time frame specified by the executive order, and the LCRR addresses public health through drinking water.

Additionally, after promulgation of the LCRR, the EPA heard from stakeholders on a range of concerns about the LCRR, including the lack of requirements or incentives to replace all LSLs, the inclusion of the trigger level that made the rule unnecessarily complicated, and the implementation burdens on systems and States.

To allow the EPA to engage with stakeholders and review the LCRR before it took effect, on March 12, 2021, the EPA published the “National Primary Drinking Water Regulations: Lead and Copper Rule Revisions; Delay of Effective Date” (86 FR 14003, USEPA, 2021c), which delayed the effective date of the LCRR from March 16, 2021, to June 17, 2021. On the same day, the EPA published the “National Primary Drinking Water Regulations: Lead and

Copper Rule Revisions; Delay of Effective and Compliance Dates” (86 FR 14063, USEPA, 2021d), which proposed further delaying the effective date of LCRR to December 16, 2021, to allow the EPA to “conduct a review of the LCRR and consult with stakeholders, including those who have been historically underserved by, or subject to discrimination in, Federal policies and programs prior to the LCRR going into effect” (86 FR 14063, USEPA, 2021d). On June 16, 2021, the EPA issued a final rule delaying the LCRR effective date to December 16, 2021, and the compliance date from January 16, 2024, to October 16, 2024, “to maintain the same time period between the effective date and the compliance date in the LCRR” (86 FR 31941, USEPA, 2021e).

As part of the LCRR review, the EPA held a series of virtual engagements from April to August 2021 to obtain public input on the LCRR. Consistent with Executive Order 13990, the EPA engaged with States, Tribes, water systems, the public, environmental advocates, and environmental justice organizations. The EPA also sought input from community stakeholders in places that have concerns due to lead in drinking water, particularly from individuals and communities that are most at-risk of exposure to lead in drinking water.

During this process, the EPA hosted a series of 10 virtual community roundtables with stakeholders in: Pittsburgh, PA; Newark, NJ; Malden, MA; Washington, DC; Newburgh, NY; Benton Harbor and Highland Park, MI; Flint and Detroit, MI; Memphis, TN; Chicago, IL; and Milwaukee, WI. Each roundtable included a range of participants representing local governments, community organizations, environmental groups, local public water utilities, and public officials. Participants shared their experiences with lead in their communities and provided the EPA with oral and written comments on the LCRR. The EPA also held a roundtable with representatives from Tribes and Tribal communities, a national stakeholder association roundtable, a national co-regulator meeting, two public listening sessions, and a meeting with organizations representing elected officials. Summaries of the meetings and written comments from the public can be found in the docket, EPA-HQ-OW-2021-0255 at <https://regulations.gov/>.

On December 17, 2021, the EPA published the results of the LCRR review (86 FR 71574, USEPA, 2021b). The EPA described the comments received as part of the public

engagement efforts conducted as part of the LCRR review and determined that there are regulatory and non-regulatory actions the agency can take to reduce drinking water lead exposure. While the EPA found that the LCRR improved public health protection relative to the LCR, the agency also concluded that there are significant opportunities to further improve the rule to support the goal of proactively removing LSLs and protecting public health more equitably (86 FR 71574, USEPA, 2021b). The EPA also announced in the LCRR review that the effective date of the LCRR published on June 16, 2021, would continue to be December 16, 2021, to support near-term development of actions to reduce lead in drinking water (86 FR 71574, USEPA, 2021b). At the same time, the EPA committed to developing a new proposed rule, the LCRI, to strengthen key elements of the rule. The EPA identified the following policy objectives informed by the LCRR review: “Replacing 100 percent of lead service lines is an urgently needed action to protect all Americans from the most significant source of lead in drinking water systems; equitably improving public health protection for those who cannot afford to replace the customer-owned portions of their LSLs; improving the methods to identify and trigger action in communities that are most at risk of elevated drinking water lead levels; and exploring ways to reduce the complexity of the regulations” (86 FR 71574; USEPA, 2021b). The EPA also stated that it did not expect to propose changes to the requirements for information to be submitted in the initial LSL inventory or the associated October 16, 2024, compliance date. The EPA described the importance of maintaining this date, stating that “continued progress to identify LSLs is integral to lead reduction efforts regardless of potential revisions to the rule. The inventory provides critical information on the locations of potentially high drinking water lead exposure within and across public water systems, which will allow for quick action to reduce exposure” (86 FR 71579, USEPA, 2021b). Specifically, the EPA noted that development of inventories nationwide over the near-term would assist water systems, States, Tribes, and the Federal Government in determining the prevalence of these lead sources and would, among other things, enable water systems to begin planning for LSLR and apply for funding.

On December 6, 2023, the EPA published the proposed LCRI for public review and comment (84 FR 84878, USEPA, 2023a). The proposal included

advancements in protecting people from the health effects from exposures to lead in drinking water. These advancements are based on the science and existing practices utilized by drinking water systems. Key provisions in the proposal include requiring virtually all water systems across the country to replace LSLs within 10 years, locating legacy lead pipes, improving tap sampling, lowering the lead action level, and strengthening protections to reduce exposure. The EPA proposed to retain the 2021 LCRR requirements and associated October 16, 2024, compliance date for the initial service line inventory; notifications to consumers served by a lead, galvanized requiring replacement (GRR), or lead status unknown service lines; Tier 1 public notification of a lead action level exceedance; and associated reporting requirements.

D. Statutory Authority

1. Establishment and Review of National Primary Drinking Water Regulations

The EPA is publishing revisions to the NPDWR for lead and copper under the authority of SDWA, 42 U.S.C. 300f *et seq.*, including sections 1412, 1413, 1414, 1417, 1445, and 1450. SDWA is the primary Federal law that protects the tap water provided to consumers by water systems across the country. Congress passed SDWA in 1974, responding to “accumulating evidence that our drinking water contains unsafe levels of a large variety of contaminants.” *Envtl. Def. Fund, Inc. v. Costle*, 578 F.2d 337, 339 (D.C. Cir. 1978). In passing SDWA, Congress intended to ensure “that water supply systems serving the public meet minimum national standards for protection of public health.” H.R. Rep. No. 93–1185, at 1 (1974), reprinted in 1974 U.S.C.C.A.N. 6454. The primary regulatory tool for this protection is section 1412 of SDWA under which the EPA is authorized to issue standards for drinking water served by water systems. These standards—entitled “National Primary Drinking Water Regulations” (NPDWRs)—are accompanied by “maximum contaminant level goal[s]” (MCLG), which are set, for each contaminant, at the level at which there are no known or anticipated adverse human health effects with an adequate margin of safety. 42 U.S.C. 300g–1(a)(3) and (b)(4). Lead and copper are subject to existing NPDWRs. Based on the health effects described above, in 1991, the EPA established the MCLG for lead at 0 mg/L, and the MCLG for copper at 1.3 mg/L.

SDWA section 1412(b)(9) states that “The Administrator shall, not less often than every 6 years, review and revise, as appropriate, each national primary drinking water regulation promulgated under this subchapter. Any revision of a national primary drinking water regulation shall be promulgated in accordance with this section, except that each revision shall maintain, or provide for greater, protection of the health of persons.” 42 U.S.C. 300g–1(b)(9). When the EPA promulgates a revised NPDWR, the agency follows the applicable procedures and requirements in section 1412 of SDWA, including those related to: (1) the use of best available, peer-reviewed science and supporting studies; (2) presentation of information on public health effects that is comprehensive, informative, and understandable; and (3) analysis of the health risk reduction benefits and costs. SDWA section 1412(b)(3)(A)–(C), 42 U.S.C. 300g–1(b)(3)(A)–(C).

2. Establishment of the Lead and Copper Rule as a Treatment Technique

Section 1412(b)(7)(A) of SDWA authorizes the EPA to “promulgate a national primary drinking water regulation that requires the use of a treatment technique in lieu of establishing a maximum contaminant level, if the Administrator makes a finding that it is not economically or technologically feasible to ascertain the level of the contaminant.” 42 U.S.C. 300g–1(b)(7)(A).

In accordance with SDWA section 1412(b)(7)(A), in 1991, the EPA promulgated the LCR, which established a treatment technique in lieu of a maximum contaminant level (MCL) for lead and copper (56 FR 26460, USEPA, 1991). The EPA’s 1991 decision to promulgate a treatment technique rule for lead and copper instead of an MCL was upheld by the United States Court of Appeals for the District of Columbia Circuit. *American Water Works Association v. EPA*, 40 F.3d 1266, 1270–71 (D.C. Cir. 1994). For discussion on the EPA’s findings and rationale supporting the agency’s determination to continue to regulate lead and copper using a treatment technique rule, see section IV.A of this preamble.

3. Prevention of Adverse Health Effects to the Extent Feasible

In establishing treatment technique requirements, the Administrator is required to identify those treatment techniques “which, in the Administrator’s judgment, would prevent known or anticipated adverse effects on the health of persons to the extent feasible” (SDWA section

1412(b)(7)(A)). “Feasible” is defined in section 1412(b)(4)(D) of SDWA as “feasible with the use of the best technology, treatment techniques and other means which the Administrator finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are available (taking cost into consideration).” Feasibility is based on the best technology, treatment techniques, or other means, that have been tested beyond the laboratory under full-scale conditions, as opposed to generally available technology; the technology need not be in widespread, full-scale use (SDWA section 1412(b)(4)(D)). Further, in selecting the best available technology, treatment techniques, and other means, the EPA evaluates the ability of the technology to reduce the level of the contaminant, and the technological and economic feasibility of the technologies being considered, as required under SDWA section 1412(b)(4)(D) (56 FR 26482, USEPA, 1991). In short, “feasible” in this context means technically possible and affordable. See SDWA section 1412(b)(4)(D); *City of Portland v. EPA*, 507 F.3d 706 (D.C. Cir. 2007) (upholding the EPA’s treatment technique rule for *Cryptosporidium* and the agency’s interpretation that “feasible” means technically possible and affordable). Therefore, to meet the statutory standard, the EPA must evaluate three primary components for a treatment technique: (1) the effectiveness of a technology, treatment technique, or other means in reducing exposure to a contaminant to protect public health; (2) the affordability of the technology, treatment technique, or other means; and (3) whether the technology, treatment technique, or other means is technically possible. Each of these three components and the “to the extent feasible” standard in the statute are discussed in sequential order in this section.

First, SDWA requires the EPA to establish NPDWRs to protect public health to reduce exposure to drinking water contaminants. Notably, the public health protection goal for NPDWRs under SDWA is the same for a MCL and a treatment technique. SDWA requires the EPA set an MCL “as close to the maximum contaminant level goal [MCLG] as is feasible” (SDWA section 1412(b)(4)(B)). Because the MCLG is set at the level at which no known or anticipated adverse effects on the health of persons occur, SDWA’s standard for a treatment technique rule—to “prevent known or anticipated adverse effects on the health of persons to the extent

feasible”—is essentially the same as the standard for an MCL (SDWA section 1412(b)(4)(A) and section 1412(b)(7)(A)). As Congress explained in SDWA legislative history, NPDWRs “are to be protective of public health. While cost and technology are factors to be considered . . . the first priority of the Act is to protect human health by reducing or preventing human exposure to potentially harmful contaminants in drinking water.” 1986 U.S.C.C.A.N. 1566, 1570, S. REP. 99–56 (1985). In establishing NPDWRs, where an agency action is based on science, SDWA directs the EPA to use the best available peer-reviewed science and supporting studies conducted in accordance with sound and objective scientific practices, as well as data collected by accepted methods or best available methods (SDWA section 1412(b)(3)(A)).

Second, in evaluating feasibility under SDWA section 1412(b)(4)(D) and section 1412(b)(7)(A), the EPA also must “take costs into consideration.” The legislative history of this provision makes it clear that this aspect of feasibility is to be evaluated relative to “what may reasonably be afforded by large metropolitan or regional public water systems” (H.R. Rep. No. 93–1185 (1974), reprinted in 1974 U.S.C.C.A.N. 6454, 6471). See also S. Rep. No. 104–169, at 3 (1995) (feasibility is based on best available technology affordable to “large” systems).⁶ The statutory framework for establishing an MCL or treatment technique rule also supports this approach of considering costs in determining the feasibility of an MCL or treatment technique rule. If the EPA cannot identify any affordable technologies for a particular category of small systems, the statute requires the EPA to identify variance technologies that “achieve the maximum reduction or inactivation efficiency that is affordable” and protective of public health (SDWA section 1412(b)(15)(A) and (B)). As a result, the EPA may not reject a treatment technique because it is unaffordable to small systems.

Third, with respect to the technical possibility⁷ component of the feasibility standard, for lead and copper drinking

⁶ Where the term “affordable” appears throughout the preamble to describe this aspect of the definition of “feasible” in SDWA section 1412(b)(4)(D), it refers to “what may reasonably be afforded by large metropolitan or regional public water systems.”

⁷ Note, given that the definition for “feasible” at SDWA section 1412(b)(4)(D) provides for the use of “treatment techniques and other means” in addition to “technology,” the terms “technological” and “technical” are used interchangeably herein for purposes of discussing feasibility to be more inclusive of the different types of treatment techniques that may be encompassed in a NPDWR.

water rules beginning with LCR, the EPA has consistently considered “whether a technology has been shown to be effective” by water systems and “is compatible with other water treatment processes” (56 FR 26482, USEPA 1991). The EPA has evaluated additional factors for lead and copper NPDWRs that may affect the ability of water systems to administer and implement rules, depending on the unique technologies, treatments, and other means available to reduce lead and copper in drinking water. Specifically, the EPA has historically considered other factors, such as the national availability of necessary capital improvement resources and supplies, labor, and specialized expertise, as supported by the best available information and the learned experiences and expertise from water systems, States, and other stakeholders. When promulgating a rule consisting of multiple treatment technique requirements, the EPA considers whether each treatment technique is feasible and whether implementation of the full suite of treatment techniques is feasible.

When the EPA assesses technical possibility, it may consider system size. In contrast to affordability, which is evaluated relative to only large metropolitan or regional water systems, the EPA evaluates technical possibility without that limitation. As previously stated, there is legislative history and case law that clearly provides Congress intended the statute to be technology-forcing and thus, that cost considerations were to be based on what is affordable only for large metropolitan or regional water systems. Absent any further limitation in SDWA, the best interpretation of the statute is to assess what is technically possible for treatment techniques by evaluating whether there are relevant, system-size-based considerations.

SDWA section 1412(b)(7)(A) also directs the EPA to evaluate the most stringent or health protective level for a treatment technique because treatment techniques must “prevent known or anticipated adverse effects on the health of persons to the extent feasible.” See *City of Portland v. EPA*, 507 F.3d 706 (D.C. Cir. 2007) (finding that SDWA requires the EPA to choose a treatment technique that is the most stringent feasible).

Interpreting the phrase “prevent . . . to the extent feasible” in this section to require treatment techniques provide the most health protection feasible accords with the plain text of SDWA section 1412(b)(7)(A), as well as SDWA section 1412 as a whole, and the

associated legislative history. First, in 1974, the statute required the EPA to evaluate feasibility based on whether treatment techniques are “generally available” with cost taken into account based on “what may reasonably be afforded by large metropolitan or regional public water systems. In 1986, however, “generally available” was changed to “best available” in the definition of feasibility, “to assure that such standards reflect the full extent of current technology capability to move toward achievement of the health effects goal.” 1986 U.S.C.C.A.N. 1566, 1570–71, S. REP. 99–56 (1985).

Second, SDWA specifies that the EPA may promulgate treatment techniques that are less stringent or health protective than feasible only in two narrow circumstances. The first such circumstance is SDWA section 1412(b)(5), under which the EPA may require the use of a treatment technique to achieve a contaminant level other than the feasible level if attaining the feasible level would result in an increase in the health risk posed by drinking water by increasing the concentration of other contaminants or by interfering with the efficacy of drinking water treatment techniques or processes that are used to comply with other NPDWRs. The second circumstance is SDWA section 1412(b)(6)(A), under which, if the EPA determines that the benefits of a treatment technique would not justify the costs of compliance, the EPA may promulgate a treatment technique for the contaminant that maximizes health risk reduction benefits at a cost that is justified by the benefits. As a result, interpreting “prevent . . . to the extent feasible” at SDWA section 1412(b)(7)(A) as anything other than what is the most stringent or health protective feasible level for a treatment technique would make these two statutory exemptions meaningless and unnecessary. See *City of Portland v. EPA*, 507 F.3d 706, 712 (D.C. Cir. 2007) (“But if ‘feasible’ meant that the technique’s benefits justified its costs, [SDWA] section [1412](b)(6)(A)—which allows EPA to use cost-benefit analysis to set *less stringent standards than the most feasible*—would be surplusage.” (Emphasis added)).

In summary, the best interpretation of the statutory standard for treatment techniques requires consideration of the terms used and defined in SDWA section 1412(b)(4) and section 1412(b)(7)(A), as described in this part of the preamble. Specifically, under SDWA section 1412(b)(7)(A), the EPA must prescribe the best available technologies, treatment techniques, or other means that are effective at

preventing adverse health effects from lead and copper in drinking water to the greatest extent that are both affordable for large systems, and which are technically possible.

Beginning with the LCR in 1991, the EPA has consistently evaluated feasibility for this treatment technique rule in accordance with SDWA section 1412(b)(4) and section 1412(b)(7)(A). As the EPA explained in the preamble to the 1991 LCR, “[t]he goal of this rule is to provide maximum human health protection by reducing the lead and copper levels at consumers’ taps to as close to the MCLG as is feasible” (56 FR 26478, USEPA, 1991). Each of the best available technologies, treatment techniques, and other means specified in the LCRI—service line replacement, CCT, and public education—prevent known or anticipated adverse health effects to the extent feasible.

Evaluating Feasibility for Each Treatment Technique

The LCRI is a treatment technique rule composed of four separate “technologies, treatment techniques or other means,” specifically: service line replacement, CCT, public education, and source water treatment.⁸ The EPA chose this approach because multiple technologies, treatments, and other means are effective at reducing public health risks associated with lead and copper contamination in drinking water. Since the first proposed NPDWR for lead and copper, the LCR, in 1988, the EPA has evaluated a combination of treatment techniques to address lead contamination in drinking water, given the complexity inherent in lead contamination and the need for a multifaceted approach to managing it (53 FR 31537, USEPA 1988; see section IV.A of this preamble about the characterization and complex nature of lead drinking water contamination). While the requirements for lead and copper NPDWRs have changed over time based on the best available information and the lived and learned experiences of water systems, communities, and States, these NPDWRs have maintained the same four treatment techniques for service line replacement, CCT, public education, and source water treatment.

Consistent with SDWA section 1412(b)(7)(A), the EPA evaluates feasibility at the level of a treatment technique, rather than evaluating the feasibility of each sub-element of a treatment technique (“the Administrator

⁸ Note, the EPA is not including a discussion of feasibility for source water treatment, because it is not being amended by this final rule. For the EPA’s feasibility determination for source water treatment, see the final LCR (56 FR 26482, USEPA 1991).

shall identify those *treatment techniques* which, in the Administrator's judgment, would prevent known or anticipated adverse effects on the health of persons to the extent feasible. Such regulations shall specify *each treatment technique* known to the Administrator *which meets the requirements of this paragraph*, but the Administrator may grant a variance from *any specified treatment technique* in accordance with section 300g–4(a)(3) of this title.” (emphasis added)). The EPA reasonably followed the statutory standard to evaluate feasibility for “each treatment technique . . . which meets the requirements” at SDWA section 1412(b)(7)(A).

4. Notice and Recordkeeping Requirements

Section 1414(c)(1) of SDWA requires public water systems to provide public notice in certain specified situations, such as when the system has failed to comply with an applicable treatment technique requirement, or if the water system is subject to a variance or exemption. SDWA section 1414(c)(2) states that the Administrator “shall by regulation . . . prescribe the manner, frequency, form, and content for giving notice.” 42 U.S.C. 300g–3(c)(2). The EPA first promulgated the PN Rule in 2000 and subsequently revised it with the issuance of new or revised NPDWRs. This final rule includes revisions to the PN Rule related to the LCRI.

Section 1414(c)(1)(D) of SDWA, as amended by the Water Infrastructure Improvements for the Nation (WIIN) Act, requires public water systems to provide notice to the public if the water system exceeds the lead action level. 42 U.S.C. 300g–3(c)(1)(D). Section 1414(c)(2)(C) of SDWA specifies additional requirements related to the public notice if the action level exceedance has the potential to have serious adverse effects on human health as a result of a short-term exposure, including that the public notice must “be distributed as soon as practicable, but not later than 24 hours” after the water system learns of the action level exceedance, and that the system must report the exceedance to both the State and the Administrator within that same time period (42 U.S.C. 300g–3(c)(2)(C)(i) and (iii)). If a water system or State does not issue the required public notice for an exceedance of the lead action level, SDWA section 1414(c)(2)(D) directs the EPA to issue the required public notice “not later than 24 hours after the Administrator is notified of the exceedance.”

In the final rule preamble for the 2021 LCRR, the EPA determined that a lead action level exceedance has the potential to have serious adverse health effects on humans as a result of short-term exposure (86 FR 4240, USEPA, 2021a). The EPA also explained that it interprets SDWA section 1414(c)(2)(C)(iii) to require systems to report only lead action level exceedances to the Administrator because the EPA does not have any obligation to issue a notice for other violations of drinking water standards in States with primacy, and therefore, the EPA does not need to be notified of those other situations.

SDWA section 1414(c)(4) requires the EPA to issue regulations to require each CWS to provide a periodic report to each customer of the system. The EPA first promulgated CCR regulations in 1998. (40 CFR part 141, subpart O) On May 24, 2024, the EPA promulgated significant revisions to the CCR Rule. (89 FR 45980, USEPA, 2024c) This final rule includes further revisions to the CCR Rule related to the LCRI.

SDWA section 1417(a)(2) provides that public water systems “shall identify and provide notice to persons that may be affected by lead contamination of their drinking water” where the contamination results from the lead content of the construction materials of the public water distribution system and/or corrosivity of the water supply sufficient to cause leaching of lead. Notice must be provided “notwithstanding the absence of a violation of any national drinking water standard.” 42 U.S.C. 300g–6(a)(2)(A)(i) and (ii). This rule requires water systems to identify, notify, and provide public education to persons when they are served by construction materials that contain may lead (lead, GRR, and unknown service lines) and when the corrosivity of the water supply is sufficient to cause leaching of lead.

SDWA section 1445(a) provides that every person who is subject to a requirement under SDWA or who is a grantee shall establish and maintain records, make reports, conduct monitoring, and provide information to the Administrator as reasonably required by regulation to assist the Administrator in establishing regulations under SDWA, in determining compliance with SDWA, in administering any financial assistance program under SDWA, in evaluating the health risks of unregulated contaminants, and in advising the public of such risks. In requiring public water systems to monitor under SDWA section 1445(a), the Administrator may take into consideration the system size

and the contaminants likely to be found in the system's drinking water. 42 U.S.C. 300j–4(a).

5. Primacy Enforcement of National Primary Drinking Water Regulations

While the EPA always retains its independent enforcement authority, pursuant to SDWA section 1413(a), the agency may authorize States, Territories, and Tribes to have primary responsibility for administration and enforcement of primary drinking water regulations and related requirements applicable to public water systems within their jurisdiction (“primacy”).⁹ Where the EPA has not approved primacy, the EPA implements the drinking water standards. The EPA may grant primacy when the agency determines that the State has adopted regulations that are no less stringent than the promulgated NPDWR, among other conditions. 42 U.S.C. 300g–2(a) and 40 CFR part 142. At this time, 49 States and the Navajo Nation have primary enforcement responsibility for public water systems in their jurisdictions.

To retain primary enforcement responsibility for public water systems, States must adopt regulations that are no less stringent than any new or revised NPDWRs promulgated in 40 CFR part 141 and request the EPA to approve a program revision. States must submit complete and final applications for approval of a program revision no later than two years after promulgation of the new or revised regulation unless the EPA grants the State a two-year extension. The EPA must approve or deny complete and final State primacy applications within 90 days of submission to the EPA. See 42 U.S.C. 300g–2(b)(2) and 40 CFR 142.12(d). In some cases, a State that has an approved primacy program for each existing NPDWR may qualify for interim primary enforcement authority for a new or revised NPDWR while the EPA's decision on the primacy application is

⁹For purposes of simplicity in this preamble, the term “primacy agencies” and “States” are used interchangeably to refer to States, Tribes, and Territories with primacy, and the Regional Administrator of EPA, where the EPA is acting as the primacy agency. The term “State” is defined in 40 CFR 141.2 to mean the agency of the State or Tribal government which has jurisdiction over public water systems. During any period when a State or Tribal government does not have primary enforcement responsibility pursuant to section 1413 of SDWA, the term “State” means the Regional Administrator, U.S. Environmental Protection Agency. The term “State” is defined in 40 CFR 142.2 to include one of the States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Mariana Islands, the Trust Territory of the Pacific Islands, or an eligible Indian Tribe.

pending. See 42 U.S.C. 300g–2(c) and 40 CFR 142.12(e). SDWA section 1413(b)(1) requires the EPA to establish regulations governing the primacy application and review process “with such modifications as the Administrator deems appropriate.” In addition to revisions to the NPDWR for lead and copper, the CCR Rule, and the PN Rule, this final rule includes changes to the primacy requirements related to this rule.

SDWA section 1450 authorizes the Administrator to prescribe such regulations as are necessary or appropriate to carry out the Administrator's functions under the Act. 42 U.S.C. 300j–9.

E. Anti-Backsliding Analysis of LCRI Relative to LCR and LCRR

Section 1412(b)(9) of SDWA is known as the “anti-backsliding” provision. Under this provision, the EPA is required to ensure that “each revision” of a national primary drinking water regulation “shall maintain, or provide for greater, protection of the health of persons.” The EPA has analyzed this rule against this standard using a framework that gives meaning to the text, structure, and purpose of the anti-backsliding provision, and is the best reading of the statutory provision. The term “each revision” is naturally read to refer to a revision of a “national primary drinking water regulation,” meaning that each new rule that revises the older regulation, shall maintain, or provide for greater health protection. The plain meaning of “revision” is broad in scope and contemplates that one revision may contain multiple parts. The word “revision” is defined as “[t]he action or an act of revising something; critical or careful examination or perusal of a text, judgment, code, etc., with a view to making corrections, amendments, or improvements.” Revision, definition 2.a. (in the context of a legal change), Oxford English Dictionary (3d ed. 2010). Thus, when analyzing whether “each revision” allows for backsliding, SDWA section 1412(b)(9)'s plain meaning asks the EPA to compare the whole of a new rule (*i.e.*, the “revision” at issue) against the whole of the prior rule to assess whether the revision maintains or improves upon health protections.

This is particularly true for a treatment technique regulation. A treatment technique rule is not centered on a single compliance level, but rather on an integrated set of actions designed to reduce the overall level of exposure to a contaminant. Therefore, in assessing whether a new treatment technique rule maintains or provides for greater health protection relative to the

existing rule, the EPA evaluates the treatment technique rule as a whole, not on a component-by-component or provision-by-provision basis. As described in the 2021 LCRR rulemaking, the backsliding analysis for a treatment technique rule is “based on an assessment of public health protection as a result of implementation of a rule as a whole, rather than a comparison of numerical benchmarks within the treatment technique rule” (86 FR 4216, USEPA, 2021a). Therefore, when analyzing the LCRI against the anti-backsliding standard, the EPA assessed the level of public health protection resulting from implementation of the whole of the final LCRI (*i.e.*, the “revision”). Because water systems are required to comply with the LCR until October 16, 2024, when water systems would have been required to comply with the 2021 LCRR in the absence of the LCRI, the EPA conducted two anti-backsliding analyses to compare the LCRI against the whole of the LCR and then separately against the whole of the 2021 LCRR to assess whether the new rule will maintain or improve public health protection relative to both prior baselines.

The EPA has found the final LCRI will improve public health protection over either the LCR or 2021 LCRR in accordance with SDWA section 1412(b)(9). Below is a more detailed breakdown of some of the most significant components that make the LCRI, as a whole, more protective than either the LCR or 2021 LCRR. The central feature of the LCRI is the mandatory replacement of lead and GRR service lines regardless of a water system's 90th percentile lead level. This is a more health protective approach relative to either the LCR or 2021 LCRR baseline because removing lead and GRR service lines eliminates a significant source of lead from the distribution system. Replacing lead and GRR service lines has been shown to significantly reduce lead levels in drinking water (Camara et al., 2013; Deshommes et al., 2018; Trueman et al., 2016), which improves public health by reducing the associated health impacts from lead exposures.

The LCR only requires water systems to replace LSLs systemwide if a system exceeds the lead action level and allows them to stop replacements once their 90th percentile lead level is below the lead action level. The 2021 LCRR requires systems to replace lead and GRR service lines if they exceed the lead action level, and to initiate a goal-based replacement program if they exceed the lead trigger level. In contrast, the LCRI requires systemwide replacement of

lead and GRR service lines regardless of 90th percentile lead levels and at a faster replacement rate. By eliminating these major lead sources, the LCRI will result in significant public health benefits. While the EPA projected that a total of 339,000 to 555,000 lead and GRR service lines under control of water systems would be replaced under the 2021 LCRR over a 35-year period, the LCRI requires replacement of all lead and GRR service lines under control of the system (USEPA, 2020a, Exhibit C–1) within 10 years for most water systems. This is a key element of the LCRI and is intended to provide both broader and more certain lead risk reduction than any of the prior lead rules. The EPA projects that all lead and GRR service lines will be replaced under the LCRI over the period covered by the economic analysis. Specifically, the EPA estimates that 6.7 million lead and GRR service lines will be replaced within the 10-year mandatory replacement window and the remaining approximately 200,000 lines will be replaced in the following years for systems with deferred replacement deadlines. Thus, the number replaced among all systems nationwide is expected to be substantially greater than under the 2021 LCRR (USEPA, 2024d). Note that under the LCRI, like the 2021 LCRR, there are also about 2 million lead connectors that are required to be replaced when they are encountered by the water system (*i.e.*, during water main replacement). For additional information on the EPA's estimated numbers of lead content service lines see chapter 3, section 3.4.4, of the final LCRI Economic Analysis (USEPA, 2024a).

In addition, the LCRI makes changes to the treatment technique for CCT that will maintain or improve public health protection. These changes include lowering the lead action level to 0.010 mg/L from 0.015 mg/L under the LCR and the 2021 LCRR. The LCRI lead action level thus requires water systems to take actions (*e.g.*, install or re-optimize CCT, conduct public education) both sooner and at lower lead levels than under the LCR or the 2021 LCRR. Similarly, the LCRI's requirement to use the higher result of the first- and fifth-liter tap samples at LSL sites will result in more systems installing or re-optimizing optimal corrosion control treatment (OCCCT) one or more times after the LCRI compliance date, as well as notifying and educating the public about health risks from lead.

Several other changes to the LCRI warranted specific anti-backsliding analysis. First, the EPA is revising the OCCCT requirements to no longer require

most systems with CCT that exceed the lead action level to re-optimize their OCCT multiple times before they complete their service line replacement program if they re-optimized once after the compliance date for LCRI and are meeting their optimal water quality parameters (OWQPs). However, the LCRI maintains or improves public health protection for those systems. Public health protection will be maintained because systems already conducting OCCT or having re-optimized OCCT will be required to continue to operate that treatment. Public health protections will also be maintained or improved because the LCRI requires systems that continue to exceed the lead action level to conduct additional public education activities and make filters available if they have “multiple lead action level exceedances” (see section IV.K of this preamble). The EPA anticipates additional health benefits from this change to the CCT requirements because systems and States can prioritize resources for these types of mitigation activities and, most importantly, lead service line replacement. These requirements will achieve greater public health benefits overall for systems with lead service lines by facilitating the removal of the most significant source of lead in drinking water and are more likely to lower the level of lead in tap samples compared to repeating OCCT re-optimization steps that may not achieve further reductions. Also, if there have been no significant source water or treatment changes (actions which themselves can require a CCT study), a new re-optimization study is likely to yield the same outcomes as a previous study. These systems will have re-optimized once after the compliance date for the LCRI and persistently high lead levels can be mitigated by targeted public education activities and the availability of filters.

In addition, the final LCRI requires systems that exceed the lead action level after they have replaced all lead and GRR service lines to install or re-optimize OCCT to tailor CCT based on the new conditions where lead and GRR service lines are no longer the most significant sources of lead. This can result in maintaining or improving health protection because systems may achieve better performing CCT when the study is designed to optimize treatment based on the new system characteristics. Further, regardless of whether a system is conducting service line replacement, the final LCRI maintains the rule provision in § 141.82(h) that allows the State to modify its decision for OCCT or

re-optimized OCCT on its own initiative or in response to a request by a water system or other interested party.

In addition, the 2021 LCRR allows CWSs serving 10,000 persons or fewer and all NTNCWSs which exceed the lead action level to choose between four compliance options: replace lead and GRR service lines, install and maintain OCCT, conduct full replacement of lead-bearing plumbing, or install and maintain point-of-use devices, while systems serving greater than 10,000 persons were required to replace lead and GRR service lines and install or re-optimize CCT. The LCRI requires all water systems with lead or GRR service lines to conduct mandatory service line replacement regardless of lead levels. Accordingly, under the LCRI, small water systems with lead and/or GRR service lines are required to remove these significant sources of lead and may not choose between service line replacement and other options to protect against lead exposures if they exceed the lead action level. Instead, small CWSs serving 3,300 persons or fewer (reduced from 10,000 persons or fewer under the 2021 LCRR) and all NTNCWSs can choose among the remaining three options if approved by the State. This reduced threshold ensures appropriate application of the remaining options. Thus, the LCRI provides greater protection of public health than the 2021 LCRR for small systems with lead or GRR service lines that exceed the lead action level. As compared to the pre-2021 LCR, the LCRI improves the level of public health protection provided by the rule for systems without lead or GRR service lines that serve less than 3,300 persons that exercise this compliance flexibility; these systems will be subject to the lower action level and improved public education, including lead sampling at schools and child care facilities. For systems with lead or GRR service lines that serve less than 3,300 persons that exercise this compliance flexibility, the lower action level, coupled with a mandatory service line replacement requirement, increases the level of health protection at those systems as compared to the pre-2021 LCR.

The EPA is requiring additional improvements across other parts of LCRI that will result in some actions taken both at lower lead levels and other actions that must be taken regardless of lead levels to better protect public health. Exhibit 1 in section II.A of this preamble summarizes these changes and illustrates comparisons among the pre-2021 LCR, the 2021 LCRR, and the final LCRI requirements.

As a whole, therefore, the LCRI improves public health protection relative to the LCR or the 2021 LCRR. This conclusion is supported by a comparison of the monetized health benefits. See chapter 5, section 5.6.2, and appendix F of the final LCRI Economic Analysis (USEPA, 2024a) for 2021 LCRR to LCRI monetized estimated health benefits comparisons and appendix C, of the final LCRI Economic Analysis for pre-2021 LCR to LCRI monetized estimated cost and health benefits comparisons.

Through this revision of the NPDWR for lead and copper, the EPA is requiring a more stringent and comprehensive set of lead reduction requirements compared to the LCR or the 2021 LCRR, including mandatory service line replacement; changes to the treatment technique for CCT; and more robust and meaningful public education. Therefore, the EPA expects the LCRI, as a whole, will improve public health protections relative to the LCR and the 2021 LCRR in accordance with SDWA section 1412(b)(9).

As part of the anti-backsliding analysis that the LCRI, as a whole, would improve public health protection relative to the LCR and the 2021 LCRR, the EPA also evaluated the impact of requiring water systems to comply with the LCR instead of the 2021 LCRR (with some limited exceptions) between October 16, 2024, and the compliance date of the LCRI. Through the consultations the EPA conducted as part of the 2021 LCRR review, as well as the engagements and consultations the EPA held to support the development of the proposed and final LCRI, including public comments received, many stakeholders, including States and water systems, provided feedback on the challenge of implementing successive changes to the LCR over a short period of time, such as the inefficient use of time and resources needed to prepare to implement requirements that could be different or no longer apply in the rule's next iteration and public confusion about rapidly changing requirements. Because of these challenges, as explained further below, the EPA is requiring that water systems continue to implement the pre-2021 LCR requirements between promulgation of the LCRI and the compliance date of three years after promulgation. In addition, the EPA is requiring water systems to implement the 2021 LCRR requirements for the initial service line inventory, notification to persons served by known or potential LSLs, Tier 1 public notification of lead action level exceedances, and associated reporting

requirements (see section V.B of this preamble for further discussion).

The EPA previously recognized that the LCRR is an improvement in public health protection over the LCR, especially in light of the inventory requirements of the 2021 LCRR. Notwithstanding the EPA's elimination of certain LCRR compliance deadlines in the LCRI, the EPA expects greater health benefits from the LCRI. The improvement of public health attributable to the 2021 LCRR compared to the LCR is based primarily on the changes to the treatment technique requirements of LSLR, OCCT, and public education—actions that occur over extended periods of time in response to tap sampling results that exceed certain thresholds. The EPA does not expect those projected improvements from the 2021 LCRR would have been realized between the October 16, 2024, compliance date for the 2021 LCRR and the compliance date of the LCRI. Moreover, the EPA expects that, if compliance with the entire 2021 LCRR were required starting October 16, 2024, it would negatively affect water systems' abilities to comply with the LCRI to realize the greater health risk reduction benefits of the LCRI.

Since LCRI compliance is required in the third year of the 2021 LCRR implementation, systems and States would be simultaneously tasked with implementation of two different rules at the same time they are engaged in the startup activities for the LCRI. The startup activities for water systems include reading and training on the rule to understand its new requirements, creating a staffing plan, and securing funds for compliance among other requirements such as developing a baseline inventory and service line replacement plan. The startup activities for a State include adopting State regulations, modifying data systems, and conducting internal and external training. If water systems are required to simultaneously implement the entire 2021 LCRR for the first time and prepare for LCRI compliance, the EPA expects that it would be beyond the capacity of water systems, States, and the EPA where direct implementation occurs, and therefore, the expected benefits of one or both rules would not be realized (see section V.B of this preamble for further discussion).

Allowing water systems to transition from compliance with the LCR to compliance with the LCRI, while requiring systems to comply with the 2021 LCRR's initial inventory requirements in the interim, will result in more full service line replacements and, thus, broader and faster health risk

reduction than if adequate planning for LCRI compliance did not take place because of the diversion of scarce system and State resources towards short-term implementation of the 2021 LCRR.

F. White House Lead Pipe and Paint Action Plan and the EPA's Strategy To Reduce Lead Exposures and Disparities in U.S. Communities

The development of the LCRI is a key action of the Lead Pipe and Paint Action Plan, released by the Biden-Harris Administration in 2021 (The White House, 2021). The aim of the plan is to mobilize resources from across the Federal Government through funding made available from the Infrastructure Investment and Jobs Act, also referred to as the Bipartisan Infrastructure Law (BIL), to reduce lead exposure from pipes and paint containing lead. The plan includes a goal of eliminating all LSLs and remediating lead paint.

In October 2022, the EPA published the "Strategy to Reduce Lead Exposures and Disparities in U.S. Communities" (or "Lead Strategy") to "advance EPA's work to protect all people from lead with an emphasis on high-risk communities" (USEPA, 2022a). This agency-wide Lead Strategy promotes environmental justice in communities challenged with lead exposure and includes four key goals: (1) reduce community exposures to lead sources; (2) identify communities with high lead exposures and improve their health outcomes; (3) communicate more effectively with stakeholders; and (4) support and conduct critical research to inform efforts to reduce lead exposures and related health risks. The LCRI is a key action within the EPA's Lead Strategy and "reflects EPA's commitment to fulfilling the Biden-Harris Administration's historic commitment of resources to replace lead pipes and support lead paint removal under the Lead Pipe and Paint Action Plan" (USEPA, 2022a).

G. Bipartisan Infrastructure Law and Other Financial Resources

There are a number of pathways for systems to receive support for LSLR and related activities, including low- to no-cost financing through the Drinking Water State Revolving Fund (DWSRF); lead remediation grants under authorities established by the WIIN Act and incorporated into SDWA at sections 1459A, 1459B, and 1464; and low-cost financing from the Water Infrastructure Finance and Innovation Act (WIFIA) program. The EPA strongly encourages water systems to evaluate these available funding opportunities to

support LCRI implementation and full LSLR. Water systems are encouraged to contact their State's DWSRF program to learn about project eligibilities, requirements, and how to apply for assistance through the DWSRF.

The BIL appropriated \$30.7 billion in supplemental DWSRF funding over a five year period and reemphasized the importance of LSLR under the DWSRF program by including \$15 billion specifically appropriated for "lead service line replacement projects and associated activities directly connected to the identification, planning, design, and replacement of lead service lines." Full service line replacement is an eligible expenditure under the DWSRF regardless of the ownership of the property on which the service line is located. The BIL LSLR, BIL General Supplemental, and base program appropriations can pay for LSLR and related activities.

The BIL requires that States provide 49 percent of their LSLR and General Supplemental capitalization grant amounts as additional subsidization in the form of principal forgiveness and/or grants to disadvantaged communities, as defined under SDWA section 1452(d)(3). Assistance provided as additional subsidization does not need to be repaid. If available, additional subsidization can be used to cover the cost of customer-side LSLR. State DWSRF programs are strongly encouraged to prioritize available additional subsidization for this purpose.

In May 2024, the White House highlighted its efforts to accelerate progress towards the elimination of LSLs in the United States (The White House, 2024a). The President announced the availability of \$3 billion in funding for LSLR, part of the \$15 billion in dedicated BIL DWSRF funding for LSLR. For example, as part of this available BIL DWSRF funding, the President announced \$76 million for LSLR in the State of North Carolina, for a total distribution of \$250 million in BIL DWSRF to communities in North Carolina over the first three years of BIL implementation. In addition, the DWSRF program is part of the Justice40 Initiative, which has the goal that 40 percent of the overall benefits of certain Federal investments flow to disadvantaged communities. Additionally, several cities demonstrate the significance of BIL funding in assisting communities to equitably replace their LSLs as quickly as feasible. Pittsburgh, Pennsylvania has received over \$40 million in BIL funding and is on track to eliminate LSLs in its city by 2026. The City of Milwaukee, Wisconsin

is receiving over \$30 million in BIL funding for LSLR through the DWSRF, putting the city on track to replace all its LSLs within 10 years instead of the initially estimated 60 years (The White House, 2024a; 2024b).

Corrosion control planning and design, LSL inventories and replacement plans, and associated capital infrastructure projects are eligible for DWSRF funding under the DWSRF General Supplemental appropriation under the BIL as well as the DWSRF annual base appropriations. However, CCT is not an eligible activity for DWSRF funding from the \$15 billion specifically appropriated in BIL for LSLR and associated activities. States may use DWSRF set-aside funds to assist water systems' development of corrosion control strategies and LSL inventories and replacement plans.

Under the DWSRF, State programs are authorized to reserve a portion of their capitalization grants as set-asides that can be spent on non-infrastructure purposes. Set-asides can fund State programs, technical assistance and training for water utilities (such as educational opportunities for operators), and other activities that support achieving the public health protection objectives of SDWA. Set-asides taken from BIL LSLR capitalization grants must be used to either administer the capitalization grant or for eligible projects and activities that meet the statutory purpose of these LSLR funds. Activities must be directly connected to the identification, planning, design, and replacement of LSLs. Examples of eligible projects and activities from BIL LSLR set-aside funds include, but are not limited to, planning and design for LSLR; developing or updating service line inventories; providing technical assistance, education, and outreach; and non-routine sampling that is not for compliance purposes.

The WIIN Act established three drinking water grant programs incorporated into SDWA that are available to support activities to reduce lead exposures in drinking water. The Reducing Lead in Drinking Water grant program awards funding for the reduction of lead in drinking water in disadvantaged communities, as defined under SDWA section 1452(d)(3). This grant program focuses on two priority areas: (1) Reduction of lead exposures in the nation's drinking water systems through water infrastructure and treatment improvements and (2) reduction of children's exposure to lead in drinking water at schools and child care facilities (USEPA, 2022b). The Voluntary School and Child Care Lead Testing and Reduction grant program

awards funding to States, Territories, and Tribes to assist local and Tribal educational agencies in voluntary testing and remediation for lead contamination in drinking water at schools and child care facilities (USEPA and USHHS, 2023). The Small, Underserved, and Disadvantaged Communities grant program awards funding to States, Territories, and Tribes to assist public water systems in underserved, small, and disadvantaged communities in meeting SDWA requirements, including the lead and copper NPDWRs (USEPA, 2021f).

The EPA also administers the WIFIA program, a Federal credit program, to accelerate investment in the nation's water infrastructure by providing long-term, low-cost supplemental loans for regionally and nationally significant projects, including those eligible for funding through DWSRFs (USEPA, 2023b). The WIFIA program can provide financial assistance for LSLR projects. The City of Chicago is using its \$336 million WIFIA loan to assist with replacing LSLs serving single family homes and small multi-unit buildings citywide whenever there is a leak or break on a lead line or when performing water and sewer main updates. The City of Philadelphia received a commitment of over \$340 million in WIFIA financial assistance to upgrade its water system, including an initial \$19.8 million WIFIA loan that will help modernize critical infrastructure by replacing approximately 160 LSLs and 13 miles of water mains.

The EPA's water technical assistance (WaterTA) supports communities to identify water challenges; develop plans; build technical, managerial, and financial capacity; and develop application materials to access water infrastructure funding that results in more communities with applications for Federal funding, quality water infrastructure and reliable water services. The EPA collaborates with States, Tribes, Territories, communities, and other key stakeholders to implement WaterTA efforts. For example, numerous Environmental Finance Centers (EFCs) are available to help underserved communities that have struggled to access Federal funding, such as DWSRF funding, to receive the support they need to access resources for water infrastructure improvements, including LSLR. The EFCs each have their own workplans and many of them include a focus on small systems. Additionally, the Training and Technical Assistance to Improve Water Quality and Enable Small PWSs to Provide Safe Drinking Water grant program provides training

and technical assistance to small systems to achieve and maintain compliance with SDWA. The grant program serves two main functions for small PWSs—to build their financial and managerial capacity to provide safe drinking water over the long term and to improve water quality and sustainable operations.

As part of WaterTA efforts, the EPA utilized BIL funds to establish the Lead Service Line Replacement (LSLR) Accelerators initiative and the Get the Lead Out (GLO) Initiative. These initiatives further the EPA's administration of the BIL DWSRF funding for LSLR by helping underserved communities access funds from the BIL to accelerate the replacement of LSLs, which pose risks to the health of children and families.

In January 2023, the EPA announced the LSLR Accelerators initiative (USEPA, 2023c). This pilot initiative provides targeted technical assistance services to four States—Connecticut, Pennsylvania, New Jersey, and Wisconsin—working with 40 communities across those States in 2023 and 2024. The EPA is providing direct technical assistance to guide communities through the process of LSLR, including support in developing LSLR plans, conducting inventories to identify lead pipes, increasing community outreach and education efforts, and supporting applications for Federal funding. In addition to providing direct technical assistance to communities, the Accelerators initiative is supporting these States in strategically deploying funding from the BIL for LSLR while developing best practices that can serve as a roadmap for other State programs. In light of the ongoing success of the LSLR Accelerators pilot, the GLO Initiative launched in November 2023 to expand LSLR technical assistance to approximately 200 communities across the country. The GLO Initiative will work with water systems to develop a roadmap for identification and full replacement of all LSLs, including associated activities such as developing a service line inventory, community engagement plan, LSL replacement plan, and a DWSRF application with active involvement from the community. The EPA will use the lessons learned from the GLO Initiative's direct technical assistance to develop tools, best practices, and peer exchange and learning that help communities nationwide address barriers to lead pipe replacement. While the EPA recognizes external funding may not be available for all systems, all systems can benefit from these lessons

learned. For additional information on EPA funding, see <https://www.epa.gov/funding-lead-service-line-replacement>. For additional information on technical assistance, see <https://www.epa.gov/water-infrastructure/water-technical-assistance-waterta>. In addition, for information on available funding and technical resources for lead service line replacement in small and disadvantaged communities please see https://www.epa.gov/sites/default/files/2020-12/documents/ej_lslr_funding_sources-final.pdf.

In addition to the EPA-administered funding for service line replacement and other lead reduction actions, other Federal programs outside of the EPA offer significant opportunities to further support these actions. Examples include Federal and State funds from the American Rescue Plan (ARP), Community Development Block Grant (CDBG) programs through the U.S. Department of Housing and Urban Development (HUD), Rural Development through the U.S. Department of Agriculture (USDA), and the Public Works Program through the U.S. Department of Commerce Economic Development Administration (EDA).

ARP funds are eligible to fund LSLR as well as replacement of internal plumbing and faucets and fixtures in schools and child care centers. Recipients of the ARP State and Local Fiscal Recovery Funds budgeted over \$519 million for projects to remediate lead in drinking water as of April 2024 (USDT, 2024). For example, Washington, DC, budgeted \$30 million to increase funding available to assist residents in replacing LSLs to their homes. Additionally, Buffalo, New York, will use \$10 million to expand its existing program to remove LSLs in 1,000 additional homes (Department of the Treasury, n.d.). Following a lead-in-water crisis, the City of Benton Harbor, Michigan, replaced all its LSLs within two years using ARP funding (The White House, 2024a). The City of St. Paul, Minnesota, received \$16 million in ARP funds which has enabled the city to target replacement of all LSLs by 2032 at no cost to residents.

HUD CDBG programs support community development through activities that address needs, such as infrastructure, economic development projects, public facilities installation, and community centers (USHUD, 2020). In 2017, North Providence, Rhode Island, utilized CDBG funding from HUD to replace customer-side LSLs (USEPA, 2023d). HUD's Healthy Homes Production grant program and Healthy

Homes Supplements to HUD's Lead Hazard Reduction grant programs are available to address a wide range of housing-related hazards including LSLR (USHUD, 2023).

USDA Rural Development provides a variety of grant and loan programs to rural communities, organizations, businesses, and individuals to finance infrastructure repair and replacement, including LSLR (USEPA, 2020b). The EDA Public Works Program supports physical infrastructure improvements in economically distressed communities (USEPA, 2020b).

States are using the available Federal funding sources as well as providing their own funding to support LSLR. As of February 2023, Illinois EPA has provided almost \$89 million for LSLR (IEPA, 2023). Illinois EPA's DWSRF is providing funding to numerous systems' LSLR projects, including over \$4 million in funding for the City of Sycamore and \$3.9 million for the City of Batavia (IEPA, 2023). Other States are also providing funding for LSLR. New York's LSLR Program received \$20 million in State funding in 2017 and an additional \$10 million in 2019 for communities meeting specific eligibility characteristics, including income, measured blood lead levels, and age of homes (NYDOH, 2019). The State of Minnesota approved \$240 million for replacing LSLs, mapping and inventory activities, and informing residents about the benefits of LSLR. The funding was used to establish an LSLR grant program, where the awarded grants must cover 100 percent of the cost of replacing the customer's portion of an LSL and prioritize replacing LSLs that are an imminent threat to public health and safety, areas with children, lower-income residents, and where replacements will provide the most efficient use of the grant funding (such as in coordination with main replacement) (State of Minnesota, 2023). The funding will be available beginning in 2024 until June 30, 2033, which corresponds to the year the State has set as their official goal for replacing all LSLs (State of Minnesota, 2023). Regional authorities, like the Massachusetts Water Resources Authority (MWRA), are also providing funding to support LSLR. MWRA provided \$100 million in loan funds for LSL investigation and replacement projects in their metropolitan Boston communities (MWRA, 2023).

The EPA developed "Strategies to Achieve Full Lead Service Line Replacement," which is a guidance document that discusses funding sources including additional ways systems have financed full LSLR

(USEPA, 2019a). For example, the City of Green Bay, Wisconsin, used funding from a stadium tax to fund customer-side LSLR (USEPA, 2019a). The EPA also developed "Funding and Technical Resources for Lead Service Line Replacement in Small and Disadvantaged Communities," which is a guide to help small and disadvantaged communities identify potential Federal funding sources and technical assistance for LSLR (USEPA, 2020b).

H. Lead Exposure and Environmental Justice, Equity, and Federal Civil Rights

1. Environmental Justice

Stakeholder feedback and the EPA's environmental justice analysis informed the agency's understanding of how the LCRI could affect communities with environmental justice concerns. As described in section IV.C of the LCRI proposal (88 FR 84898, USEPA, 2023a), the EPA developed the proposed revisions after engaging with community stakeholders in cities with concerns about lead in drinking water during the LCRR review and by holding two public listening sessions on the topic of environmental justice to support the LCRI rulemaking. The EPA also prepared an environmental justice analysis for the proposed rule to inform the EPA's understanding of how the proposed LCRI could impact communities with environmental justice concerns (USEPA, 2023e).

The EPA is finalizing requirements that are anticipated to achieve more equitable human health protection outcomes, especially in how service line replacement programs are planned and implemented. For example, the LCRI has a requirement for water systems to make their service line replacement plans publicly accessible to inform their communities about how they will prioritize service line replacement (see section IV.C of this preamble). The rule's requirements will also help to ensure that communication about the replacement program and the risks of lead in drinking water are more accessible to all consumers including individuals with limited English proficiency. See section V.B.9 of the proposed LCRI for further discussion (88 FR 84927, USEPA, 2023a). In addition, as discussed in the previous section, Federal funds are available to support equity including BIL funds that require that States provide 49 percent of their LSLR and General Supplemental capitalization grant amounts as additional subsidization in the form of principal forgiveness and/or grants to disadvantaged communities, as defined

under SDWA 1452(d)(3) (see section III.G of this preamble).

2. Applicability of Federal Civil Rights Laws

The EPA enforces and ensures compliance with Federal civil rights laws that together prohibit discrimination on the bases of race, color, national origin (including limited-English proficiency), disability, sex and age, respectively title VI of the Civil Rights Act of 1964 (title VI), section 504 of the Rehabilitation Act of 1973 (section 504), title IX of the Education Amendments of 1972 (title IX), section 13 of the Federal Water Pollution Control Act Amendments of 1972 (section 13), and the Age Discrimination Act of 1975. The EPA's nondiscrimination regulations at 40 CFR parts 5 and 7 implement these Federal civil rights statutes and contain important civil rights requirements for applicants and recipients of EPA financial assistance.

All applicants for and recipients of EPA financial assistance have an affirmative obligation to comply with these laws, as do any subrecipients of the primary recipient, and any successor, assignee, or transferee of a recipient, but excluding the ultimate beneficiary of the assistance.

The Federal civil rights laws prohibit discrimination based on race, color, national origin (including limited-English proficiency), disability, sex, and age in any program or activity of applicants for and recipients of EPA financial assistance. Accordingly, water systems that apply for or receive EPA financial assistance must take reasonable steps to provide meaningful access to their programs and activities to individuals with limited-English proficiency. Recipients must provide individuals with disabilities an equal opportunity to participate in or benefit from their programs and activities.

When developing service line replacement plans, water systems that are recipients or subrecipients of EPA financial assistance must ensure compliance with Federal civil rights laws and the EPA's nondiscrimination regulations. As a best practice, recipients may consider including as one component of such a plan an analysis of the demographic data that recipients of EPA financial assistance are required to collect under 40 CFR 7.85(a). The EPA encourages water systems to engage with local community-based organizations and community members about the service line replacement process and in the development of the service line replacement plan. The EPA also

encourages States to consider if any State law or regulation may create barriers that could lead to challenges for water systems to meet their obligations under Federal civil rights laws and the EPA's nondiscrimination regulations. To support this effort, the LCRI has a special primacy requirement for States to identify any potential barriers to full service line replacement, which is discussed further in section V.C of this preamble.

IV. Final Revisions to 40 CFR Part 141, Subpart I, Control of Lead and Copper

A. Regulatory Approach

Section 1412(b)(7)(A) of SDWA authorizes the United States Environmental Protection Agency (EPA) Administrator "to promulgate a national primary drinking water regulation that requires the use of a treatment technique in lieu of establishing an MCL, if the Administrator makes a finding that it is not economically or technologically feasible to ascertain the level of the contaminant" (42 U.S.C. 300g-1(b)(7)(A)). In the 1991 Lead and Copper Rule (LCR), the EPA evaluated the best information available at the time consistent with the statutory standard and determined that lead and copper met the criteria for establishing a treatment technique rule. For the Lead and Copper Rule Improvements (LCRI), the EPA is again finding, as it has consistently done since 1991, that an MCL for lead is not feasible because "it is not feasible to ascertain the level of the contaminant" within the meaning of the Act. While it is economically and technologically feasible to detect the presence and/or amount of lead in a water sample, it is not feasible to ascertain the level of lead such that the EPA can set an MCL within the purpose of the statute: *i.e.*, a level of lead applicable to the entire system that accurately reflects both consumers' exposure to the contaminant and the public water system's contribution to that exposure or ability to control it.

Specifically, as described in more detail below, the EPA considered whether the level of lead and copper can be ascertained at the tap, whether it was possible to determine single national numerical standards for lead and copper at the tap that is reflective of the effectiveness of treatment applied by water systems, and the feasibility of establishing MCLs for lead and copper when lead and copper are present in both water systems' distribution system and building premise plumbing. In making this finding, the EPA conducted a new analysis of the issue by re-evaluating the information and data and

analyses underlying the EPA's conclusion in the 1991 LCR and evaluating the new information and data available since the 1991 LCR was promulgated.

The primary rationale for promulgating the LCR as a treatment technique rule was due to the nature of lead and copper contamination. As the EPA described in 1991, and is still accurate today, lead and copper do not generally occur in source water, but instead are introduced in drinking water by the corrosive action of water in contact with plumbing materials containing lead and copper. These sources of lead and copper were and continue to be present in both the water system's distribution system and in plumbing materials in homes, as discussed further below. In 1991, the EPA explained that lead and copper levels at the tap can be highly variable "due to many factors including the amount of lead and copper in the resident's plumbing or in the PWS's distribution system . . . temperature, age of plumbing components, chemical and physical characteristics of distributed water, and the length of time water is in contact with those materials" (56 FR 26473, USEPA, 1991). The EPA noted that while it is feasible to accurately measure the level of lead or copper in an individual sample, the inherent variability across sites and systems makes it "technologically infeasible to ascertain whether the lead or copper level at a tap at a single point in time represents effective application of the best available treatment technology" (53 FR 31527, USEPA, 1988). The EPA discussed how if the agency were to select an MCL, it must be "as close as feasible" to the maximum contaminant level goal (MCLG) in accordance with the statutory standard. The EPA analyzed lead and copper tap sampling data to determine if there is a "precise level [of lead] at the tap" that could be feasibly met by large water systems if they were to apply treatments representing best available technology to the water systems themselves (56 FR 26473, USEPA, 1991). The EPA found that even when minimizing some of the sources of variability (*e.g.*, the time the water is in contact with the plumbing materials, age and type of plumbing material), lead and copper levels still varied considerably. Lead and copper levels varied at the same system both before and after the application of corrosion control treatment (CCT), between different systems, and between individual homes within the same system (56 FR 26473-26475, USEPA,

1991). The EPA concluded that because of the sources of variability described above, there is no precise level that would be generally considered “feasible” based upon application of best available treatment in all water systems and further found that the level that is as close as “feasible” to an MCLG would vary in systems throughout the country based on the sources of lead and copper, the corrosivity of the water, and how the water chemistry responds to CCT (56 FR 26473, USEPA, 1991).

Second, in the development of the 1991 LCR the EPA explained that an additional challenge for establishing MCLs for lead and copper was that much of the lead and copper sources are privately owned and/or are outside of the control of the public water system (PWS), such as premise plumbing. During the development of the 1991 LCR, the EPA received comments stating that by “only establish[ing] MCLs for lead and copper for the water as it leaves the control of the public water system” (56 FR 26472, USEPA, 1991), and therefore monitoring for compliance in the distribution system (e.g., the entry point to the distribution system), could the EPA reduce some of the variability associated with lead and copper levels and address the problem of water system responsibility for conditions outside of their control. However, the agency determined that setting an MCL for lead and copper at the point the water leaves the control of the PWS would be inconsistent with the Safe Drinking Water Act (SDWA) definition of an MCL as “the maximum level allowed of a contaminant in water which is delivered to any user of a public water system.” Specifically, the EPA reasoned that MCLs for lead and copper would have to be assessed with monitoring at customers’ taps to accurately represent the level of the contaminants in drinking water delivered to the user, noting that, “EPA has established monitoring requirements for inorganic and organic contaminants that require monitoring in the distribution system because this is easier and provides just as accurate an assessment of tap levels as tap sampling itself” (56 FR 26478, USEPA, 1991). In contrast, the EPA determined that monitoring for lead and copper in the distribution system for compliance with MCLs “would not adequately protect the public from lead and copper introduced by the interaction of corrosive water delivered by the PWS with lead and copper-bearing materials in the homeowners’ plumbing” (56 FR 26472–26473, USEPA, 1991). Despite the fact that some lead and copper

sources may be outside the control of the water system, including premise plumbing sources, the EPA determined that “public water systems can affect, at least to some degree, water tap lead and copper levels through adjustment of the corrosivity of water delivered by the water system” (56 FR 26473, USEPA, 1991). However, as explained in the 1991 LCR rulemaking, due to the factors described above (e.g., variability of lead and copper in drinking water, treatment effectiveness, and sources of lead and copper), water systems can affect drinking water corrosivity, but not in a manner that would make it technically feasible to set an MCL applicable to all systems. As explained above, the EPA is reaffirming that it is not feasible to ascertain the level of lead such that the EPA can set an MCL within the purpose of the statute: *i.e.*, a level of lead applicable to the entire system that accurately reflects both consumers’ exposure to the contaminant and the public water system’s contribution to that exposure or ability to control it.

Third, the EPA reasoned in the 1991 rulemaking that the definition of a PWS under SDWA precludes the agency from promulgating a “regulation that holds a [public water system] liable for conditions that are beyond its control” (56 FR 26476, USEPA, 1991). In the 1991 rulemaking, the EPA posited that an MCL would not be considered “feasible” if a significant number of water systems would be in noncompliance due to conditions outside of their control, such as lead exposures from customer’s premise plumbing within buildings. The EPA contemplated an alternative approach of establishing MCLs that would meet the statutory standard for an MCL in SDWA section 1412(b)(4)(B) and 1412(b)(4)(D)—“as close to the maximum contaminant level goal as is feasible”—*i.e.*, “feasible with the use of the best available technology, treatment techniques and other means which the Administrator finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are available (taking cost into consideration.)” The resulting MCLs would need to be high enough to enable most systems to meet them after installing treatment (while accounting for the variability of lead and copper levels that would persist after treatment installation, given the sources of lead and copper). However, the EPA found that such an approach would lead “to unnecessarily high exposures of significant segments of the population” and noted that systems below this higher MCL “would not be required to

install any treatment to be in compliance” (56 FR 26477, USEPA, 1991). Therefore, the EPA concluded that such an approach would be inconsistent with the objective of the statute to prevent “known or anticipated adverse effects on the health of persons to the extent feasible” (SDWA 1412 (b)(7)(A)). As explained above, the EPA is reaffirming that it is not feasible to ascertain the level of lead such that the EPA can set an MCL within the purpose of the statute.

Considering the above facts, analyses, and statutory requirements, the EPA concluded that it was not feasible to set MCLs for lead and copper and promulgated the 1991 LCR that is comprised of four treatment techniques: CCT, source water treatment, lead service line replacement (LSLR), and public education. As described in section III.C of this preamble, the EPA introduced action levels for lead and copper to implement the treatment technique requirements in the rule. The action levels are not based on a level of exposure but rather are designed to determine the systemwide effectiveness of corrosion control and are compared to the 90th percentile of lead and copper samples collected from consumer taps to determine if the water system must take actions under the rule. In 1991, the EPA explained how the action levels are not MCLs, and they do not function as MCLs (56 FR 26488, USEPA, 1991). For more information about action levels, including the lead action level the EPA is finalizing in the LCRI and the EPA’s determination about why an action level was not an MCL under the LCR and is still not an MCL under the final LCRI, see section IV.F.4 of this preamble.

The EPA’s 1991 decision to promulgate a treatment technique rule for lead was challenged and upheld by the D.C. Circuit Court of Appeals (*American Water Works Association v. EPA* (AWWA), 40 F.3d 1266, 1270–71 (D.C. Cir. 1994)). Because the Court agreed with the EPA’s analysis, described above, that it is not feasible to ascertain the level of lead in drinking water, the Court upheld the EPA’s decision not to implement an MCL for lead (AWWA, F.3d 1266, 1270–71).

As described in the proposed LCRI, the EPA re-evaluated whether a treatment technique rule in lieu of an MCL is consistent with the statute. As part of the agency’s analysis, the EPA re-evaluated the information considered and conclusions made in promulgating the LCR in 1991, in addition to the best information and data available in more than 30 years since the LCR was promulgated, including from stakeholder feedback received during

the LCRR review. Based on the analysis conducted, the EPA has determined that information and factors consistent with SDWA that cause lead and copper variation identified in the 1991 LCR and supported in the 2021 LCRR continue to apply today. Therefore, the EPA is finding that it is not feasible to ascertain the level of the contaminant and the EPA thus is not establishing MCLs for lead and copper. The EPA received comments stating that the EPA must promulgate an MCL for lead, as described below. However, commenters did not raise any new arguments that change the agency's analysis and understanding of this issue. For the final LCRI, the EPA is reaffirming the findings and rationale presented in the proposed LCRI (88 FR 84907–84910, USEPA, 2023a) and as discussed below.

New information available since the 1991 LCR continues to show that the variability of lead and copper levels make it infeasible to ascertain the level of the contaminant, and any level that could be feasibly set would not provide the protection from lead exposure that can be provided by the treatment technique. Several reasons contribute to the EPA's determination on lead and copper variation supporting the use of a treatment technique. First, as noted in the LCR, "lead release can be unpredictable over time and across households, can originate from many sources owned by the water system and the customer, can vary based on the sample technique used, and can be affected by customer water use habits" (53 FR 31527, USEPA, 1988). Studies continue to show that the levels of lead and copper measured at the tap after treatment are variable due to several factors including, but not limited to, the amount of lead in any individual site's plumbing, the age of plumbing components, the physical and chemical characteristics of the water, the length of time water is in contact with material, and consumer water use patterns (Triantafyllidou et al., 2021). Studies show that lead levels can widely vary at a single site depending on the sampling protocol (Del Toral et al., 2013; Lytle et al., 2019; Lytle et al., 2021; Masters et al., 2021; Triantafyllidou et al., 2015). For example, Del Toral et al. (2013) showed that there was significant variability in lead concentrations from water samples collected at the same site as well as among different lead service line (LSL) sites across Chicago, Illinois. The EPA's analysis of 2019 State of Michigan Lead Tap Monitoring Data as part of the 2021 LCRR (see docket item no. EPA-HQ-OW-2017-0300-1617) also demonstrated variability among

collected water samples grouped by combinations of LSL status, CCT status, and liter sampled (USEPA, 2020c, Exhibit F–4). Even when using the same sampling protocol, variation in lead at a single site can still occur due to water use patterns and highly variable release of particulate lead (Clark et al., 2014; Masters et al., 2016; Xie and Giammar, 2011).

As described in the proposed LCRI, the EPA analyzed lead data from the dataset collected for the Six-Year Review 4 (2012 to 2019) for systems with different characteristics (e.g., CCT and LSL status) to further evaluate how lead and copper levels at the tap can vary. The EPA used the Federal version of the Safe Drinking Water Information System (SDWIS/Fed) (2012 to 2020) data and information on LSL status to select a subset of 7,161 systems with identified CCT and LSL status (USEPA, 2023a). The EPA conducted a similar analysis to the one used for the 1991 LCR, by evaluating the magnitude of difference between two points in the distribution (i.e., the ratio of the 90th percentile and 50th percentile) as a measure of variability (56 FR 26474, USEPA, 1991). The results of the analysis developed for the LCRI show high variability across systems for both lead and copper. Lead and copper levels vary both between systems, and at the same system across various years, regardless of CCT and LSL status. In some cases, systems had some tap samples with high levels of lead and copper and other samples where no concentrations were detected. This information confirms that lead and copper variability persist at the tap in water systems across the nation. See Exhibits 2 and 3 of the LCRI proposal for results and additional details (88 FR 84907–84908, USEPA, 2023a). Commenters did not dispute that lead and copper levels are variable at the tap.

Second, the conditions of plumbing materials also continue to vary from water system to water system, and from site to site within a water system, such that lead in drinking water continues to be subject to high levels of variability. Studies have shown that LSLs are the predominant contributor of lead in drinking water where they are present. A study published by the American Water Works Association (AWWA) Research Foundation found that LSLs contribute an estimated 50 to 70 percent of the mass of lead at the tap for sites served by LSLs (Sandvig et al., 2008). Another study found that removal of LSLs resulted in an average reduction of lead content at the tap by 86 percent (Lytle et al., 2019). However, while removal of LSLs is critical to reducing

lead in drinking water, premise plumbing materials also continue to be a source of lead in drinking water (Elfland, 2010; Kimbrough, 2007; Rockey et al., 2021). In addition, premise plumbing materials can be a source of particulate lead. For example, brass particles and lead solder particles were identified as the cause of severe tap water contaminations during three field investigations in North Carolina and Washington, DC (Triantafyllidou and Edwards, 2012). This means that even where systems remove all LSLs, CCT must be continued because of the lead and copper sources that will remain in the premise plumbing of consumers' homes and other buildings (USEPA, 2020c), and in lead connectors. Systems without LSLs can exceed the lead action level, for example, due to the corrosion of premise plumbing containing lead. Under the 2021 Lead and Copper Rule Revisions (LCRR), the EPA estimated between 2.3 and 4.7 percent of community water systems (CWSs) without LSLs will exceed the current lead action level of 0.015 mg/L (USEPA, 2020d, chapter 3, Exhibit 3–25). Thus, the factors that cause lead and copper variation will continue to exist.

Third, despite changes to the allowable amount of lead in "lead free" plumbing, many older buildings can still be a source of lead. Some commenters asserted that LSLs have overtaken household plumbing as the dominant source of lead contamination due to the revised "lead free" standard. However, these commenters misconstrue SDWA section 1417 requirements. SDWA section 1417 prohibits the use of any pipe, any pipe or plumbing fitting or fixture, solder, or flux in the installation or repair of any PWS or in plumbing in a residential or nonresidential facility that provides water for human consumption that is not "lead free" as defined in section 1417(d). The 2011 Reduction of Lead in Drinking Water Act revised the definition of "lead free" in SDWA section 1417(d) from eight percent to a weighted average of 0.25 percent,¹⁰ lowering the amount of lead that may be in plumbing materials used in repairs or new installations starting in 2014. The EPA's Lead Free Rule (85 FR 54236, USEPA, 2020c) requires third-party certification for new plumbing products

¹⁰ The term "lead free" provided here is defined under SDWA section 1417(d) as follows: "[T]he term 'lead free' means—(A) not containing more than 0.2 percent lead when used with respect to solder and flux; and (B) not more than a weighted average of 0.25 percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures."

as of September 1, 2023. However, SDWA section 1417 does not require anyone to replace previously installed plumbing materials that are not “lead free” as currently defined, and many buildings in the U.S. were constructed prior to 2014. Accordingly, the revisions to the “lead free” definition alone do not change the prevalence of legacy lead sources. Further, even products that meet the new definition of “lead free” may contain trace amounts of lead that can leach into drinking water (42 U.S.C. 300g–6(d)(1)). Therefore, premise plumbing in these buildings will continue to be a source of lead in drinking water. As illustrated both in peer-reviewed studies and through reported compliance data, lead levels vary at single sites over time, between sites within a system, and between systems, both for systems with and without LSLs and CCT.

Some commenters asserted that the agency’s reasons for not setting an MCL for lead are inconsistent, stating that the EPA’s primary rationale is based on not holding water systems responsible for sources of lead not owned by the water system while including provisions in the 2021 LCRR and the LCRI for LSLs that apply regardless of water system ownership (e.g., service line inventory, service line replacement, and tap sampling requirements). This argument misconstrues the comprehensive set of reasons for the EPA’s decision to not set an MCL for lead. In deciding whether to set an MCL for a particular contaminant or set a treatment technique rule, the primary focus of the statutory analysis is not on who is “responsible” for the sources of lead in drinking water, but whether it is feasible to ascertain the level of lead in drinking water. As described above, the variability of lead and copper levels make it “technologically infeasible to ascertain whether the lead or copper level at a tap at a single point in time represents effective application of the best available treatment technology” (53 FR 31527, USEPA, 1988). While premise plumbing is a contributor to lead and copper at the tap, the EPA found, and continues to find, that the quality of water delivered to customers can be controlled by systems regardless of whether the system physically controls all lead sources and that “water systems can affect, at least to some degree, water tap lead and copper levels through adjustment of the corrosivity of water delivered by the system” (56 FR 26473, USEPA, 1991). For example, studies indicate that CCT can reduce drinking water lead levels at the tap (Cardew, 2009; Hayes et al., 2008; Tully et al.,

2019). However, while water systems can affect drinking water corrosivity, they cannot do so in a way that allows the EPA to set an MCL due to factors such as variability of lead and copper in drinking water, treatment effectiveness, and the sources of lead and copper as discussed above. Additionally, if the EPA were to establish an MCL despite these factors, it would be based on the principle that the MCL would set a level that could be met by most systems (taking into account variability in tap levels among systems after treatment), resulting in a level too high to be health protective as water systems below this high level would not be required to take any actions. Therefore, a treatment technique rule for lead and copper is also more health protective than an MCL would be.

Some commenters claimed that, because the LCR requires water systems to conduct tap sampling and take actions based on action levels, the EPA has found it feasible to ascertain lead levels for the purposes of a treatment technique, and therefore the EPA must set an MCL for lead. The EPA notes that the ability to accurately measure the level of a contaminant in a single sample is not equivalent to finding that it is “feasible to ascertain the level of the contaminant” for purposes of establishing a rule that prevents lead exposure consistent with SDWA. The measurement of lead or copper in a single sample alone does not indicate the extent of corrosion of lead and copper from plumbing materials (53 FR 31527, USEPA, 1988). As noted above, the EPA found that there is no precise level of lead at the tap that can be achieved through application of the best available treatment due to the high variability of lead at the tap. The EPA has also demonstrated that the key factors that led to the agency establishing a treatment technique rule for lead and copper still apply today. Therefore, it is not feasible to ascertain the level of lead for the purposes of establishing an MCL.

Additionally, the EPA notes that these commenters misconstrue the difference between the action level and an MCL. Due to the factors described above, the lead action level is not a precise statistical analysis of the effectiveness of treatment, but rather is a general screening level developed for use as a tool to simplify and enable implementation of the CCT treatment technique (see section IV.F.4 of this preamble for discussion of how the action level was developed). One key difference between action levels and MCLs is that exceeding an action level alone is not a violation of the rule, but

rather a system is in violation if it fails to take required actions following an action level exceedance. While the lead action level is a numerical value, it is not equivalent to an MCL either in function or in terms of how it is derived (56 FR 26488, USEPA, 1991).

Some commenters claimed that the EPA has established MCLs for other drinking water contaminants, such as disinfection byproducts (71 FR 388, USEPA, 2006), and that EPA has stated that such contaminants are similarly prone to sampling variability. However, the preamble to the Stage 2 Disinfectants and Disinfection Byproducts Rule does not suggest that disinfection byproduct sampling is subject to the same level of sampling variability as lead sampling or that disinfection byproducts are so affected by sampling variability that it impacts the ability of water systems to accurately ascertain disinfection byproduct contamination from water samples (71 FR 388, 394, USEPA, 2006). Specifically, there is no discussion of the disinfection byproduct levels measured in the distribution systems and used for compliance as being unrepresentative of the levels in water delivered to consumers at the tap. Disinfection byproduct levels can vary based on factors such as residence time in the system, pipe diameter, location where disinfectants are added, and water temperature (71 FR 394, USEPA, 2006). Water systems are required to sample at different sites across the distribution system to account for this variability. However, the greater variability in lead and copper materials from sampling site to sampling site and the lead and copper levels in water at individual taps within the system is one difference between the lead and copper and the disinfection byproduct rules. While both rules require systems to evaluate water quality within the distribution system, due to the reasons stated above, the LCR also requires sampling at consumer taps, which is inherently variable across sites due to factors including differences in premise plumbing within homes. Sampling in the distribution system for lead and copper would not be representative of the levels of lead and copper at the tap. Put simply, there is no indication that the level of purported sampling “variability” associated with disinfection byproducts can be reasonably compared to that of lead contamination in drinking water.

Another critical distinction between lead and disinfection byproducts is that, unlike lead, disinfection byproducts arise from water systems disinfecting the water supply. Water systems

introduce disinfectants, such as chlorine and chloramine, into the drinking water supply (71 FR 394, USEPA, 2006). These disinfectants interact with organic and inorganic material in source waters to form disinfection byproducts. Water systems can control and account for the formation of disinfection byproducts, such as through source water treatment to reduce precursors (e.g., total organic carbon) that can lead to disinfection byproduct formation when these precursors come into contact with disinfectants. On the other hand, lead is rarely found in source water (86 FR 4231, USEPA, 2021a) and instead enters drinking water through corrosion in lead pipes and fixtures, sometimes from lead pipes and fixtures outside the direct control of the water system. As such, there is no inconsistency between regulating disinfection byproducts through an MCL while finding that a treatment technique is necessary for lead.

Considering the above information and analysis, the EPA is determining that the same conditions that prompted the agency to promulgate a treatment technique rule for lead and copper in 1991 still exist today and justify continued use of a treatment technique rule for regulating lead and copper. This includes the nature of lead contamination, where much of the lead in drinking water continues to originate in the distribution system and from sources outside the control of water systems (e.g., premise plumbing), the condition and composition of water systems' plumbing and distribution system varying from system to system, and the variability of lead and copper levels at the tap. In addition to finding that it is not feasible to set an MCL for lead and copper at the tap, the EPA also notes the benefit of a treatment technique. As noted above, the EPA can set requirements that compel the system to take various actions to reduce exposure to lead in drinking water, while an MCL would not compel action until, and unless, the MCL is exceeded (USEPA, 2020b). The EPA is prohibited from requiring a specific treatment when promulgating an MCL (see SDWA section 1412(b)(4)(E)). For example, the agency would not be authorized to require all water systems to conduct mandatory service line replacement or some of public education requirements as part of an MCL rule.

The conditions that led the agency to make the findings necessary to promulgate a treatment technique rule for lead and copper in 1991 still apply and are supported by an evaluation of the best information and data available since the LCR was promulgated. For

these reasons, the agency is continuing to regulate lead and copper through four treatment techniques: (1) service line replacement, (2) CCT, (3) public education, and (4) source water treatment.

B. Service Line Replacement

1. Overview

There is no safe level of lead in drinking water. More than 30 years after the EPA promulgated the 1991 LCR, the use of lead and galvanized requiring replacement (GRR) service lines to deliver water poses a continual threat of significant adverse health effects. Where present, LSLs are the most significant source of lead in drinking water. Even when water systems with lead and GRR service lines have implemented optimal corrosion control treatment (OCCT), lead can still be released from these service lines. In addition, improper implementation of tap sampling and OCCT requirements in the LCR has resulted in significant increases in lead levels that are unaddressed and cause increased exposure to lead in drinking water for consumers in multiple water systems. As a result, this final rule modifies the National Primary Drinking Water Regulation (NPDWR) for lead by mandating service line replacement of lead and GRR service lines regardless of tap sampling results or corrosion control efforts.

The final LCRI requires mandatory replacement of both lead and GRR service lines. Under the 2021 LCRR, galvanized service lines that currently are or ever were downstream of lead or unknown service lines are considered to be "galvanized requiring replacement" service lines (§ 141.2) because the risk of high lead levels from these service lines is comparable to that of LSLs. Where the system is unable to demonstrate that a galvanized service line "never was" downstream of an LSL, it must categorize the service line as GRR. Galvanized service lines downstream of a lead connector are not required to be replaced because the risk is not as significant.

The final rule requires replacement of the entire service line, such that no portion of a lead or GRR service line remains. Partial lead or GRR service line replacements do not prevent known or anticipated adverse health effects and may cause adverse health effects; however, water systems may, in limited circumstances, need to conduct partial service line replacements as part of an emergency repair or to facilitate the completion of planned infrastructure work (separate from service line replacement activities, such as water

main replacement) that would disturb the service line. Accordingly, the rule (1) prohibits water systems from conducting a partial lead or GRR service line replacement, except in the mentioned limited circumstances, and (2) requires water systems that conduct partial service line replacement to comply with notification requirements and other measures to mitigate the potential increased levels of lead as a result of the partial replacement (section IV.B.5).

The EPA is authorized to promulgate NPDWRs for PWSs and not for individual property owners. Under SDWA, a PWS is defined to include service lines ("distribution facilities") if they are "under control" of the operator of the PWS and "used primarily in connection with" the system (SDWA section 1401(4)(A)). Therefore, the requirement in the final LCRI for PWSs to fully replace lead and GRR service lines applies only to service lines "under control" of the operator of the PWS and "used primarily in connection with" the system (section IV.B.3). Where a water system has access (e.g., legal access, physical access) to conduct full service line replacement, the service line is under its control, and the water system must replace the service line. The LCRI does not delineate or establish the criteria for determining whether a system has access to conduct full service line replacement; that determination is governed by State or local law or water tariff agreements. The LCRI does not presume that customer consent is required for a system to gain access to conduct full service line replacement, yet the final rule recognizes that customer consent may be a prerequisite for access in some States and municipalities because, in some cases, service lines may only be under control of the water system when the customer provides consent to replace the customer-owned portion of the line. For that reason, where property owner consent is required under State or local law, the LCRI requires that the water system at a minimum make a "reasonable effort" (four attempts) to obtain property owner consent, and if the customer does not consent to the replacement, the system is not required to make further attempts to gain access to replace the service line until there is a change in property ownership.

The final LCRI establishes a deadline for water systems to complete their service line replacement program within 10 years (section IV.B.6), unless the State sets a shorter deadline for the system (section IV.B.7) or the system is eligible and plans to use a deferred deadline (section IV.B.8). The EPA

determined that a 10-year replacement deadline is feasible for the vast majority of water systems. However, the number and proportion of service lines requiring replacement can vary significantly among systems, making it difficult to identify a single deadline that represents the fastest feasible rate of replacement for all systems across the nation. In recognition of the strong possibility that some systems may be able to replace all of their lead and GRR service lines on a faster schedule, and to ensure that the rule meets the statutory standard for a treatment technique rule to “prevent known or anticipated adverse effects on the health of persons to the extent feasible” (SDWA section 1412(b)(7)(A)), the rule requires the State to set a shortened deadline if the State determines an earlier replacement deadline is feasible for the system.

On the other hand, to ensure that the rule’s service line replacement deadline is not infeasible for a large number of systems, the final rule includes a pathway for a water system to defer its replacement deadline if the system meets specific threshold criteria established in the rule, while also requiring that the State periodically evaluate whether the deferred deadline and associated replacement rate the system identifies are the fastest feasible. Systems on a deferred deadline must regularly provide their State with information on the deadline and rate they consider as the fastest feasible to support their continued eligibility for a deferred deadline, and the State must periodically approve the system’s continued use of the deferred deadline and associated replacement rate or determine a faster replacement rate. The EPA determined that setting a deadline of 10 years and incorporating procedures for reducing or extending that time frame on a case-by-case basis will ensure that the LCRI requires water systems to replace lead and GRR service lines as quickly as is feasible.

2. Mandatory Service Line Replacement

a. Rationale and Proposed LCRI Revisions

Lead service line replacement is a highly effective treatment technique for reducing lead levels in drinking water. It has been part of the EPA’s NPDWR for lead since 1991. The LCRI makes a fundamental improvement to the LSLR treatment technique in the LCR NPDWR. The 1991 LCR requires systems that exceed the lead action level of 0.015 mg/L to replace LSLs systemwide at a mandatory replacement rate and allows these systems to stop

replacing LSLs if the system ceases to exceed the action level. Under the 1991 LCR, systems could meet the mandatory replacement rate by partially replacing the system-owned portion of the LSL or through “test-outs” of individual service lines. However, research conducted after 1991 revealed that LSLR is highly effective at reducing lead levels in drinking water only where the entire LSL is replaced (Deshommes et al., 2017; Trueman et al., 2016; USEPA, 2011a). Thus, the 2021 LCRR maintained the approach of the 1991 LCR to require replacement if a system exceeds the action level of 0.015 mg/L, but reduced the replacement rate to three percent per year. The 2021 LCRR also required systems to replace the entire LSL, prohibited “test-outs”, and required systems that exceed the lead trigger level of 0.010 mg/L to replace lead and GRR service lines at a goal-based replacement rate until the system ceases to exceed the lead trigger level. The 2021 LCRR also required water systems to provide notification and risk mitigation actions, including the provision of pitcher filters, when a service line replacement was conducted.

In the 2021 LCRR review, the EPA noted the “urgency of fully removing all lead service lines” and acknowledged that under the 2021 LCRR, millions of LSLs would be left in place, resulting in “generations of Americans being at risk of significant lead exposure through their drinking water” (86 FR 71577, USEPA, 2021b). During the 2021 LCRR review, the EPA listened to the nation’s concerns on lead in drinking water through two days of public listening sessions, 12 community and stakeholder roundtables, and two co-regulator and elected official meetings. Nearly all commenters expressed support for the goal of full replacement of all the nation’s LSLs. Commenters frequently suggested that the agency mandate replacement of all LSLs over a defined time (e.g., 10 to 15 years) regardless of drinking water lead levels, ban all or certain partial service line replacements, and increase financial support for LSLR from the EPA and other Federal agencies (86 FR 71576, USEPA, 2021b). These stakeholder recommendations reflect a widespread awareness that LSLs pose a continued threat to public health that cannot be quickly and fully remedied through installation or re-optimization of CCT.

Consistent with the statutory direction when promulgating a treatment technique rule, the EPA proposed in the LCRI mandatory full service line replacement of all lead and GRR service lines, regardless of lead levels, because full replacement will

prevent to the extent feasible the known or anticipated significant adverse threat to public health caused by the presence of these service lines. Mandatory full service line replacement prevents known adverse health effects because it reduces lead levels in drinking water more than other risk mitigation actions and treatment, such as OCCT, flushing, and public education. Even when a system’s 90th percentile lead level is relatively low, full service line replacement is the only risk mitigation action that permanently removes the lead source and associated exposure risk. Although OCCT can be effective at reducing lead levels, it requires consistent proper operation, water quality parameter monitoring, and tap sampling to ensure it is effective at reducing lead levels. The EPA’s experience with implementing the LCR for over 30 years has shown that improper implementation of tap sampling and CCT has resulted in significant increases in lead levels that were unaddressed and caused increased exposure to lead in drinking water for consumers in multiple water systems (e.g., Edwards and Dudi, 2004; Lytle et al., 2020; Sarver, 2019; USEPA 2023f). Additionally, in recent years, systems ranging from small to large have experienced high lead levels despite having installed OCCT and maintained compliance with the LCR OCCT requirements (Masters et. al, 2021). In addition, when elevated levels of lead are detected, OCCT can take years to study and implement, and some systems, based on the water chemistry in their source water and distribution systems, may face challenges optimizing CCT, leaving their consumers at a higher risk of lead exposure compared to other communities. Recognizing that there is no known safe level of lead in drinking water, removing the largest sources of lead in drinking water (lead and GRR service lines where present) can reduce lead levels more than OCCT alone or in combination with public education and other risk mitigation activities. Furthermore, lead particulates can be released sporadically or as a result of service line disturbances even in systems that have well-operated OCCT and have measured generally low lead levels (Del Toral et al., 2013; Triantafyllidou et al., 2007). Thus, systems with 90th percentile levels below the lead action level or even the lead practical quantitation limit (PQL) may still have higher lead levels at individual sites served by lead and GRR service lines. These higher lead levels then result in increased lead exposure to the consumers served, but without any

requirement for systemwide follow-up actions such as CCT, public education, or LSLR. Cases of lead poisoning in children have been documented and attributed to drinking water in communities whose systemwide lead levels remained below the lead action level (Triantafyllidou et al., 2007; Triantafyllidou and Edwards, 2012).

i. Scope of Mandatory Service Line Replacement

The pre-2021 LCR did not require galvanized service lines to be replaced. A galvanized service line that currently is or previously was downstream of an LSL can contribute to lead in drinking water and resulting lead exposure to consumers (USEPA, 2020d) and, therefore, is considered a “galvanized requiring replacement” or GRR service line under the 2021 LCRR. Such GRR service lines can adsorb particulate lead initially mobilized from the upstream LSL, which can later be released back into the drinking water even after removal of the LSL (McFadden et al., 2011). The 2021 LCRR’s inclusion of GRR service lines in the full service line replacement requirements ensures that all galvanized service lines currently or previously downstream of an LSL will be treated the same as an LSL under the service line replacement requirements (USEPA, 2020d). The proposed LCRI maintained the 2021 LCRR requirements for water systems to fully replace both lead and GRR service lines in their distribution systems.

The 2021 LCRR did not require replacement of galvanized service lines downstream of a lead connector. Galvanized service lines downstream of a lead connector may contribute lead into drinking water, but for the 2021 LCRR, the EPA did not find it appropriate to categorize these service lines as “galvanized requiring replacement” if these lines were not currently or previously downstream from an LSL (USEPA, 2020e). The EPA determined that it was not feasible to include a requirement for all systems to inventory lead connectors; therefore, they cannot be used to categorize a galvanized line as needing to be replaced under the LCRR (USEPA, 2020e). Additionally, the EPA did not want LSLR to be slowed by including galvanized service lines downstream of a lead connector in the total number of service lines requiring replacement. The 2021 LCRR requires lead connectors to be tracked and replaced as they are encountered during normal operations. The EPA did not propose in the LCRI to expand the definition of a GRR service line to include galvanized service lines downstream of a lead connector for the

same reasons identified in the 2021 LCRR, but the agency did request public comment on this topic.

The EPA maintained the 2021 LCRR requirement to provide notification and risk mitigation measures, including pitcher filters, where full service line replacements were conducted to account for potential temporary increases in lead levels and further prevent the potential for known adverse health effects.

b. Summary of Public Comments and the EPA’s Response

Many commenters supported the proposed requirement for water systems to replace lead and GRR service lines regardless of 90th percentile lead levels, highlighting the benefits of service line replacement to eliminate the risk of lead exposure posed by these significant lead sources. A few commenters stated that CCT is effective at reducing lead in drinking water, and therefore, mandatory service line replacement should not be required. After consideration of all the comments on this issue, the agency is requiring full replacement of lead and GRR service lines in the final rule. Replacement of lead and GRR service lines can substantially reduce the risk of lead exposure from drinking water because lead and GRR service lines can release lead even when systemwide lead levels are low (Triantafyllidou et al., 2007). Many water systems have proactively and voluntarily replaced LSLs (USEPA, 2024d), and the States of Illinois, Michigan, New Jersey, and Rhode Island have passed State laws and regulations requiring mandatory service line replacement independent of their tap monitoring results. Proactive and voluntary measures alone, however, cannot achieve replacement of 100 percent of lead and GRR service lines as quickly as feasible. A national mandate ensures public health protection for customers and consumers served by these service lines, including populations most sensitive to the effects of and communities disproportionately impacted by lead exposure, in States or water systems that do not have mandatory or proactive replacement programs.

One comment claimed that the proposed LCRI implicates the major questions doctrine, violates the commerce clause, is “unworkable, underfunded, and unnecessary,” and is arbitrary and capricious. The comment was based on the erroneous assumption that the LCRI regulates homeowners. The EPA disagrees with these characterizations of the proposed rule. Regarding the major questions doctrine,

the comment claimed that the proposed LCRI implicates the major questions doctrine because of a substantial expansion in scope, stating that the “greater the scope of the proposed action, the clearer that Congressional authorization must be” (State of Kansas and Office of Attorney General of Kansas, 2024). Contrary to the comment’s assumption, however, the EPA has authority under SDWA to regulate PWSs, not homeowners. As a result, the LCRI regulates PWSs and their distribution systems; it does not regulate indoor plumbing or require homeowners to take any actions. Moreover, the LSLR has been a central part of the LCR’s treatment technique as far back as the original 1991 LCR and continuing through the 2021 LCRR. The LCRI’s mandatory service line replacement requirement differs from the 1991 LCR and 2021 LCRR LSLR requirements in two ways, but neither difference represents an expansion of scope, so the major questions doctrine is not applicable to the LCRI’s service line replacement requirements. The first difference is that the LCRI requires water systems to conduct a full service line replacement program independent of their tap monitoring results. The EPA notes that the 2021 LCRR and 1991 LCR both also require systems to conduct mandatory LSLR if a system exceeds the lead action level. The EPA does not view the LCRI’s similar requirement to be an expansion of scope simply because the requirement applies independent of tap water monitoring results. Rather, imposing that requirement irrespective of tap monitoring results follows directly from SDWA’s statutory mandate in light of current information. SDWA requires the EPA to promulgate NPDWRs that “prevent known or anticipated adverse effects on the health of persons to the extent feasible” (SDWA 1412(b)(7)(A)). As section IV.B.1 of this preamble explains, the EPA’s finding that a mandatory, systemwide service line replacement program irrespective of tap monitoring results is essential to meet this statutory requirement, as the requirement is both feasible and prevents known or anticipated health effects of lead exposure from drinking water. For more information, see section IV.B.1 of this preamble.

The second difference between the LCRI and the LCR and 2021 LCRR is that the LCRI removes statements about service line ownership and responsibility to pay for full service line replacement. This change does not expand the scope of this rule; in fact, the EPA made the change to better align

the rule with SDWA's definition of a "public water system" and to clarify that the EPA is not directing through this rule how a water system should cover the costs of compliance with a NPDWR. How a system chooses to cover the costs or allocate the costs among users are matters of State and local law beyond the scope of the EPA's authority under section 1412 of SDWA. Because State and local governments regulate how water systems charge for services they provide to their customers, and the EPA has no explicit statutory authority to regulate in an NPDWR how water systems charge for their services, under the LCRI, the EPA has removed all statements in the prior rule about service line ownership and responsibility to pay.

The EPA disagrees that the LCRI is "unworkable, underfunded, and unnecessary," particularly, the commenter's assertion that almost none of the cost of the rule is offset by the Federal Government. On the contrary, the Bipartisan Infrastructure Law (BIL) dedicates \$15 billion in funding for service line inventory and replacement, and other Federal funding is also available to support implementation of the LCRI (see section III.G of this preamble). The final tranche of this BIL DWSRF funding for lead service line inventory and replacement will be appropriated in Fiscal Year 2026; however, funds will remain available for the EPA to obligate (*i.e.*, award) to States during the fiscal year in which they are appropriated and the following fiscal year, consistent with SDWA section 1452(a)(1)(C). After the second fiscal year of availability, any unobligated funds would be reallocated by the EPA to other States, as described in SDWA section 1452(a)(1)(E). The EPA notes that its economic analyses for the proposed and final rules do not account for external funding, such as from BIL, in the calculation of PWS costs and household cost to residents in CWSs. Furthermore, the agency also did not rely upon external funding, such as from BIL, to support its finding that the proposed and final rules are affordable in accordance with SDWA's definition of "feasible" in section 1412(b)(4)(D) for NPDWRs ("what may reasonably be afforded by large metropolitan or regional public water systems.") The EPA finds the LCRI as a whole is affordable. For discussion on the affordability of service line replacement, please see section IV.B.6 and IV.B.9 of this preamble and the final rule's Technical Support Document (USEPA, 2024d). For CCT, please see section IV.F.1 of this preamble. For public

education, please see sections IV.J.1 and IV.K.1 of this preamble. Note that the EPA is not including a discussion for source water treatment because those requirements are not being amended by this final rule. For the EPA's feasibility determination for source water treatment, see the final LCR (56 FR 26482, USEPA 1991). In addition, the EPA evaluated the cumulative impact of the LCRI requirements as a whole to household costs by system size, which are discussed in the EPA's Economic Analysis for the final LCRI (USEPA, 2024c) in section 4.3.7.3 and shown in Exhibit 7 and Exhibit 8 in section VI.D.2 of this preamble.

The EPA disagrees that the LCRI is "arbitrary and capricious." The comment claimed the rule would cost the States, PWSs, and households billions "without resulting in any measured benefit, and the agency lacks clear Congressional authorization to impose these burdens, and the proposed rule does not adequately explain why it is departing from past practice" (State of Kansas and Office of Attorney General of Kansas, 2024). The claim that the proposed rule had no measured benefit is simply untrue. The final rule's economic analysis showed that the monetized net annualized incremental benefits range from \$12.0 billion to \$23.2 billion (in 2022 dollars, discounted at two percent) as well as many unquantified benefits, and these benefits justify the costs (USEPA, 2024a, chapter 6, section 6.3). As described above, the EPA has clear authority to promulgate the LCRI under SDWA section 1412. The proposed rule also explained at length the factors it considered when proposing a mandatory service line replacement requirement irrespective of lead levels (USEPA, 2023a).

Some commenters suggested that water systems' mandatory service line replacement programs should extend to replacement of the lead connector because they are a source of lead in drinking water. The EPA agrees that lead connectors can contribute lead into drinking water and encourages their replacement to reduce lead in drinking water. The LCRI maintains the 2021 LCRR's requirement that lead connectors must be replaced when they are encountered by the water system (*e.g.*, during water main replacements). The EPA disagrees, however, that the LCRI should require systems to locate and then replace all connectors in the system. Lead and GRR service lines, where present, are the most significant source of lead in drinking water. Incorporating a requirement for replacement of lead connectors into the

10-year service line replacement could take significant time and resources away from replacing lead and GRR service lines. Systems would be required to identify where all lead connectors are and then replace them in addition to the lead and GRR service lines. Furthermore, this would not be feasible within the 10-year replacement timeframe required for replacing lead and GRR service lines, and adding this requirement would, therefore, delay replacement of the most significant sources of lead exposure in drinking water. The LCRI requires that the system's inventory include information about lead connectors based on available information, but the rule does not require systems to engage in a proactive effort to collect additional information to locate all lead connectors that may be in the system. Many water systems do not have information on the presence or location of lead connectors in their distribution system, but systems conducting a service line inventory may find that they have records of connectors, and systems may encounter connectors while conducting service line replacements as well as conducting repairs and maintenance work. Accordingly, the LCRI requires water systems that do have records on the location of lead connectors to include them in their inventory and replace connectors encountered during service line replacement and other work.

Some commenters argued that galvanized service lines downstream of a lead connector should be classified as requiring replacement (a "GRR") under the system's mandatory service line replacement program, while other commenters stated that including such lines in mandatory replacement requirements could significantly impact a system's ability to complete their service line replacement program within 10 years. The EPA disagrees with including galvanized service lines downstream of a lead connector in the mandatory replacement program. In order to prioritize replacement of the most significant contributors of lead in drinking water, the final rule does not define galvanized service lines that are or were downstream of a lead connector as GRR service lines, and, thus, they are not inventoried or replaced as such (see section IV.O.3 of this preamble).

c. Final Rule Requirements

The final LCRI requires water systems to conduct full service line replacement of lead and GRR service lines regardless of their 90th percentile lead levels. Partial service line replacement and "test-outs" at individual service lines do not count towards mandatory full

service line replacement. Lead connectors must be replaced where encountered during normal system operations and service line replacement unless the connector is not under the control of the system.

3. Service Lines Under the Control of the System

a. Rationale and Proposed LCRI Revisions

The EPA is authorized by SDWA to regulate PWSs to include any “distribution facilities under control of the operator of such system and used primarily in connection with such system” (SDWA section 1401(4)(A)). In some cases, service line ownership is shared between customers and PWSs; in other cases, service lines are owned in their entirety either by customers or by PWSs and used by PWSs to distribute water. Under the LCR, a water system is required to replace only the portion of the service line that is owned by the system and offer to replace the portion of the line not owned by the system. As a result, for the LCR, “under control” of the water system was interpreted as ownership of the service line. The LCR does not identify how ownership of the service line would be determined. The LCR explicitly states that a water system is not required to pay for replacement of the portion of the service line that is not owned by the system, or to conduct the replacement of the privately-owned portion of the service line where the owner chooses not to pay for replacement of the privately-owned portion of the line, or where replacing the privately-owned portion of the service line is precluded by State, local, or common law.

Under the 2021 LCRR, water systems are required to conduct full LSLR, and only full LSLR counts towards a system’s mandatory replacement rate. A system remains in compliance if it is unable to meet the mandatory replacement rate because a customer refuses to participate in the replacement program or does not respond to the system after two good faith efforts to reach the customer. Under the 2021 LCRR, a system must conduct a full service line replacement regardless of ownership if the customer consents to the replacement of their portion of the line. However, the 2021 LCRR does not require a water system to pay for replacement of the portion of the line that is “customer-owned” and not owned by the system. The cumulative effect of these provisions is that a water system is required to conduct full LSLR where the customer consents to the replacement and agrees to cover the cost

of the replacement or the water system chooses to cover the full cost of the replacement.

The proposed LCRI builds on 2021 LCRR’s requirement to conduct full LSLR, but the proposed rule did not make any assumptions about customer consent or payment requirements or assume that there are no other potential barriers to the system’s ability to access the service line to conduct a full replacement. Under the proposed LCRI, full replacement of all lead and GRR service lines is required wherever a system can access the service line in order to conduct a full replacement. The EPA does not have the authority under SDWA section 1412 to specify whether customer consent is required for a water system to gain access to a service line, nor does the EPA have the authority under SDWA section 1412 to determine that a water system is or is not responsible for the cost of the service line, or how those costs should be allocated among rate payers, as these are matters determined by State or local law. In addition, the EPA recognizes that there may be other barriers that prevent a system from gaining access to conduct a full service line replacement on a case-by-case basis (e.g., threats to the safety of system personnel due to site characteristics). Accordingly, in the proposed LCRI, the EPA proposed to treat a service line as “under control” of the system wherever the system has access (e.g., legal access, physical access) to conduct a full service line replacement.

Under the proposed LCRI, a water system’s obligation to conduct full service line replacement extends to those service lines under control of the system, *i.e.*, those service lines that the system can access to conduct a full service line replacement. If a system does not have access to conduct a full service line replacement, it is not required by the rule to replace the lead or GRR service line, but it must document the reasons that the water system does not have access and include any specific laws, regulations, and/or water tariff agreements that affect the system’s ability to gain access to conduct full service line replacement identified in the service line replacement plan. The system must provide this documentation to the State.

The proposal also included requirements for systems to make reasonable efforts (four attempts using two different communication methods) to obtain property owner consent where a water system has legal access to conduct full service line replacement only if the property owner consent is obtained, where the number of attempts

was doubled relative to the 2021 LCRR requirement and the use of multiple communication methods was incorporated to better reach property owners and increase participation in service line replacement programs (USEPA, 2021b). If the system is unable to obtain property owner consent after four attempts, the system is not required to replace the service line. However, the system would need to offer full service line replacement within six months of any change in property ownership and make four attempts to obtain property owner consent within one year of the change in property ownership. The EPA proposed that requirement to continue to apply until a water system no longer has lead, GRR, or unknown service lines in their inventory. The purpose of this requirement is to ensure that water systems give property owners an adequate notice and opportunity to provide any necessary consent for service line replacement. The EPA also proposed that any water system that was not able to obtain property owner consent after making a reasonable effort must certify to the State the number of service lines not replaced due to property owners not providing consent where consent is required by State or local law.

The EPA did not propose to delineate the prerequisites or elements of “access” that a system would need to conduct full service line or connector replacement because of the wide variation of relevant State and local laws and water tariff agreements as well as the potential for these to change over time. The proposed LCRI also emphasized the many possible approaches water systems could use to overcome access barriers to conduct full service line replacement, some of which may be unique to the system (88 FR 84925, USEPA, 2023a).

The proposed LCRI included several rule provisions designed to increase transparency and incentivize systems to find ways to overcome barriers to a water system’s ability to gain access to conduct full service line replacement. First, the EPA proposed to require water systems to identify legal barriers (e.g., laws, ordinances, and water tariff agreements) to gaining access for full service line replacement in their service line replacement plans and make the plans publicly accessible, which may facilitate action by the community served to overcome those barriers (see section IV.C of this preamble for more information on the replacement plan). Second, the proposed rule provides a pathway for systems to defer optimizing or re-optimizing CCT and conducting costly and complex pipe rig/loop

studies by replacing all lead and GRR service lines in their distribution system within five years at a rate of a minimum of 20 percent of lines per year. To take advantage of this proposed pathway, systems must have access to fully replace all lead and GRR service lines in their inventories and identify all unknown service lines within five years. Third, the EPA expects systems to be motivated to find ways to access each lead and GRR service line for replacement because removing these significant lead sources can reduce the system's 90th percentile lead level, which, in turn, would decrease the likelihood of a lead action level exceedance and the subsequent need to (1) install (and maintain) or re-optimize OCCT (that could involve costly CCT studies), (2) replace lead-bearing plumbing or install point-of-use filters (for small systems that choose not to install or re-optimize CCT), and (3) make filters available along with additional public outreach if the system meets the requirements for multiple lead action level exceedances. With the most significant lead sources replaced, systems would also have a lower likelihood of measuring higher lead levels, which are tied to the Tier 1 public notification requirements after a lead action level exceedance (also referred to as the 24-hour public notification) and Distribution System and Site Assessment (DSSA) requirements. Fourth, systems without lead and GRR service lines that exceed the action level due to other sources of lead (*i.e.*, premise plumbing) would be able to conduct less costly, complex, and time-consuming CCT studies, such as metal coupon tests, should they be required to initiate OCCT steps. Fifth, the more rigorous sampling of the first- and fifth-liter samples at LSL sites could also be avoided where systems accessed and replaced all lead and GRR service lines. Sixth, systems that have replaced all their lead and GRR service lines would have to meet fewer public education requirements. For example, systems without lead, GRR, or unknown service lines would not have to conduct the proposed notification and risk mitigation requirements after a service line disturbance or the annual notification of service line material type to consumers served by these lines. Seventh, public education requirements in the LCRI are designed to inform consumers about the adverse health effects associated with lead in drinking water and risk reduction measures, including full service line replacement, which may result in more customers

providing access (where property owner consent is required for legal access).

b. Summary of Public Comments and the EPA's Response

The EPA received many comments on the provision in § 141.84(d)(2) of the proposed LCRI stating that “[w]here a water system has access (*e.g.*, legal access, physical access) to conduct full service line replacement, the service line is under its control, and the water system must replace the service line.” On one end of the spectrum, several commenters stated that the EPA's interpretation of “control” as access is beyond the EPA's authority under the SDWA. Many of these commenters argued that the EPA should not change its prior interpretation of “control” as exclusively tied to ownership. Some of these commenters argued that service lines, or service lines not owned by the system, are not covered by the definition of “public water system” in section 1401(4) of SDWA at all and are therefore beyond the reach of a NPDWR; several others asserted that control should be interpreted as ownership and without ownership, or if the service line is on private property, then the service line is not under control of the system. Several commenters raised practical and policy concerns associated with conducting a lead service line replacement on private property. On the other end of the spectrum, several commenters stated that the EPA's interpretation of “control” as access is too narrow and will create a loophole allowing systems to avoid conducting service line replacement wherever they determine that they lack access. These commenters argue that the EPA should structure the rule to either deem service lines as under control of the system (or require States to do so as a condition of primacy) or create a rebuttable presumption that service lines are under control of the system, as promulgated by the EPA in the 1991 LCR.

The EPA disagrees with commenters on both ends of the spectrum. Commenters advocating that the EPA interpret “public water system” to include either no service lines or only service lines “owned” by the system ignore the statutory definition of “public water system” which is tied to control, not ownership. Moreover, these comments fail to comport with both SDWA's mandate in section 1412(b)(7)(A) for the EPA to identify treatment technique requirements that prevent known or anticipated adverse effects to the health of persons to the extent feasible and SDWA's requirement in section 1412(b)(9) for any revision of an existing NPDWR to maintain, or

provide for greater protection of the health of persons. Full lead service line replacement prevents known or anticipated adverse effects to the health of persons and it is feasible even where water systems do not own any portion of the service line. Partial service line replacement does not prevent known or anticipated adverse effects to the health of persons, and may result in continued exposure and short-term increased levels of lead in drinking water. For those reasons, the EPA promulgated the 2021 LCRR to require water systems to conduct full service line replacements even if they do not own the service line, as long as the customer provides consent and to ensure that partial replacements would not be conducted as a result of a NPDWR. The LCRI similarly requires full service line replacement even when the system does not own the service line and it does not require or allow partial service line replacement to meet the replacement requirement of the rule and in doing so, the EPA is consistent with the statutory definition of “public water system” and meets the requirements in section 1412(b)(7)(A) and 1412(b)(9). None of the commenters that advocate for the EPA to limit the service line replacement requirements to portions of the service line owned by the system, or give credit for partial replacements, explain how such a rule would be consistent with section 1412(b)(7)(A) and 1412(b)(9).

The term “public water system” is defined in SDWA section 1401(4) as “a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves at least twenty-five individuals. Such term includes (i) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (ii) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system.”

The plain language of the first sentence of this definition includes service lines because they are “pipes” used for the “provision of water to the public” through “service connections” that “serve . . . individuals.” The second sentence explains further that the definition includes “distribution facilities *under control of the operator of such system*” (*emphasis added*). Service lines are used to distribute water to consumers and as such, are part of the system's “distribution facilities.” Therefore, the EPA does not agree with commenters that state that service lines

are not part of the definition of “public water system” and thus outside of EPA jurisdiction because they are not covered by either the first or second sentence. Such an interpretation would be inconsistent with the statutory text and the EPA’s longstanding implementation of the statutory definition of “public water system.” Service lines are pipes through which drinking water flows to the customer as part of distribution facilities under control of the operator. Service lines are directly connected to the water mains that are directly connected to the treatment facility or storage facilities. These are all interconnected to convey drinking water to the building for consumption and the flow of drinking water through these pipes is controlled by the water system.

Moreover, there is nothing in the definition that suggests the distribution facility must be owned by the public water system or any basis to read that requirement into the phrase “under control of the operator of such system.” Public water system operators may not be the same entity that “owns” the system of pipes, service connections, collection, treatment, storage, and distribution facilities. Therefore, the question is not whether the public water system “owns” the service line, but whether it is “under control of the operator of the system.”

In addition, the interpretation of the “control” within the definition of “public water system” to mean “access” is consistent with the dictionary definitions of the terms “control” and “under control”. As a verb, “control” means “to exercise restraining or directing influence over” (Merriam-Webster Dictionary. Retrieved August 27, 2024, from <https://www.merriam-webster.com/dictionary/control#dictionary-entry-1>). As a noun, “control” means “an act or instance of controlling” and also “power or authority to guide or manage” (Merriam-Webster Dictionary. Retrieved August 27, 2024, from (n) <https://www.merriam-webster.com/dictionary/control>). The phrase “under control” is defined in the Oxford English Dictionary as “subject to a restraining or controlling influence, esp. so as not to cause damage or harm; (of a situation) so as to be managed competently or dealt with successfully.” Oxford University Press (2024, March). “under control” in control (n). *Oxford English Dictionary*. Retrieved August 27, 2024, from <https://doi.org/10.1093/OED/6427628422>. The interpretation of service lines as “under control” of a water system whenever the system has “access (e.g., legal access, physical access) to conduct full service line

replacement” is consistent with these definitions. If the water system can, as a factual matter, gain access over the service line to disconnect it from use and replace it with a new line, then the water system is directing influence over the line and exercises power or authority to manage it and it is subject to a restraining or controlling influence of the system—i.e., “under control” of the system.

At the same time, the EPA does not have the authority to assert in an NPDWR that a water system has “control” of any particular part of the system’s distribution facilities, such as all service lines. Commenters that advocate for a rule that “deems” all service lines as under control of the system (or requires states to do so as a condition of primacy) disregard the limits on the EPA’s authority to establish a “primary drinking water regulation” that “applies to public water systems” (SDWA 1401(1)(A)) and establish requirements under section 1413 of SDWA for “primary enforcement responsibility for public water systems.” The EPA cannot ignore the definition of “public water system” in section 1401(4) of SDWA, which, as explained above, applies only to the extent the operator has “control” of the system. The EPA cannot simply declare—contrary to the record (LSLR Collaborative, n.d.b) (see comment IDs EPA-HQ-OW-2022-0801-0845 and EPA-HQ-OW-2022-0801-1328 in the LCRI docket EPA-HQ-OW-2022-0801 for example)—that all service lines are “under control” of a water system for purposes of replacement. Instead, whether a service line is under the control of the water system will depend on: (1) The relevant laws that authorize and/or condition a water system’s ability to exert control over the line in order to replace it and (2) whether, as a factual matter, a water system can gain physical access to the service line in order to conduct a full replacement. Accordingly, as noted above, the rule does not make any assumptions about customer consent or payment requirements or assume that there are no other potential barriers to the system’s ability to access the service line to conduct a full replacement. Instead, under the LCRI, full replacement of all lead and GRR service lines is required wherever a system can access the service line in order to conduct a full replacement and not where a system does not have access to conduct full service line replacement. See § 141.84(d)(2).

Accordingly, the EPA rejects the approaches advocated by commenters on both ends of the spectrum that would

require the EPA to go beyond the plain language of the statute to use a narrower or broader definition of “public water system” to reduce or expand a water system’s responsibility for replacing lead service lines. In the final rule, the EPA is requiring full lead service line only “[w]here a water system has access (e.g., legal access, physical access) to conduct full service line replacement” to meet the mandates of section 1412(b)(7)(A) and 1412(b)(9) while staying within the bounds of the EPA’s authority under SDWA to regulate “public water systems” as defined in section 1401(4).

Some commenters agreed with the EPA’s interpretation of control to mean access. Other commenters agreed with the EPA’s proposed approach, but they described it as vague and subject to different interpretations. Commenters recommended that the EPA include specific criteria to specify when a water system has access to prevent systems from defining access too narrowly in attempts to avoid mandatory service line replacement. Another commenter provided an example of specific access criteria: (1) whether the system can safely enter the property, (2) whether the system can safely conduct the replacement, and (3) whether the system has obtained the property owner’s consent, if consent is required for access. The EPA agrees that these criteria are reasonable and appropriate for a system to consider in evaluating whether it has the requisite access. In fact, physical access is explicitly referenced in the regulatory text: “Where a water system has access (e.g., legal access, physical access) to conduct full service line replacement, the service line is under its control.” However, the EPA disagrees that the final rule should include mandated criteria applicable to all water systems because a water system’s ability to obtain access to a service line to conduct a full service line replacement is governed by State law, local law, and/or water tariff agreements and may include requirements for customer cost sharing for to conduct the replacement. Thus, systems should have some flexibility to accommodate specific circumstances affecting access that this rule may not be able to predict. More prescriptive criteria for determining where a service line is under the control of a system than “access to conduct full service line replacement” might be overly broad and, therefore, beyond the EPA’s authority to regulate, or the criteria may be too narrow and, therefore, not adequately protective of public health to meet the requirement of SDWA section

1412(b)(7)(A) to prevent known or anticipated adverse health effects of persons to the extent feasible.

Some commenters were concerned that defining control as where systems have access could result in water systems leaving LSLs unreplaced by claiming a lack of access to any portions of LSLs, such as those on private property. The final rule is structured to mitigate this concern. The rule requires replacement of all lead and GRR service lines under the control of the water system. Where a water system has access to conduct full service line replacement, the service line is under its control, even if it is located on private property, and the water system must replace the service line. For service lines in which the water system does not have access to conduct a replacement, the water system must document the reason for lack of access and provide this documentation to the State. Submitting documentation to the State explaining why the water system does not have access to a service line provides the information needed for oversight of this rule requirement and allows States to ensure water systems are replacing lines in which they have access.

Where the system has access to conduct full replacement only if property owner consent is obtained, the system must make a reasonable effort to obtain consent through at least four outreach attempts using two different methods of communication. The EPA expects this outreach will support communication between property owners and the water system to improve access. In addition, the EPA is finalizing requirements in the LCRI that provide incentives for systems to overcome barriers to access or may increase a water system's ability to gain access to conduct full service line replacement, such as deferring an OCCT study to replace all lead and GRR service line in the distribution system and identifying legal barriers in laws, ordinances, or water tariff agreements to service line access in the replacement plan. (See section IV.B.3.a of this preamble). The EPA provided several examples in the proposal on a range of strategies that systems, municipalities, and States have used to overcome both financial and non-financial barriers to full service line replacement in the proposed LCRI, even where laws require customers to provide consent or payment to replace their portion of the service line (88 FR 84926, USEPA 2023a). Example strategies are also discussed later in this section. Additionally, funding and non-regulatory actions can increase water system access to service lines for full

replacement (see section III.G of this preamble).

Where water systems are unable to gain access to conduct a full service line replacement, water systems are not in violation of the treatment technique if they fail to replace these service lines by their replacement deadline because they are not under the control of the system. Water systems must continue to publish the addresses of those service lines in the publicly accessible inventory, deliver annual notification of service line material to the consumer, and make a reasonable effort to gain access of the service line for full service line replacement when the property changes ownership.

Some commenters recommended that the EPA interpret "under control of" the water system as including only those service lines that are owned by the system, as the EPA did in the 2000 LCR Minor Revisions (USEPA, 2000a). The EPA disagrees with these commenters. The EPA interprets the phrase "under control of" as distinct from "ownership" in SDWA. The term "control" is not defined in SDWA, and use of the phrase "under control of" instead of the more commonly used phrase "owned by" suggested that Congress had a different concept in mind. Moreover, the EPA has never concluded that SDWA mandates an interpretation of "control" to mean ownership exclusively. In the 1996 proposal to revise the 1991 LCR, the EPA considered two different interpretations of "control", one interpretation that would require replacement of the system-owned portion of the service line along with an offer to replace the customer-owned portion at the customer's expense, and another interpretation that would require replacement of the system-owned portion of the service line as well as any additional portions the system has the authority to replace. In the final LCR published in 2000, the EPA expressed concern that the broader definition of control "could result in unintended delays and other complications" and, therefore, the "EPA believe[d] it [was] appropriate to equate 'control' with 'ownership' to eliminate potential legal confusion and delays in implementing the Rule" (65 FR 1950, 1962, USEPA, 2000a).

As discussed in the LCRI proposal, since the 2000 LCR rulemaking, there are many examples of water systems that have carried out successful service line replacement programs to fully replace LSLs regardless of ownership status. There are several documented examples of systems that have completed or made substantial progress

conducting full replacement of service lines not entirely owned by the system, including Denver, CO, Flint, MI, Trenton, NJ, York, PA, and projects in multiple communities through the Massachusetts Water Resource Authority (USEPA, 2024d). Additionally, the proposed LCRI includes several examples of communities that changed local ordinances to facilitate full replacement in areas where service lines are not entirely owned by the system (88 FR 84926, USEPA, 2023a). Additionally, States have passed laws to facilitate full service line replacement. For example, Pennsylvania passed laws to allow rate funds to be used to replace LSLs on private property that did not change ownership of the service line or impose any other duties following system funding or replacement of the service line, unless determined to be necessary by the system (Pennsylvania General Assembly, 2017). The proposed LCRI also describes the two laws New Jersey passed to facilitate full service line replacement both financially and with respect to private property access. The laws grant municipalities the authority to adopt an ordinance that allows water systems to enter private property to conduct LSLR (Ruiz, 2019) and authorizes them to replace LSLs on private property if the work is an environmental infrastructure project and funded either by loans from the New Jersey Infrastructure Bank or by loans issued through the New Jersey Department of Environmental Protection (State of New Jersey, 2020). Since the proposed LCRI was published, an Indiana law requires water utilities to work with the owners of buildings, structures, or dwellings with LSLs to replace their portions of the service line upon request by the water utility (Indiana General Assembly, 2024). If the owner refuses or does not respond, the utility or the utility's agent may enter the property to replace the customer's portion of the LSL without the owner's permission or to disconnect water service to the property if prevented by the owner. Under the law, the non-owner occupant of a property can grant physical access for service line replacement, where the utility and occupant are "held harmless" by and not liable to the property owner with respect to the entry or replacement (Indiana General Assembly, 2024). These State laws do not change ownership of the service line but show that water systems can obtain access to conduct full service line replacement without owning the line.

Some commenters recommended that the EPA explicitly state in the rule that water systems control all service lines based on an assumption that without that assertion, LSLs will remain in use around the country. The EPA does not have the authority to assert in an NPDWR that a water system has control of any particular part of the system's distribution facilities, such as all service lines. The examples provided in the previous paragraph from Pennsylvania, New Jersey, and Indiana highlight ways States and local governments can change laws or ordinances to facilitate water system access to conduct full service line replacement. In addition, the EPA is finalizing several rule requirements and flexibilities that may lead to an increase a water system's access to conduct full service line replacement (see section IV.B.3.a of this preamble).

Finally, the significant Federal funding sources, such as the \$15 billion from the BIL, can help increase water system access to conduct full service line replacement. For example, property owners may be more likely to agree to replace their portion if the cost is subsidized or offered at no cost. (See section III.G of this preamble on funding for service line replacement.) Additionally, the final rule's public education requirements may increase customer access where property owner consent is legally required to obtain access to conduct a full service line replacement. (See sections IV.B.3.a and IV.J.2.a of this preamble and "Public Education and Engagement" in the proposed LCRI preamble (88 FR 84921, USEPA, 2023a) for more information and examples of systems that have increased customer participation in service line replacement programs through their public education.)

c. Final Rule Requirements

In the final rule, where a water system has access (e.g., legal access, physical access) to conduct full lead or GRR service line replacement, the service line is under its control, and the system must replace the service line. Where a water system does not have access to conduct full service line replacement, the water system is not required by this rule to replace the line, but the water system must document the reasons why the water system does not have access. The EPA is not including specific provisions to delineate where a system has access to conduct a full replacement. Annually, the system must submit to the State documentation of the reasons for each line that is not replaced due to lack of access. Along with other information listed in

§ 141.90(e)(8), the system must annually submit to the State the total number of lead and GRR service lines that are not replaced because the system does not have access to conduct full replacement. The water system must identify any laws, regulations, and/or water tariff agreements that affect the water system's ability to gain access to conduct full lead and GRR service line replacement, including the citation to the specific laws, regulations, or water tariff agreement provisions and include them in their service line replacement plan as well as the publicly accessible version of the plan.

The final LCRI requires that where a water system has access to conduct a full service line replacement only if property owner consent is obtained, the water system must make a "reasonable effort" to obtain property owner consent. A reasonable effort must include at least four attempts to engage the property owner using at least two different methods of communication (e.g., in-person conversation, phone call, text message, email, written letter, postcard, or information left at the door such as a door hanger) before the applicable deadline of mandatory service line replacement. The State may require systems to conduct additional attempts and may require specific outreach methods to be used. Within six months of any change in ownership of the property, the water system must offer full service line replacement to any new property owner. Within one year of any change in ownership of the property, the system must make a "reasonable effort" to obtain the property owner's consent. The EPA expects that changes in property ownership have likely occurred when water service is initiated or service is transferred such as when there is a customer name or an account change on a water billing account. If the water system is unable to obtain consent from the current property owner after making a "reasonable effort" to obtain it, the water system is not required under the LCRI to replace the line. This requirement applies to systems until all lead and GRR service lines are replaced in the distribution system. Annually, the system must submit to the State documentation of each reasonable effort conducted where the system was not able to obtain property owner consent where consent is required by State or local law. The submission for each documented reasonable effort is required by the January 30 after the system has completed all four (or more, if required) attempts to engage the property owner as described in

§ 141.84(d)(3)(i) and, if applicable, the January 30 after the specified timeframe (e.g., within one year of any change in property ownership).

4. Payment for Full Service Line Replacement

a. Rationale and Proposed LCRI Revisions

As noted above, the 1991 LCR and 2021 LCRR include statements affirming that, while water systems must offer to replace the customer's portion of a service line, systems are not required to bear the cost of replacement of the portion of the LSL not owned by the water system. For the LCRI proposal, the EPA removed these statements from the regulation, recognizing that how a water system covers the costs of compliance with an NPDWR cannot be Federally mandated by the EPA in an NPDWR under SDWA. The EPA does not have statutory authority to allocate payment; rather, State and local governments regulate how water systems provide and charge for services to their customers. Consistent with this approach, the proposed rule did not include a prohibition on cost sharing for full service line replacement. While the EPA strongly encourages systems to offer full service line replacement at no cost to the customer, a prohibition on cost sharing in the rule is outside the EPA's authority and would result in a lengthy legal challenge creating uncertainty that would delay implementation of the rule and further delay service line replacement.

b. Summary of Public Comments and the EPA's Response

Some commenters recommended that the EPA require water systems to pay for full service line replacement or to prohibit cost sharing, highlighting potential environmental justice concerns for customers who are unable to afford to replace their portion of the service line. The EPA strongly encourages water systems to offer full service line replacement at no cost to the customer; SDWA does not provide authority for the agency to direct how a water system covers the costs of compliance with an NPDWR and the EPA has not used its section 1412 authority under SDWA to do so. This is a matter of State and local law, as the State and local governments regulate how water systems provide and charge for services to their customers. The EPA remains concerned, as it did in the proposal, that any attempt to use an NPDWR to assert Federal authority over how water systems charge for their services would be met with a protracted

legal challenge that would delay implementation of the rule and further delay service line replacement. Thus, the final rule does not prohibit cost sharing or mandate how water systems must pay for customer-side service line replacements.

The EPA strongly encourages customer-side service line replacement to be offered at no direct cost to the customer wherever possible. Subsidizing customer-side service line replacement in whole or in part may result in higher overall participation in the replacement program and potentially reduce disparities created where service line replacement is less accessible to lower-income individuals (Baehler et al., 2022; Environmental Defense Fund (EDF), 2020). The EPA highlights the significant Federal funding available that can facilitate full service line replacement (see section III.G of this preamble).

c. Final Rule Requirements

The final rule eliminates regulatory text stating that water systems are not required to bear the cost of replacement of the portion of the service line that they do not own. The EPA strongly encourages water system to offer full service line replacement at no direct cost to the customer wherever possible, but this is not a requirement of the LCRI. The final LCRI remains neutral on how water systems provide and charge for services to their customers.

5. Partial Service Line Replacement

a. Rationale and Proposed LCRI Revisions

Research shows that partial service line replacement does not reliably reduce lead levels in drinking water and can sometimes temporarily increase these levels (Deshommes et al., 2017; USEPA, 2011a). For the LCRI, the EPA proposed prohibiting partial service line replacements unless conducted in coordination with emergency repair or planned infrastructure projects that affect the service line. Planned infrastructure work could include water infrastructure or capital improvement projects that do not solely replace lead and GRR service lines as part of a service line replacement program. Examples include, but are not limited to, water main replacement, meter replacement, and transportation-related construction projects. The proposed prohibition was intended to “ensure that the rule itself does not cause additional partial replacements to be conducted solely for the purpose of LSL or GRR service line replacement” (88 FR 84918, USEPA, 2023a), which could

cause negative public health outcomes. While partial service line replacement has the potential to temporarily increase lead levels in drinking water, an outright ban on the practice could be infeasible (USEPA, 2020e). For example, water systems conducting emergency main replacement may require the removal of at least a portion of the LSL due to the alignment or spacing requirements to connect the new main with existing service lines (USEPA, 2020e; USEPA, 2023i). Additionally, in the case of some emergency repairs, a partial replacement may be necessary to ensure prompt restoration of water service to the consumer. Water service is critical to public health as it provides water for drinking, cooking, and sanitation. Water systems that conduct full service line replacement in coordination with planned infrastructure work may realize public health benefits, efficiencies, and cost savings; however, the agency recognizes that there may be barriers to a system’s access to service lines on private property. In the proposed rule, the EPA sought comment on this approach to limiting, but not prohibiting all partial service line replacements, and whether the exclusion should be limited to only certain types of infrastructure work.

Lead and GRR service lines are likely to undergo significant disturbance as a result of planned infrastructure work or emergency repairs, thereby increasing the risk from all lead sources that remain following the emergency repair or infrastructure work. To address the increased risk from this disturbance, the EPA proposed to retain the 2021 LCRR notification and risk mitigation requirements for partial service line replacement, including requirements for the system to notify the consumer of the risks of the partial replacement and actions they may take to minimize lead exposure, provide a pitcher filter or point-of-use device certified to reduce lead in drinking water and six months’ worth of replacement cartridges, provide flushing instructions, and offer to take a tap sample between three and six months following the completion of the partial replacement. The LCRI also proposed to require water systems conducting a partial replacement to install a dielectric coupling separating the remaining portion of the service line and the new portion of the service line, unless the new portion is made of plastic. A dielectric coupling between the replaced line and the partial lead or GRR service line reduces the risks of galvanic corrosion between lead and other metallic pipes that causes lead release as documented in previous lab-

scale studies (DeSantis et al., 2018; Triantafyllidou and Edwards, 2011; Wang et al., 2012). Multiple laboratory experiments using harvested pipes showed substantial decreases in lead release when the electric connection is broken or dielectric couplings are inserted (Clark et al., 2013; St. Clair et al., 2016; Wang et al., 2013), demonstrating the value of requiring the insertion of such couplings. This is consistent with the EPA’s Science Advisory Board (SAB) 2011 report that “[i]nsertion of a lead-free dielectric eliminates galvanic corrosion at the new pipe junction by breaking the electrical circuit between the new and old pipes,” concluding that “insertion of a dielectric will likely reduce lead levels in tap water”; although, the SAB also noted that “it cannot confidently estimate the magnitude of the reductions because the contribution of galvanic corrosion and depositional corrosion to drinking water lead levels has not been quantified” (USEPA, 2011a).

The EPA proposed in the LCRI to retain the 2021 LCRR requirements that apply to a water system when a customer initiates a partial replacement of an LSL. If the water system is notified that a customer intends to conduct a partial lead or GRR service line replacement, the system must replace the remaining portion of the line within 45 days (or notify the State within 30 days to complete the replacement no later than 180 days) of the date the customer conducted the partial replacement and provide notification and risk mitigation measures. The EPA also proposed in the LCRI to retain the 2021 LCRR requirement that, if the system is notified or otherwise learns of a customer-initiated replacement that has occurred within the previous 6 months, the system must replace any remaining portion of the affected service line within 45 days of becoming aware of the replacement and provide notification and risk mitigation measures.

b. Summary of Public Comments and the EPA’s Response

Some commenters agreed with the proposed approach of banning partial service line replacement unless conducted as part of an emergency repair or in coordination with planned infrastructure work, stating that partial replacement may be necessary in some emergency scenarios and in coordination with planned infrastructure work; for example, if a disturbance to the service line is unavoidable and the water system cannot gain access to conduct a full lead

service line replacement (*e.g.*, a customer refuses to allow replacement of the customer-owned portion of the service line). Other commenters thought partial replacements should be banned in all situations, including as part of an emergency repair, or that they should be banned in all situations except as part of an emergency repair. These commenters highlighted the potential for partial replacements to result in temporarily elevated lead levels in drinking water and potential disproportionate impacts to customers who cannot afford to replace their portion of the service line.

While partial replacements can cause lead levels to temporarily increase, the EPA shares commenters' concerns about potentially disproportionate impacts to customers who cannot afford to replace their portion of the service line where water systems require customer cost sharing. The final rule does not prohibit all types of partial replacements because the EPA is concerned that an outright ban on partial service line replacement is infeasible. For example, water main replacement may require the removal of at least a portion of the LSL due to the alignment or spacing requirements to connect the new main to existing service lines (USEPA, 2020e; USEPA, 2023i), and maintaining water service is critical to public health as it provides water for drinking, cooking, and sanitation. The EPA recognizes there are situations following planned infrastructure work or emergency repair in which full service line replacement is not possible, such as when the water system is prohibited by law from replacing all or a portion of the service line without customer consent and the customer has not provided consent. While the final LCRI does not further limit the circumstances when partials may occur following emergency repair or planned infrastructure work (other than to exclude service line replacement projects from planned infrastructure work), the EPA has clarified in the final rule where a water system has access to conduct full service line replacement, the system must fully replace the service line. The EPA has also clarified in the final LCRI for protocols for planned partial service line replacement (*i.e.*, planned infrastructure work that impacts service lines) that where a system has access to conduct full service line replacement only if property owner consent is obtained, the water system must make a "reasonable effort" to obtain property owner consent. The EPA strongly encourages water systems to create plans, such as by developing standard operating

procedures, for planned infrastructure work, emergency repair, and planning for contingency costs should lead service lines be discovered.

Instead of prohibiting the water system from conducting a partial replacement in planned infrastructure work or emergency repair, the final rule requires the water system to take risk mitigation measures to minimize the risk of lead exposure in drinking water to the persons served by the affected service line, including providing public education, a filter and replacement cartridges certified to reduce lead in drinking water, and an offer to take a follow-up tap sample after replacement. In addition to these mitigation measures, the final rule requirements for the service line inventory, replacement plan, and public education as well as the EPA-administered financial assistance for full LSLR are aimed at reducing the likelihood that water systems will need to conduct partial service line replacements as part of an emergency repair or in coordination with planned infrastructure work. A discussion of the requirements and support to facilitate systems gaining access to conduct full service line replacement is included in section IV.B.3 of this preamble.

The EPA notes that full service line replacement is also a goal of the DWSRF. While full LSLR is the desired outcome of all DWSRF assistance for LSLR, the logistics involved with coordinating LSLR with planned infrastructure projects may dictate that partial replacement of a service line is necessary if disturbance to the service line is unavoidable and the water system cannot gain access to conduct a full lead service line replacement (*e.g.*, a customer refuses to allow replacement of the customer-owned portion of the service line). For the purposes of oversight and confirming eligibility, State programs must require borrowers to document customer refusals, which could consist of any of the following: a refusal signed by the customer, documentation of a verbal statement refusing replacement, or documentation of no response after multiple attempts to reach the customer regarding full LSLR. State programs are required to report this information to the EPA (USEPA, 2024i).

A partial LSLR may only be funded by the DWSRF where the water system shows all of the following: that the partial LSLR is done in conjunction with planned infrastructure work, that disturbance to that service line is unavoidable because of the planned infrastructure work, and that the water system has documented customer

refusal showing it cannot gain access to that property to conduct a full LSLR following multiple attempts (USEPA, 2024i).

Some commenters also recommended that the EPA not prohibit partial service line replacement under any circumstances and highlighted the effectiveness of public education and risk mitigation measures to reduce exposure following the elevated lead levels that can result from a partial replacement. The EPA does not agree that partial service line replacement should be permitted under all circumstances. The prohibition in the final rule ensures that water systems do not conduct any partial replacements that would occur outside of an emergency repair or coordination with planned infrastructure work that impacts service lines and that is not solely service line replacement. Partial replacement has not been shown to reliably reduce lead levels and is known to temporarily increase them. In some cases, increases in lead levels could extend over longer timeframes (Dore et al., 2019). Although the final rule requires water systems to provide information and filters to consumers to reduce their risk to lead exposure where partial replacements are unavoidable, these requirements are short-term measures, and the EPA emphasizes the importance of its prohibition of partial replacements except in certain circumstances. The EPA considers avoiding the short-term increases in lead levels caused by partial replacements preferable to conducting risk mitigation measures to reduce lead levels after a partial replacement. Lead exposures continue to remain when partial replacements occur. In addition, risk mitigation measures such as filters or flushing protocols may not always be utilized by or correctly implemented by consumers. For example, existing flushing procedures that call for 30 minutes of flushing at every tap in the home, to be repeated every two weeks, (*i.e.*, AWWA, 2017) may be challenging to follow, time intensive, and expensive for some consumers.

Some commenters were concerned that the requirement for water systems to replace the remaining portion of a service line when a customer initiates replacement of their private side service line could worsen environmental justice impacts by allowing customers who can pay for their replacement to "jump the line" as opposed to those who cannot afford to conduct their own private-side replacement. While the EPA appreciates these environmental justice concerns, the increases in lead levels following a customer-initiated partial lead or GRR

service line replacement could pose an increased risk of adverse health effects, and this risk will be highest immediately following the replacement. Thus, replacing the system's portion of the affected service line and providing notification and risk mitigation measures as required is necessary to prevent adverse health effects to the extent feasible.

c. Final Rule Requirements

The final LCRI defines partial service line replacement as the replacement of any portion of a lead or GRR service line that leaves in service any length of lead or GRR service line upon completion of the work. The final rule prohibits water systems from conducting partial service line replacement, except when the replacement is conducted as part of an emergency repair or in coordination with planned infrastructure work that impacts service lines (excluding planned infrastructure work solely for the purposes of lead or GRR service line replacement). The final rule clarifies that where a water system has access to conduct full service line replacement the water system must fully replace the service line. Where a water system conducts a partial lead or GRR service line replacement, the system must install a dielectric coupling separating the remaining service line and the newly installed service line, unless the newly installed service line is made of plastic. Where a water system conducts partial service line replacement, the final rule requires the system to comply with the notification and risk mitigation requirements.

Where a partial replacement is to be conducted in coordination with planned infrastructure work that impacts service lines, the system must notify the property owner, or the owner's authorized agent, as well as non-owner occupant(s) served by the affected service line at least 45 days prior to the replacement and offer the opportunity to fully replace the service line. Before the affected service line is returned to service, the water system must provide the consumer with the following: written notification that explains that the consumer may experience a temporary increase of lead levels in their drinking water due to the replacement; contact information for the water system; written information about a procedure for the consumer to flush service lines and premise plumbing of particulate lead following the partial replacement; and a pitcher filter or point-of-use device that is certified by an American National Standards Institute (ANSI) accredited certifier to reduce lead along with six months'

worth of replacement cartridges. The final rule clarifies that where a water system has access to conduct full service line replacement only if property owner consent is obtained, the water system must make a "reasonable effort" to obtain property owner consent to replace the remaining portion of the service line. The reasonable effort must be completed before the partial lead service line replacement.

Where partial service line replacement is conducted due to an emergency repair, systems must provide the same notification and risk mitigation measures to consumers as when conducting a planned partial replacement before the line is returned to service; however, the system must offer to replace the remaining portion of the service line created by the emergency repair within 45 days.

Where the customer intends to replace their portion of a lead or GRR service line, the final rule requires that water systems replace their remaining portion of the service line at the same time as, or as soon as practicable after, but no later than 45 days from the date the customer conducted their partial replacement and provide notification and risk mitigation measures. The water system must notify the State within 30 days to complete the replacement no later than 180 days from the date the customer conducted their partial replacement. Where the water system is notified or otherwise learns that a customer-initiated replacement occurred within the previous six months, the system must replace any remaining portion of the service line within 45 days from the day of becoming aware of the customer-initiated replacement as well as provide notification and risk mitigation measures within 24 hours of becoming aware of the customer-initiated replacement. Where the water system is notified or otherwise learns of a customer-initiated replacement that occurred more than six months in the past, the LCRI does not require the system to replace the remaining portion of the service line within a certain number of days. Instead, the remaining portion of the lead or GRR service line must be identified in the system's inventory and replaced as part of mandatory service line replacement. For any replacement prompted by a customer-initiated replacement, the final rule requires notification and risk mitigation measures be provided to the persons served by the affected service line.

In the final LCRI, partial service line replacement does not count towards mandatory full service line replacement.

On an annual basis, water systems must report to the State the number of partial lead and GRR service line replacements that have been conducted in the preceding program year and the address associated with each partial replacement (§ 141.90(e)(8)(iii)). Water systems must also annually update that number in their inventories. Public education to notify customers of their service line material must continue annually until the entire lead or GRR service line is replaced. Within six months of any change in ownership of the property, the system must first reach out to the new owner with an offer to replace the remaining lead or GRR portion of the service line. Systems may use new service initiation or service transfer to a new customer to identify when there is a change in ownership. Within one year of any change in ownership of the property, the system must make a reasonable effort to obtain the property owner's consent to conduct full service line replacement. If the new property owner declines the replacement, the water system must continue to provide annual notification of their service line material until the entire lead or GRR service line is replaced.

The final rule requires the provision of filters following partial service line replacement to mitigate potential increases in lead release to drinking water. These requirements are intended to further protect public health in the event of increased lead release following a disruption of the scale caused by these events.

6. Time Frame for Full Service Line Replacement

a. Rationale and Proposed LCRI Revisions

Under the LCR, systems must conduct LSLR after the system exceeds the lead action level at a rate of seven percent per year, corresponding to a 15-year deadline to replace all LSLs. However, the rule allowed systems to use partial LSLR and sampling ("test-outs") for individual service lines to count toward the replacement rate. Under the 2021 LCRR, systems must replace the entire service line at a rate of three percent per year if they exceed the lead action level, corresponding to an approximately 33-year deadline to replace all lead and GRR service lines. The 2021 LCRR does not allow partial replacement and "test-outs" to count towards the replacement rate.

For the proposed LCRI, the EPA proposed a 10-year deadline for water systems to replace all lead and GRR service lines under their control. In

recognition of the wide variation among systems with respect to the number and proportion of lead and GRR service lines in their distribution systems, the proposed LCRI included two provisions to adjust the time frame for LSLR. To ensure that the rule meets the statutory standard for a treatment technique rule to “prevent known or anticipated adverse effects on the health of persons to the extent feasible,” the EPA proposed to retain the requirement that the State establish a shortened deadline if the State determines it is feasible for a water system (e.g., by considering the number of lead and GRR service lines in a system’s inventory) (see section IV.B.7 of this preamble). To ensure that the rule’s service line replacement deadline is not infeasible for systems with a large number or proportion of lead and GRR service lines, the EPA proposed provisions for systems to apply for a deferred deadline (see section IV.B.8 of this preamble).

For the proposed LCRI, the EPA utilized new evidence available after the promulgation of the 2021 LCRR to determine the feasibility of conducting full service line replacement by a set deadline. During the development of the 2021 LCRR, there was a lack of data regarding the number of lead and GRR service lines in systems as well as very few broad service line replacement mandates in large geographic regions, or State laws requiring such. The EPA was only aware of a limited number of systems that had or were proactively conducting service line replacement. For the proposed LCRI, however, new and higher quality evidence and data were available to more accurately assess the feasibility of requiring full service line replacement by a set deadline. Many systems have documented the voluntary completion of both service line inventories and full service line replacement programs (USEPA, 2023a; USEPA, 2023k). In addition, four State (Illinois, Michigan, New Jersey, and Rhode Island) service line replacement laws suggest that States expect broad, mandatory service line replacement by a set deadline to be “technically possible” given the thousands of systems required to conduct service line replacement simultaneously within and across these States. Specifically, Michigan requires replacement of all lead and galvanized previously downstream of LSLs starting in 2021, to be completed by 2041. Illinois requires replacement of all LSLs starting in 2027, with the timeline determined by the number of lead and galvanized lines (if the galvanized lines are downstream of lead). Both New Jersey and Rhode

Island require all LSLs and galvanized service lines (irrespective of whether there is or was an upstream LSL) to be replaced in 10 years unless the system is granted an extension by the State (State of New Jersey, 2021a; State of Rhode Island, 2023a). Michigan and New Jersey have several years of experience implementing their service line replacement laws that were promulgated in 2021, demonstrating the feasibility of the States’ replacement requirements. The EPA notes that these four States have approximately one-fifth of the lead content service lines in the country (1.9 lead content lines out of 9.0 million estimated lead content lines) and have among the most LSLs in the country (USEPA, 2023l; USEPA, 2024n). Finally, BIL and other funding has become available after the 2021 LCRR promulgation to support lead and GRR service line replacement projects, which in turn further supports the feasibility of setting a 10-year replacement deadline because this requirement is a primary driver of the proposed rule costs.

For the LCRI proposal, the EPA’s feasibility analysis used data from official sources documenting service line replacement rates that had been achieved in systems nationwide. The EPA used data from 30 systems serving more than 50,000 persons that had maintained proactive LSLR programs to ensure the resulting rate reflected the technically possible rate of replacement that may reasonably be afforded by a large system; in doing so, EPA used the definition of “large system” that has historically been used in the LCR, such as for CCT requirements. The EPA then normalized the systems’ replacement rates by the estimated number of households served by each water system. The EPA calculated the 95th percentile of the annual replacements per households served to set as the national threshold reflecting the fastest feasible annual replacements per household served that systems could achieve under a 10-year deadline, which equaled 0.039 annual replacements per household served. The EPA used the 95th percentile rather than the maximum rate achieved by any one of the 30 systems to avoid setting the per-household rate based on the rate achieved by an individual system as that may not accurately reflect the conditions at a wide variety of systems subject to the replacement requirements in the rule. The analysis also used the results of the 7th Drinking Water Infrastructure Needs Survey and Assessment (referred to as “Needs Survey”), which was conducted in 2021. The data was published and used

in the feasibility analysis in 2023 (USEPA, 2023l), providing better estimates on the number of lead, GRR, and unknown service lines in individual systems and nationwide than were available during the development of the 2021 LCRR. The EPA used data from the Needs Survey to estimate the number of systems that would exceed the 0.039 annual replacements per household served threshold and determined that mandatory service line replacement in 10 years or less is technically possible and affordable for 96 to 99 percent of all systems (USEPA, 2023k).

b. Summary of Public Comments and the EPA’s Response

Several commenters suggested that the 10-year deadline is not practical or feasible. Some comments simply asserted, without explanation, that a 10-year deadline was not feasible. Other commenters stated that the EPA had not adequately demonstrated feasibility, that the 10-year deadline was not feasible without the availability of substantial additional funding, and that the systems used in the feasibility analysis were not appropriate for determining replacement feasibility for typical systems under the LCRI. The EPA disagrees that feasibility of a 10-year replacement deadline was not adequately demonstrated. In the feasibility analysis for the proposed rule, as in the updated analysis for the final rule, the EPA examined annual replacement rate data from water systems that are conducting or have finished conducting service line replacement. Due to the complexity of service line replacement and the numerous variables that affect replacement rates, many of which are specific to each water system or even each site within a water system, modeling or projecting future service line replacement rates is highly uncertain. Thus, basing the feasibility analysis on available data from replacement programs that have already been conducted by real world systems provides the soundest basis for evaluating the technical possibility and affordability of mandatory service line replacement requirements and for establishing a deadline in a national rule covering a wide variety of systems (also see preamble sections IV.B.7 and IV.B.8 for shortened and deferred deadlines).

The EPA considered comments on data for use in the agency’s analysis, such as whether the EPA should include replacement rate data from systems with “exceptional” circumstances, systems serving 50,000 persons or fewer, and

four water systems that provided data in their public comments. Details on each aspect of the feasibility analysis are provided in subsequent paragraphs. In summary, the final LCRI's updated feasibility analysis excluded replacement rate data from Newark, NJ, and included replacement rate data from systems serving populations greater than 10,000 persons and from three of the four systems that provided replacement rate data.¹¹ In total, the dataset used for the final rule's service line replacement feasibility analysis included replacement rates from 44 water systems. The 95th percentile of these data is 39 annual replacements per 1,000 service connections (see section IV.B.8 of this preamble for an explanation on the use of service connections instead of households served). This information demonstrates that, based upon the best available service line replacement data, it is technically possible and affordable for water systems to replace lead and GRR service lines at a rate of 39 annual replacements per 1,000 service connections (USEPA, 2024d).

Some commenters suggested that the EPA should not use systems with "exceptional" circumstances, such as Flint, MI, and Newark, NJ, in its analysis because they claimed that the average system would not be able to complete service line replacement as quickly as these systems. These commenters asserted that these water systems were exceptional because they had significant external financial subsidies, were in the midst of much larger lead in drinking water crises, and had taken steps to initiate their replacement programs prior to the construction period referenced in the EPA's analysis. These commenters also pointed out that inclusion of these "exceptional" systems in the dataset influence the per-household threshold, even when using the 95th percentile, and that they should be excluded from the dataset entirely to avoid any influence on the per-household rate threshold.

The EPA acknowledged in its feasibility analysis for the proposed LCRI that two systems (Flint, MI, and Newark, NJ) received substantial external funding. For the proposed LCRI, the EPA selected the 95th percentile of the per-household rate to set the fastest feasible rate while

avoiding setting the rate at the maximum recorded annual replacements per household rate of a single system. For the final LCRI, the EPA considered the replacement rate data for both Flint, MI, and Newark, NJ, separately as described below.

With respect to Newark, NJ, the EPA became aware after publication of the proposed rule of an ongoing formal investigation by the City of Newark and the NJ Department of Environmental Protection (DEP) into whether a contractor for the Newark LSLR program conducted partial service line replacements instead of full replacements in some homes (City of Newark, 2024). The formal audit is seeking to determine the number of partial replacements that may have taken place (City of Newark, 2024). The uncertainties associated with ongoing audit of the Newark LSLR data could potentially affect the rate at which full service line replacement was conducted because a partial service line replacement could be completed more quickly than a full replacement. As of August 2024, the results of the audit are not yet available. Because of the new uncertainty this investigation raises with respect to the Newark data and the importance of moving expeditiously to promulgate the final LCRI, the EPA has excluded the replacement rate data from Newark, NJ, from the quantitative analysis for determining the feasibility threshold rate for service line replacement. Nevertheless, Newark's LSLR program provides qualitative evidence in support of finding that it is technically possible to conduct a full service line replacement program across a large metropolitan or regional PWS in a short period of time. For example, Newark employed 20 service line replacement crews simultaneously during their program to replace more than 20,000 lead and GRR service lines in less than three years (City of Newark, 2020).

With respect to Flint, MI, the EPA disagrees with commenters that the City's replacement rate data should be excluded from the dataset used to calculate the feasible rate threshold. Flint received financial and technical assistance for its replacement program as well as substantial press coverage; however, the EPA does not agree that this support and media coverage warrant exclusion from the feasibility analysis. The replacement rate data in Flint represents the annual replacements per 1,000 service connections averaged over the period from 2016 to 2022, when the City of Flint reported having replaced 97 percent of its service lines requiring

replacement (City of Flint, n.d.). Thus, while nearly 8,000 of the approximately 10,000 replacements conducted in Flint were completed over a 2-year period between March 2016 and April 2018 (City of Flint, 2019), the EPA uses an average rate across six years in its feasibility analysis. Thus, the EPA's analysis uses an average annual rate that does not rely solely upon the initial replacement rates at the height of the lead crisis. In addition, while Flint received financial subsidies for service line replacement, data from the U.S. Census Bureau shows that Flint had a high poverty rate in 2015, measured at 41 percent (U.S. Census Bureau, 2015a). This is significantly higher than the 2015 national average poverty rate of 13.5 percent (U.S. Census Bureau, 2015b). Thus, other cities will have fewer economic challenges than Flint and may be less reliant on external funding to support service line replacement.

One commenter suggested that the proposed replacement rate and timeline are not feasible for large systems, particularly when "large" systems are defined as systems that serve more than 10,000 persons rather than those that serve more than 50,000 persons. The commenter noted that a system size of less than 10,000 persons served is used to assess "small system impacts under SBREFA and is also the breakpoint used in SDWA for small systems". In light of this comment, the EPA reconsidered its decision to assess feasibility based only on the 30 systems serving more than 50,000 persons in the proposed rule. In the final rule, the agency included an additional 12 systems (serving between 10,000 and 50,000 persons) in the analysis. Of these 12 systems, 10 are within metropolitan statistical areas as defined by the Office of Management and Budget (OMB) for statistical use (OMB, 2021), supporting that these systems may represent large metropolitan or regional PWSs. In addition, including such systems increased the sample size of the EPA's dataset, which can improve the assessment of feasibility of mandatory full service line replacement for a wider variety of systems. The EPA also agrees with the commenters noting that a cut off of 10,000 persons served aligns with the SDWA breakpoint for small systems and the small system impact analysis under SBREFA.

The EPA did not include replacement rate data identified from two systems serving 10,000 persons or fewer in the feasibility analysis for the final rule. In assessing the affordability aspect of feasibility for purposes of an NPDWR, the EPA evaluates costs to large

¹¹ Replacement rate data for one system was provided by a State, which did not include the name or any identifying information for the system. Therefore, the annual replacements per service connection or per household served could not be calculated, and data from this system was not included in the feasibility analysis (USEPA, 2024d).

metropolitan or regional PWSs, not small PWSs. Additionally, both small systems had substantially higher annual replacements per 1,000 service connections. Small systems having higher replacement rates is not unexpected in this scenario due to smaller systems having fewer service lines overall and, therefore, fewer lines to replace compared to larger systems. Individual service line replacement has generally similar cost and time needed regardless of system size. Despite potential resource limitations small systems may face, fewer lead and GRR service lines require less time and fewer resources, making 100 percent replacement relatively easier to complete for small systems than for large systems with similar percentages of lead and GRR service lines in their inventory. Additionally, service line replacement contrasts to centralized treatment operations, where the same treatment unit is employed at the treatment plant for different system sizes, and, therefore, systems can take advantage of the economy of scale present in installing and maintaining these treatments.

For the final LCRI, the EPA retained from the proposal the use of the 95th percentile to set the fastest feasible annual replacements per 1,000 service connections that water systems nationwide can achieve within 10 years. The EPA did not select the maximum number of annual replacements per 1,000 connections in the dataset to represent the fastest feasible rate because the agency did not intend for any single system with potentially unique circumstances to determine the rate for a broad range of systems covered by a national rule.

Commenters suggested that the EPA evaluate the feasibility of alternative deadlines to 10 years. Some commenters suggested a shorter deadline, such as five years or eight years, to ensure that no system that could meet an earlier deadline would fail to do so. Other commenters suggested longer deadlines (such as 15 years), suggesting that 10 years is not feasible. After consideration of all the comments and the available data, the EPA determined that 10 years is at feasible deadline for most systems (USEPA, 2024d). Under the statute, the final LCRI must meet the standard of preventing lead health effects “to the extent feasible,” which means that the service line replacement rate must be both feasible and the fastest feasible. If a shorter national deadline was set, such as five years, this would compromise implementation of the rule since a larger number of systems would be eligible for a deferred deadline under the final rule

criterion or seek exemptions or variances. Setting a shorter deadline nationwide in the rule could also impact States and some water systems’ ability to effectively comply with other aspects of the rule to support and manage an effective replacement program, including the inventory development and validation and maintenance of an updated service line replacement plan. In addition, a more compressed schedule for all systems nationwide could more significantly impact supply chains for materials as well as impact worker availability, which some commenters raised as areas of concern. All of these factors indicate that a national deadline shorter than 10 years could be infeasible for many water systems across the United States. The EPA maintains that for some individual water systems, such as those with a small proportion or total number of lead and GRR service lines, a rate faster than 10 years could still be feasible.

Furthermore, using the 10-year replacement deadline helps streamline the rule and facilitate implementation, a priority identified in the 2021 LCRR review. The 10-year deadline represents the EPA’s best approximation of the fastest feasible service line replacement rate for most systems, and therefore, it is the default deadline. In recognition of the strong possibility that depending on the specific circumstances, which may evolve over time, many systems will be able to replace all their lead and GRR service lines even faster than their replacement deadline (*i.e.*, 10 years, deferred deadline), the LCRI requires States to set shortened deadlines where it is feasible. For example, for systems with a small proportion of lead and GRR service lines, it may be feasible to complete replacement within a much shorter period than 10 years and at a more rapid rate than 10 percent of lines per year. In addition, it may be less efficient to conduct replacement over a 10-year period than a shorter timeline. For example, Central Arkansas Water, which serves approximately 205,000 service connections, identified and replaced all 115 remaining LSLs in 14 months. A 10-year replacement program for this system would lead to approximately 12 service line replacements per year, which is less efficient and could lead to an increased need of resources considering replacement crews would be needed over a much longer period of time (Sweeney, 2020; Central Arkansas Water, 2022).

In addition to failure to meet the “feasibility” requirements in the statute, a shorter mandatory replacement deadline in the final LCRI would likely

result in a greater number of water systems seeking exemptions from the treatment technique requirements. Systems may seek an exemption from the LCRI’s treatment technique to obtain additional time to complete their service line replacement programs in accordance with requirements under §§ 142.50 through 142.57. To obtain an exemption, systems must expend resources demonstrating eligibility for the exemption. States and the EPA would need to expend resources to evaluate the exemption request, hold public hearings, and consider the public input prior to approving or denying an exemption providing a later compliance date. The EPA thinks that system, State, and EPA resources are better expended on inventorying and replacing lead and GRR service lines than evaluating exemptions. The EPA’s decision to establish a 10-year replacement deadline with limited criteria for extensions will also reduce the resources spent issuing exemptions for the requirements.

Commenters recommended that instead of a national deadline established in the LCRI, the replacement rate for each State or system be determined at the State or local level on a case-by-case basis, as these entities would have a better understanding of system specific challenges or advantages that would allow them to determine the fastest feasible rate. While no single deadline in a national-level regulation can represent the fastest feasible deadline for each of the nearly 66,000 individual systems nationwide that are required to comply with the LCRI, the EPA disagrees that replacement rates should be solely determined at the State or local level. States or local levels of government determining deadlines would make implementation more challenging, place significant burden on States to determine either State- or system-specific deadlines, and complicate State oversight with a resulting hodge-podge of deadlines. The LCRI’s approach of a 10-year deadline that may be adjusted up or down is essentially a hybrid approach of single deadline and a case-by-case determination that best meets SDWA standards for a NPDWR, while giving due consideration to the variability among systems, and is more streamlined and implementable than a case-by-case determination. While States may be in a better position to determine an individual system’s unique characteristics and challenges, it is beyond their resource capacity to make this determination on a case-by-case basis for each system and unnecessary

in light of the EPA's feasibility analysis using actual data.

Some commenters recommended use of a binning system in the LCRI, similar to that employed in the Illinois LSLR requirements (which assigns systems to one of six default replacement deadlines based on the number of LSLs in a system), rather than a fixed rate and three-year rolling average. In the 1991 LCR, the EPA acknowledged that "it is difficult to determine a uniform, national replacement schedule applicable to all public water systems because the circumstances faced by systems can vary substantially, depending upon the number of lead lines in a system and system size" and that large systems with few lines could replace lines on the fastest schedule, while systems with high percentages of LSLs would take the longest to complete replacement (56 FR 26508, USEPA, 1991). For the 1991 LCR, the EPA had considered alternate ways to structure the LSLR rate to take into account system size and the number of LSLs in the system. The EPA found that such an approach, while accounting for various factors affecting feasibility for individual systems, can yield "inappropriate results" in some cases, requiring systems to complete replacement on an "inordinately fast" schedule that would not be feasible (56 FR 26460, USEPA, 1991). The 1991 LCR proposal gives the example where the number of replacements required per year corresponds to a fixed percentage (e.g., 10 percent) of the total number of service lines in the system. Under a construct where a system must replace 10 percent of all its service lines, a large system with 200,000 non-LSLs and 50,000 LSLs would need to replace all their LSLs in just 2.5 years (*i.e.*, replacing 20,000 LSLs per year at an annual rate of 40 percent) and there are no data to support that such a rate is feasible. The EPA also considered using a binning approach but determined it could create implementation challenges and add complexity to the rule, which runs counter to the priority identified in the 2021 LCRR review to simplify the rule. The final LCRI provides a single replacement rate but with some flexibility to shorten or lengthen schedules in individual cases; this is much simpler than a multiple bin scheme. Because a binning approach would add significant and unnecessary complexity to the rule and the LCRI already provides flexibility to alter the deadline in appropriate cases, the EPA has determined that the approach in the final rule, with a national 10-year deadline, and deferred deadline criteria

for a limited number eligible systems, and with the requirement for the State to set a faster rate where feasible, is a simpler and more implementable approach to assure LSLs are replaced at the fastest feasible rate.

i. Additional Discussion of Affordability

Some commenters stated that, because there exists substantial evidence of water systems conducting service line replacement, the technology itself is clearly affordable. The EPA agrees with commenters that service line replacement is an affordable technology, and the technology has been required by the rule since the 1991 LCR, albeit at differing scales. As noted previously, service line replacement is unlike centralized treatment in that the total cost is dependent upon the number of service lines replaced rather than the cost of the treatment itself. The cost per customer, if costs of replacement are spread to all rate-paying customers, is also dependent on the proportion of lead and GRR service lines to total service lines in the distribution system. Thus, based on the fastest feasible rate established by already completed service line replacements, 10-year service line replacement was demonstrated to be technically possible and reasonably afforded for approximately 98 percent of systems (see section IV.B.8 of this preamble for a discussion on deferred deadlines).

Some commenters suggested that replacement of all LSLs in 10 years would not be affordable for water systems because they would have to rely on the ability of their local communities to pay for replacements, that more State or Federal funding will be needed, or that the EPA had not adequately demonstrated affordability in the Economic Analysis of the proposed rule. The EPA disagrees that the 10-year deadline is not affordable and that the agency has not demonstrated its affordability. The final rule feasibility analysis for service line replacement examines replacement rates achieved by systems and concludes that the rates achieved in this analysis are the highest rates for which currently available data can demonstrate to have been reasonably afforded water by systems (USEPA, 2024d). As noted above, the analysis demonstrates that, based upon the best available service line replacement data, it is technically possible and affordable for water systems to replace lead and GRR service lines at a rate of 39 annual replacements per 1,000 service connections. While some of the identified systems received varying amounts of financial assistance to support service line replacement, the

EPA did not consider the availability of external funding in its calculation of household costs in the economic analysis. Costs of the service line replacement requirement were calculated over the entire 35-year period of analysis and per-household costs of implementation of the entire rule (not limited to LSLR) were estimated based on system size, water source, and ownership (see Exhibit 6 in section VI of this preamble for annualized service line replacement cost and Exhibits 7 and 8 for total rule cost per household). Implementation costs to systems and States were also considered in the affirmation of the cost-benefit determination (see Exhibit 10 of this preamble for total annualized rule cost including PWS and State implementation and section VI.F.3 of this preamble (Reaffirm Cost-Benefit Determination)). The EPA notes that there is significant funding available to support service line replacement, and the EPA expects that the additional funding from BIL will increase the affordability of the achieved replacement rates (see section III.G of this preamble for further discussion on funding).

c. Final Rule Requirements

The final rule establishes a 10-year deadline for water systems to replace all lead and GRR service lines under their control. In recognition of the wide variation among systems with respect to the number and proportion of lead and GRR service lines in their distribution systems, the final LCRI also includes provisions for systems to apply for a deferred deadline (see section IV.B.8 of this preamble) and provisions for States to require systems to replace all lead or GRR lines under a shortened deadline (see section IV.B.7 of this preamble).

7. Mandatory Service Line Replacement Rate

a. Rationale and Proposed LCRI Revisions

The 1991 LCR requirement to replace (or "test out" individual service lines) at a rate of seven percent per year is calculated on an annual basis (§§ 141.84(b)(1) and 141.90(e)(1) through (3)). The 2021 LCRR replacement requirements of three percent per year following a lead action level exceedance and at a "goal-based rate" determined by the State following a lead trigger level exceedance must be calculated using a two-year rolling average.

For the LCRI, the EPA proposed a minimum average annual replacement rate of 10 percent for most systems,

calculated as a 3-year rolling average. Water systems would be required to average the annual percentages of service lines replaced in the preceding three years of the replacement program, beginning at the end of the third “program year” and annually thereafter. The EPA proposed for a “program year” to be measured from the LCRI compliance date. The agency proposed a rolling average across a three-year period to account for stakeholder concerns about the potential annual variability and temporary disruptions or shortages that impede a system’s ability to replace service lines, such as supply chain delays, workforce limitations, natural disasters or extreme weather, and difficulties gaining access for full service line replacement. The EPA anticipated that this approach would provide water systems with flexibility during the initial years of their replacement programs to create and manage their programs, adjust and plan for market corrections in labor and supplies, apply for and obtain funding, and obtain advice on applicable laws, regulations, or water tariff agreements associated with the replacement of lead and GRR service lines. The EPA sought comment on how to calculate compliance with a service line replacement deadline and the average annual rolling rate construct, including the complexity of the construct.

The EPA proposed in the LCRI to require water systems to calculate the percent of service lines replaced for each year using the replacement pool and the annual number of service lines replaced. The proposed LCRI included requirements for water systems to calculate the baseline replacement pool by adding the total number of lead, GRR, and unknown service lines in the baseline inventory submitted by the compliance date. To calculate the number of lead and GRR service lines a system would need to replace in a given program year, the EPA proposed to require systems to divide the most up-to-date replacement pool by the total number of years allowed to complete mandatory service line replacement (e.g., 10 years). At the beginning of each replacement program year, water systems must update the replacement pool to account for inventory updates and recalculate the annual number of service line replacements needed to meet the replacement rate. The EPA proposed to require that water systems update their replacement pools by: (1) Subtracting unknown service lines that are identified as non-lead from the replacement pool and (2) adding any non-lead lines found to be lead or GRR

service lines. As proposed, unknown service lines identified to be lead or GRR service lines are recategorized in the replacement pool, but they do not change the number of lines because they have already been counted in the number of lines for determining the replacement pool.

The EPA proposed to not limit the replacement rate to service lines solely under the control of the system. The proposed rule did not permit water systems to subtract lead and GRR service lines that are not under the control of the system from the replacement pool nor count them towards the annual number of service lines replaced. All water systems are subject to mandatory service line replacement and must replace all lead and GRR service lines; however, systems are not required by this rule to replace lead and GRR service lines that are not under the control of the system. As discussed in section IV.B.3 of this preamble, control is not static, and service lines can come under the control of the system at any time as circumstances change. Counting lead and GRR service lines that are not under the control of the system as “replaced” provides water systems would not be appropriate as they could become under the control of the water systems as well as this would disincentivize systems from actively seeking opportunities to replacing these lines in the future such as outreach with community members, which does not protect public health to the extent feasible. The replacement pool provides the water system with a full account of the historic and current lead and GRR service lines in the system, regardless of the system’s access or lack thereof at one point in time, starting at the LCRI compliance date. Removing these lines from the replacement pool does not remove their risk to consumers.

The proposed LCRI also included requirements on what full lead and GRR service line replacements must count towards the number of service lines replaced and the average annual replacement rate. Full service line replacements would count towards the replacement rate in the following instances: (1) where the replacement results in the entire service line to be categorized as non-lead in the inventory, (2) where a non-lead service lines is installed for use and the lead or GRR service line is disconnected from the water main or other service line, and (3) where the system physically disconnects a service line that is not in use and does not install a new non-lead line because there is no service line in use (the system must not reconnect the

line to resume service). Service line replacements would not count towards the replacement rate in the following instances: (1) Where the service line is partially replaced, (2) where a lead, GRR, or unknown service line is determined to be non-lead, (3) where only a lead connector is replaced, and (4) where pipe lining or coating technologies are used while the lead or GRR service line remains in use. The EPA proposed for unknown service lines identified as non-lead to not count towards the number of service lines replaced because such a requirement could inadvertently incentivize water systems to delay the identification of the material of unknown service lines so water systems could claim “replacement” credit for when lead or GRR service lines have not been replaced, thereby delaying the public health benefits of replacement to consumers served by a lead or GRR service line.

b. Summary of Public Comments and the EPA’s Response

Some commenters stated that the proposed three-year rolling average is complex and may be difficult to implement. Other commenters supported the proposed approach, with one commenter noting that the LCRI is inherently complex, and the EPA struck a reasonable balance. Some commenters stated that using a cumulative average approach to track compliance with LSLR would provide more flexibility for water systems than a three-year rolling average and accounts for the potential that replacements become more challenging towards the end of program when customers are harder to reach or because the replacements are conducted individually as opposed to in coordination with infrastructure work where replacement may be more efficient.

The EPA agrees with commenters that a cumulative average is simpler to understand and calculate than a three-year rolling average. Simplifying the rule to ease implementation was identified in the 2021 LCRR review as a priority for the final rule. Rather than calculating an average within a rolling three-year window, a water system calculates the average rate of replacement from the beginning of the program. For example, for a water system with a 10-year mandatory replacement deadline, at the end of the fourth program year, the system must have replaced at least 40 percent of the lines in the replacement pool. With a three-year rolling average, the system averages the replacement rate in program years two, three, and four,

whereas with a cumulative average, all replacements conducted since the compliance date are included in the calculation (*i.e.*, average of rates summed for years one, two, three, and four). A cumulative average has the additional benefit of providing more flexibility for water systems that may experience challenges that temporarily disrupt replacement progress. For example, for a water system that is on track to complete replacement by the program deadline under a rolling three-year average, it would be possible to be in violation if they replaced fewer than 10 percent of the replacement pool over a few consecutive years because only three years of the replacement program are considered in the calculation. Especially toward the end of the service line replacement program, remaining property owners with lead or GRR service lines may be harder to reach, and the remaining replacements may need to be conducted individually instead of conducted more efficiently in coordination with other replacements or infrastructure work. A cumulative average will assure that systems that were ahead of their replacement schedule initially would not necessarily be in violation if their replacement rate slows as a result of these difficulties. The final rule includes a requirement for systems to meet a cumulative average rather than a three-year rolling average.

The EPA emphasizes that systems should not slow their replacement rate simply because they have “banked on” service line replacements in earlier years of the program. However, the EPA does not anticipate this practice occurring because of the many requirements and incentives that the final rule contains to ensure water systems are replacing lead and GRR service lines as quickly as feasible. For example, the final rule provides a pathway for water systems to defer CCT steps and avoid a more burdensome OCCT study if they replace all remaining lead and GRR service lines in five years or less (see section IV.F.2.d of this preamble). Additionally, replacement of these significant lead sources is likely to reduce the systems 90th percentile lead levels, thereby reducing the likelihood of a lead action level exceedance and associated required actions (*e.g.*, OCCT, systemwide public education, Tier 1 PN). States also must set a faster rate where feasible, which would also apply if the system intentionally slowed their replacement rate. Additionally, the final LCRI retains from proposal the inclusion of unknown service lines in

the replacement pool, which incentivizes more rapid identification of unknown lines.

The EPA received mixed comments about whether to require water systems to meet the minimum service line replacement rate in each of the first three program years following the compliance date. Some commenters said that waiting until the third program year to assess compliance with the replacement rate could allow water systems to more effectively scale up their replacement program by engaging in planning and bidding on contractors and to identifying unknowns, whereas other commenters said that requiring earlier demonstration of compliance would allow States to enforce sooner and noted that systems already have the three years prior to the compliance date to become prepared for the replacement requirement.

The EPA agrees that requiring calculation and reporting of compliance with service line replacement three years after the compliance date provides water systems with additional time beyond the three-year period between promulgation and the compliance date for the rule before assessment with the cumulative average replacement rate is measured. While the EPA anticipates that water systems will use the three years prior to the compliance date to prepare for mandatory replacement, water systems will continue to build capacity for their service line replacement programs, identify service line materials, and initiate mandatory full service line replacement that is required during the first few years of the program starting upon the compliance date. By requiring the cumulative average replacement rate to be calculated starting at the end of the third program year, water systems are provided with additional flexibility to scale up their program and provide more time to enact policies to facilitate full service line replacement. Under a cumulative rate measured at the end of year three, water systems will be required to have replaced an average of 10 percent of the replacement pool per year, or 30 percent by the end of year three. This is the equivalent number of replacements that water systems would have been required to complete by the end of year three if the rate was measured annually, but this approach provides more flexibility for fluctuations in the annual percent replaced, especially during the first few years after the compliance date. Additionally, this requirement could also facilitate service line replacement prioritization as well as facilitate efficiencies in service line replacement.

Therefore, the EPA is requiring that the cumulative average replacement rate be calculated starting at the end of the third program year. The EPA adds the text “water systems must start mandatory service line replacement programs no later than the compliance date specified in § 141.80(a)(3)” to § 141.84(d)(4)(i) to clarify that water systems must comply with service line replacement on the LCRI compliance date and not by three years following the LCRI compliance date. Rather, water systems are required to meet the cumulative average replacement rate of 10 percent, first assessed at the end of three program years following the compliance date and annually thereafter.

Several commenters expressed concerns over the inclusion of unknown service lines in the replacement pool. Commenters stated that the proposed approach could result in non-compliance where many unknown service lines remain that are, in fact, non-lead (*e.g.*, the system runs out of known lead or GRR service lines to replace because its inventory contains only unknown lines, and, thus, cannot complete the required number of replacements). The EPA disagrees with commenters that unknown service lines should be excluded from the calculation of the number of required annual replacements for multiple reasons. First, the identification of unknown service lines in a timely manner is important for public health and transparency, and including unknown lines in the replacement rate incentivizes their identification as quickly as feasible. By identifying unknown lines early in the replacement program, systems can avoid the situation where they run out of lead and GRR service lines to replace, leading to non-compliance. Second, a requirement to exclude unknown service lines from their replacement pool could itself lead to a situation where the system is not in compliance. For example, if a system determines that many of their unknown lines are lead or GRR service lines later in the replacement program, those systems could be in jeopardy of non-compliance with their service line replacement deadline because they had not set an appropriate replacement rate in the initial years of the program and may not be able to complete the replacement of the remaining lead and GRR service lines by the deadline. Third, systems have had ample notice to start identifying the material of unknown service lines. The 2021 LCRR requires initial inventories to be submitted by October 16, 2024, and systems will have

another three years following promulgation of the LCRI to complete their LCRI baseline inventory. Furthermore, existing State regulations already require completion of service line inventories (*i.e.*, identification of all unknown lines) on shorter timelines. Rhode Island finalized an inventory and replacement law in 2023, which requires initial inventories in 2024 and a completed inventory in 2026 and Illinois signed their law in 2021, which required initial inventories in 2022 and final inventories by 2024 (USEPA 2023a, Section D.1; Illinois General Assembly, 2021; State of Rhode Island, 2023a). Illinois's experience is instructive. Its law prompted most systems to complete service line inventory and identify unknown service lines prior to the compliance date, and the median system had no unknown service lines remaining as of 2022 (USEPA, 2024d). Fourth, the EPA provided guidance and support materials for identifying service line materials and continues to provide guidance and technical assistance to facilitate water system progress in identifying unknown lines. In 2022, the agency developed Guidance for Developing and Maintaining a Service Line Inventory (USEPA, 2022c), inventory templates (<https://www.epa.gov/ground-water-and-drinking-water/revised-lead-and-copper-rule>), and fact sheets (USEPA, 2023o), and in 2023, provided the small entity compliance guide for developing service line inventories (USEPA, 2023n). Additionally, the EPA's Get the Lead Out (GLO) Initiative provides technical assistance to communities to accelerate LSLR, including inventory development. Finally, funding from BIL and other sources is available for systems to identify and replace service lines (see section III.G of this preamble). For all these reasons, water systems that do not want to include unknown service lines in their replacement rate calculation have sufficient opportunity to remedy that by identifying unknown service lines prior to the LCRI compliance date to avoid non-compliance with service line replacement requirements due to high numbers of unknown service lines.

The EPA received comments about specific situations that commenters believed would merit recalculating the replacement rate. For example, some commenters suggested that the water system should get credit for a service line replacement when a line previously characterized as a lead or GRR service line is determined to be non-lead. The EPA disagrees that systems should be

allowed to count identification of lead and GRR service lines as non-lead as a service line replacement. While the EPA appreciates the effort required to identify a non-lead line previously thought to require replacement, allowing systems to count as a replacement the reclassification of a lead or GRR service line to a non-lead service line would create a disincentive for systems to accurately characterize service lines in the inventory. Sufficient checks to prevent this from disincentivizing systems to create accurate inventories would greatly complicate the rule. Additionally, the EPA is concerned that, if water systems are allowed to count non-lead identifications as replacements, water systems could delay replacing known lead and GRR service lines by focusing efforts on identifying unknown lines that are more likely to be non-lead. Under the final rule, systems can subtract any lead, GRR, or unknown service lines newly discovered to be non-lead service lines from their replacement pool, which can reduce the number of service lines they are required to replace in the following program years; however, systems cannot count a reclassification as a replacement.

Some commenters similarly argued that water systems should not be penalized when property owners do not cooperate with providing access for a full replacement and to allow customer refusals to count as replacements. The EPA requires systems to conduct four outreach attempts per property owner to gain access and strongly encourages water systems take steps to ensure the likelihood of gaining access to conduct full service line replacement, such as seeking out alternate funding sources and engaging in comprehensive communication with their customers. The EPA disagrees with crediting water systems that are unable to gain access with a count towards full replacement because it could disincentivize efforts to obtain access. Therefore, customer refusals do not count as a service line replacement, and water systems must retain that service line as part of their replacement pool. The EPA also disagrees that water systems will be penalized if a property owner does not provide access. Water systems that do not replace all their lead or GRR service lines by the deadline because they lack access are not in violation of the treatment technique. Additionally, the final rule adds text in § 141.84(d)(5)(iv)(A) stating that a water system is not required to meet the cumulative average replacement rate if

that system has, after the compliance date, replaced all lead and GRR service lines in the replacement pool that are under the control of the system, identified all unknown service lines in the inventory, and documented and submitted to the State the reasons the system does not currently have access to conduct full replacement of the remaining lead and GRR service lines in the replacement pool. Those systems, however, are required to continue to document the reasons the system does not have access, show those unreplaced service lines in the publicly available inventory, conduct tap sampling at these sites (where the sites are included in the sampling pool and the water system has access to sample), and notify consumers annually about their service line material, until those service lines are replaced. If service lines previously not under the control of the system come under the control of the system at any point prior to the removal of all lead and GRR service lines, these service lines are required to be replaced at the fastest feasible rate as described in § 141.84(d).

The EPA received comments requesting procedures for the rare occurrence of a lead or GRR service line and the need to simplify the compliance for systems with no or few lead or GRR service lines. The EPA agrees there should be a path for the rare lead or GRR service line that may be discovered and has therefore added a provision to the final LCRI that should a lead or GRR service line be discovered in a system with only non-lead service lines in their inventory, the system must replace the affected service line as soon as practicable but no later than 180 days after the date the service line is discovered. The agency also recognized in some circumstances, such as freezing conditions, it may not be practicable to conduct full service line replacement within 180 days after the date of discovery and therefore the system may request State approval for an extension of no later than one year after the date the service line was discovered to replace the affected service line. The request for an extension must be made no later than 90 days after the date of discovery of the affected service line. The EPA strongly encourages systems to replace lead and GRR services lines as fast as feasible. Once systems are comprised of only non-lead service lines implementation burden can be reduced as certain requirements of the LCRI are no longer applicable such as public education of service line material and first- and fifth-liter samples at LSL sites. The EPA notes systems that replace all

the discovered lead or GRR service lines prior to the start of the next tap monitoring period would not need to restart standard monitoring as described in § 141.86(c)(2)(iii)(H).

c. Final Rule Requirements

The final LCRI requires water systems to replace lead and GRR service lines at an average annual replacement rate of 10 percent calculated across a cumulative period, unless the system is eligible for a deferred deadline (see section IV.B.8 of this preamble) or required to replace service lines on a shortened deadline. The first cumulative average replacement rate must be assessed at the end of the third program year and is calculated by dividing the cumulative percent of service lines replaced by the number of completed program years (three in this case). Annually thereafter, at the end of each program year, systems must assess the cumulative average replacement rate by dividing the most recent cumulative percent of service lines replaced by the number of completed program years. The cumulative average replacement rate for systems on a 10-year deadline is 10 percent or greater each program year, and all water systems must make up any deficient percentages of their replacement rate for any program year by the applicable deadline for completing mandatory service line replacement.

The final LCRI adds a definition for “program year” in § 141.84(d)(5)(iii). The first mandatory service line replacement program year runs from the compliance date to the end of the next calendar year (December 31, 2028), and every program year thereafter is a calendar year (January 1 to December 31). A program year is a term used throughout the replacement and reporting requirements. The term is used to streamline reporting requirements (see section IV.N.1 of this preamble for more information) and describe annual activities for mandatory service line replacement.

The final rule also removes the regulatory text related to calculating the annual percent of service lines replaced and adds the term “cumulative percent of service lines replaced”. To calculate the cumulative percent of service lines replaced, at the end of each program year, water systems must divide the total number of lead and GRR service lines replaced thus far in the program by the number of service lines within the replacement pool. The cumulative average replacement rate for systems on a 10-year deadline must be 10 percent or greater each program year.

Where the State determines that a shortened replacement deadline is feasible for a water system (*e.g.*, by considering the number of lead and GRR service lines in a system’s inventory), the system must replace service lines by the State-determined deadline and by a faster minimum replacement rate. The State must make this determination in writing and notify the system of its finding. The State must set a shortened deadline at any time throughout a system’s replacement program if a State determines a shorter deadline is feasible. This requirement also applies to systems eligible for a deferred deadline (see section IV.B.8 of this preamble). If the State determines a shortened deadline is feasible, systems must replace lead and GRR service lines at an average annual replacement rate calculated by dividing 100 by the number of years needed to meet the shortened deadline determined by the State, expressed as a percentage. For example, if a State determines a system can feasibly complete mandatory service line replacement on a shortened deadline no faster than 5 years, the system’s average annual replacement rate would equal 100/5, or 20 percent. Systems must comply with the cumulative average replacement rate, where the first cumulative average replacement rate is assessed at the end of the program year that is at least one year after the shortened deadline determination, as determined by the State. If the system’s shortened replacement deadline is less than three years, compliance is assessed on a schedule determined by the State.

Under the final LCRI, if a lead or GRR service line is discovered when the system’s inventory is comprised of only non-lead service lines, the system must update their replacement pool with the discovered service line. The system must also comply with the requirements to conduct a full service line replacement of the affected service line as soon as practicable but no later than 180 days after the date the service line is discovered. Where a system determines that it is not practicable to conduct a full replacement within 180 days after the date of discovery, such as due to freezing ground conditions, the system may request State approval for an extension of no later than one year after date the line was discovered to replace the affected line. The request for an extension must be made no later than 90 days after the date of the discovery of the affected service line. See section IV.D.2 of this preamble for related inventory requirements in the proposed and final rules.

8. Deferred Deadlines

a. Rationale and Proposed LCRI Revisions

In the proposed rule, the EPA recognized that the default 10-year replacement deadline may be infeasible for some systems due to the large number or proportion of lines that would need to be replaced in 10 years. For these systems, the EPA proposed two ways that a system could establish eligibility for a deferred deadline to conduct service line replacements. The first eligibility criterion was proposed for systems with a high proportion of lead and GRR service lines in their distribution system relative to their total number of households served. The EPA used the feasibility analysis in the proposed LCRI to determine the fastest per-household replacement rate demonstrated to be affordable for systems with a high ratio of lead and GRR service lines. This feasibility analysis resulted in a value of 0.039 annual replacements per household served (39 replacements per 1,000 households served) (USEPA, 2023k). Also, see section IV.B.6.a of this preamble. In the proposed preamble, the EPA noted that the per-household replacement rate identifies an “affordability threshold”; however, the fact that replacements were conducted also demonstrates that replacement at these rates is technically possible for these water systems. For more information, see the Technical Support Document for the proposed LCRI (referred to as “proposed TSD”; USEPA, 2023k).

The proposed rule included a second deferred deadline eligibility criterion for systems that would be required to replace greater than 10,000 service lines per year under the proposed 10-year deadline. The EPA selected 10,000 as the proposed upper threshold for what is technically possible based on the replacement rate achieved in Newark, NJ, between January and March 2020 and the projected replacement rate that Detroit, MI, announced it would achieve. The EPA projected that only three to six systems nationwide would have more than 100,000 lines requiring replacement to qualify for a deferred deadline based on this criterion.

In the proposed rule, the EPA also highlighted that the requirement for the State to set a faster replacement rate where feasible also applies to systems eligible for a deferred deadline. Thus, the deadline calculated according to the EPA eligibility criteria would serve as the maximum allowable time to complete replacement and the State

could reduce that time if they determine the system can achieve a faster rate.

The EPA sought comment on the approach and basis of a deferred deadline for service line replacement at systems with a high proportion of lead and GRR service lines in their distribution system relative to the number of households served, the proposed threshold of 0.039 average annual number of replacements per household served, the proposed threshold of 10,000 annual replacements for systems with atypically high numbers of lead and GRR service lines, and an alternate threshold of 8,000 annual replacements. The EPA also requested any data available that would further inform the value for annual replacements per household served and the threshold for maximum annual replacement.

b. Summary of Public Comments and the EPA's Response

Some commenters recommended that deferred deadlines be removed from the rule because the statute does not require that a treatment technique be feasible for every single system in the nation. They recommended that, instead of deferred deadlines, water systems apply for variances to the 10-year service line replacement deadline or negotiate new deadlines through enforcement actions. The commenters stated that, because some large, regional water systems have replaced all their LSLs in 10 years or less, this service line replacement deadline has been demonstrated to be technically possible and reasonably afforded by large systems. The EPA agrees that SDWA does not require the EPA to demonstrate the feasibility of a NPDWR for every single water system, and the EPA acknowledges that SDWA includes provisions for variances and exemptions to address the possibility that not all water systems will be able to comply with an NPDWR by the compliance date. At the same time, the EPA recognizes that 500 to 700 systems are not likely to be able to replace all lead and GRR lines within 10 years (USEPA, 2024d). Furthermore, if 500 to 700 systems applied for a variance or exemption, the significant time and resources involved in the State's and the EPA's review and approval of these requests would significantly hamper implementation and enforcement of the service line replacement requirements and other treatment techniques in the LCRI, and require significant EPA resources, which could strain the EPA's efforts to publish guidance, properly oversee enforcement of the rule, and provide technical assistance to systems and States. Similarly, it is not realistic

to assume that together States or the EPA would have adequate resources to devote to between 500 and 700 enforcement actions at approximately the same time to address the systems for whom a 10-year replacement deadline is infeasible. Instead, the final rule uses a process for establishing deferred deadlines to manage the systems for which a 10-year deadline is expected to be infeasible, based on the EPA's current analysis. Fewer annual service line replacements allow the system to spread the costs and replacement efforts of the replacement program across additional years to make the LCRI's replacement provision feasible. The final rule's deferred deadline provision also includes additional measures to ensure that systems meeting the criteria for a deferred deadline are required to replace service lines more quickly if a faster rate is feasible for the system (also see section IV.C of this preamble for service line replacement plan requirements). The EPA intends to create guidance to assist States in determining a system's fastest feasible replacement rate.

Some commenters supported the deferred deadline option for systems with a high proportion of lead and GRR service lines using the 0.039 annual replacements per household threshold. Some commenters recommended that the EPA use the number of service connections, rather than the number of households, to ease implementation as the number of service connections is already reported to the State via the service line inventory, whereas the number of households served may not be readily available to systems, and ambiguities in what constitutes a "household" could lead to inconsistent application of the LCRI nationwide. Additionally, the use of households may be a less meaningful measure to assess the scale of service line replacements needed; multi-household properties are generally served by a single service line. The EPA agrees that the number of connections provides a better estimate of the proportion of service lines that require replacement. The proportion of service lines requiring replacement, rather than the total number of service lines requiring replacement, was the basis for normalizing service line replacement rates by system size, and, thus, it is important that the method of normalization maintains this proportion. The EPA also agrees that revising the deferred deadline eligibility criterion to use per connection rather than per household simplifies the rule and eases implementation, which was identified in the 2021 LCRR review as

a priority for the final rule. Finally, the use of service connections rather than households served does not result in major differences in the total number of systems projected to be eligible for a deferred deadline as compared to the use of households served (USEPA, 2024d). For these reasons, the final rule uses the number of connections to calculate the final rule's deferral threshold. The EPA refers to this threshold in the final rule as 39 annual replacements per 1,000 service connections rather than 0.039 annual replacements per service connection because this representation of the deferral option is more understandable and can ease implementation.

Some commenters claimed that the 0.039 replacements per household deferral rate threshold was too low and too many systems would be eligible, while other commenters said that it was too high and should be lowered to allow more systems to defer their deadlines. The EPA does not agree with arbitrarily lowering or raising the deferral threshold and notes that these commenters did not offer an alternate feasibility analysis to use instead of the proposed rule's feasibility analysis. The EPA derived the threshold for the final rule based on the EPA's updated feasibility analysis and the conversion to a per connection metric. Thus, the final rule's per-connection threshold is based on the best available data from the EPA's analysis of replacement rates actually achieved by systems (USEPA, 2024d). Therefore, the identified fastest feasible rate represents the fastest demonstrated rate to be both technically possible and affordable, using the currently available data, and there would be no basis for increasing or decreasing the threshold. There are many factors that can influence the technical possibility of a service line replacement rate, including seasonal weather changes that shorten construction, practical limitations on the number of street closures and interfering with other system operations, etc. By using replacement rate data from various real-world systems, such factors and any other encountered by these systems, are incorporated into the analysis of technical feasibility.

The EPA received comments about the data used to support the proposed deferral option for systems that would be required to replace more than 10,000 service lines per year to meet the 10-year deadline as well as the extended replacement timelines that resulted from it. Some commenters suggested that the 10,000 per year threshold is not feasible due to constraints such as

weather conditions, holidays, traffic disruptions, and logistical and planning limitations, and that a threshold of 8,000 service lines per year is more realistic or achievable. Other commenters suggested, without detailed explanations, that 8,000 replacements per year would not be a feasible standard. Other commenters suggested the EPA lower the threshold to 6,000 or 7,000 replacements per year, based on anecdotal experience of replacement rates at water systems. Other commenters suggested that Newark data, which was used to support the proposed rule's 10,000 threshold, should not be used in this determination at all because commenters theorized that much higher replacement rates could be achieved by cities that are much larger than Newark (commenters specifically mentioned Chicago, IL, and New York, NY, as examples), due to their relatively larger population size and associated resources. Other commenters argued that the Newark data should not be used for opposite reasons, stating that Newark was aided by substantial funding, technical assistance, and news coverage of service line replacement that helped Newark conduct an accelerated service line replacement program that is unlikely to be replicated nationwide. Some commenters were also concerned that the deferred deadline threshold of 10,000 allows some systems to defer their service line replacement deadline by decades, up to 45 years in the case of Chicago. These commenters said that given the harms of lead exposure from lead and GRR service lines and the urgency of service line replacement, these systems should be required to complete service line replacement sooner.

The EPA agrees with commenters recommending removing this deferred deadline option. For the final rule, the EPA has eliminated the deferral option based on a maximum number of annual replacements. The EPA made this change for several reasons. First, two deferral options unnecessarily complicate the implementation of the rule, as only three systems are estimated to be eligible for this deferral option, and two of those systems are estimated to also be eligible for the per-connection deferral option. Second, the EPA agrees with commenters that the underlying data used to determine the replacement maximum might not reflect replacement feasibility, given that the three systems estimated to be eligible were all larger than the system whose underlying replacement data was used to determine

the proposed replacement maximum (Newark, NJ).

Additionally, the EPA acknowledges the challenge in establishing a single number of replacements per year upper threshold limit, based upon replacement data from one system (Newark, NJ) and projected data from a second system (Detroit, MI), to apply to all systems nationwide and which will continue to apply over the coming years. Therefore, due to the lack of replacement rate data on the scale required for systems with more than 100,000 service lines requiring replacement, it is not possible to determine a maximum number of replacements per year for such systems and setting a static national maximum based on two cities has limitations in this situation (see section IV.B.6 of this preamble on feasibility).

Some commenters suggested that systems with deferred deadlines should be required to conduct additional actions to protect public health while their replacement program is ongoing. Other commenters opposed such requirements, stating that these systems would have the most challenges in conducting service line replacement and that additional required actions to protect public health would take away resources from the systems' replacement program. The EPA does not agree with requiring additional actions to protect public health and agrees that additional requirements could draw resources away from service line replacement itself and prevent service line replacement from occurring at the fastest feasible rate.

The EPA shares commenter concerns that the maximum replacement deferral option could result in some systems having deferred deadlines that could go beyond multiple decades, which is inconsistent with the urgency of achieving lead and GRR service line replacement as quickly as feasible. Some commenters also suggested that the required replacement rate should increase over time due to increases in expertise, experience, and new technologies, especially after the 10-year deadline when most other programs have finished replacements and there is excess capacity in terms of available equipment and trained workforce. The EPA agrees that conditions can change over the course of a replacement program, such as the provision of new funding, expanded access to service lines (such as passage of a State or local law that overcomes barriers to access), or increased contractor availability as many systems finish their replacement programs. Additionally, the EPA agrees that systems that are eligible for the deferred deadline may be able to

complete service line replacement earlier than the deferred deadline, thus the final rule provides that systems eligible for a deferred deadline may be put on a shorter deadline where the State determines it is feasible. The final rule builds on this concept by allowing a system that is eligible for a deferred deadline to begin its service line replacement program using a deferred deadline, and associated cumulative average replacement rate, that is no longer than needed to conduct at least 39 annual replacements per 1,000 service connections per year; the system must identify the deferred deadline and associated cumulative average replacement rate that it is using in its service line replacement plan along with other information supporting the system's determination that a faster rate is not feasible (as described in § 141.84(c)(1)(x)). Then, as soon as practicable, but no later than the end of the second program year, the State must evaluate the system's deferred deadline and associated cumulative average replacement rate to determine if it is the fastest feasible rate for the system. The State must either approve the continued use of this replacement rate, or, if the State determines a faster rate of replacement is feasible, the State must set a new deferred deadline and replacement rate to ensure that the system is conducting service line replacement at the fastest feasible rate. The State must review the replacement rate information submitted by the system in their service line replacement plan every three years to ensure that the deferred deadline and associated replacement rate is regularly assessed and updated throughout the replacement program, and that systems eligible for deferred deadlines are continuing to replace service lines at the fastest feasible rate. These provisions are intended to inform the State's determination of whether the replacement rate is the fastest feasible. This process will also allow systems and States to respond to changing conditions to ensure they are replacing service lines as quickly as feasible (see sections IV.B.6 through 8 of this preamble).

Some commenters suggested that replacement timelines be determined by a system's 90th percentile lead level or CCT status and that systems with lower lead levels should be allowed to start later or given additional time to complete their replacement program. The EPA disagrees with this recommendation for several reasons. There is no safe level of lead in drinking water and the EPA is not aware of data

showing that accelerated service line replacement is less feasible for systems with lower lead levels. As such, the recommendation is inconsistent with the SDWA requirement to promulgate NPDWRs that “prevent known or anticipated adverse effects on the health of persons to the extent feasible” (SDWA 1412(b)(7)(A)). The need for service line replacement at the fastest rate feasible is described further in section IV.B.2 of this preamble.

c. Final Rule Requirements

The final rule includes a deferred deadline option for systems with a high proportion of lead and GRR service lines to total service lines. The final rule sets the deferral threshold at 39 annual replacements per 1,000 connections based on the updated feasibility analysis (see section IV.B.2 of this preamble) and conversion from a per-household metric to per-connection. To reduce the complexity of this deferral option, the final rule refers to the threshold as 39 annual replacements per 1,000 connections instead of 0.039 replacements per connection per year. Additionally, the final rule is not including the second deferral option for systems required to replace more than 10,000 service lines per year.

To ensure that systems continue to replace at the fastest feasible rate throughout their replacement program, the final rule requires the State to set a faster replacement rate where feasible. The final rule also requires States to regularly make determinations in writing that the deferred deadline and associated replacement rate is the fastest feasible, based on the initial service line replacement plan and subsequent updates from the system. More specifically, by the end of the second program year, and every three years thereafter, the State must evaluate the system’s use of the deferred deadline and associated replacement rate to determine if it is the fastest feasible rate for the system. The State must either approve the continued use of the deferred deadline and associated replacement rate, or set a new replacement deadline and associated replacement rate so that replacements are conducted as fast as is feasible for the system. States must report these determinations to the EPA. In their publicly accessible replacement plan, systems with deferred deadlines must document their deferred deadline and associated replacement rate, which must be at least 39 annual replacements per 1,000 service connections or faster if feasible, the annual number of replacements required, the length of time (in years and months), the date of

completion, and other information supporting the system’s determination that replacing lead and GRR service line by an earlier date and faster rate is not feasible. These systems must also provide in their plans additional information (e.g., the annual number of service lines replaced, the total number of known lead and galvanized requiring replacement lines remaining, status of identifying unknown service lines, etc.) that supports the system’s deferred deadline and associated replacement rate. The EPA intends to issue guidance to assist States in determining the fastest feasible rate for systems.

9. Summary of the Feasibility of Mandatory Service Line Replacement

a. Overview

In considering the full record for this rulemaking, the EPA concluded that the mandatory service line replacement requirement is feasible. It applies only to service lines that a system can access in order to conduct a full service line replacement. It recognizes that State or local laws, or water tariff agreements, as well as a customer’s consent, may affect a system’s ability to access a service line to conduct a full replacement. It establishes a 10-year deadline, with a pathway for a small percentage of systems to obtain a deferred deadline, while requiring States to set a faster rate where feasible. This approach ensures that service line replacement requirements do not overburden primacy States with case-by-case feasibility determinations, requests for variances or exemptions, or enforcement actions. The EPA has committed to developing guidance to assist States in evaluating relevant data to determine the fastest feasible replacement deadline for a system and improve their ability to set faster rates where feasible.

b. Summary of Public Comments and the EPA’s Response

Some commenters theorized that in the past, systems with replacement rates documented by the EPA were able to replace lead and GRR service lines more quickly than future systems will be due to the lack of “administrative burden and associated rigidity of the proposed LCRI framework” and that the feasibility analysis for the proposed LCRI did not take this into account. The EPA does not agree with these comments and highlights that mandatory service line replacement and other LCRI provisions will increase the replacement rates relative to previous voluntary programs (see section IV.B.6 of this preamble for further discussion). Additionally, other rule requirements could increase public

support and knowledge of service line replacement and benefit future service line replacement programs. For example, the public education requirements in the rule, such as annual notification to consumers that their residence is served by a lead or GRR service line and making inventory with addresses and service line replacement plan publicly available, will create greater awareness of the remaining lead and GRR service lines and result in more property owners interested in participating in the LSLR program. Risk reduction measures, including for full service line replacement, will aid in garnering public support or broader awareness of replacement programs (see section IV.J.2.a of this preamble and “Public Education and Engagement” in the proposed LCRI for examples of public education and community engagement supporting service line replacement efforts).

Furthermore, the EPA has launched several technical assistance programs specifically to assist with service line replacement, including the Lead Service Line Replacement Accelerators and the GLO Initiative. Since January 2023, the EPA partnered with 40 communities across four States (Connecticut, New Jersey, Pennsylvania, and Wisconsin) through the LSLR Accelerators pilot program to address existing barriers and accelerate progress towards LSL identification and replacement (USEPA, 2023m). The GLO Initiative takes the lessons learned and best practices from the LSLR Accelerators program to expand LSLR technical assistance to approximately 200 additional underserved and disadvantaged communities (USEPA, 2024e). The EPA has also published resources for developing and maintaining service line inventories (USEPA, 2022c; USEPA, 2023n; USEPA, 2023o) and for planning and conducting service line replacement (USEPA, 2023p). In addition to the EPA resources, lessons learned, best practices, and other previous experience documented and publicly shared by water utilities and drinking water organizations will provide further resources for systems as they manage mandatory service line replacement programs. The EPA is aware of additional systems that have conducted or are beginning to conduct their replacement programs (EDF, 2024), which will provide further learning opportunities for other systems to develop and optimize their service line replacement programs. Documents describing lessons learned and advice for future systems, which have previously been published (e.g., LSLR

Collaborative, Denver Water Lessons Learned; see the full list in the final TSD (USEPA, 2024d)), are also expected to continue to evolve as service line replacement programs continue. As another recently announced example, the mayors of the cities of Chicago, IL, Milwaukee, WI, and Detroit, MI, pledge through the Great Lakes Lead Partnership to facilitate close, purposeful collaboration among mayors and water utilities to surmount common challenges, highlight emerging best practices, and replicate successes from city to city (City of Detroit, 2024). Furthermore, unprecedented funding is available from BIL and other sources to support service line inventory and replacement efforts (see section III.G of this preamble).

i. Additional Discussion of Technical Possibility

In the proposed LCRI's feasibility analysis, the EPA explicitly assumed that the market would correct for any potential shortages in labor, filters, or material for service line replacement, especially because compliance with the mandatory replacement requirement would not begin until three years after the compliance date. The EPA sought comment on this assumption and the ability of the market to respond to the service line replacement requirements. Some commenters, including relevant labor and industry associations, agree that the market can meet the demand for the potential shortages, while other commenters expressed concern about potential shortages when conducting required replacement simultaneously with other systems. While these commenters listed anecdotal examples of the amount of time it currently takes to receive various materials, these data do not show that a 10-year deadline will be infeasible for a large volume of systems, as they are reflecting the conditions within a single system at the one point in time, rather than the conditions at a national level at the LCRI compliance date (*i.e.*, 2027), when mandatory service line replacement must begin. Based on the record and comments as summarized below, the EPA disagrees that nationwide service line replacement in 10 years would be challenged or rendered infeasible by supply chain delays, labor shortages, and competition for workers and materials.

As discussed in the proposed LCRI, simultaneous full service line replacement over a large geographic area remains feasible (*i.e.*, no market or labor shortages), as demonstrated by the fact that LSLR has been simultaneously conducted in several places in recent

years (*e.g.*, Flint, MI, Newark, NJ, Denver, CO, etc.). Furthermore, four States (Illinois, Michigan, New Jersey, Rhode Island) require systems to conduct mandatory service line replacement are all currently in effect. These States also have relatively high lead and GRR service line prevalence compared to other States (see section V.B.2 of the proposed preamble (88 FR 84912, USEPA, 2023a)), which suggests that these States also expect full service line replacement to be successfully implemented over a large geographic area simultaneously.

Additionally, commenters were concerned about the ability of the market to meet the demands of full service line replacement, including concerns about the availability of filters, contractors and plumbers, and replacement materials. Some commenters also raised concerns about the potential for increased prices or "price gouging" due to higher demand and competition. Some commenters requested that the EPA undertake a comprehensive assessment of labor and material markets. The record continues to support the agency's assumption at proposal that the market will correct for any potential shortages in the three years before the LCRI compliance date. The EPA obtained confirmatory data with respect to the share of the copper and PVC pipe supply as well as the share of domestic copper and PVC production needed to achieve full replacement to better understand the potential impacts on the availability of these materials. Assuming that all water systems replace lines with a single material (which represents the upper bound because systems may utilize a combination of materials), the EPA estimates that full service line replacement will require 35.61 million pounds of copper, or 2.06 percent of the average annual share of domestic production, and 57.09 million pounds of PVC, or 0.22 percent of the average annual share of domestic production (ICF, 2024a). Accounting for the proportions of different materials used in service line replacement, the EPA estimates that the share of domestic production necessary to meet the estimated raw material demands is 0.84 percent for copper and 0.07 percent for PVC (Lee & Meehan, 2017). Thus, the LCRI should not create significant raw material demands, and the market should be able to adjust to meet the modest increase in demand created by the LCRI. Three companies from the copper industry affirmed their readiness to ensure a seamless supply of copper for the increased demands from the

LCRI and mentioned taking various steps to upgrade operations, hiring new personnel, adding shifts to their existing infrastructure, and investing in a copper tube mill (Copper Development Association Inc. (CDA), 2024a). Additionally, the Copper Development Association, the market development, engineering and information services arm of the copper industry, stated that there is sufficient domestic supply of copper to meet the need for replacing lead pipes (CDA, 2024b).

One commenter from a State with many rural communities expressed their concern that the filter market would be dominated by larger cities and States, making filters harder for smaller systems to access and more expensive. To address these comments, the EPA obtained the confirmatory data with respect to filter availability to meet all of the filter provisions of the final rule (*i.e.*, multiple lead action level exceedances, full or partial service line replacements, certain service line disturbances, small system flexibility). The data from multiple sources confirm the EPA's assumption that the filter market will sufficiently expand to meet these needs over the next 10 years. For example, one source estimates the market will reach \$120.38 billion by 2032 with a compound annual growth rate of 10.79 percent and is projected to nearly triple in size in the next decade (Razgaitis, 2023). The EPA also examined filter usage in Denver Water's Lead Reduction Program (LRP) to assess if they encountered filter supply issues during LRP implementation. The full program began in 2020 with nearly 100,000 households participating and a calculated filter adoption rate of 80 percent (Harvard School of Public Health, 2024). Surveys from Denver LRP indicate that 93 percent of households filter their drinking water using filters from Denver Water with 68 percent report using filtered water for cooking (Harvard School of Public Health, 2024). Additionally, the EPA found that other States are turning to filters to reduce levels of lead in drinking water. For example, Michigan's Filter First law requires schools and child centers to develop a drinking water management plan, install filters, and test filtered water for lead. These State laws assume the market will be able to meet the demands of the program. Finally, two commenters, one representing a filter manufacturer and the other representing the point-of-entry and point-of-use filter manufacturing industry, both indicated their expectations that the industry will be able to meet the increased filter demand resulting from the LCRI (Docket

ID EPA-HQ-OW-2022-0801, Comment submitted by the Brita brand and The Clorox Company, Comment submitted by Water Quality Association (WQA)).

Some commenters had concerns about the availability of workers to conduct service line replacement within 10 years while other commenters agreed that the labor market can meet the demand created by the mandatory service line replacement provisions. One commenter, representing a trade union, highlighted its numerous training programs and affirmed its capacity to develop the workforce to complete LSLR within the next 10 years (Laborers' International Union of North America (LIUNA), 2024). In the proposed LCRI, the EPA had noted its assumption that the three years before water systems must begin to conduct service line replacement would give the market time to adjust and correct for any potential labor shortages. While some commenters noted that the construction and infrastructure sectors reported backlogs for eight to nine months in 2023, those backlogs are not a measure of hardship, as backlogs do not suggest that construction firms are behind schedule or having difficulties completing contracted jobs, but rather there is consistent work indicating a safer investment for building capacity. The greater the duration of the backlog, "the more comfortable contractors can be with their near-term economic circumstances" (Associated Builders and Contractors, 2023). In response to comments and to evaluate whether the EPA's assumption regarding the market is correct, the EPA reviewed data such as the projected job growth in labor markets that are relevant to service line replacement to evaluate the demand created by the final rule's service line replacement requirements, including plumbers and pipefitters, as well as operators of heavy equipment. A study from the United Association of Union Plumbers and Pipefitters in partnership with the BW Research Partnership for E2 concluded that lead pipe replacement programs would create an estimated 26,900 construction jobs per year in 10 years, plus additional jobs through supply chain effects. More specifically, the study estimates that 10 percent of the newly created jobs would be in pipefitting occupations and 7.2 percent would be in pipelaying/pipefitting occupations (E2, 2021). Those findings exceed the EPA estimate using anecdotal evidence that it will take the full-time equivalent of 17,000 crews to replace 8.8 million lead and GRR service lines per year with replacement efforts involving

approximately 3.6 percent of the pipe worker labor force and 3.5 percent of the excavator workforce (ICF, 2024b). The studies determining the percentage of the workforce necessary to meet the LCRI are reinforced by activities around the country. Unions—the Laborers' International Union of North America, the United Association of Plumbers and Pipefitters, and the International Union of Operating Engineers to name three—are already training workers in LSLR and putting them to work across the country (The White House, 2024a). Additionally, the White House has created nine White House Workforce Hub cities to train and connect American workers to jobs created by the BIL funding and other Federal investments (The White House, 2024b). The EPA documented in the proposed rule two water systems (Detroit, MI, and Newark, NJ) and one State (Rhode Island) that have planned or already implemented apprenticeship or training programs to increase contractor capacity during upcoming LSLR projects (see section V.B.2 of the proposed preamble (88 FR 84912, USEPA, 2023a)). These studies and activities demonstrate that the skilled workforce is sufficiently robust to meet the demands of the final LCRI's service line replacement requirement and will be supplemented by additional job training.

C. Service Line Replacement Plan

1. Rationale and Proposed LCRI Revisions

The service line replacement plan is a critical element of the LCRI. A well-developed plan can facilitate timely compliance with the mandatory service line replacement requirements and, therefore, provide greater public health protection and replacement program efficiency. Under the 2021 LCRR, the EPA required systems to submit an LSLR plan by October 16, 2024, so water systems could (1) quickly commence a systemwide replacement program following a lead trigger level or action level exceedance and (2) be ready to complete customer-initiated LSLR requests regardless of their 90th percentile lead level. The LSLR plan requirements promulgated in the 2021 LCRR required all water systems with at least one lead, GRR, or unknown service line to create and submit to the State a replacement plan containing sufficiently detailed information on six elements: a strategy for determining the material of unknown service lines, a procedure for conducting LSLR, an approach to informing customers before replacement, a flushing procedure for customers, a prioritization plan (based

on, but not limited to, known LSLs and LSLR for communities of concern and populations most sensitive to the effects of lead), and a funding strategy. Systems serving more than 10,000 persons must also include in the plan a recommended LSLR goal-based rate in the event of a lead trigger level exceedance.

For the LCRI, the EPA proposed to expand the 2021 LCRR LSLR plan to require two additional elements. For the first new element, systems must develop a communication strategy to inform residential and non-residential customers (property owners) and consumers (e.g., tenants) served by the system about the service line replacement plan and program. This proposed plan element assures that both the consumers and owners of rental properties are aware of the water system's program to replace lead and GRR service lines and ensures that both tenants and their landlords have information about the program. The second new element requires the identification of any laws, regulations, and/or water tariff agreements that affect the system's ability to gain access to conduct full service line replacements, such as any requirements for customer consent or customer cost-sharing. In the proposal, the EPA explained that this element would support and encourage water systems to comply with the requirement to conduct full service line replacement, especially given that the water system's self-identified elements of control determine whether the water system must conduct replacement. The requirement to make these potential access barriers public would also facilitate public engagement on the effect of State or local laws or water tariff agreements on a system's access for full service line replacement.

In addition to the new elements, the proposed LCRI modified the plan element requiring a funding strategy to specifically require systems to describe whether and how the system intends to assist customers who are unable to pay for replacement where the water system intends to charge customers for the cost of all or any portion of the replacement because it is authorized or required to do so under State or local law or water tariff agreement. In addition, the EPA proposed to require that the plan be made available to the public, and systems serving more than 50,000 persons must make the plan publicly available online. Finally, the EPA proposed to remove the element for systems serving more than 10,000 people to recommend a goal-based replacement rate because the agency proposed to eliminate the lead trigger level.

The proposed rule did not require water systems to update their plan, however the EPA sought comment on a requirement for systems to update their service line replacement plans if there are any changes, such as changes to laws and policies applicable to full service line replacement. The public accessibility requirements, together with the plan's additional and revised elements, were proposed to ensure that property owners and consumers have information about the water system's plans for conducting service line replacements, including any requirements for customer consent or cost-sharing.

2. Summary of Public Comments and the EPA's Response

Some commenters suggested the EPA require more specific prioritization criteria for service line replacement in the plan. Some commenters specifically recommended that water systems be required to prioritize replacement in accordance with health and socioeconomic indicators, and at hospitals, nursing homes, child care facilities, schools, and for disadvantaged consumers. Some commenters also suggested that the EPA should provide guidance for developing service line replacement plans, including a template, and provide technical assistance to help systems design and implement their prioritization strategies. The EPA disagrees that the national requirements for the replacement plan should be required to include more specific prioritization criteria because every community is different, and each community is better positioned to identify the best way to prioritize service line replacement. For example, one water system may serve a community with housing that also contains lead paint, so the water system could prioritize replacement in that community to reduce disparities in potential lead exposures. The EPA encourages water systems to engage with their citizens when devising prioritization strategies to better understand their communities' needs. The final LCRI aims to advance equitable service line replacement by enhancing transparency between the water system and the community on the practices adopted and progress made towards replacing all lead and GRR service lines under the control of the system, *e.g.*, by requiring the service line inventory and plan to be made publicly accessible or available and by adding or revising elements in the plan. Making the replacement plan available to the public will increase community awareness of the prioritization strategy,

the laws affecting the system's ability to gain access to conduct full service line replacement, and the replacement program. Publication of the service line inventory will ensure water systems can be held accountable by the community for replacing lead and GRR service lines in accordance with their plans.

Some commenters recommended that water systems with lead connectors or connectors of unknown material should be required to develop a replacement plan (even if the system does not have any lead, GRR, or unknown service lines) that includes a strategy to identify and replace them. The EPA disagrees with these comments because the plan is intended to support the systems' compliance with the requirements to replace all lead and GRR service lines, and there is no requirement in the LCRI for systems to establish a program to locate and replace lead connectors other than those that would be replaced with a lead or GRR service line, or connectors that are otherwise encountered by the system.

Other commenters agreed with the EPA's proposed requirement that systems identify State and local laws, and water tariff agreements that affect a water system's ability to gain access to conduct full service line replacement because they may increase transparency around a utility's processes and potentially enhancing public discussion around changes to align laws and policies to support expanded access and swift and equitable service line replacement. Commenters also affirmed the EPA's expectation that this requirement could help resolve confusion and lack of clarity around what, if any, impact such State and local provisions actually have on access and financing issues. The final LCRI requires systems to include the citations to the specific laws, regulations, or water tariff agreement provisions. In some cases, this exercise may help systems realize that they already have access to the full service line for replacement. Moreover, making this information publicly available may facilitate public engagement on the effect of these laws and water tariff agreements on a system's access for full service line replacement. The EPA has included examples of systems, localities, and States, such as the 2024 act passed by the State of Indiana (Indiana General Assembly, 2024), that have successfully changed existing laws or agreements to overcome access barriers in section IV.B.3 of this preamble.

The EPA received comments about lead-lined galvanized service lines, with some recommending that discovery of one lead-lined galvanized service line

should prompt the system to assume all galvanized service lines are lead-lined. The EPA agrees that lead-lined galvanized service lines can contribute significant amounts of lead in drinking water, and, as the agency previously stated in the 2021 LCRR and proposed LCRI, these service lines are covered by the definition of an LSL (USEPA, 2022c; USEPA, 2023a) because a portion of the service line is made of lead. The EPA disagrees that discovery of one lead-lined galvanized line should, as some commenters recommended, require the system to categorize all galvanized service lines in the distribution system as lead-lined. The EPA found only limited information about the prevalence of these service lines nationwide, and commenters did not provide data to support the assumption that if one lead-lined galvanized service line is discovered, all galvanized service lines in the system are lead-lined. To address the possibility that systems may have (or find in the future) lead-lined galvanized service lines, the EPA is finalizing a new requirement for systems that identify any lead-lined galvanized service lines to include in their service line replacement plan a strategy to determine the extent of the use of lead-lined galvanized service lines in the distribution system (see section IV.D.1.b.iv of this preamble). If a water system is aware of their presence in the distribution system, this plan requirement can help systems understand how widespread their use may be.

Under the proposed LCRI, the EPA sought comment on whether the service line replacement plan should be updated if there are any changes, such as changes to laws and policies applicable to full service line replacement. Some commenters supported a requirement to update the plan, noting that there may be changes that impact full service line replacement. One commenter stated that updates to the plan should be required no sooner than the next service line inventory update or no sooner than 12 months after the previous submission, whichever is longer. Other commenters stated that systems should be required to update the plan if there are changes to applicable legal or contractual provisions or the service line inventory. The EPA agrees that water systems should update their plans to accurately reflect the current service line replacement plan, including any applicable laws, regulations, or water tariff agreements. Maintaining an up-to-date service line replacement plan will facilitate customer and consumer

engagement and cooperation with the system's service line replacement program as well as State oversight.

The EPA is also revising the plan requirements for water systems that are eligible for and plan to use a deferred deadline in response to comments that that plans may need to be updated for changes in circumstances. The system and the State will regularly evaluate the system's use of the deferred deadline and associated replacement rate, which may change over time as conditions change. These systems must document in the plan (1) the basis for the system's eligibility for a deferred deadline, showing that 10 percent of the total number know lead and GRR service lines in the replacement pool exceeds 39 annual replacements per 1,000 service connections and any additional supporting information, (2) the fastest feasible replacement rate and associated deferred deadline that the system has identified in which it can complete its replacement program, which may not to be less than 39 annual replacements per 1,000 service connections, and (3) information supporting the system's determination that an earlier deadline and faster rate than 39 annual replacements per 1,000 service connections is not feasible. The EPA expects this information may change as systems identify unknown service lines and update their replacement pools, which may affect the total number of known lead and GRR service lines and the annual number of replacements required. These requirements will provide the State with information necessary for its determination of the system's ability to replace service lines at a faster rate; however, the State may also require the system to provide additional information for the State to consider in its assessment of the continued use of a deferred deadline and the fastest feasible replacement rate. Requiring systems to include information about their deferred deadlines in the replacement plan along with the system's justification as to why it thinks one is necessary also improves transparency between the system and the public by explaining the reasons why the system may take longer than 10 years to replace all lead and GRR service lines.

Some commenters recommended that the EPA require more systems to make their service line replacement plans publicly available online by reducing the threshold to systems serving greater than 10,000 persons rather than systems serving more than 50,000 persons, as proposed. One commenter recommended that there should be no threshold and all systems should

publish their plans online. The EPA disagrees with this suggestion because the EPA is concerned about the feasibility and ability of systems serving 50,000 people or fewer to maintain and update websites. In addition, the threshold is consistent with the recently promulgated requirement for systems serving more than 50,000 persons to make the Consumer Confidence Report available online (USEPA, 2024c).

3. Final Rule Requirements

Under the final rule, all water systems with at least one lead, GRR, or unknown service line in their inventory must create a service line replacement plan by the LCRI compliance date. It is important that systems have developed a comprehensive and detailed plan by the compliance date so that systems have planned for important aspects of their service line replacement program and can implement their program accordingly and begin replacing lead and GRR service lines upon the compliance date if not sooner. The EPA is retaining most of the service line replacement plan elements that were proposed. This includes the requirements for water systems to include in their service line replacement plans: (1) A description of a strategy to identify the material of all unknown service lines in the inventory; (2) a standard operating procedure for conducting full service line replacement (e.g., techniques to replace service lines, plans for procurement of materials, or plans for utilizing contractors); (3) a communication strategy to inform consumers and customers before a full or partial lead or GRR service line replacement; (4) a procedure for consumers and customers to flush service lines and premise plumbing of particulate lead following disturbance of a lead, GRR, or unknown service line following full or partial replacement of a lead or GRR service line; (5) a funding strategy for conducting service line replacement; (6) a communication strategy to inform residential and non-residential customers and consumers (e.g., property owners, renters, and tenants) served by the water system about the service line replacement plan and program; and (7) identification of any laws, regulations, and water tariff agreements that affect the water system's ability to gain access to conduct full lead and GRR service line replacement, including the citation to the specific laws, regulations, or water tariff agreement provisions.

The final LCRI clarified the plan element requiring systems to create a prioritization strategy. The final rule clarifies the prioritization strategy must

be based on factors including but not limited to known lead and GRR service lines and community-specific factors, such as populations disproportionately impacted by lead and populations most sensitive to the effects of lead. This clarification does not change the intent of the proposed LCRI requirement, but instead clarifies the plan element to include community-specific factors. Every community is different, and each community is better positioned to identify the best way to prioritize service line replacement.

The final LCRI also includes new plan requirements for any water system that identifies any lead-lined galvanized service lines in the development of the service line inventory (the baseline inventory or any update). One requirement consists of developing a strategy to determine the extent of the use of lead-lined galvanized service lines in distribution system and categorizing (or recategorize if they were categorized as non-lead) the lines as LSLs for mandatory service line replacement. Lead-lined galvanized service lines contain a lead inner lining and are, therefore, considered LSLs in the final rule. If a water system is aware of their presence in the distribution system, it is important to understand how widespread their use may be to accurately identify all LSLs in the distribution system.

For a water system that is eligible for and plans to use a deferred deadline, the plan must include the following items. First, the system must include documentation of the system's eligibility for a deferred deadline that shows that 10 percent of the total number of known lead and galvanized requiring replacement service lines in the replacement pool exceeds 39 annual replacements per 1,000 service connections. Second, the system must include documentation detailing mandatory service line replacement under a deferred deadline at the fastest rate that system identifies as feasible, including the annual number of replacements required, the length of time (in years and months), the date of completion, and the associated cumulative average replacement rate the system considers to be the fastest feasible but no slower than the replacement rate corresponding to 39 annual replacements per 1,000 service connections, as well as the annual number of replacements required, the length of time (in years and months), and the date of completion for this deadline and replacement rate. Third, the system must include information supporting the system's determination that replacing lead and GRR service

lines at a shorter deadline and faster rate than identified in the plan is not feasible.

The final LCRI also requires water systems to annually update the service line replacement plan to reflect any new or updated information, including any changes that affect the system's ability to conduct mandatory full service line replacement (e.g., new State or local laws and water tariff agreements, a new strategy for identifying the material of unknown service lines based on inventory validation, or lessons learned from risk communication efforts in the community), and to submit these updates to the State annually. If the plan does not need to be updated, the water system may then certify to the State that the plan has no updates. Water systems may cease annual certifications to the State when there are no lead, GRR, and unknown service lines left in the inventory.

Systems with deferred deadlines, in addition to annual updates, must every three years after the initial submission of the plan, update their replacement plan with the latest: (1) Documentation of the system's eligibility for a deferred deadline; (2) documentation detailing the system's identified replacement rate for completing mandatory service line replacement under a deferred deadline; and (3) information supporting the system's determination that replacing lead and GRR service lines at a shorter deadline and faster rate than documented in the plan is not feasible (see section IV.B.8 of this preamble for more information on deferred deadlines). The State will then review these updates and determine by the end of the fifth program year, and every three program years thereafter, if a shorter deadline and faster rate are feasible. The State must also report to the EPA the system's expected completion date and an explanation for why this date is the fastest feasible.

Under the final LCRI, water systems are required to make their plan publicly accessible, and systems serving more than 50,000 persons must make the plan available online. The publicly accessible plan must also reflect any updates no later than the deadline to submit the updated plan to the State.

D. Service Line Inventory

1. Baseline Inventory and General Inventory Requirements

a. Rationale and Proposed LCRI Requirement

A comprehensive and accurate service line inventory is critical to a water system's ability to inform consumers that may be affected by lead

contamination in their drinking water and to comply with the requirements in this rule to identify the material of unknown service lines and replace lead and GRR service lines by a specified deadline. The service line inventory provides the foundation for a water system to address a significant source of lead in drinking water, lead and GRR service lines, and strengthen public health protection. Inventories are also critical for developing tap sampling plans and conducting targeted public education. Inventories can help water systems and consumers (persons served at a service connection) determine the source of high lead levels in drinking water at a home or building and the possible solutions for reducing exposure to lead.

Inventories are critical to the EPA's administration of targeted funding and financial assistance programs, such as the WIIN Act lead remediation grants, low- to no-cost financing through the DWSRF, including supplemental funding from the BIL, and low-cost financing through the WIFIA program (see section III.G of this preamble for more information on the BIL and other financial resources). In America's Water Infrastructure Act of 2018, Congress recognized the importance of increasing the understanding about the extent of LSLs in the nation by mandating the EPA to include an assessment of costs to replace LSLs in the 7th Drinking Water Infrastructure Needs Survey and Assessment (referred to as the Needs Survey) to inform the distribution of DWSRF BIL LSL funding to States.

The proposed LCRI built upon the LSL inventory requirements in the 2021 LCRR. Under the 2021 LCRR, all water systems must develop an initial inventory of service lines using available records, make it publicly accessible or available, and submit it to the State by October 16, 2024. The EPA did not propose to change the LCRR initial inventory compliance date to ensure that systems make continued progress towards inventory development. However, the EPA proposed in the LCRI to require all water systems to update the LCRR initial inventory with information about connector materials and locations along with any new information on service lines by the rule compliance date (three years after promulgation). The updated initial inventory, referred to as the baseline inventory, aims to better position water systems to immediately begin mandatory full service line replacement upon the LCRI compliance date and to better protect public health by improving transparency and consumer awareness of where they are

served by service lines and connectors that contain lead.

In the 2021 LCRR, the EPA determined that it is practical and feasible for water systems to prepare an initial inventory by October 16, 2024, and update it because the rule did not impose a deadline on water systems to determine the composition of every service line categorized as lead status unknown or "unknown" (USEPA, 2020e). The EPA also considers submission of the baseline inventory by the LCRI compliance date to be feasible because: (1) Systems are not required to identify all unknown service lines until the mandatory service line replacement deadline, (2) systems have had opportunities to gather information about their service lines to meet the requirements of the 1991 LCR, including conducting materials evaluations for tap sampling and for systems that exceeded the LCR's lead action level, where systems identified the number of LSLs, (3) several States have already required water systems to create service line inventories, and (4) systems are required to review available records and submit an LCRR initial inventory by October 16, 2024.

For the LCRI, the EPA proposed to also require water systems to include connector materials in their service line inventories. The EPA proposed to require systems to conduct a review of specified sources (e.g., construction and plumbing codes, records, and other documentation) on connectors, similar to the requirement for systems to review these specified sources for service line material information under the 2021 LCRR, and to identify and track connector material when encountered during normal operations and when lead connectors are replaced. The EPA proposed to require the inclusion of lead connectors in the inventory because it provides additional information to the system and public on potential sources of lead in drinking water, which could prompt actions to reduce lead exposure and provide systems with information to consider during Distribution System and Site Assessment (DSSA). As stated in the "Guidance for Developing and Maintaining a Service Line Inventory" (or the LCRR Inventory Guidance) document, this information would allow systems to track and manage this potential source of lead, improve asset management, and increase transparency with consumers (USEPA, 2022c). As stated in the proposal, tracking the locations of connectors, including replaced lead connectors, can provide additional information relevant to assess potential health risks, considering lead

from an upstream source can adsorb onto galvanized pipe over time.

b. Summary of Public Comments and the EPA's Response

i. Baseline Inventory

The EPA received many comments on the inclusion of lead connectors in the baseline inventory and review of specified sources for connector materials. Some commenters supported the proposed requirement because connectors can be a source of lead contamination. One State commenter noted that the inclusion of these requirements is consistent with that State's regulatory approach regarding connectors and that the deadline to submit the LCRI baseline inventory three years after rule promulgation is ample time for systems to check their records. Some commenters recommended stricter requirements, such as physically verifying each connector of unknown material or "never lead" connector. Other commenters disagreed with the proposed requirement for various reasons, including (1) the value is not clear for inventorying connectors when the proposed rule already requires water systems to remove lead connectors upon encounter, (2) the burden and inefficiency to require a review of specified sources for connectors when systems have already begun or completed a review for service lines, (3) the burden it would impose on States to send out new inventory templates to all their systems, (4) the limited public health benefit, and (5) the lack of available records for connectors. Many commenters stated that they were under the impression that the EPA would not change the 2021 LCRR inventory requirements in the LCRI. Commenters also requested the inclusion of connectors to be optional to align the proposed requirements with past inventorying requirements. Some commenters that opposed the requirement to conduct a review of specified sources for connector materials generally were, however, in support of identifying connector materials and locations when encountered during normal operations. Lastly, commenters asked the EPA to specify which connectors along the service line must be included in the inventory, how many connectors needed to be reported along the line, and if multiple connectors along the line needed to have unique identification.

The EPA acknowledges the burden associated with including a review of specified sources for connector

materials and locations in the LCRI baseline inventory. The EPA also understands that some systems may lack records on connector materials. However, the agency disagrees that it is not practical or feasible to conduct a review of specified sources and include information on connector materials based on those sources in the LCRI baseline inventory. Systems in some States (*i.e.*, Illinois, Michigan, and New Jersey) have already begun inventorying lead connectors because lead connectors are included in the State definitions of an LSL. The sources that systems must review are clearly stated in the final rule. Systems also do not need to re-review sources of service lines that they have already reviewed if they know that connector materials were not denoted in them. The EPA also determined that it is practical and feasible for water systems to prepare the baseline inventory by the rule compliance date (three years after rule promulgation; see section IV.D.1.a of this preamble for more information).

The EPA also disagrees that including connectors in the inventory provides limited benefits to public health. Inventoried lead connectors can provide additional information to the public on potential sources of lead in drinking water, both from the lead connector itself and from lead that might have adsorbed onto galvanized service lines or premise plumbing that are currently or were previously downstream of the connector. Although lead connectors are expected to contribute less to lead in drinking water when compared to LSLs because they are shorter in length, lead connectors are still a source of lead that may contribute to lead in drinking water. Commenters did not provide information or data to support concluding that it is not feasible for systems to conduct a review of applicable sources for connectors and to track connectors during normal operations. Lastly, all connectors identified along a service line must be included in the inventory. The LCRR Inventory Guidance (USEPA, 2022c) provides recommendations on how to uniquely label service lines at the same address, which may be applied to a configuration of multiple connectors along the same service line and, therefore, the same address.

The EPA received comments on the proposed categories for connector materials in the baseline inventory. Commenters asked for the "replaced lead" category to be made optional due to the increase in workload to identify where lead connectors have been replaced in the past, to focus time and resources on higher priority inventory

and replacement activities, the lack of clarity on the intent for including the category, and the potential for customer confusion due to the lack of clarity on what actions, if any, should be taken based on this information. One commenter stated that the category is inconsistent with categories for service lines, which do not keep track of where LSLs have been replaced. Another commenter stated that, if an entire service line has been replaced, there is no reason to "alarm the public" by noting the connectors that were previously made of lead. The same commenter was also confused as to why the categories did not mimic the service line categories more (*e.g.*, lead, galvanized, non-lead, or unknown). Other commenters found the distinction between certain categories to be unclear, noting an example of copper service lines falling under the "never lead" and "no connector present" categories because they do not have connectors, and asked for clarification on locations where there are no records available. One commenter stated all connector categorizations were unnecessary, whereas another commenter supported the connector categorizations as proposed.

The agency agrees with commenters who raised concerns about tracking replaced lead connectors when the entire service line has been replaced as well as the concerns about potential for customer confusion of the "replaced lead" category and what actions consumers should take, consistency with the service line material categories, and commenters' confusion on inventorying connectors based on the proposed rule categorizations. The categories for service lines did not include replaced LSLs or replaced GRR service lines, which was inconsistent with the categories for connectors that include replaced lead. Therefore, the agency is revising the final LCRI to remove the "replaced lead" and "never lead" connector material categories and add a new "non-lead" category. Water systems would categorize replaced lead connectors and never lead connectors as "non-lead," and they would categorize sites where the lead connector was removed and no non-lead connector replaced it as "no connector present." These finalized requirements simplify and streamline the proposed requirements by removing the separate category for replaced lead. The EPA encourages water systems include additional subcategories for non-lead connectors or sites with no connectors present, such as whether a lead connector was replaced at or removed

from the location. Locations of where lead connectors were previously replaced may provide the water system with additional information, particularly when investigating the cause of elevated lead under the DSSA requirements. This additional information could also be useful to consumers, such as if they have a downstream galvanized service line or downstream galvanized premise plumbing that might have adsorbed lead particulates released from the upstream lead connector. Additionally, water systems improving their water infrastructure by fully replacing old, galvanized service lines that are downstream of a known lead connector or replaced lead connector are eligible for BIL DWSRF LSLR capitalization grants to conduct these improvements (USEPA, 2022d). See section IV.D.1.c of this preamble for more information on the final LCRI requirements for connector material categorization.

ii. Inventory All Service Lines

Under the final LCRI, as proposed, all CWSs and non-transient non-community water systems (NTNCWSs) must update their LCRR initial inventories to create a baseline inventory of all service lines in the distribution system. No service line is to be excluded, regardless of water system size, system characteristics, service line ownership, actual or intended use of the service line, historical tap sampling results, or service line installation date. The inventory requirements include all service lines connected to the distribution system including service lines with no known potable applications, such as those designated for fire suppression or emergencies, as well as service lines connected to vacant or abandoned buildings even if the buildings are unoccupied and water service is turned off.

The EPA received comments stating that the agency should not require water systems to inventory service lines with non-potable applications (*i.e.*, fire suppression lines), service lines at abandoned properties, and service lines installed after lead bans became effective, such as Federal, State, or local bans. Commenters stated that fire suppression lines are typically larger than lead or GRR service lines and are used for non-potable purposes. One commenter stated that the limited resources available to water systems would be better directed towards activities with greater benefit to public health because inventorying fire suppression lines provides limited benefit to public health.

The EPA disagrees with commenters that suggested service lines with non-potable applications should be excluded from the inventory requirements. A requirement to inventory only those lines that are currently being used for potable purposes or may be used for potable purposes is administratively unworkable. Moreover, it could expose consumers to lead in drinking water from lead or GRR service lines because the water system is not aware of all actual uses of the water service by consumers, which could include potable uses, *e.g.*, industrial workers potentially drinking water at the facility or agricultural workers filling up water bottles from a close by tap that is primarily used for irrigation. Service lines, as defined by the rule, are used for the distribution of potable water; therefore, regardless of their current or intended use, they are capable of being used for potable purposes. The possibility that the potable water may in fact be used exclusively for non-potable applications at some point in time does not preclude the possibility that the potable water could in fact be used for human consumption or that these service lines could be repurposed in the future for potable uses. For example, these service lines may be repurposed for potable use during a natural disaster or other major emergency or may be repurposed for new residential use. Furthermore, the EPA is concerned that any exclusion of service lines to LCRI requirements based on anticipated or intended use could erroneously exclude some service lines from other LCRI requirements (*e.g.*, service line replacement, public education, and tap sampling). The final rule similarly does not exclude service lines connected to abandoned or vacant properties from the service line inventory because of the potential for these sites to be occupied by consumers in the future. An NPDWR provision that applies to only where the water is actually used for human consumption is administratively unworkable, difficult to implement, and would introduce unnecessary complexity into the rule, which would run counter to the EPA's commitment to simplifying the rule. By including all service lines in the inventory, water systems can avoid these potential harms to public health.

The EPA received comments stating that the agency should not require water systems to inventory service lines on private property. Commenters also asked whether water systems must inventory service lines downstream of a master meter (also called, "mass meter") or other single point of connection.

Commenters stated that CWSs should not be responsible for inventorying and taking subsequent actions for what they characterize as distribution systems that are maintained by someone other than the water system and "only connected to the water system by virtue of the sale of water through a mass meter." Commenters noted that the definition of a service line may create a responsibility for buildings on a college campus, manufactured housing communities, apartment complexes, etc., where the system does not have the authority, control, or responsibility beyond the connection point. Commenters suggested that the regulated system should not be burdened by these groups of connections beyond a master meter, which they implicitly assume are separate and/or unregulated PWSs.

The EPA disagrees with commenters that service lines on private property should not be inventoried. Therefore, the final rule, like the 2021 LCRR, requires water systems to include in their inventory all service lines that are connected to the distribution system, regardless of ownership. Because all service lines are connected to the PWS's distribution system, they are accessible at that juncture to the PWS in order to allow for identification. If the service line is connected to the distribution system, then the water system should be aware of its composition in order to comply with the requirements in the rule to provide public education to persons served by lead and GRR service lines and to replace these lines if they are under the control of the system. Under the 1991 LCR, systems have been able to identify service line materials even where the service lines traverse private property to comply with the tap sampling and service line replacement requirements, and water systems have been developing an inventory of all service lines connected to a distribution system, regardless of ownership, to comply with the 2021 LCRR.

In some situations, an apartment complex, manufactured housing community, or other multi-family or multi-unit entity will have a master meter at the property line of the community. If these communities are considered part of or within a CWS or NTNCWS service area, then that water system is required to inventory all service lines, even if they are beyond a master meter, just as the system is required to inventory service lines between a water main and a single-family residence regardless of the presence of a meter between the water main and the building inlet. As stated above, the inventory must include all service lines connected to the public

water distribution system. If the group of connections beyond a master meter meets the definition of a PWS (*i.e.*, serve at least 15 service connections or 25 persons for 60 days per year) and receives some or all of its finished water from one or more wholesale systems, it would meet the EPA's definition of consecutive system (§ 141.2, definition of "consecutive system"). Consecutive systems that are CWSs or NTNCWSs must complete and submit the LCRR initial inventory to their State by October 16, 2024, and follow the requirements of the LCRI. Some of these systems may meet the criteria that allows a system to not comply with NPDWRs under SDWA section 1411 and § 141.3. The EPA encourages systems to contact their State for questions concerning the application of these criteria to a specific system.

iii. Methods To Categorize and Identify Service Lines

The EPA received comments on methods for service line material identification. Some commenters stated that water systems should be able to use the age of the service line and the effective date of the lead ban as well as statistical approaches (like interpolation and predictive modelling) to categorize a service line as non-lead. These and other commenters also stated that the EPA should prescribe acceptable methods for service line identification along the entire line and provide guidance on how to determine whether an emerging method is acceptable. One commenter stated that every service line should not need to be "manually verified," and a different commenter stated that, if a utility has identified 10 percent of their service lines as non-lead, the rest of the service lines should be assumed to be non-lead. Another commenter stated that NTNCWSs should be allowed to use sampling as a preliminary assessment to determine the potential presence of LSLs before using more invasive investigative methods that may disrupt facility operations. Another commenter stated that unknown service line identification should be risk-based (*e.g.*, taking into account the probability an LSL exists and identifying unknown lines based on that probability).

The EPA disagrees that the agency should prescribe a list of acceptable methods for service line identification beyond the list of specified sources in the rule, which allows for the use of additional sources and new technologies developed in the future to aid in determining service line material if approved or required by the State. The EPA proposed to require systems to

review certain specified sources described in § 141.84(b)(2)(i) through (iii). Water systems may use the age of the service line and the date of the applicable lead ban to categorize service lines because such records fall under the sources of information that systems must review as described in § 141.84(b)(2)(ii). Water systems may use any sources that are or previously have been approved or required by their States. While the EPA disagrees with commenters that the rule should prescribe a list of additional specific acceptable methods for identifying service line materials at the national level, the EPA notes that it has published the LCRR Inventory Guidance that discusses available methods that water systems could use with State approval (USEPA, 2022c). The agency has also published other guidance documents on developing and maintaining service line inventories including a general fact sheet, inventory template, and small entity compliance guidance (USEPA, 2023n; USEPA, 2023o).

The EPA disagrees that the inventory should include additional "risk-based" categorizations for unknown service lines (*e.g.*, likely lead versus unlikely lead). Water systems may choose to include this type of information, and the EPA notes that, in § 141.84(a)(3), the definition of a lead status unknown service line indicates that water systems can provide additional information regarding their unknown service lines as long as the inventory clearly distinguishes unknown lines from those where the categorization of the material is based on the applicable sources of information specified in § 141.84(b)(2) (*e.g.*, records, codes, inspections, and other documentation). There is nothing in the rule that would preclude systems from providing additional information in the inventory to describe the basis for the categorization or the likelihood that the service line is made of lead. For example, a system that adds subcategories, such as "unknown—likely lead" and "unknown—not likely lead," may use that information to prioritize identifying service lines suspected or likely to be lead. The EPA agrees that the LCRI should not preclude the inclusion of this type of information, but the agency does not agree that all water systems should be required to include this level of categorization as it would add burden, make the rule more complex, and could take time and resources away from identifying unknown service lines.

iv. Lead-Lined Galvanized Service Lines

The EPA received comments about lead-lined galvanized service lines in the proposed rule. Commenters recommended that the EPA require water systems that identify lead-lined galvanized service lines in their distribution system to categorize all galvanized lines in those systems as lead-lined galvanized service lines and replace them. Because these pipes can be difficult to detect and verify, these commenters said all galvanized lines should be assumed to be lead to protect public health. One commenter stated that the EPA should require water systems to check for lead lining in galvanized service lines using specific technologies and to update the EPA's guidance on service line inventories to incorporate lessons learned from systems with lead-lined galvanized service lines.

The EPA agrees that lead-lined galvanized service lines can contribute significant amounts of lead in drinking water, and, as the agency previously stated in the 2021 LCRR Inventory Guidance and proposed LCRI, these service lines are covered by the definition of an LSL (USEPA, 2022c; USEPA, 2023a) because a portion of the service line is made of lead. Therefore, as clarified in the final LCRI, any lead-lined pipe is required to be categorized as an LSL in the inventory and is treated as an LSL for all other requirements in the rule, such as mandatory service line replacement, public education, tap sample tiering, and risk mitigation.

The EPA disagrees with the suggestion that water systems should be required to categorize all galvanized service lines in the system as LSLs if there is at least one lead-lined galvanized service line in the distribution system. During the proposal and development of the final rule, the EPA conducted a web search and found limited information about the existence or past installation of lead-lined galvanized service lines in about 30 communities in varying amounts, where the majority of these communities are in the State of Massachusetts (City of Rochester, n.d.; Klemick et al., 2024; MWRA, 2023; Sedimentary Ores, n.d.). The information collected provided no data about the prevalence of lead-lined galvanized service lines nationwide or whether these lines, some of which were installed over a century ago, have already been replaced. Additionally, commenters did not provide data to support the assumption that, if one lead-lined galvanized service line is found, then all galvanized lines in the system are lined with lead. Because the EPA

could not find nor was the agency provided with significant data on the prevalence of lead-lined galvanized service lines nationwide, the agency does not agree with requiring that all galvanized service lines be designated as lined with lead based on the presence of one or a small number of galvanized lines lined with lead in a system. States or localities may use information specific to their region to better inform this type of assumption. To address the possibility that systems may have (or find in the future) lead-lined galvanized service lines, the EPA is finalizing a new requirement for systems that identify any lead-lined galvanized service lines to include in their service line replacement plan a strategy to determine the extent of the use of lead-lined galvanized service lines in the distribution system (see section IV.C of this preamble). Water systems can check GRR service lines currently or previously downstream of LSLs to evaluate whether they are lined with lead when they are replaced under the mandatory service line replacement program. The average service life of cast iron and ductile iron pipe is 40 years (Florida Department of State, 2010), and any lead-lined galvanized service lines are expected to be approximately a minimum of 40 years old by the LCRI compliance date in late 2027 because installation of new lead-lined galvanized lines would have been prohibited under section 1417 of SDWA, given the Federal lead ban that was enacted in June 1986 and enforced through State and local plumbing codes no later than June 1988. Additionally, as water systems replace old, galvanized service lines (in addition to replacing GRR service lines during mandatory replacement) over time and improve their water infrastructure to reduce water loss, respond to service line breaks, remediate low water pressure to buildings, and increase efficiency across the system, they will have opportunities to check whether any galvanized service lines are lined with lead and remove them from their distribution system.

c. Final Rule Requirements

For the final LCRI, all water systems are required to develop a baseline inventory that includes the material of each service line and identified connector that is connected to the public water distribution system regardless of ownership status and intended use. Water systems must develop the baseline inventory by the LCRI compliance date in § 141.80(a) by updating the LCRR initial service line inventory with any new information on service line materials from the

applicable sources described in § 141.84(b)(2) and information on connector materials identified through a review of specified sources. Systems are required to review specified sources of information, such as construction and plumbing codes, permits, and records, that describe connector material and locations; and systems may use other sources of information not listed if approved or required by the State. The system may categorize a service line or connector as non-lead where the service line is determined through an evidence-based record, method, or technique to not be a lead or GRR service line. The final LCRI includes a definition of newly regulated PWSs in § 141.2, where these systems are required to develop a baseline inventory on a schedule established by the State that does not exceed three years from the date the system is subject to NPDWRs (see section IV.O.3 of this preamble).

For the final LCRI, water systems must conduct a review of specified sources on connector materials and include information on connector materials in their service line inventories. Water systems must identify connector materials as they are encountered during normal operations and update the inventory to include the newly encountered connector. Connector materials must be categorized in the inventory as either lead, non-lead, unknown, or no connector present. The lead category is for connectors made of lead. The unknown category is for connectors that are identified through an available source, but the material of the connector is not known or documented in the source. Systems are not required to document connector materials and locations where the system's review of specified sources and lack of encounters during normal operations have not revealed whether there is or is not a known connector at the location. The non-lead category is for connectors that are determined through an evidence-based record, method, or technique not to be made of lead. Water systems may include additional information such as the specific material of a non-lead connector (e.g., copper or galvanized) as an alternative to categorizing it as "non-lead." Water systems may also provide more information regarding their non-lead connectors, such as whether a lead connector was replaced at the location. Lastly, the "no connector present" category is for where there is no connector at the location, such as locations where the connector was removed or locations where there never was a connector, e.g., in instances where

the service line directly connects a water main to a building inlet.

2. Inventory Updates and Discrepancies

a. Rationale and Proposed LCRI Requirements

For the LCRI, the EPA proposed that water systems update the inventory annually. Under the 2021 LCRR, systems are required to update the inventory and submit it to the State on the same frequency as the system's tap sampling and monitoring schedule, but no more frequently than annually. Decoupling the inventory update submissions from the tap sampling and monitoring schedule was proposed to: (1) Ensure the system is providing up-to-date information to consumers on an annual basis and (2) enhance compliance with the mandatory service line replacement requirements, which are assessed annually, and annual public education requirements. Annual inventory updates also increase transparency for consumers and States relative to the 2021 LCRR, which allowed inventory updates every three years. Consistency between annual updates and other LCRI requirements would reduce discrepancies between the information, *i.e.*, the service line material in the inventory may not match the material provided in the consumer notification if the inventory is not updated annually. For example, water systems would need to update their inventories over time because service line material categorizations may change as service line materials are identified over time through normal operations, targeted investigations of unknown service lines, and service line replacements.

For the LCRI, the EPA also proposed that water systems include the total number of lead, GRR, and unknown service lines, the number of lead connectors in the inventory, and the number of full lead and GRR service line replacements completed with each inventory update submitted to the State and to make them available in the publicly accessible inventories to improve transparency and customer tracking of inventory and service line replacement progress. This information is also important for compliance and enforcement of the mandatory service line replacement requirements and for the EPA's administration of financial assistance programs.

The EPA proposed to expand the 2021 LCRR requirement for a water system to update their inventory by the next submission deadline if a system, including a system whose inventory previously consisted solely of non-lead

service lines, discovers a lead or GRR service line. The agency proposed to require systems to add the discovered lead or GRR service line to the replacement pool for the mandatory service line replacement program. The agency also proposed to require systems to replace the service line within six months of discovery if the system's inventory only contained non-lead lines, such as after the system finished mandatory service line replacement. Systems must then comply with any additional actions required by the State. This requirement ensures that systems update the inventory with the newly discovered lead or GRR service line and replace the line accordingly.

Additionally, the EPA proposed to require water systems to respond to consumer inquiries of a suspected incorrect categorization of their service line material in the inventory with an offer to inspect the service line within 60 days of receiving the notification. The EPA explained that this would provide another opportunity for the system to assess the accuracy of its inventory to inform potential actions to remedy discrepancies at the individual site and throughout the distribution system more broadly (88 FR 84935, USEPA, 2023a). For example, if a consumer previously replaced a service line that is still listed as lead or GRR based on a historical record, the system can correctly recategorize that service line material.

b. Summary of Public Comments and the EPA's Response

The majority of commenters supported the proposed requirement for inventories to be updated and submitted to the State annually. Some commenters stated that submission of annual updates to the State would be too frequent and burdensome, especially for smaller systems with few staff. One commenter requested that inventories be updated "as needed" as replacement programs progress.

The EPA disagrees with commenters that it is unnecessarily burdensome for systems to submit updated inventories to the State on an annual basis and make them available to the public no later than the deadline for the State submission. Annual inventory updates increase transparency for consumers and States and are essential to comply with the annual consumer notification and mandatory service line replacement requirements. Water systems will need to update their inventories over time as service line material categorizations change as a result of replacement and validation and as the materials of unknown service lines are identified.

The EPA expects water systems to update their inventories in real time or regularly throughout the year as new data becomes available, which will lessen the burden with preparing, submitting to the State, and publishing the updated inventory for the public. Annual submission to the State of updated inventories will allow systems time to compile the updated information while assisting States in ensuring compliance with requirements, including public education and service line replacement. Water systems are subject to several annual reporting requirements in NPDWRs and have demonstrated the ability to prepare annual reports.

The EPA received comments on the content of the inventory updates. One commenter stated that, to simplify inventory updates, systems with online inventories should only have to notify their States annually with summary information of any updates and provide them with instructions on how to access the online inventories. The commenter noted that it would be unnecessary to annually re-submit an online inventory to the State. Another commenter advocated including additional information in the summary of information provided with each update, such as the number of partial LSLRs conducted. Some commenters also stated that the updated inventories should include the number of abandoned or disconnected LSLs and lead connectors left in the ground because they are concerned abandoned sections of lead pipe in the ground may later contribute to soil and ground water contamination.

The EPA agrees that systems should be able to provide States with summary information and instructions on how to access online inventories in lieu of submitting the entire inventory because, together, the summary information and instructions to the online inventory are effectively the same as submitting full documentation for the updated inventory as described in § 141.84(b); they fulfill the same purpose of ensuring State and public access to the most up-to-date inventory information on at least an annual basis. Therefore, the EPA is revising the final LCRI to allow water systems that make the publicly accessible inventory and its subsequent updates available online (e.g., an online map or downloadable file on a website) the flexibility to provide instructions on how to access the updated inventory information instead of preparing a fixed copy of the entire updated inventory (which includes the summary information), submitting it to the State, and making it available to the public on

an annual basis. These systems will only need to provide the summary information regarding service line material identification and replacement as specified in § 141.84(b)(2)(iv) and instructions on how to access the updated inventory to their States. Systems that utilize this flexibility must ensure the required summary information is publicly available online (e.g., listed on the same web page as the online map) to fulfill the inventory updates requirement. A State may also request their water systems who take advantage of this option to provide them with an indication of where changes have occurred since the previous submitted inventory because this would allow States to focus on where changes were made.

The EPA agrees with commenters requesting additional items in the list of summary information to be included and submitted with the inventory. As a result, the EPA is revising the proposed list of information water systems must include with each updated inventory to also contain the total number of each of the following: non-lead service lines in the inventory, connectors of unknown material in the inventory, and the number of partial lead and GRR service line replacements that have been conducted in each preceding program year. This provides consumers with additional information to understand their public water distribution system and the potential risks of lead exposure in their drinking water. By including the number of partial service line replacements conducted each year, the State and consumers can more easily monitor the system's compliance with service line replacement requirements. The EPA recommends that systems include the number of lead service lines and connectors that remain in the ground after "abandon-in-place" or "pipe splitting" practices are used to replace these pipes; however, this information is not required to be included in the inventory or service line replacement plan. Tracking information on these lead materials would ensure that this locational information exists should the system or the public need such information in the future. However, once the service line is cut, it is not a part of the water service (see code 9.14 in the LCRI Response to Comments document for more information, USEPA, 2024k).

The EPA received comments on the proposed requirement that water systems must offer to inspect a service line that a consumer suspects is incorrectly categorized. Commenters stated that the EPA should allow systems to provide available

documentation on why a service line is categorized as such and allow follow-up actions (e.g., phone calls, emails, and submitted photos) with the consumer to determine if visually inspecting the service line is necessary. One commenter stated that systems should be allowed a longer period to inspect service lines where the material is unknown. Another commenter stated that systems should inspect the service line within 60 days rather than only offering the inspection within 60 days.

The EPA agrees that there are several effective ways for a water system to respond to a customer request for inspection besides on-site visual inspection. The EPA is not specifying the timeframe for which water systems would need to conduct the inspection, recognizing (1) the actions that are most appropriate can vary across systems (e.g., on-site visual inspection of the pipe exterior; virtual inspection such as a photo or video submission from the consumer or a video call with the consumer) and (2) the system-specific conditions, such as freezing ground conditions in some climates, can impact when certain types of inspections can be conducted. A visual inspection of the pipe conducted remotely can be as effective as an on-site inspection and will reduce the burden on a system to respond to consumer notifications of suspected incorrect categorizations of service line materials. The EPA did not propose to require water systems to offer to inspect and follow through with the inspection within 60 days and has clarified that rule text accordingly. Additionally, the agency is revising the final rule to require systems to offer inspection within 30 days of receiving the notification from the consumer or the customer (if different from the person served at that service connection). The 30-day period to offer to inspect is required to ensure timely follow-up with the consumer or customer has occurred.

c. Final Rule Requirements

The final LCRI retains the proposed requirement for water systems to continue to update their service line inventories until their inventories contain only non-lead service lines, non-lead connectors, or no connectors present. Systems with lead, GRR, or unknown service lines, lead connectors, or connectors of unknown material must submit the inventory updates to the State annually and make the update available to the public no later than the deadline for submitting it to the State. Systems must update the inventories based on the sources of information specified in the rule, other sources of

information approved or required by their States, their mandatory service line replacement programs, and encounters during normal operations.

Inventories must be updated with information from any encounters with service line or connector materials, service line inspections, and replacements that have occurred since the previous update. Systems must also report summary information that includes the total number of service lines for each service line material category (lead, GRR, unknown, and non-lead), the total number of lead connectors, and the total number of connectors of unknown material as well as the number of full lead and GRR service line replacements and the number of partial lead and GRR service line replacements that have been conducted in each preceding program year. A water system that makes the publicly accessible inventory and its subsequent updates available online (e.g., online map or downloadable file on a website) has the option to submit to the State the summary information regarding service line material identification and replacement as specified in § 141.84(b)(2)(iv) and instructions on how to access the updated inventory in lieu of providing a fixed copy of the entire updated inventory that includes the required summary information. A system that uses this option must ensure the summary information is publicly available online.

All water systems that discover a lead or GRR service line that was previously inventoried as non-lead must update their inventories, notify the State in accordance with the reporting requirements, and comply with any additional actions required by the State to address the inventory inaccuracy. The final LCRI requirements to replace the discovered lead or GRR service lines have been moved to § 141.84(d)(4)(ii) and are discussed in section IV.B.7.c of this preamble.

If a consumer or customer (if different from the person served at that service connection) notifies the water system of a suspected incorrect categorization of their service line material in the inventory, the system must respond to the consumer or customer within 30 days of receiving the notification to make an offer to inspect the service line.

3. Public Accessibility of the Inventory and the Inclusion of Addresses in the Publicly Accessible Inventory

a. Rationale and Proposed LCRI Requirements

Publicly accessible inventories can facilitate community engagement and improve transparency. These inventories inform the public of the location of possible lead exposures and provide transparency to the State and the public of system progress on service line identification and replacement. In turn, publicly accessible inventories can help protect public health by making this information broadly available. For the LCRI, the EPA built upon the 2021 LCRR's publicly accessible inventory requirements by proposing that water systems make not only service line materials accessible to the public, but also connector materials and the street address of each identified service line and connector.

The proposed LCRI retained the 2021 LCRR requirement for systems serving greater than 50,000 persons to make the publicly accessible inventory available online. This threshold was set in the 2021 LCRR because of the potential burden associated with digitizing and hosting the inventory online for smaller systems (USEPA, 2020e). It is feasible for large systems to host their inventories online (USEPA, 2020e). In the proposed LCRI, the EPA sought comment on changing the threshold.

The 2021 LCRR requires water systems to create and maintain an inventory that includes the specific addresses associated with each service line connected to the water system, but the 2021 LCRR does not require the publicly accessible inventory to include the specific addresses of lead or GRR service lines; instead, water systems are permitted to use a "location identifier," which could be a street address, block, intersection, or landmark. For the LCRI, the EPA proposed to require water systems to include a street address associated with each service line and connector in the publicly accessible inventory; where a street address is not available for an individual service line or connector, the EPA proposed that systems use a unique locational identifier. The EPA proposed this requirement to increase transparency with their consumers about the locations and materials of service lines and connectors connected to their residences or other buildings they may occupy (e.g., places of employment and child care facilities). This ensures that all persons served by a lead, GRR, or unknown service line have access to this information, not just those

consumers who received targeted public education from the system. As stated in the proposal, including addresses in the publicly accessible inventory is critical to make more people aware of their risk to lead in drinking water because the requirements for notification may not be sufficient to reach all persons at or who use that site (e.g. where the persons served are short-term residents in non-owner occupied buildings, parents and guardians of children at in-home child care facilities, and residents of long-term care facilities). Additionally, it is feasible for systems to make publicly accessible the specific addresses where connectors and lead, GRR, unknown, and non-lead service lines are located, as demonstrated by the fact that several systems are already publishing service line inventories containing addresses (88 FR 84936, USEPA, 2023a).

b. Summary of Public Comments and the EPA's Response

The EPA received comments supporting and opposing the proposed requirement to include street addresses in the publicly accessible inventory. Some commenters supported the proposed requirement because it provides transparency, builds accountability and trust with the public, makes people aware of their risk of lead in drinking water, and, if searchable by address, can provide information to prospective buyers and renters and create an incentive for property owners to provide consent for full service line replacement.

Some commenters opposed the inclusion of specific addresses in the publicly accessible inventory for a range of reasons. Some commenters noted that sites, such as those in very rural areas, with water service may not have street addresses and, instead, water systems typically have Global Positioning System (GPS) coordinates for those properties. Some commenters suggested addresses are unnecessary because consumers served by lead, GRR, and unknown service lines will receive an annual notification of service line material. Some commenters questioned the EPA's authority for the requirement and expressed concerns, without explanation, about potential liability and complications due to privacy laws. Some commenters suggested that the requirement would discourage property owners from providing consent to identify service line material using field investigation methods like potholing and act as a disincentive for water systems serving less than 50,000 persons from posting their inventory online.

The EPA agrees that, in some cases, a site may not have a street address. In these cases, the final rule allows water systems to assign a non-address locational identifier (e.g., a block, intersection, or landmark) to a service line or connector. The final rule adds GPS coordinates as a potential example of a non-address locational identifier that can be used in circumstances where a street address does not exist.

The EPA disagrees with commenters that the agency has no need or clear authority to require addresses be included in the publicly accessible inventory. This provision is authorized under SDWA section 1412(b)(7)(A) because, as explained below, it prevents known or anticipated adverse effects on the health of persons. In addition, SDWA section 1417(a)(2) requires "[e]ach owner or operator of a public water system" to "identify and provide notice to persons that may be affected by lead contamination of their drinking water where such contamination results from [. . .] the lead content in the construction materials of the public water distribution system." A publicly accessible inventory with street addresses ensures that all persons served by a lead, GRR, or unknown line have access to this information, not just those consumers who received targeted public education from the system. The requirements for notification (such as the requirements for annual notification of known or potential lead service line material) may not be sufficient to reach all persons at or who consume water at that site, such as where the persons served are short-term residents and visitors, parents and guardians at child care facilities, residents of long-term care facilities, and employees. The inclusion of addresses in the publicly accessible inventories also strengthens public health protection by incentivizing property owners to identify and replace service lines.

In light of the public health benefit of this requirement, the EPA does not agree that the rule should not require the use of street addresses in the publicly accessible inventory due to the perceived concerns that water systems could face potential liability for the public disclosure of this information. No commenters provided any detail to explain the basis for their concerns about potential liability. Many water systems across the nation have published or made publicly available inventories that include street addresses, such as the City of Columbus Department of Public Utilities, OH; the City of Grand Forks, ND; the City of Lincoln, NE; the City of Somerville, MA; the City of Troy Department of Public

Utilities, NY; the City of Wheaton Water Division, IL; DC Water, DC; Marshfield Utilities, WI; Pittsburgh Water and Sewer Authority, PA; and Saint Paul Regional Water Services, MN. All systems in New Jersey are required to include the locations of all service lines in their inventories, and systems serving 3,300 persons or more are required to host their inventories on their websites (State of New Jersey, 2021b). Additionally, the Rhode Island State Department of Health plans to publish and maintain an online map of the specific location of each service line and identify whether it is a lead or unknown service line (State of Rhode Island, 2023b).

The EPA received comments on the threshold to make a publicly accessible inventory available online. Commenters stated that the EPA should maintain the threshold at systems serving more than 50,000 persons because smaller systems are less likely to have the resources to comply with the requirement, implementation of the various NPDWRs would be easier and more streamlined if the thresholds for making information available online were more aligned across NPDWRs, and the uncertainty about whether the requirement would be feasible for medium systems. One commenter stated that the EPA should not revisit the threshold but should instead incentivize online posting of the inventory by eliminating detailed data submissions to the State for all systems that meet the following requirements: post the inventory online, update the online inventory with new information as required by the rule, and provide the inventory website to the State. Conversely, other commenters stated that the threshold should be either lowered to include medium systems (systems serving more than 10,000 persons) or the threshold should be eliminated, requiring all water systems to make the inventory publicly available online. Commenters stated several reasons for lowering the threshold, such as: (1) The lack of readily accessible information about water systems can be a barrier to participation in the replacement program, trust in the system, and successful prevention of the risk of lead exposure from drinking water for homeowners and tenants; (2) more water systems are capable of posting their inventories online; and (3) sharing critical information appropriately is one of the most important and least expensive tools for public health protection, public transparency, and public education. One commenter representing a State noted that a

threshold of 10,000 persons could be feasible if inventories can be made available online via an online file sharing services instead of a website. Another commenter representing a State noted that their experience shows that systems serving more than 10,000 persons have the resources and capacity to make their inventories available on the municipal or water system website. One commenter stated that States should be authorized to post the inventories on their own website for individual water systems and serve as a central database, where systems would only have to post an external link to the State's website on their websites for consumers to easily access.

The EPA agrees that publicly accessible information about inventories is important to all consumers as provided by the LCRI public education requirements. However, as discussed below, the EPA disagrees that the threshold for requiring the inventory be available online should be lowered from 50,000 persons served and, therefore, the EPA is retaining the threshold of systems serving more than 50,000 persons in the final LCRI. When developing the final LCRR, the EPA determined that this threshold is feasible for larger systems as mentioned in section IV.D.3.a of this preamble. This threshold also is consistent with other requirements, including the CCR requirements. The EPA selected this threshold because it is feasible for systems serving over 50,000 persons to publish the inventory online (USEPA, 2020e). For systems serving 50,000 persons or fewer, however, the potential burden associated with digitizing and hosting the inventory online is greater and would likely take resources away from developing the inventory, identifying unknown service lines, and conducting lead and GRR service line replacement. As stated above, systems serving 50,000 persons or fewer are given the flexibility to choose how they make their inventories accessible to the public. The EPA anticipates that systems serving 50,000 persons or fewer that have the ability may choose to host their inventories online as this would ease their inventory submission burden to the State as well as provide a convenient way for their customers and consumers to access the inventory. Additionally, States may set a lower threshold if they choose.

However, the EPA agrees with the suggested incentive for systems that post their inventories online, and, as discussed in section IV.D.2 of this preamble, the final LCRI provides water systems that make their inventory and its subsequent updates available online

(e.g., an online map or downloadable file on a website) along with the summary information regarding service line material identification and replacement as specified in § 141.84(b)(2)(iv) the option to provide instructions to access to the online inventory and the summary information to the State in lieu of providing a fixed copy of the entire inventory as described in § 141.84(b). Additionally, the EPA notes that inventories can be made available online via online file sharing services. The LCRR Inventory Guidance states that, for systems that may not have the capacity for online GIS mapping applications, there are other online data sharing methods that better fit the needs of these systems and their consumers, such as through an online cloud-based data sharing, online spreadsheet, file transfer protocol (FTP) server, or a downloadable format linked to text or an image on the system's website (USEPA, 2022c). Furthermore, the EPA agrees that States and their systems may take this approach to publishing the baseline inventories and subsequent updates to the inventory online and satisfy this part of the requirements; however, systems will still need to annually report the information regarding service line material inspections and replacements to their States.

c. Final Rule Requirements

The final LCRI requires water systems to make their service line inventories publicly accessible. The publicly accessible inventory must include the material and street address of each service line and identified connector in the service line inventory. Where a street address is not available for an individual service line or connector, a unique locational identifier (e.g., block, GPS coordinates, intersection, or landmark) may be used instead. The publicly accessible inventory must reflect any updates to the inventory no later than the deadline to submit the updated inventory to the State, including the listed information regarding service line material identification and replacement that has occurred since the previous update. Water systems serving greater than 50,000 persons must make the publicly accessible inventory available online.

When a water system has no lead, GRR, or unknown service lines and no known lead connectors or connectors of unknown material in their distribution system, the system may use a written statement in lieu of a publicly accessible inventory. The written statement must include a general description of all applicable sources used in the inventory

to determine that the distribution system does not have any lead, GRR, or unknown service lines, known lead connectors, and connectors of unknown material. Water systems, including those with publicly accessible inventories consisting only of a written statement, must include instructions to access the publicly accessible inventory in their CCRs.

4. Inventory Validation

a. Rationale and Proposed LCRI Requirements

Accurate service line inventories are essential to ensure replacement of all lead and GRR service lines. The EPA heard, through stakeholder engagement, concern for accuracy in inventories. To increase the accuracy of service line inventories, the EPA proposed that water systems must validate a subset of the non-lead service lines in their inventory. The proposed validation requirement would test the reliability of certain methods, techniques, and alternative sources of information used to identify service lines as non-lead and facilitate action to remedy any discrepancies that may be discovered as a result of the validation as well as provide systems, States, and consumers with additional confidence in the accuracy of the inventory. The EPA proposed to require the inclusion of all non-lead service lines in the validation pool unless the service lines were identified through the specified sources listed in § 141.84(b)(2)(i) through (iii) such as construction and plumbing codes and water system records, visual inspection of the pipe exterior at a minimum of two points, or previously replaced lead or GRR service lines. The EPA proposed to require water systems to confirm the service line material of a random sample of non-lead service lines from the validation pool using a visual inspection of pipe exterior at a minimum of two points and provide the validation results to the State. Under the proposal, systems would be required to validate the number of service lines necessary to achieve a 95 percent confidence level. For more information on the methodology used to determine the minimum number of validations required based on a system's validation pool, see the "Technical Support Document for the Proposed LCRI" (USEPA, 2023k). The EPA proposed to require systems to complete the validation by year 7 of a 10-year replacement program to allow time for the system to address potential issues identified in the validation process and complete replacement by the deadline. For systems subject to a deferred

deadline for service line replacement, the State would be required to set a deadline no later than three years prior to the deadline for replacement.

b. Summary of Public Comments and the EPA's Response

Some commenters support including a validation requirement in the LCRI to ensure inventory accuracy, enhance the effectiveness of the service line replacement plans (e.g., inform the methods used to identify service lines of unknown or unconfirmed material), build trust, and help ease concern over using State-approved methods like predictive modelling and emerging identification technologies. Conversely, other commenters oppose a validation requirement because it diverts time and resources from service line replacement and is unnecessary because they assert that systems using predictive modelling (if approved by the State) already complete some form of validation process for their models. One commenter suggested that the rule require water systems to validate their inventories only after any inaccuracies are found, and another commenter suggested the rule allow systems to either visually verify the material of all service lines in 10 years or complete the proposed validation requirement by the 7-year deadline. Some commenters suggested that the rule waive, or allow a State to waive, the validation requirements if the water system completed an inventory validation prior to the promulgation of the LCRI.

The EPA agrees with the commenters that support the inventory validation requirements for the reasons mentioned: ensuring inventory accuracy, enhancing the effectiveness of the service line replacement plans (e.g., inform the methods used to identify service lines of unknown or unconfirmed material), building trust with the public, and increasing confidence in the reliability of State-approved methods like predictive modelling and emerging identification technologies. The validation process does not divert time and resources from the service line replacement requirements but rather supports the effective implementation of the service line replacement requirements. Inventory validation increases the confidence of consumers, systems, States, and the EPA that the methods used to categorize non-lead service lines in the inventory are accurate and that systems are truly replacing all lead and GRR service lines in their distribution system. In addition, the deadline for validation provides systems with ample time to complete the validation process and will allow

systems to combine validation efforts with normal operations and service line replacement activities to increase efficiency of validation.

The agency also acknowledges the concern for water systems that have already completed inventory validations, including systems that conducted previous validation efforts to develop and train predictive models. Therefore, the EPA is finalizing a flexibility for systems to be able to make a written request to the State to approve a waiver of the inventory validation requirements if the system completed validation efforts prior to the compliance date that are at least as stringent as the LCRI requirements.

In the proposed LCRI, the EPA requested comment on its proposed methodology to calculate the minimum number of validations systems would be required to perform. The EPA's proposed methodology set the size of the validation pool to achieve a 95 percent confidence level or, for systems with relatively few of these service lines, to validate 20 percent of the non-lead service lines in their validation pools. Some commenters supported the methodology and stated that the approach is reasonable. One commenter recommended that the EPA increase the number of validations required for larger systems. On the other hand, some commenters questioned why the EPA maintained an expected sample proportion of 0.5 even though it provides the most conservative number of validations required and why the agency does not allow each water system's "consultant" to develop a testing program that achieves a 95 percent confidence level at a sample proportion catered to each system. The same commenters stated that the EPA should clarify the validation calculations, e.g., the data used to determine the expected sample proportion, the relevant comparison between the number of validations required and the validation pool, and where the EPA derived its formulas for determining the number of validations required.

The EPA used a conservative sample proportion of 0.5 because the agency does not have sufficient data to estimate a sample proportion specific to discovering a non-lead service line as a lead or GRR service line and, therefore, used 0.5 to ensure the minimum number of validations required is statistically significant in all systems nationwide regardless of the possibility for a more precise sample proportion at an individual system's level. A sample proportion of 0.5 is used when a better estimate is unavailable (Daniel and

Cross, 2013). The EPA disagrees that water systems or their designated consultants should be required to conduct a testing program or pilot study to estimate the sample proportion prior to conducting inventory validation because conducting a testing program or pilot study would be resource intensive and add burden to systems. The validation requirements ensure systems do not need to do that by setting a procedure at the national level.

The EPA derived the equations to calculate the minimum number of validations required from the formulas used to assess the distribution of the sample mean when sampling without replacement by using the finite population correction factor (Daniel and Cross, 2013). The minimum number of validations required is the sample size of a finite population when sampling without replacement, and the validation pool is the assumed finite population size. See the "Technical Support Document for the Final Lead and Copper Rule Improvements" (final TSD) for an expanded derivation of the minimum number of validations required for a system's validation pool of non-lead service lines (USEPA, 2024d).

In the proposed LCRI, the EPA requested public comment on whether non-lead service lines that were categorized based on records should be subject to the validation requirements. Some commenters encouraged the EPA to include non-lead service lines categorized based on historical records in the validation pool. For example, one commenter recommended that the agency require service lines categorized based on records unless the records show the lines were installed, inspected, or replaced after the effective date of a local lead ban. Another commenter suggested requiring a random sampling of historical records because the initial inventory requirements in the 2021 LCRR did not require systems to identify the specific source used to categorize service lines. Other commenters were concerned that the reliability of historical records may vary across systems and provided examples of systems having inaccurate records. For example, one commenter mentioned that, in Flint, Michigan, inspections during a service line replacement project revealed that 24 percent of the service lines identified as copper based on historical records were actually made of lead (372 out of 1,489 service lines; BlueConduit, 2020). Commenters provided the example of the Lead Free DC task force, where the task force found that 20 percent of service lines identified as copper

through historical records were actually made of lead (Betanzo and Attal, 2022). A commenter representing a State also noted that some systems within their jurisdiction have found that historical records have been inaccurate.

In addition to these examples of inaccurate historical records raised by commenters, the EPA is aware of other data showing that historical records can be unreliable sources of information for service line material categorization. As the EPA noted in the LCRR Inventory Guidance, only 63 percent of the Pittsburgh Water and Sewer Authority's historical records were accurate because of the service line repair and maintenance activities that have taken place since the records were created (USEPA, 2022c). In addition, a 2023 study on the accuracy of service line identification methods found that, of the 159 control homes, records for 90 percent of the 99 known LSL sites were accurate, whereas records for 3 percent of the 60 non-lead service line sites accurately identified the service line material (Smart et al., 2023). Therefore, the EPA is revising the final LCRI to require the validation pool to include records of non-lead service lines. The EPA agrees, however, that records showing that the service line was installed after the effective date that the Federal, State, or local lead ban in the validation pool would have been enforced (June 19, 1988, if there was no enforcement of a State or local lead ban prior to that date) would be more reliable because these regulatory changes marked a change in system and plumbing practices nationally, where previous studies show instances of inaccurate records prior to these regulatory dates.

The EPA received comments on the proposed 7-year deadline for water systems to complete inventory validation when the system is subjected to a 10-year mandatory service line replacement deadline or only has non-lead service lines in their inventory. Some commenters supported the proposed deadline because it would allow systems three years before the deadline for service line replacement to implement changes if inaccuracies are found. Conversely, other commenters questioned whether requiring inventory validation efforts to be conducted within the first seven years is the best use of water system resources, instead recommending that validation be completed after (1) all unknown service lines have been identified to be representative of all non-lead service lines that could be included in the validation pool or (2) all known lead and GRR service lines are removed, so

water systems can focus on lead and GRR service line replacement. Another commenter stated that the EPA should require inventory validation to be completed within the first three years of rule promulgation, or no later than halfway through the mandatory service line replacement timeline if extra time has been granted, because the proposed deadline is "far too late."

The EPA agrees with the commenters that supported the seven-year deadline because the deadline allows systems three years to address potential discrepancies found by the validation. The agency proposed a seven-year deadline to allow water systems to focus on identifying unknown service lines as well as validate service lines identified during the replacement program using field investigation techniques and alternative sources of information approved by the State. The EPA disagrees with the commenters that questioned whether the inventory validation requirement would be representative of all potential non-lead service lines to be added to the validation pool if validation is completed before water systems identify all unknown service lines. If a system complies with the inventory validation process sometime before seven years into the replacement program, it is expected to be reliable because the sources of information the system would be using are expected to be the same in the beginning years of inventory development to the end, especially if the validation results provide further confidence in the use of those sources, unless the system is approved or required by the State to use another source or method of identification. In that instance, if a system discovers a lead or GRR service line where a non-lead line was inventoried, the system is required to notify the State with the methods used to categorize the service line material and comply with any additional actions required by the State to address the inventory inaccuracy. Conducting inventory validation before the deadline for mandatory service line replacement allows the system time to investigate certain methods used to categorize non-lead service lines if discrepancies are found during the validation process before they complete replacement.

The EPA received comments on the proposed rule's requirements to address discrepancies found during the validation process. Some commenters advocated for requirements for water systems to take actions to increase the accuracy of their inventories if they identify discrepancies during the validation process because failure to

include concrete steps to improve inventories could undermine the trust and reliability of the document that is the "backbone" of LCRI compliance (BlueConduit, 2024; Office of the People's Counsel for the District of Columbia (OPC-DC), 2024). One commenter recommended that water systems that inaccurately identify lead or GRR service lines as non-lead should be required to submit a plan to their States about how they will increase the accuracy of their inventories.

The EPA agrees that, when inventory discrepancies are identified during the validation process, remedial actions can improve the inventory's accuracy. The final LCRI requires water systems to submit to the State a list of the locations of any non-lead service lines identified to be a lead or GRR service line through the validation along with the methods used to categorize those service lines. The final LCRI also requires systems to comply with any additional actions required by the State to address the inventory inaccuracies found during the validation process. Given the range of possible reasons for inventory inaccuracies, the EPA expects States to be better suited to identify the appropriate actions systems must take to improve the accuracy of their inventories. A single, prescribed approach in a national rule could be overly broad and unnecessary if, for example, there is only one misidentified line, or inadequate to remedy the problem if the validation shows widespread inaccuracies of categorizations. Moreover, it would not adequately capture the broad range of potential responses that could improve inventory accuracy. Instead, the appropriate remedy is best identified on a system-specified basis tailored to the system's specific inventory inaccuracies and potential systemwide issues discovered during inventory validation.

c. Final Rule Requirements

In the final LCRI, the EPA made clarifying revisions to ensure the requirements are clear based on comments received. Under § 141.84(b)(5) of the final rule, water systems must validate the accuracy of the methods used to categorize service lines as non-lead. First, water systems must identify a "validation pool" of service lines that were determined to be non-lead through specific sources and exclude service lines determined to be non-lead through: (1) Records showing the service line was installed after the effective date of the Federal lead ban (June 19, 1988), or after the compliance date of a State or local law prohibiting the use of service lines that do not meet

the 1986 definition of lead free in accordance with SDWA section 1417, whichever is earlier, (2) visual inspection of the pipe exterior at a minimum of two points, or (3) previously replaced lead or GRR service lines. Previous visual inspections of the pipe exterior must consist of an inspection of at least two points. Previous lead or GRR service line replacements may also be excluded when identified during their review of specified sources. The EPA compiled a list of the lead ban provisions by State in appendix D of the LCRR Inventory Guidance (USEPA, 2022c); however, water systems should verify the compliance date for any local or State lead ban before using a date earlier than June 19, 1988.

Under the LCRI, water systems must confirm the service line material of a random sample of non-lead service lines from the validation pool by visual inspection of the pipe exterior at a minimum of two points. Visual inspection of the pipe exterior could be conducted by, but not limited to, potholing, viewing the service line material in the meter pit or stop box, or viewing the service line entering the building. Where ownership is shared, the water system must conduct at least one visual inspection on each portion of the service line (*i.e.*, one inspection on the system-owned portion and one inspection on the customer-owned portion of the service line). Where ownership is shared and only one portion of the service line is included in the validation pool, systems must conduct at least one point of visual inspection on the unconfirmed portion of the service line. For example, a non-lead service line is included in the validation pool because the system-owned portion of the line is made of copper due to a previous partial LSLR and the customer-owned portion of the line is estimated to be non-lead based on the materials observed in other homes built around the same time in the same neighborhood. The system will need to confirm that the customer-owned portion of the service line is non-lead through at least one point of visual inspection of the pipe exterior.

The size of the random sample of non-lead service lines from the validation pool is based on the number of service lines a water system needs to validate, at a minimum, to achieve a 95 percent confidence level (USEPA, 2023k; USEPA, 2024d). To achieve the 95 percent confidence level, the EPA requires water systems with more than 1,500 non-lead service lines in their validation pool to confirm the material at between 322 and 384 sites, as

specified in the rule, depending on the specific size of the validation pool. Systems with 1,500 or fewer non-lead service lines in their validation pools must validate at least 20 percent of the total number of non-lead lines in the pool. If physical access to private property is necessary to complete the validation and the water system is unable to gain access, the system is not required to validate the service line material at that site. Instead, the system must randomly select a new service line from their validation pool to conduct the validation.

Once water systems have completed their inventory validation, they must submit to the State the results of the validation by the applicable deadline based on the system's mandatory service line replacement program. Systems required to replace lead and GRR service lines in 10 years or less must complete their inventory validations no later than December 31 following seven years after the LCRI compliance date. Systems who have reported only non-lead service lines are also subject to the validation requirement and must complete inventory validation no later than December 31 following seven years after the LCRI compliance date. Where States have required systems to replace service lines on a shortened deadline, the State is required to set a deadline for the validation. Systems that are eligible for and plan to use deferred deadlines must complete inventory validation by a deadline established by the State to be no later than three years prior to the deferred deadline. Systems must submit the results of the inventory validation. The final rule clarifies that the results of the inventory validation must also include the submission of the specific version (including the date) of the inventory that was used to determine the number of non-lead lines included in the validation pool in order to provide the State with the information needed to assess the inventory validation. The system must comply with any additional actions required by the State to address inaccuracies in the inventory.

The final LCRI was updated to also include a flexibility for water systems that have previously conducted inventory validation efforts that, at a minimum, are as stringent as the LCRI inventory validation requirements. Water systems may make a written request to the State to approve a waiver of the inventory validation requirements. To obtain a waiver, the system must submit documentation to the State by the LCRI compliance date to demonstrate that they conducted an inventory validation effort that is at

least as stringent as the validation requirements specified in the rule and obtain written approval of the waiver from the State.

5. Deadline To Identify All Unknown Service Lines

a. Rationale and Proposed LCRI Requirements

For the LCRI, the EPA proposed to require water systems to identify the material of all service lines categorized as unknown in the inventory by the system's deadline to complete mandatory full service line replacement for several reasons. Using the same deadline for these two requirements eliminates the need for a separate set of requirements for this purpose, such as a minimum rate for identifying unknown service lines. In the LCRI proposal, the EPA also explained that this approach prevents additional rule complexity as well as reporting and tracking burden, a priority identified in the EPA's 2021 LCRR review notice to assure that States and water systems can effectively implement the LCRI. It also provides systems with flexibility to plan a full service line replacement program that meets local needs. Without a separate and earlier deadline to identify unknown service lines, systems can plan to identify service line materials in tandem with other infrastructure work, such as water main or meter replacement, as they are planned to occur in the proceeding years up until the deadline for service line replacement. This could allow water systems to identify service line materials more efficiently as they will already be onsite and, in some cases, may encounter the service line material directly as they perform other planned work. This efficiency could reduce the overall costs and time to identify service line materials. Aligning the service line replacement and inventory completion deadline could improve inventory information quality because systems could take additional time to develop an inventory with an emphasis on accuracy by choosing, for example, a more time-consuming technique that is also more reliable. Finally, in the proposed LCRI, the EPA noted that new technologies for identifying service line materials may be developed in coming years and existing technologies may be refined; therefore, aligning the deadline for service line replacement and inventory completion will allow systems to use these new or refined technologies on a greater proportion of their unknown lines.

For the proposed LCRI, the EPA determined that it is feasible (*i.e.*, technically possible and reasonably

affordable relative to a large system) for water systems to create a complete and accurate inventory of service line materials by the proposed service line replacement deadline to support the treatment technique for mandatory service line replacement. For the 1991 LCR, the EPA anticipated that systems that were triggered into an LSLR program should be able to locate their LSLs and provide this information in 8 to 10 years even with poor records of service line materials (56 FR 26507, USEPA, 1991). The EPA also evaluated more recent efforts by systems to replace all their LSLs and complete their inventories in 10 years or less. Seven States have inventory laws (*i.e.*, California, Illinois, Michigan, New Jersey, Ohio, Rhode Island, and Wisconsin), which together comprise nearly a third of the Nation's estimated lead content service lines (32 percent; 3.2 million lead content lines out of an estimated 9.0 million lead content lines) (USEPA, 2023l), meaning that these systems will have made progress on their inventories beyond the 2021 LCRR requirements. These State laws indicate that an inventory requirement is feasible, and inventory data show relatively low incidence of unknown service lines in some States as well as rapid progress towards identification of their unknown service line materials (USEPA, 2023k). The One-Time Update to the Needs Survey indicates that many participating systems have made substantial progress on identifying unknown service lines (median percentage of unknown lines per system is 6.5 percent); however, other participating systems have made much less progress or have not yet reported service line statuses (USEPA, 2023l; USEPA, 2024d). Furthermore, four States (Illinois, Michigan, New Jersey, and Rhode Island) passed State laws that require LSLR by a specified deadline. For these systems, inventory completion is required to comply with the mandatory LSLR requirements. For example, Michigan law requires their applicable water systems to submit a preliminary materials inventory by January 2020 and a complete materials inventory, including verification methodology and results, by January 2025, which is a five-year deadline to identify all unknown service lines (Michigan Administrative Rules, 2023). The Illinois Environmental Protection Agency (IEPA) first required their CWSs to submit an inventory by April 2018 in the repealed Public Act 099–0922 along with annual updates. Under the 2022 Lead Service Line Replacement and Notification Act, IEPA required systems

to submit a complete material inventory by April 2024 (Illinois General Assembly, 2021), which gave their systems six years to identify all unknown service lines. Finally, the EPA is aware of several water systems who have fully eliminated LSLs from their distribution system at a rapid pace, which would not be possible if unknown service lines remained in the system's inventory (USEPA, 2023k).

b. Summary of Public Comments and the EPA's Response

Many commenters supported keeping the deadline to identify unknown service lines and the deadline to complete mandatory service line replacement consolidated because it streamlines administrative processes, allows systems to focus more time and resources on replacing lead and GRR service lines and identifying unknown service lines, and provides the type of flexibility to allow for inventory efforts to be tailored to individual system needs and replacement programs. Conversely, other commenters supported an earlier deadline to identify unknown service lines before the replacement deadline, ranging from three years after promulgation of the LCRI to three years before the 10-year replacement deadline to reduce the possibility of noncompliance with the service line replacement deadline. Some commenters also suggested the final rule should include a requirement for systems to meet interim deadlines to identify unknown service lines and remove unknown lines from the replacement pool.

The EPA disagrees with commenters requesting an earlier deadline for identifying all unknown service lines, noting that a single deadline streamlines administrative processes, allows time and resources to focus on both replacing lead and GRR service lines and identifying unknown service lines, and provides flexibility for water systems. Therefore, the EPA is finalizing the requirement for systems to identify all unknown service lines by the applicable mandatory service line replacement deadline, as proposed. In doing so, the EPA will prevent complicating the rule.

The 2021 LCRR requires water systems to review available sources and submit an initial inventory by October 16, 2024, and the EPA has been recommending through its LCRR Inventory Guidance that systems should identify unknown service lines (USEPA, 2022c). Therefore, the EPA expects water systems will be prepared to make necessary progress to identify unknown service lines without setting an earlier deadline for inventory completion.

c. Final Rule Requirements

In the final LCRI, water systems are required to categorize the material of all unknown service lines in the inventory by the system's deadline to complete mandatory full service line replacement.

E. Tap Sampling for Lead and Copper

1. Rationale and Proposed LCRI Revisions

Tap sampling for lead and copper is required to evaluate CCT performance using the action level and serves “to identify the need for additional treatment and to ensure that adequate treatment is installed” (56 FR 26514, USEPA, 1991). Specifically, the purpose of tap sampling is to identify situations where the water is too corrosive, and therefore, can trigger additional actions that water systems are required to take to reduce lead and copper exposure, including by reducing the corrosivity of water in a system by installing or re-optimizing OCCT, or through public education. Conversely, tap sampling itself is not intended to assess exposure to lead and copper from drinking water because the sampling protocol is designed to assess CCT by targeting the highest levels of lead and copper typically present at the tap, representing the high end of actual human exposures (USEPA, 1988), rather than designed to capture typical exposure to consumers. In turn, a system's compliance with the treatment technique rule is not based on tap sampling results alone, but rather on compliance with actions triggered by those results.

The EPA designed tap sampling requirements in the LCR primarily to evaluate the corrosion of lead and copper sources present in the distribution system. Water systems are required to sample at sites with a higher potential to contribute lead and copper using a sampling protocol to “assess the degree to which a system has minimized corrosivity for lead and copper” (56 FR 26520, USEPA, 1991). Tap sampling under the rule is not intended to represent typical drinking water consumption or exposure; rather, again, it is intended to determine the effectiveness of OCCT and whether corresponding actions are needed to reduce lead levels (USEPA, 2020e).

a. First- and Fifth-Liter Sampling

In the LCRI, the EPA proposed that systems must take first-and-fifth-liter-paired samples for lead at LSL sites and use the higher of the two values to calculate the 90th percentile lead level. This requirement would improve identification of sites with higher levels of lead at the tap and better determine

when OCCT or re-optimized OCCT in the system is necessary. The requirement to take a fifth-liter sample was first promulgated under the 2021 LCRR, while the requirement to take a first-liter sample is from the 1991 LCR. Based on evidence from Del Toral et al., 2013, Deshommes et al., 2016, Masters et al., 2021, and Betanzo et al., 2021 that lead released from LSLs is not reliably captured in just the first- or fifth-liter sample alone, as discussed in the preamble to the proposed LCRI, the EPA proposed that systems must collect both liters during the same sampling event when sampling at sites with LSLs (88 FR 84930, USEPA, 2023a).

Both first- and fifth-liter samples have been determined to provide information relevant to assess CCT. At the time of the 2021 LCRR, the EPA determined that fifth-liter samples increase the likelihood that samples capture water that has been sitting in contact with LSLs. The EPA recognized that the variability of plumbing configurations does not allow for a single prescribed sample volume to capture the highest lead level at every site; however, the EPA reviewed data from Sandvig et al. (2008), Del Toral et al. (2013), and Lytle et al. (2019) in support of selecting the fifth-liter sample in the final 2021 LCRR as a screen that is likely to detect higher lead levels than first-liter samples alone (86 FR 4226, USEPA, 2021a). In the proposed LCRI, the EPA also cited Masters et al. (2021) and Deshommes et al. (2016) in support of maintaining the requirement to collect a fifth-liter sample from the 2021 LCRR (88 FR 84929, USEPA, 2023a).

First-liter samples, which have been implemented as the compliance sampling protocol since the 1991 LCR, are useful for capturing water that has been sitting in contact with premise plumbing. For LCRI, the EPA reviewed implementation data from Michigan's revised LCR that shows that some samples collected at LSL sites measure higher lead levels in the first liter than the fifth. Michigan's requirement under State law to use the higher lead level of the two samples to calculate the 90th percentile lead level has resulted in more systems exceeding the lead action level of 0.015 mg/L than only collecting either the first- or fifth-liter sample (Betanzo et al., 2021). In addition to data from Michigan, the EPA is aware of studies that have evaluated lead sampling data collected from multiple liters at the same site in cities including Washington, DC, Flint, Michigan, and Chicago, Illinois. The data compiled in these studies similarly show variability in which liter contains the highest lead level. These data also suggest that

collecting two samples and using the higher of the first- and fifth-liter lead values at LSL sites captures lead presence more effectively than collecting only one sample (Masters et al., 2021; Mishra et al., 2021).

For the LCRI, the EPA proposed to continue collecting only first-liter samples at Tier 3 sites comprised of sites with lead connectors and sites with galvanized service lines and/or galvanized premise plumbing that were ever downstream of an LSL or connector. The EPA proposed that the first liter is more appropriate for galvanized service lines because they contribute lead primarily through the release of lead particulate. Because the mobilization of particulate lead can be highly variable, depending upon changes in pressure and flow volume, velocity, and/or direction (Schock, 1990), particulate release is not captured consistently in any individual sample. The EPA proposed that the first liter is also more appropriate for lead connectors because detectable contributions of lead from lead connectors are most likely to occur as a result of particulate lead that has dislodged from the pipe and is caught in premise plumbing, such as faucet aerators (Deshommes et al., 2016; Lytle et al., 2019). It is also difficult to identify a single designated service line sample volume that would capture water that has stagnated in a lead connector, which are short in length and typically installed closer to the water main. Additionally, water traveling from the lead connector to the faucet will undergo dispersion, resulting in lower concentrations of lead at the tap. At the time of proposal, the EPA acknowledged that particulate lead is challenging to predict and could occur in any sample volume. However, the first liter has been documented to capture the highest fraction of particulate lead (Deshommes et al., 2010). Therefore, to capture particulate lead release from lead connectors and from galvanized service lines and/or galvanized premise plumbing that were ever downstream of an LSL or connector, the first liter presents the highest likelihood of a single sample capturing particulate lead.

b. Tiering of Sampling Sites

The EPA proposed three revisions to the tiering criteria as promulgated under the 2021 LCRR. The EPA proposed to update the definition for Tier 1 and Tier 2 sites to include sites with premise plumbing made of lead due to the high potential of lead contributions associated with premise plumbing made of lead. By "premise plumbing made of lead", the proposal refers to premise

plumbing that consists of pure lead pipes, rather than pipes made from metal alloys that may contain lead content. When sampled, systems would follow the first-liter sampling protocol at sites with lead premise plumbing, unless the site is also served by an LSL, which would require first- and fifth-liter sampling. The EPA also proposed to correct the Tier 3 description from the 2021 LCRR that inadvertently described a galvanized site currently downstream of an LSL as Tier 3 when it is a site served by an LSL and would meet the criteria of a Tier 1 or 2 site. The proposal removes the term "currently" from the Tier 3 provision to implement this correction. While the EPA described in the final 2021 LCRR preamble the agency's intention for galvanized service lines to be included in Tier 3, the 2021 LCRR Tier 3 provision includes only sites which "contain galvanized lines," which refers to premise plumbing material and not service lines. As such, the EPA also proposed to clarify that sites served by galvanized service lines or containing galvanized premise plumbing that are identified as ever being downstream of an LSL or a lead connector in the past are included in Tier 3.

The EPA also proposed several revisions and additions for sites included in Tier 3. In addition to maintaining sites with galvanized premise plumbing that are downstream from a lead connector in Tier 3, the EPA proposed to expand the sites included in Tier 3 to also include any sites with galvanized premise plumbing or served by galvanized service lines that were ever served by a lead connector in the past. While the EPA was not aware of information at the time of the proposed LCRI regarding the national extent of homes containing galvanized premise plumbing that are downstream of a lead source, the addition of galvanized premise plumbing is consistent with the inclusion of galvanized service lines that were ever downstream of an LSL as sites with a higher potential to contribute lead to drinking water than sites in Tiers 4 and 5. Like galvanized service lines downstream of an LSL discussed in section IV.E.1.a of this preamble, galvanized premise plumbing that is downstream of a lead source can also adsorb and release lead primarily through particulate release.

The EPA also proposed to include in Tier 3 sites with any non-lead service line material or non-lead premise plumbing that are currently served by a lead connector. With the proposed revisions to inventory requirements to include information on lead connectors, some systems will have improved

knowledge of sites with lead connectors. The EPA proposed that sites with lead connectors are not Tier 1 or 2, but Tier 3, based on the EPA's priorities for the proposed LCRI to identify sites through sampling with the highest lead levels and the difficulty in detecting lead contributions for lead connectors, which is similar to galvanized service lines discussed in section IV.E.1.a of this preamble. At the time of proposal, the EPA cited Deshommes et al. (2016) and Lytle et al. (2019) that show detectable contributions of lead from lead connectors are most likely to occur as a result of particulate lead that has dislodged from the pipe and is caught in premise plumbing, such as faucet aerators. The EPA recognized that, due to the limited length of lead connectors, the amount of lead contributed from them is expected to be less than from LSLs, which are typically much longer in length, where all other aspects of the pipes are equal. Under the proposal, Tier 3 would include: (1) Sites served by galvanized service lines that ever were downstream of an LSL or lead connector; (2) sites with galvanized premise plumbing that ever were downstream of an LSL or lead connector; and (3) other sites currently served by a lead connector (e.g., a site served by a copper service line downstream of lead connector.) The EPA proposed to maintain the criteria for Tier 4 and Tier 5.

c. Sample Site Selection

For LCRI, the EPA did not propose any changes to the requirement for systems to select replacement sampling sites within a reasonable proximity. In the proposed LCRI, as maintained from the 2021 LCRR, systems must sample from the same sites in consecutive tap monitoring periods and, when unable to do so, must select a replacement site that meets the same tiering criteria and is within reasonable proximity of the original site.

The EPA also did not propose any changes to the requirement for systems to sample sites from the highest tier available (Tier 1 is the highest and Tier 5 is the lowest), as well as the requirement for systems to collect 100 percent of samples from available LSL sites. The proposed LCRI specifies that systems may choose alternate sampling sites when they are not able to gain access to a site.

d. Frequency and Quantity of Sampling

In LCRI, the EPA proposed revisions to tap sampling frequency requirements to conform with the proposed elimination of the trigger level. The EPA proposed to maintain six-month

monitoring as the standard monitoring frequency, as well as the pathway to triennial monitoring for any system that does not exceed the PQL for two consecutive monitoring periods. With the proposed elimination of the trigger level, the EPA proposed that small and medium systems monitoring annually would qualify for triennial monitoring if they do not exceed the lead and copper action levels for three consecutive years. The EPA also proposed to maintain the pathway to annual monitoring for any system that does not exceed the action level for two consecutive six-month tap monitoring periods, at the lower proposed action level of 0.010 mg/L. Also, the EPA proposed to maintain the nine-year reduced monitoring waiver.

The EPA did not propose any changes to the minimum number of samples required to be collected by systems. The proposed rule maintained the requirement for systems on annual reduced monitoring to collect and analyze the standard number of samples for lead and a reduced number of samples for copper.

e. Standard Monitoring

In LCRI, the EPA proposed that systems with unknown sites in their inventory at the compliance date would be required to conduct standard six-month monitoring in the first six-month tap sampling period following the compliance date. These systems would be in addition to the 2021 LCRR requirement, which was maintained in the proposed LCRI, that any systems with lead and/or GRR service lines in their inventory at the compliance date conduct standard monitoring beginning with the first full six-month monitoring period after the compliance date. The proposed requirement to begin standard monitoring following the compliance date was accompanied by the proposed requirement for systems to submit an updated site sample plan to the State prior to the first tap monitoring period, as described in section IV.N of this preamble. The EPA proposed that systems with lead, GRR, and unknown service lines sample under the standard monitoring schedule to ensure that systems with the highest potential for lead, and which are most impacted by the changes to sampling protocol, could determine whether they are exceeding the new action level as soon as practicable to determine next steps such as remediation activities through CCT or public education to protect public health. Systems required to conduct standard monitoring in accordance with this requirement would need to complete two consecutive, six-month tap monitoring periods before they

could qualify for a reduced monitoring schedule.

f. 90th Percentile Value Calculation and Inclusion of Additional Samples

The EPA proposed to maintain the LCRR approach for calculating the 90th percentile level when a system with LSLs does not have enough sites in Tiers 1 and 2 to meet the minimum number of samples required. Specifically, a system must use all samples collected at Tier 1 and 2 sites and only the highest results from samples collected at Tier 3, 4, and 5 sites (in that order) to meet the minimum number of samples. For example, if a system is required to collect 100 samples and the system collects 80 samples at Tier 1 and 2 sites, and 30 at Tier 3 sites, the system would have to use the 80 samples from Tier 1 and 2 sites and only the 20 samples with the highest lead concentration from the Tier 3 sites. While the EPA was not aware of situations where higher concentrations in lower tiers are expected, as discussed in the preamble to the proposed LCRI (88 FR 84932, USEPA, 2023a), the purpose of this proposed requirement was to prevent systems from collecting additional samples from sites less likely to contain lead (*i.e.*, Tiers 3, 4, and 5) to reduce their 90th percentile lead value.

The EPA proposed to clarify that water systems seeking to reduce monitoring frequency or cease specific actions under the rule, including CCT and public education-related requirements, cannot do so with fewer than the required minimum number of samples. For example, a small or medium system without CCT would be allowed to propose stopping the CCT steps using data showing the system is at or below the lead action level for two consecutive tap monitoring periods. As described in the preamble to the proposed LCRI, systems have been advised in past EPA guidance to calculate 90th percentile lead and/or copper levels even when there are insufficient samples (88 FR 84932, USEPA 2004c, USEPA 2023a). Under the proposed rule, the data showing the system has a 90th percentile lead level at or below the lead action level must be calculated from a compliance data set of at least the minimum number of samples required. In other words, a system with an insufficient number of samples cannot use the results to reduce treatment technique actions. The EPA proposed this clarification to improve implementation. In addition, the agency is concerned that water systems may purposefully fail to comply with the minimum monitoring requirements in

an attempt to reduce required compliance actions through provisions intended for systems with demonstrated lower lead or copper levels.

The EPA proposed to exclude additional samples collected as part of required monitoring following full or partial service line replacement from the 90th percentile calculation. The 2021 LCRR requires water systems to use results of any additional monitoring (e.g., consumer-requested samples) in the 90th percentile calculation if the samples meet the tiering and sample protocol requirements. At the time of the LCRI proposal, the EPA was concerned that water systems may include samples from follow-up monitoring following full or partial replacement that may not be known to meet the correct sampling tier and may not be reflective of corrosion control performance.

The EPA proposed to maintain flexibility for systems sampling at sites in response to customer requests to use alternative sample volumes and stagnation times. The EPA proposed a revision to require these samples to include sample volumes representative of both premise plumbing and the service line when the customer is served by a lead, GRR, or unknown service line (see section IV.J of this preamble for details on consumer-requested sampling). The EPA also proposed to maintain the requirement for these additional samples to be included in the 90th percentile calculation only if the sample meets the compliance site tiering and sampling protocol, including stagnation time, sample volume, and whether the sample is collected within the tap sampling period.

g. Wide-Mouth Bottles

The EPA proposed a revised definition of wide-mouth bottles for tap sampling to address uncertainty around which diameter should be measured. In the proposed LCRI, the EPA clarified the definition for wide-mouth bottles to specify it means bottles that are one liter in volume with a mouth, the outer diameter of which measures at least 55 mm wide (see section IV.O.3 of this preamble).

h. Sample Invalidation

The EPA proposed that States have the authority to invalidate samples not collected in accordance with § 141.86(b)(1), including requirements for minimum stagnation period, sample volume, sample bottle characteristics, sample collection location, and rules regarding sampling instructions. The EPA proposed that this authority is in addition to the existing authority under

the 2000 LCR for States to invalidate samples not collected in accordance with the tiering criteria in § 141.86(a)(4). The proposed revision would allow States to invalidate samples based on information regarding sample collection. For example, the rule specifies collection of samples at a kitchen or bathroom sink cold-water tap. If a sample was taken at a hose bib, States could invalidate that sample because it would not meet the sample collection criteria.

i. Practical Quantitation Limit

The PQL is defined at 40 CFR 141.2 as the minimum concentration of an analyte (substance) that can be measured with a high degree of confidence that the analyte is present at or above that concentration. PQL is the level established in a regulation to identify the lowest reliable concentration of an analyte laboratories are able to measure.

For the proposed LCRI, the EPA reconsidered the practical quantitation limit used in the LCR to see if there was evidence to support lowering it. The lead practical quantitation limit is currently set at 0.005 mg/L and is incorporated into the National Environmental Laboratory Accreditation Conference (NELAC) Institute (The NELAC Institute, 2021) accreditation process. NELAC was established by the EPA in 1995 to develop consensus national standards for environmental laboratory accreditation. These established standards work to ensure the quality of environmental data from lab to lab. The EPA also received data, during the development of the proposed LCRI, from a company that conducts proficiency testing and at that time, the agency was not aware of data to support proposing to lower the PQL ("Lead Drinking Water Proficiency Testing Data (2016–2022)" available in the LCRI docket EPA–HQ–OW–2022–0801). The EPA also noted that while the method detection limit (MDL) of lead can be as low as 0.0006 mg/L under certain EPA approved methods (Diebler, 2013), the PQL is set higher than the method detection limit to account for analytical variability, along with the EPA's standard practice of adding an uncertainty factor of 5–10 (53 FR 31550, USEPA, 1988). Thus, the EPA proposed that the current practical quantification limit of 0.005 mg/L is consistent with published detection limits. Further, the EPA was not aware of national-scale data evaluating lead detection limits, or on the number or percentage of labs nationwide measuring lower levels. The EPA was not aware of any additional evidence to support lowering the

current lead PQL below 0.005 mg/L in the proposed LCRI.

2. Summary of Comments and the EPA's Response

a. First- and Fifth-Liter Sampling

The EPA received many comments supporting the proposed sampling protocol, including the use of the higher of the first- and fifth-liter sample in the 90th percentile calculation. These commenters stated that the first- and fifth-liter protocol better assesses situations with a higher potential of lead faced by consumers. Some commenters expressed concern that the fifth-liter sample does not adequately represent CCT performance. Other commenters asserted that the fifth-liter sample should not be used for multi-family sites because it is not possible to meet the intent of sampling, including both capturing water in contact with the service line and meeting the six-hour minimum stagnation time. Some that supported the proposed protocol requested that it be applied in additional situations, such as at Tier 3 sites and at sites following service line removal.

The EPA agrees with comments in support of requiring systems to collect the first- and fifth-liter samples at sites served by LSLs. As discussed in the proposed LCRI under section V.C.1, the EPA evaluated implementation data from Michigan's revised LCR that shows some first-liter samples collected at LSL sites measure higher lead levels than fifth-liter samples collected at the same sites (Betanzo et al., 2021). The EPA cited Masters et al. (2021) and Mishra et al. (2021) which also show results where the first and fifth liters are more effective than either sample alone at indicating the presence of lead in drinking water.

The EPA disagrees that the fifth-liter sample should not be used for compliance sampling. The EPA acknowledged in the final LCRR preamble that the fifth-liter sample may not correspond to the sample volume with the highest lead levels in all cases, but selected it as a sample "more representative of lead concentrations in service lines than the first-liter sample" and "most likely to contain the water that remained stagnant within a customer-owned portion LSL" (86 FR 4226, USEPA, 2021a). This remains true for multi-family residences where the LSL may reside at a location farther than that captured by the fifth liter, but the fifth liter, as compared to the first liter, will capture water that has undergone less dispersion since the LSL. For this reason, the EPA does not agree that the

fifth liter should not be used at multi-family residences. The EPA also disagrees that the fifth liter cannot be used to assess CCT performance. Both first- and fifth-liter samples seek to identify situations with high lead levels, specifically by selecting the water volumes most likely to contain elevated lead levels, that can be remedied by adjustments to CCT and public education outreach.

The EPA does not agree the first- and fifth-liter sampling protocol should be applied to Tier 3 sites. As previously discussed in IV.E.1.a of this preamble, the fifth liter does not help to assess CCT performance in situations such as galvanized service lines where particulate lead is the most likely contributor to lead in drinking water and lead connectors where lead components are situated far from the tap and undergo dispersion prior to reaching the tap. Specifically, in these situations, a first-liter sample is more appropriate to evaluate CCT as it will capture water in contact with particulate lead trapped in premise plumbing.

The EPA also requested comment on “the applicability of alternate sampling protocols to assess CCT performance, increase customer participation, and other relevant factors.” Commenters requested that only the fifth liter be used to calculate the 90th percentile since systems are not required to remove premise plumbing features containing lead. Similarly, commenters cited concerns over the requirement to leave aerators in place during sampling because systems do not have to clean aerators with trapped particulate. Other commenters expressed support for only using the first liter in 90th percentile calculations, since the lead and copper NPDWRs implemented to date have only required systems to take first-liter samples and thus, fifth-liter samples would be a departure from tap sampling used in the past to evaluate CCT performance. The EPA interprets this comment to indicate that the commenter feels a long record of sampling under a single protocol offers valuable information when applying the data to decisions regarding CCT. One commenter requested the EPA further study the potential of random daytime sampling as a method that better represents lead and copper exposure and is easier to implement, since the method does not require a set stagnation period. Lastly, the EPA also received a request to allow the use of updated lead-sensing technology, such as a rapid biosensor test that can evaluate the presence of lead above 0.010 mg/L in

water, as part of a CCT evaluation protocol.

The EPA disagrees with only requiring systems to consider the fifth-liter sample in calculating the 90th percentile and also disagrees that systems are not responsible for controlling for lead in premise plumbing through CCT, including lead trapped in faucet aerators. While systems are not required to remove lead premise plumbing materials, the EPA determined in the LCR that water systems can affect lead levels at the tap by adjusting the corrosivity of the water delivered to consumer so it will not leach lead from multiple sources of lead in the distribution system, including premise plumbing (see section IV.A of this preamble for further discussion on the EPA’s regulatory approach). Additionally, as described in the proposed LCRI in section V.C.1 (88 FR 84929, USEPA, 2023a), the first-liter sample can capture higher levels of lead from LSLs than the fifth-liter sample in some conditions. Specifically, when water chemistry results in the formation of relatively fragile scales, maximum lead values have been documented in the first liter of sampling at some homes in Flint, Michigan (Lytle et al., 2019), Washington, DC (Clark et al., 2014), Providence, Rhode Island (Clark et al., 2014), and Chicago, Illinois (Masters et al., 2021). The lead release captured in the first liter is attributed primarily to lead particles that can become detached, such as from the LSL or from galvanized pipes that are or were downstream of lead pipes, and have accumulated in the premise plumbing. Therefore, the EPA finds that systems should continue to sample the first liter, as required under the 1991 LCR, in addition to the fifth liter, as incorporated from the 2021 LCRR, to best identify situations where CCT is operating insufficiently to prevent lead in drinking water.

The EPA disagrees that past use of first-liter sampling prevents the agency from adopting a new protocol based on new and updated information because prior requirements, including tap sampling protocols, do not limit the agency’s ability to update lead and copper NPDWRs based on the best-available scientific and technical information and the learned experiences of States and systems. The first- and fifth-liter sampling protocol has been implemented for several years at the State-level in Michigan and is accompanied by evidence demonstrating that the protocol proposed by the EPA is better able to identify lead presence than the first- or fifth-liter sample alone (Betanzo et al., 2021). The EPA disagrees that the first-

and fifth-liter sampling protocol is less effective for evaluating CCT than the first-liter sampling protocol. The first- and fifth-liter sampling protocol is suitable for compliance testing because it uses the same basis for evaluation of CCT performance as was used for the first-liter sampling protocol—that is, whether lead is released as either dissolved or particulate lead. The EPA agrees that systems’ history of first-liter sampling since the 1991 LCR will offer systems valuable information about their CCT performance and adds that the fifth-liter samples will improve the information available to make decisions regarding CCT. Additionally, as previously discussed in IV.E.1.a of this section, the EPA finds that the fifth liter can capture water in contact with the service line in many, though not all, sites. Further, the EPA disagrees that the change is too difficult for systems and States to implement. Without revisions in the LCRI, a fifth-liter-only protocol is in effect under the 2021 LCRR. The EPA is adding the fifth-liter sample, which many systems are currently preparing to implement, to the existing first-liter sample to improve the monitoring technique for detection of lead at drinking water taps when service line sources of lead are known.

The EPA acknowledges that a protocol with reduced stagnation time can ease consumer sampling burdens. However, no commenters submitted, and the EPA does not find that there is, sufficient information to select random daytime sampling and other alternative sampling technologies in lieu of the current sampling protocol for the assessment of CCT, especially for sampling water in contact with the service line. The first-liter and the first- and fifth-liter sampling protocols in the LCRI are required in combination with tiering criteria that prioritize sites with the highest potential exposure to lead and copper to conduct targeted assessments of systemwide CCT performance. The agency does not agree that these alternative sampling methodologies have been shown to provide equal or improved public health protection as a compliance strategy without further study.

Regarding comments requesting that the EPA consider the use of rapid at home testing for lead in drinking water for regulatory compliance, the EPA does not agree that there currently is a role for rapid at-home lead-sensing technology for assessment of the effectiveness of CCT. Generally, at-home lead-sensing technologies can be characterized as qualitative because they do not assess the contribution of particulate lead. Qualitative, at-home

tests are useful for assessing the potential presence of lead in drinking water but not for making quantitative assessments; nor do they account for the variability of lead levels as discussed in section IV.A of this preamble.

b. Tiering of Sampling Sites

For the proposed LCRI, the EPA requested comment on the sites included in Tier 3 and whether all of the proposed sites should be included in Tier 3, if additional sites should be included, or if some should be included in a different, lower priority tier, such as Tier 4. Specifically, comment on whether sites served by galvanized service lines or containing galvanized premise plumbing that are identified as ever being downstream of an LSL or lead connector should be included in the same tier as other sites with a current lead connector (*e.g.*, copper service line downstream of a lead connector). The EPA received comments on the sites proposed to be prioritized in Tier 3, including requests to move sites with galvanized service lines downstream of a previously removed lead connector and sites with lead connectors to a lower tier than sites with lead solder, which were proposed to be included in Tier 4. In support of this recommended revision, commenters described data showing that lead levels at sites served by galvanized service lines downstream of previously removed lead connectors were consistently lower than lead levels at sites with lead solder. However, these commenters did not provide the data described to the EPA. The EPA also received comments both in support of, and stating concerns with, including sites characterized by premise plumbing in the tiering criteria. The latter commenters articulated concerns over whether systems would be required to inspect plumbing within structures to determine whether they contain material that would place the structure in a sampling tier, such as Tier 1 or 2 for sites with lead premise plumbing and Tier 3 for sites with galvanized premise plumbing. Some commenters provided support for including lead connectors in Tier 3 and agreed connectors should be in lower tiers than sites served by LSLs. Lastly, the EPA received requests to simplify the tiering structure, including suggestions to remove premise plumbing characteristics and a suggestion to remove multi-family versus single-family structure characteristics. Commenters asserted that complicated tiering is difficult to implement when homeowners are the ones conducting sampling.

The EPA agrees that galvanized service lines downstream of a previously removed lead connector are likely to present a lower likelihood of contributing to lead in drinking water than sites with galvanized service lines downstream of a previously removed LSL (Tier 3) as well as sites with lead solder (Tier 4). Lead connectors are shorter in length than LSLs and the length of LSL has been correlated with the amount of lead released (Deshommes 2016). Thus, a relatively shorter upstream lead connector may lead to less buildup of lead-containing scale on downstream galvanized pipe scale than an upstream LSL. For the final LCRI, Tier 5 includes sites that are representative of sites throughout the distribution system. Where galvanized service lines downstream of a previously removed connector are representative of sites throughout the distribution system, they would be sampled in Tier 5.

As proposed, the EPA placed sites with lead connectors in Tier 3. The EPA agrees with commenters that sites with lead connectors should be tiered below sites with LSLs in Tiers 1 and 2. The EPA also emphasizes that sites with minor variations in the likelihood of lead contributions do not need to be prioritized into separate tiers since further divisions within tiers would result in smaller pools of sites that are likely to be insufficient to equal or exceed the minimum required number of samples. All samples included in the 90th percentile calculation are given equal weight in the 90th percentile calculation, including samples from different tiers and samples with different probability of lead contribution within the same tier. The equal weight given in the 90th percentile calculation means that even if sites are prioritized differently for sample collection, once they are sampled and if used in the calculation of the 90th percentile, each site contributes equally in the calculation. Sites such as those grouped under Tier 3, each of which may have slightly higher or lower likelihood of contributing lead to drinking water, will all be included in the 90th percentile calculation. Therefore, while the types of sites included in Tier 3 may have slight differences in the likelihood of contributing lead, in many cases, systems will likely need to sample at multiple types of Tier 3 sites to meet their minimum required number of sites and consider those samples equally for compliance purposes.

As previously stated, the EPA disagrees that systems should not be required to sample for lead in drinking water when the lead sources are in

premise plumbing. Premise plumbing, like service lines, is impacted by the corrosivity of the tap water. Thus, preventing the leaching of lead and copper from premise plumbing as a result of water corrosivity is under the control of water systems. The purpose of sampling at sites with premise plumbing known to contain lead is to alert the system to potential corrosion control issues leading to elevated lead in such sites. Commenters opposed to including premise plumbing in site tiering may be incorrectly characterizing the requirement to identify premise plumbing materials in their service line inventory. The LCRI does not require water systems to conduct material inventories for premise plumbing as required for service lines (§ 141.84(a)); however, the LCRI does require that sites with lead premise plumbing and galvanized premise plumbing material ever having been downstream of a LSL be included as part of site sample collection if known to the water system. Systems should include sites with lead premise plumbing as Tier 1 or 2 and galvanized premise plumbing ever having been downstream of a LSL as Tier 3 when they are aware of the material composition; however, again, the LCRI does not require systems to proactively identify or inventory where lead premise plumbing exists for purposes of meeting the tiering requirements. Systems may encounter premise plumbing in the course of normal operations including through service line identification and replacement that would provide information to inform tier site selection.

The EPA disagrees with commenter suggestions to remove premise plumbing from sample tiering, for reasons described above, and with suggestions to combine single-family and multi-family structures. The 2021 LCRR maintained the tiering structure established in the LCR for prioritized, targeted monitoring of sites with a higher potential for lead contribution to drinking water, with the highest priority tiers (Tiers 1 and 2) comprised of sites with LSLs representing the sites with the highest potential to contribute lead. Tier 1 sites include single-family structures served by LSLs and Tier 2 sites include multi-family residences served by LSLs. The Tier 2 sites serve to distinguish multi-family structures with lead as sites with a higher potential to contribute lead to drinking water than Tier 3 sites, which are sites that are served by a lead connector or sites served by a galvanized service line or containing galvanized premise plumbing that are identified as ever

having been downstream of a lead service line. In addition, the EPA did not include multi-family structures in Tier 1 because they have more complex plumbing layouts compared to single-family structures in Tier 1. While the fifth-liter sample increases the chance of detecting water that has been sitting in contact with an LSL, generally, it is more difficult to detect corrosion control issues in multi-family structures as compared to single-family structures.

c. Sample Site Selection

The EPA received comments regarding the selection of replacement sites from the sampling pool when previously sampled sites are no longer accessible, and the timing under which systems can sample at replacement sites, including sites that are in a lower tier. Specifically, as mandatory service line replacement is underway, commenters expressed concern over identifying replacement sites as the number of sites in Tiers 1 and 2 diminish. Commenters expressed concern that the requirement for systems to sample at 100 percent of LSL sites under § 141.86(a)(3) could make them repeatedly return to homes with LSLs that have refused or declined to respond to requests for sampling. Commenters requested the EPA better describe how and when sites can be considered unavailable. Another comment suggested that systems should be required to maintain records on customer refusals for tap sampling for customers with Tier 1 sites. Commenters noted this recordkeeping would help States ensure that no Tier 1 sites are missed by systems. Commenters also expressed concern over the requirement for systems to replace unavailable sampling sites with locations in a reasonable proximity. These commenters stated it could be difficult for systems to interpret the meaning of “reasonable proximity.”

The EPA agrees that systems should be able to consider sites unavailable when customers refuse to participate in tap sampling, recognizing the tap sampling sites are within structures such as homes, and that this would constitute a lack of access by the system to conduct tap sampling at that site (see section IV.A of this preamble for details on control). As such, the EPA added a provision to the final LCRI at § 141.86(a)(4) to allow systems to consider sites unavailable for tap sampling after a customer refuses to participate or a customer does not respond after two outreach attempts.

In addition, the EPA agrees in part with requests to add system reporting requirements to help States review

when customer refusals lead to a lack of access for tap sampling and systems sample at replacement sites. To assist State tracking of system activities related to selection of replacement sites, the EPA added a requirement to the final LCRI at § 141.90(a)(2)(viii) for systems to report the number of customer refusals to participate in tap sampling during each tap sampling period. This requirement is in addition to existing reporting requirements under § 141.90(a)(2)(v) for systems to provide an explanation for any site sampled for compliance monitoring that was not sampled in the previous tap monitoring period.

The EPA also agrees that the 2021 LCRR requirement to identify replacement sites within a reasonable proximity as this could be challenging to interpret and is no longer needed with the LCRI requirement of mandatory service line replacement. Therefore, the EPA removed this requirement in the final LCRI.

The EPA requested comment on “whether State authority to specify sampling locations when a system is conducting reduced monitoring should apply regardless of the number of taps meeting sample site criteria.” Commenters expressed that States may not have the appropriate information to specify locations, or if they have that knowledge, they may not have the resources or capacity to do so. Others expressed that States will likely not exercise their authority to specify locations, but the authority may come in use from time to time.

The EPA disagrees that States do not have the information necessary to specify accurately tiered locations since systems are required to report their inventory of service line material to the State under § 141.90(e). States have access to information provided by systems, submitted via both site sample plans and service line material inventories, and are able to review them, as needed, to determine if the selected sampling pool should be modified to prioritize sampling at sites with a higher potential for lead contribution. State review of sampling locations can be helpful to assess system-specific situations where the selection of sites, even when the selection meets rule requirements, underestimates the potential for lead in the systems drinking water (Stratton, et al., 2023). The final LCRI maintains the authority for States to require modifications to site sample plans, but does not require that States review and approve them. The option to review site sample plans enables States to prioritize resources for the systems most in need

of oversight. The EPA encourages States to review site sample plans to provide feedback to systems to ensure that their sampling approach meets the requirements under the LCRI, instead of waiting until sample results are submitted to the State to alert systems to issues in the sampling approach that could result in the need to resample, such as due to incorrect tiering.

The EPA also received a comment requesting clarification on whether sites with installed point-of-use treatment can be sampled for lead and copper when the point-of-use device is bypassed. Installed point-of-use devices are those attached to premise plumbing and deliver treated water through a tap. While point-of-use devices can be bypassed, such that samples can be collected through premise plumbing without passing through the point-of-use device, doing so requires a more complex sampling protocol. The EPA disagrees with increasing the complexity of tap sampling in this way and did not make changes to the final LCRI to allow for sampling at bypassed sites. Therefore, the final LCRI does not allow sites with installed point-of-use or point-of-entry devices to be selected for compliance tap sampling, except in water systems using these devices at all service connections for primary drinking water taps to meet other primary and secondary drinking water standards as under § 141.93(c)(1).

d. Frequency and Quantity of Sampling

The EPA received comments regarding the number of sites sampled and the frequency of sampling.

i. Minimum Number of Sites

Some commenters were concerned that the reduced minimum number of sites required for systems on reduced monitoring is insufficient and recommended that systems always collect at the standard minimum number of sites regardless of their monitoring schedule. Other commenters supported the use of a reduced number of monitoring sites but suggested the EPA simplify and reduce burden on systems by requiring those on annual reduced monitoring to sample at a reduced number of sites for both lead and copper instead of the current requirement to sample at the standard number of sites for lead and the reduced number of sites for copper.

The EPA disagrees with commenters stating the number of sampling sites required for reduced monitoring is too low or that all systems should sample at the same number of sites. Reduced sampling requirements effectively prioritize sampling resources, including

State time and effort, to systems with the highest potential for lead and copper in drinking water. Additionally, the lower lead action level means that systems must meet a stricter threshold to qualify for reduced monitoring. The EPA is maintaining the requirements for reduced monitoring in the final LCRI; systems can only qualify for a reduced minimum number of monitoring sites after they have demonstrated low levels of lead in at least two consecutive tap monitoring periods. At their discretion, systems remain able to collect samples above the minimum number required, including samples taken by customer request under § 141.85(c) that meet the requirements for compliance lead and copper samples.

The EPA does not agree that requiring different minimum numbers of sites for annual monitoring of lead and of copper is too burdensome or confusing for systems because the same sample can be used for both lead and copper analysis. The tiering criteria for site selection is not dependent on whether the sample is collected for both lead and copper analysis or only lead analysis. Systems only need to collect one first-liter or first-and-fifth-liter-paired sample from sites equal to the standard minimum number of sites to meet the requirements of annual reduced monitoring according to § 141.86(d)(2)(i). All samples collected from the standard minimum number of sites are analyzed for lead. Then, systems are only required to analyze a portion of those samples equal to the reduced minimum required number of copper monitoring sites, thus reducing the costs of sample analysis.

The EPA maintains that a standard number of monitoring sites for lead for systems on an annual reduced monitoring schedule is reasonable and disagrees with comments that systems on annual reduced monitoring should sample at a reduced number of sites for both lead and copper. The purpose of reduced monitoring is to alleviate sampling burdens on systems with a lower potential of lead and copper occurrence in drinking water, while maintaining a minimum level of monitoring commensurate to the likelihood of deviations in CCT performance. Systems on annual reduced monitoring already have a reduced burden by sampling once instead of twice per year, thereby representing a burden reduction even when sampling at the standard number of sites for lead. Furthermore, triennial reduced monitoring, where systems sample every three years at a reduced number of sites for both lead and copper, is allowed only after systems

have met more rigorous requirements of three years at or below the action level or one year at or below the PQL and systems with CCT must also maintain their OWQPs. Reduced monitoring on a triennial schedule is reserved for the systems with the lowest potential of lead and copper in drinking water, as evidenced by consistently low levels of lead. The final LCRI maintains the standard number of sites for lead on an annual monitoring schedule due to the critical role of sampling in assessing issues in CCT performance and the goal of preventing adverse health effects from lead to the extent feasible. See section IV.M of this preamble for details on the LCRI approach to copper.

ii. Nine-Year Waiver

Some commenters recommended the EPA eliminate the nine-year waiver to limit the amount of time between sampling. The EPA disagrees that the nine-year waivers, which includes the copper waiver and lead waiver, should be eliminated. The nine-year waivers, which have been a part of the lead and copper NPDWRs since the 2000 LCR, offer flexibility to the smallest systems, and requires that those systems meet strict criteria to receive a waiver. Specifically, water systems must meet both a materials criteria (§ 141.86(g)(1)) and a monitoring criteria (§ 141.86(g)(2)). Water systems may qualify for a lead and/or copper waiver to monitor at a nine-year frequency only if they certify to the State that the system has no lead and/or copper-containing plumbing materials in their system, including premise plumbing, and have sampling results that do not exceed the lead and/or copper PQLs, respectively. The nine-year waivers provide very small systems with the lowest potential for lead and/or copper a potential pathway to allocate limited resources for other purposes. The nine-year waivers are not available to larger systems since it is not feasible for larger systems to determine a complete absence of plumbing materials containing lead and/or copper in their distribution system and premise plumbing.

iii. Sampling During Mandatory Service Line Replacement

The EPA also received feedback that sampling during mandatory service line replacement would place too much burden on systems. In response, some commenters requested the EPA waive sampling requirements until service line replacement is completed to help systems meet service line replacement deadlines. The EPA does not agree that systems should be allowed to waive or

otherwise suspend sampling during service line replacement because it is important and feasible for systems to maintain the treatment technique for CCT and public education during service line replacement, which includes maintaining OCCT and taking public education actions following an action level exceedance. Tap sampling is a critical component for both assessing CCT performance and requiring certain public education activities. Further, systems have been conducting sampling under the LCR for many years and already have processes and experience in place to continue conducting monitoring.

e. Standard Monitoring

The EPA requested comment on whether a phased or alternative approach should be considered for systems required to begin standard monitoring and required to submit site sample plans to the State by the start of the first full tap sampling period following the compliance date. Commenters expressed concerns over the ability of States to review new site sample plans in a short timeframe, lab capacity and supply chain issues, and the ability of systems to simultaneously implement additional monitoring requirements while conducting mandatory service line replacement. Commenters offered several suggestions for phased and alternate approaches. Commenters suggested that systems be phased into standard monitoring based on system size, such as an approach similar to one employed under another EPA rule, the Stage 2 Disinfection By-products Rule. Commenters recommended large systems should comply with standard monitoring first. These commenters argued this option would offer the most public health protection since large systems combined serve the greatest total number of people, while allowing smaller systems, which serve fewer people and typically have more limited resources, more time before beginning standard monitoring. Other commenters suggested that small systems should comply soonest followed by medium systems and then large systems, as small systems have the least complex site sample plans and require the least review. These commenters indicated that site sample plans from larger systems, which sample at the greatest number of sites, will require more time for States to review them. Other commenters suggested that systems be staggered according to the value of their 90th percentile lead level, where systems with the highest lead levels would be required to begin standard monitoring

before systems with lower lead levels. This approach would prioritize State and system resources to review and implement sampling at the greatest number of sites and with the highest frequency for systems with the highest potential for lead and copper in drinking water. Additionally, the EPA received comment that all systems should be required to conduct two rounds of standard monitoring as a result of promulgating the LCRI, with varied suggestions ranging from one year after promulgation to dates staggered for the first few years after the compliance date. Lastly, the EPA received suggestions for exemptions conducting standard monitoring at the compliance date, including systems with State-approved supplemental monitoring programs and systems already implementing first- and fifth-liter monitoring at LSL sites.

The EPA agrees that the rule should both limit the burden on systems and States and prioritize actions that are most protective of public health to the extent feasible. To facilitate these goals, the EPA is finalizing requirements at § 141.86(c)(2)(i) for only those systems with any lead and/or GRR service lines in their inventory at the compliance date and at § 141.86(c)(2)(ii) for any system at the compliance date whose most recent 90th percentile lead and/or copper levels exceed the action levels under the LCRI to conduct standard monitoring starting with the first full tap monitoring period after the compliance date. The EPA does not agree that systems with known lead-contributing service lines should delay monitoring, since it is important to assess CCT with the updated tap sampling protocol for systems with known sources of lead. Systems without known lead and GRR service lines in their inventory at the compliance date will only be required to conduct standard monitoring if they do not qualify for reduced monitoring, including meeting the lead and copper action levels under the LCRI. This incentivizes systems to identify and replace all lead and GRR service lines in their distribution system before the compliance date, resulting in the public health benefits of service line replacement to be realized more quickly. Additionally, systems with lead and GRR service lines that adopt the sampling protocol under the LCRI prior to the compliance date and measure 90th percentile levels at or below the LCRI action levels are not required to conduct standard monitoring at the compliance date. More specifically, for systems with lead and GRR service lines to stay on reduced monitoring, the

complete sampling protocol must include the first- and fifth-liter sampling protocol at sites served by LSLs as described in § 141.86(b)(1)(ii), all sample collection requirements in § 141.86(b)(1) and (3) (such as stagnation times and sample volume), and priority tiering requirements to sample at sites served by lead and GRR service lines as described in § 141.86(a).

The EPA is not finalizing the proposed requirement to require systems with unknown sites but no lead and/or GRR service line sites in their inventory at the compliance date to start standard six-month monitoring in the first six-month tap sampling period following the LCRI compliance date. The EPA has determined that systems with known lead and GRR service lines have the greatest potential to have lead that can be better identified with the revised tap sampling protocols. By requiring these systems to implement the revised tiering and tap sampling protocols as soon as possible, the final rule facilitates expedited identification of systems that need to take additional actions based on their tap sampling results to reduce drinking water lead exposure and protect public health. Systems with unknown service lines but without at least one known lead and/or GRR service line on the LCRI compliance date will not have to meet the standard monitoring requirements under the LCRI unless they identify a known lead or GRR service line among their unknown lines or are required by another provision in the LCRI, such as exceeding the action level or conducting source water/treatment changes. The EPA estimates that many of the systems with either all unknown service lines or a combination of unknown and non-lead service lines are small water systems. This conclusion is based on an evaluation of the 7th Drinking Water Information Needs Survey and Assessment, which indicated that an estimated 44 percent of small systems serving 3,300 persons or fewer, approximately 20,000 systems, have either all service lines of unknown material or some service lines of unknown materials and non-lead service lines (USEPA, 2024a, chapter 3). The EPA believes these systems will better be able to focus time and resources on the service line materials inventory requirement to determine the material of all unknown service lines which can lead to improved public health protection such as the replacement of an LSL. The EPA notes that these systems would be required to start standard monitoring on the compliance date if their most recent

90th percentile level exceeds 0.010 mg/L (§ 141.86(c)(2)(ii)).

Allowing systems with unknowns to focus on developing their inventory can result in greater public health benefits by prioritizing the investigation of unknowns, which could lead to the identification of lead and/or GRR service lines. Additionally, the final LCRI, under § 141.86(c)(2)(iii)(H), requires that if a system identifies a lead or GRR service line at any time, it is required to conduct standard monitoring in the next six-month tap sampling period. Therefore, systems cannot avoid standard monitoring by postponing development of their service line materials inventory. If a system identifies a lead and/or GRR service line in its inventory, it must sample at the highest tiered sites according to the final LCRI's revised tiering and tap sampling protocols until all lead and GRR service lines are replaced. Water systems without lead or GRR service lines in their inventory must start standard monitoring if they subsequently discover a lead or GRR service line in the distribution system, unless the system replaces all the identified service lines prior to the start of the next tap monitoring period. If a system can replace those service lines prior to the next tap monitoring period, it would be a system with no lead and/or GRR service lines and therefore, would not need to start standard monitoring. The EPA does not anticipate that this requirement will disincentivize water systems from developing their inventory in order to avoid standard monitoring. Because the service line replacement pool includes unknowns, water systems are strongly incentivized to investigate the material of unknowns to reduce the annual number of replacements they must conduct (*i.e.*, where unknowns are determined to be non-lead). Additionally, the identification of unknowns as non-lead service lines can reduce system burden in other rule areas, such as providing annual public education to persons served by unknown service lines and risk mitigation measures following service line disturbance.

Systems on reduced monitoring that are not required to start standard monitoring at the first six-month tap sampling period following the LCRI compliance date will continue reduced monitoring in accordance with the requirements of the LCRI. Systems that do not meet the reduced monitoring criteria, including measuring 90th percentile lead and copper levels at or below the action levels of 0.010 mg/L and 1.3 mg/L, respectively, in the tap sampling period prior to the compliance

date, must begin standard monitoring at the first six-month monitoring period following the LCRI compliance date. Nearly all systems, except some systems on a nine-year waiver, will conduct their first tap monitoring period under the rule within three years of the compliance date. In contrast, systems not in compliance with the requirements of § 141.86(c)(2)(i), or in exceedance of the action levels under the LCRI at the compliance date, will begin their first tap monitoring period in January or July following the compliance date, whichever is sooner. The EPA encourages States to adopt LCRI sampling requirements prior to the compliance date to assist systems with implementing the new requirements and reducing the number of systems required to start or continue standard monitoring at the same time.

The EPA does not agree that all systems need to begin conducting standard monitoring following promulgation of the LCRI, whether soon after promulgation or phased in over a few years. The purpose of the requirement for some systems to begin conducting standard monitoring as soon as possible after the compliance date is so that systems with the highest risk of lead in drinking water can determine, under updated sampling and tiering requirements, whether they have exceeded the action level under the LCRI and must conduct additional actions to prevent lead exposure and protect public health. Systems without lead and/or GRR service lines in their inventory at the compliance date represent systems with a lower risk and therefore, are not required to change their monitoring frequency at the compliance date unless they do not qualify for reduced monitoring. Systems may still be required to begin conducting standard monitoring following the compliance date if they meet any of the criteria in § 141.86(c)(2)(iii) or if they exceed the lead or copper action level under the LCRI in the tap monitoring period immediately preceding or on the compliance date according to § 141.86(c)(2)(ii). The EPA added the requirement at § 141.86(c)(2)(ii), and maintained the provision at § 141.86(c)(2)(iii)(A) to require systems exceeding the lead or copper action level to begin standard monitoring. The EPA considers 90th percentile levels as current until the next 90th percentile is calculated following a subsequent tap sampling period. Thus, under the LCRI, systems with their most recent 90th percentile lead values that exceed 0.010 mg/L will be required to begin standard

monitoring upon the compliance date. The addition at § 141.86(c)(2)(ii) clarifies that this requirement applies to all systems using their most recent 90th percentile lead levels.

The EPA disagrees with suggestions made by commenters to stagger or postpone the requirement for some systems, as summarized above, to conduct standard monitoring following the compliance date because the suggestions offered would either require additional State burden to track changing monitoring frequencies for several years following compliance or would not prioritize systems with the highest risk of lead in drinking water. The EPA considered suggestions to stagger requirements to begin standard monitoring following the compliance date by system size or by 90th percentile lead level and the agency does not anticipate that the solutions offered would substantially reduce administrative burden or enhance public protection for systems as part of the CCT or public education. Further, the EPA determined that staggering by 90th percentile lead level is not dissimilar from sampling requirements triggered by the lead action level where systems with high 90th percentile lead levels would already be required to conduct standard monitoring. Therefore, staggering by 90th percentile lead level captures systems that are already likely to sample at a higher frequency due to their 90th percentile levels. Instead, the EPA selected a solution for requiring systems to return to standard monitoring that would also capture systems that measure low levels of lead under the LCR but have known sources of lead in the form of lead and/or GRR service lines. Thus, the EPA is finalizing the approach to require systems with lead and galvanized requiring replacement service lines in their inventory at the LCRI compliance date to conduct standard monitoring, and for other systems to otherwise monitor in accordance with the requirements of the LCRI.

Some commenters expressed concern that it is infeasible to require systems to begin standard monitoring at the same time because States will have to review too many site sample plans at the same time. The EPA disagrees with the commenters' interpretation of the proposed and now final requirement for States to review site sample plans. In the preamble to the 2021 LCRR, the EPA indicated that States could review and approve site sample plans that include locations and tiering criteria of sites identified for sampling (USEPA, 2021a). While systems must submit site sample plans to the State (§ 141.90(a)(1)(i))

under the final LCRI, States do not have to review and approve them. For the final LCRI, the EPA is clarifying that States nonetheless may review and approve site plans; however, they do not have to do so prior to a system's first tap sampling period after the compliance date. Though States are not required to review site sample plans, States are required to review similar information on sample locations and tiering criteria after systems have completed sampling. At the end of each tap sampling period, systems must submit the results of sampling along with documentation of the location of each site and information to support the site selection according to tiering criteria (§ 141.90(a)(2)(i)). This is the same information as required in the site sample plan under § 141.90(a)(1)(i). States may, at their discretion and at a time of their choosing, review site selection criteria in the site sample plans to assist system compliance with tap sampling requirements. The EPA encourages States to prioritize review of these plans to ensure and support compliance with the tap sampling requirements. The LCRI incorporates requirements from the 2021 LCRR for States to require changes to the site sample plan, including the authority to specify sites for compliance tap sampling (§ 141.86(a)(1)).

f. 90th Percentile Value Calculation and Inclusion of Additional Samples

The EPA requested comment on the potential inclusion of samples from lower-priority tiers (*i.e.*, Tiers 3 through 5) that have a higher lead or copper concentration than samples from Tier 1 and Tier 2 sites for calculating the 90th percentile value for systems that do not have a sufficient number of samples from Tier 1 and 2 sites to meet the minimum number of samples required. The EPA received a range of comments. Some supported the proposed approach to include the highest samples from lower tiers and others suggested the samples with the highest lead and copper concentrations be included regardless of tier.

Additionally, the EPA requested comment and any relevant data on the number and tiering of samples used to calculate the 90th percentile lead and/or copper levels for systems with LSLs for purposes of assessing the effectiveness of CCT. Specifically, whether samples from non-lead service line sites that have higher lead concentrations than samples from LSL sites should be included and whether these higher values should replace lower values from LSL sites in the 90th percentile calculation, including at systems that are collecting compliance

samples from all Tier 1 and 2 sites. The EPA received a range of comments, with some requesting that the highest samples be included regardless of tier, and other comments asking for Tiers 1 and 2 to be prioritized. Some commenters specified that the compliance samples with the highest lead and copper concentrations should be considered, while others did not specify the specific type of samples (e.g., compliance, consumer-requested) that should be included as part of the 90th percentile calculation. The EPA received a suggestion to consider all samples collected regardless of tier, including consumer-requested samples, and for systems to calculate the 90th percentile based on the highest samples equal in number to the minimum number required in all cases. The commenters noted such an approach would take the strictest stance on preventing the 90th percentile from being diluted due to samples with lower lead concentrations.

The EPA also received recommendations that additional samples should have limited inclusion in the 90th percentile calculation, including recommending that additional samples only be included when they are consumer-requested samples that meet the same tiering and protocol requirements as compliance samples. Some commenters were concerned about the potential for these additional samples to alter the system's compliance dataset because they would not necessarily be included in the sites identified in the site sample plan. Some commenters stated that including additional samples that were not collected for compliance in the 90th percentile calculation would assess the highest levels of lead regardless of cause, and may not represent CCT performance, especially if samples would be included without consideration of tiering priorities.

Additional concerns raised by commenters included the potential to include duplicate samples from sites sampled multiple times in a sampling period, and the potential for additional samples to be geographically clustered. Some commenters had concerns that systems would reduce voluntary supplemental monitoring programs if the sample results would potentially be included in their 90th percentile calculation, with a suggestion that systems only include additional samples up to the minimum number of required samples. Other commenters stated concerns over the applicability of samples to assess CCT if they are collected within other sampling programs, including voluntary programs

conducted by systems, and particularly if those programs are not designed to take compliance samples and may not have information on site tiering. Lastly, the EPA received comments that the proposed rule was unclear about which additional samples can and cannot be included in the 90th percentile calculation.

The EPA agrees that Tiers 1 and 2 represent the highest risk of lead in drinking water. The EPA uses tiering to prioritize sites selected for tap sampling according to the likelihood of having elevated lead levels based on the presence of service lines and plumbing materials most likely to contribute lead to drinking water. Therefore, tiering supports public health protection under SDWA by capturing the highest levels of lead typically at the tap, which in turn indicate the need to assess the effectiveness of CCT in order to maximize reducing exposure of lead in drinking water and inform next steps to control lead releases. The EPA agrees that water systems should not be allowed to "dilute" the 90th percentile with compliance samples from lower-priority tiers when a system does not have enough Tier 1 and 2 sites to meet the minimum number of required samples. The EPA also did not receive any data during public comment to support the inclusion of all samples from lower tiers that, though unlikely, have higher lead levels than higher tier sites for the purposes of assessing CCT. The final LCRI, the EPA is maintaining the proposed approach to require water systems to use samples from Tiers 1, 2, and from the next higher available tier (i.e., Tier 3, 4, or 5) only up to the minimum number of required samples. The EPA agrees that a high lead value indicates a public health risk regardless of tier and individual sites with a lead result above 0.010 mg/L require the system to investigate the site as part of Distribution System and Site Assessment (see section IV.H of this preamble).

The EPA notes CCT is also assessed at each individual site with a lead result above 0.010 mg/L, including at lower or unknown tiers, under the rule's Distribution System and Site Assessment requirements. See section IV.H of this preamble for more details. All sampling results must be submitted to the State, regardless of whether the sample is used in the 90th percentile value calculation. The State has the authority to take action, including re-evaluation of approved OCCT, as a result of high lead values resulting from consumer-requested sampling.

The EPA also agrees that the proposed 90th percentile calculation is complex

because water systems, or the State, will be required to separate out the Tier 1 and 2 samples and identify only the samples with the highest lead and copper concentrations from the next highest tier (i.e., Tier 3, 4, and 5) in order to meet the minimum required number of samples. The EPA has simplified the 90th percentile value calculation procedure for systems with insufficient Tier 1 and 2 sites to meet the minimum number required. For the final LCRI, systems must include samples from each tier at which the system conducted compliance sampling. Then, systems must use the highest samples from among those samples equal to the minimum number of samples required to calculate the 90th percentile. While the EPA anticipates in many cases that this approach will not yield different results than what the EPA proposed because of the higher likelihood of lead in samples collected at Tier 1 and 2 sites, the EPA is making this change in the final LCRI to simplify the calculation and streamline the rule in response to comments. For the final LCRI, the EPA also clarified how systems that sample at a mix of Tiers 1 and 2 and lower tiered sites (i.e., Tiers 3, 4, and 5) but do not sample at enough sites to meet the minimum number required can still calculate 90th percentile values. While systems that do not sample at the minimum number of sites required are in violation of the rule, systems must calculate 90th percentile values from the samples collected in order to prevent systems from avoiding an action level exceedance by undersampling. Systems with less than the minimum number of samples must calculate their 90th percentile values based on the total number of samples, rather than the minimum number of samples required (§ 141.80(c)(3)(iii)(G)). This calculation is the same as one that is used for systems sampling only at Tiers 3 through 5 sites.

The EPA disagrees with restricting the number of samples that can be used to calculate the 90th percentile in situations where systems have sufficient Tier 1 and 2 sites to meet the minimum number of samples and are collecting compliance samples at those sites. The EPA also disagrees with requiring water systems to use the highest tap samples regardless of tier to calculate the 90th percentile for systems in those situations. The EPA introduced the tiering criteria to prioritize sampling at sites most likely to contain lead and does not anticipate that there will be many instances where systems have samples from lower priority tiered sites

with higher lead results than those at Tier 1 and 2 sites. In the 2021 LCRR, the EPA expanded tiering from three tiers to five tiers in order to make lead service lines the highest priority and to help prioritize sampling at the highest risk lead sources when systems do not have lead service lines (86 FR 4225, USEPA, 2021a). Tiers 1 and 2 represent sites with lead sources that, when present, have the greatest contribution to lead in drinking water. See section IV.E.2.b of this preamble for additional discussion on the prioritization of sites within each tier. The EPA acknowledges concerns that water systems may collect additional samples in efforts to dilute the 90th percentile level but disagrees with prohibiting systems from using more than the minimum number of required samples when a system is sampling at sites within the same tier. Additional samples collected within the same priority tier do not represent dilution because they share the same likelihood of lead contributions. Rather, additional data that meets the tiering and sampling protocol requirements can provide better systems-wide assessment of CCT performance at those sites. The EPA notes that water systems are not permitted to collect compliance samples from a lower tier if the system has sufficient number of sites at a higher tier under § 141.86(a). For example, a system with enough Tier 1 and 2 sites to meet the minimum number of samples required may not collect samples from lower-priority tiered sites for inclusion in the 90th percentile calculation. This is to ensure that water systems prioritize sampling from higher tier sites while sites remain available and prevents diluting the 90th percentile by including samples from lower tiers that are likely to have lower lead concentrations. The EPA is only limiting the number of samples used for the 90th percentile calculation in the situation where a system does not have enough Tier 1 and 2 sites to meet the required minimum number of samples to limit the dilution of the 90th percentile calculation when a system has a mix of samples from lead service line sites and lower tiered sites. The EPA is also not limiting the number of samples used for the 90th percentile calculation in the situation where a system is collecting all compliance samples at sites in Tiers 3 through 5 but the agency notes as described in the regulatory text under § 141.86(a) water systems must prioritize compliance sampling at the highest tier available. For example, for a water system to use Tier 4 sites it must have an insufficient number of Tier 1 through 3 sites. A CWS

with insufficient Tier 1, Tier 2, and Tier 3 sampling sites shall complete its sampling pool with “Tier 4 sampling sites”.

As noted above, some commenters were unclear whether the rule requires systems to include consumer-requested samples as part of the 90th percentile calculation, particularly if the samples do not match the tier of compliance samples. The EPA agrees with commenters that consumer-requested sampling is conducted for public education purposes and are not required to use the same protocol as required for compliance sampling nor collected according to the site sample plan. Water systems develop site sampling plans to ensure compliance sample sites meet the tiering criteria and to maintain consistency in sample site locations that meet the required tiers between sampling periods. The EPA is concerned that requiring water systems to include consumer-requested samples regardless of tier will make it more difficult for water systems and States to verify that sampling tiering and protocol were accurately followed, and that lack of consistency in sample sites used for the 90th percentile calculations may make it more difficult for water systems to identify potential issues with CCT. Therefore, the EPA is finalizing the proposed requirement for consumer-requested samples to be included in the 90th percentile calculation only if the sampling meets the compliance sampling tiering and protocol.

In the final LCRI, systems are required to offer sampling to any site with a lead or GRR service line (§ 141.85(c)(2)), and to offer lead sampling to any site, regardless of service line material type, following a lead action level exceedance (ALE) (§ 141.85(c)(1)). These sample results may produce additional valuable information regarding CCT performance as well as provide consumers with information about lead in drinking water. The EPA agrees that any samples that do not meet the same criteria as compliance samples collected in accordance with § 141.86(a) and (b) should not be included in the 90th percentile calculation as it may dilute the 90th percentile level, but disagrees that all consumer-requested samples should be excluded. Samples that meet the same tier and protocol as the required compliance samples offer additional information to water systems to evaluate CCT performance at those sites and must be included in the 90th percentile calculation (§ 141.86(e)). The EPA also disagrees that these requirements will disincentivize voluntary programs. The EPA is aware that systems may offer sampling under

different protocols (e.g., sequential sampling) to provide consumers with information about lead in their drinking water. The EPA clarified in the final LCRI at § 141.86(b)(1)(iv) that systems have flexibility to use alternate sampling protocols for consumer-requested samples. Consumer-requested sampling in accordance with § 141.85(c) maintains flexibility but specifies that water systems sampling at lead service line sites must offer samples that capture water in contact with both the lead service line and the premise plumbing. Systems may choose to use the standard compliance sampling protocol for consumer-requested samples for ease of implementation (e.g., one set of sampling instructions) and to address challenges with identifying enough participation in compliance sampling to obtain the minimum number of required samples. Alternatively, water systems may choose to devise alternate protocols to assess site-specific water quality issues. However, samples collected in accordance with § 141.85(c) that do not meet the appropriate tier and protocol requirements of § 141.86(a) and (b) may not be included in the 90th percentile calculation in accordance with § 141.86(e). See section IV.J of this preamble for more information on requirements for consumer-requested samples. When multiple samples that meet the standard compliance tap sampling requirements are collected from the same site during a tap sampling period, the EPA agrees including each of these in the 90th percentile calculation can result in an inaccurate reflection of CCT performance. In the final rule, only the highest sample reading from that site can be included in the 90th percentile calculation (§ 141.86(e)).

g. Wide-Mouth Bottles

The EPA requested comment on the proposed updated definition of wide-mouth bottles, that is “bottles that are one liter in volume with a mouth, whose outer diameter measures at least 55 millimeter wide,” and specifically on the availability of qualifying bottles. The EPA received comments noting concern that the definition of wide-mouth bottles with a minimum of 55 millimeter outer diameter is too restrictive based on the sizes of one-liter bottles available commercially. Commenters suggested that a 40 millimeter inner diameter is more representative of commercially available bottles, given that suppliers typically categorize products by the inner diameter of the opening, and is still sufficient to maintain the benefits of

collecting samples in a wide-mouth bottle. The EPA agrees that the definition of a wide-mouth bottle should describe items that are readily and commercially available to systems and revised the definition of wide-mouth bottles for the final LCRI to include an inner diameter that measures at least 40 millimeter diameter. The EPA also anticipates that this change to accommodate commercial availability of wide mouth bottles, per commenters' concerns, will not impact the functionality of wide-mouth bottles to allow for sample collection with the tap fully open. The EPA also heard concern that restricting other characteristics of the sample bottle, such as size, shape, color, and material, reduces options for systems to creatively develop customer sampling solutions around the more complex first- and fifth-liter paired sample protocol. The EPA confirms that there is no restriction on bottle size, shape, color, or material aside from being one liter in volume with a mouth measuring a minimum of 40 millimeter inner diameter.

h. Sample Invalidation

The EPA received comments supporting revisions that allow the State to invalidate samples not collected in accordance with requirements. Commenters asked that the invalidation authority be expanded, such as to include samples incorrectly collected from sites with point-of-use or point-of-entry devices. The EPA agrees that sites with point-of-use or point-of-entry devices are not suitable for compliance tap sampling and has revised the final rule to allow States to invalidate based on any site selection criteria in § 141.86(a). When information on site characteristics includes information that a point-of-use or point-of-entry device is installed, States may use that information to determine whether the sample is invalid. A site with a point-of-use or point-of-entry device may be eligible for sampling under Tier 5, such as when the site is representative of other sites in the system and the system has no sites in Tiers 1–4. The final rule gives States the authority to invalidate samples based on any site selection criteria under § 141.86(a), and finalizes proposed language to give States additional authority for invalidation based on sample collection criteria under § 141.86(b)(1), including minimum stagnation time and sample volume.

Additionally, the EPA requested comment and data, including modeling and sampling data, on potential maximum stagnation times, and specifically how stagnation times

inform corrosion rates. Many commenters suggested setting a maximum time for stagnation under sample collection criteria, beyond which samples could be invalidated. Commenters did not offer data to support a scientific reason for any suggested maximum stagnation times provided in their comment. One commenter advocated against setting a maximum time for stagnation since stagnant water may still be used for human consumption and thus represents water delivered under the control of systems. The EPA clarifies that systems have the authority to review sample collection criteria as reported by consumers, and to request replacement samples if the system believes that the sample is not representative of water in the distribution system. However, systems may not challenge samples after they have been sent for analysis. This provision prevents systems from targeting samples with high lead and copper readings to submit for invalidation.

The EPA received comments requesting the EPA extend the time allowed for acidification of samples following sample collection. Commenters expressed that there is no scientific difference with respect to sample analysis between acidification after two weeks and acidification after four weeks and noted extending the acidification window would allow systems to batch more samples and process them more efficiently. The EPA did not receive data in support of these comments to consider an extended acidification window and is not aware of data that would support such a change. Therefore, the EPA is unable to assess the validity of these comments and is not amending the proposed LCRI requirements for the time for sample acidification.

i. Practical Quantitation Limit

The EPA received comments on the lead PQL suggesting that the EPA should consider lowering the lead PQL from 0.005 mg/L. Many of these commenters suggested lowering the lead PQL to 0.001 mg/L, the current lead MDL in the LCRI. These commenters presented studies of individual labs demonstrating the use of an EPA method able to achieve MDLs below the 0.005 mg/L lead PQL.

The EPA disagrees with lowering the lead PQL below the level of 0.005 mg/L. As discussed in the proposed LCRI, due to the lack of national-scale data demonstrating lead MDLs at levels significantly lower than the current MDL of 0.001 mg/L, there is not enough

scientific evidence to lower the PQL. Compared to the PQL, the MDL is the minimum measured concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results (§ 136.2(f)). The current lead PQL is based on the approved MDLs of the analytical methods for lead detection in § 141.23(k)(1). Based on these methods, the EPA established the MDL for lead as 0.001 mg/L in § 141.89(a)(1)(iii), and the PQL is established with a margin of error around demonstrated MDLs. The EPA is not aware of sufficient evidence to show the widespread analytical capability of laboratories for lower MDLs. Additionally, the commenters arguing for a lower PQL did not provide the EPA with national scale data that demonstrates widespread analytical capability for lower MDLs, so the EPA is retaining the requirement for the lead PQL at 0.005 mg/L.

3. Final Rule Requirements

a. First- and Fifth-Liter Sampling

The final LCRI requires water systems to take first- and fifth-liter paired samples for lead at LSL sites (§ 141.86(b)) and use the higher of the two values to calculate the 90th percentile lead level (§ 141.80(c)(ii)(A) and § 141.80(c)(iii)(A)). For sites that are Tier 1 or Tier 2 because they have lead premise plumbing only and no LSLs, only the first liter must be sampled. The final rule maintains that systems continue to collect first-liter samples at Tiers 3, 4, and 5 sites.

b. Tiering of Sampling Sites

For LCRI, the EPA is finalizing the tiers for sampling sites as proposed with minor modifications (§ 141.86(a)(4)). Tier 1 sampling sites are single-family structures with either premise plumbing made of lead and/or are served by an LSL. Tier 2 sampling sites are buildings, including multiple-family residences, with premise plumbing made of lead and/or served by an LSL. The rule promulgates corrections to Tiers 1 and 2 that were inadvertently dropped from the 2021 LCRR, such that lead premise plumbing is included in Tiers 1 and 2. Tier 3 sampling sites are sites that are served by a lead connector. Tier 3 sites are also sites served by a galvanized service line or containing galvanized premise plumbing that are identified as ever having been downstream of an LSL. Tier 3 for community water systems only includes single-family structures.

Tier 4 sampling sites are sites that contain copper premise plumbing with lead solder installed before the effective

date of the State's applicable lead ban. Tier 4 for community water systems only includes single-family structures. Tier 5 sampling sites are sites that are representative of sites throughout the distribution system. For purpose of § 141.86(a), a representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the water system.

c. Sample Site Selection

Under the final LCRI, each water system must identify potential tap sampling sites and submit a site sample plan to the State by the start of the system's first lead and copper tap monitoring period (§ 141.90(a)(1)(i)). States have the authority to require systems to modify site sample plans or use specific sampling sites (see section IV.N of this preamble on reporting for additional details). The EPA encourages States to evaluate site sample plans prior to the start of a systems' tap sampling period to ensure site locations meet the requirements of the LCRI.

Water systems must select sampling sites from the highest tier available as described above in accordance with § 141.86(a). The final rule continues to require systems to sample at the same sites between tap monitoring periods. The final rule removes the requirement to select replacement sample sites within reasonable proximity when systems are unable to access previously sampled sites to provide more flexibility for systems and in recognition of the difficulty in selecting similar sites while service line replacement is underway.

In the final rule, the EPA is also clarifying that sample sites are no longer available for sampling following either a customer refusal for participation or customer non-response after a system conducts two outreach attempts. The number of customer refusals for compliance sampling must be submitted to the State. These requirements will enable systems, particularly those required to conduct 100 percent of samples at sites served by LSL or with lead premise plumbing under § 141.86(a)(3), to move on to subsequent tiers once all potential sites in a higher tier are unavailable. Systems that expect to be short of sites in a particular tier may commence sampling at lower tiers to meet the minimum number of required samples by the reporting deadline. Systems must document reasons for site unavailability when they are not included in the compliance dataset and they were not previously documented as unavailable, such as for LSL sites that must be sampled under § 141.86(a)(3).

d. Frequency and Quantity of Sampling

With the elimination of the trigger level in the final rule, the EPA is finalizing the revised tap sampling frequency requirements as proposed (§ 141.86(c) and (d)). Any system that is at or below the lead action level of 0.010 mg/L and copper action level of 1.3 mg/L for two consecutive six-month tap monitoring periods qualifies for annual reduced monitoring. Any system that meets the lead PQL of 0.005 mg/L and copper PQL of 0.65 mg/L for two consecutive tap monitoring periods qualifies for triennial reduced monitoring. Small and medium systems that meet the action level for three consecutive years (which may include a combination of standard and annual reduced monitoring) qualify for triennial reduced monitoring. The LCRI does not include any changes to the nine-year reduced monitoring waiver, nor any changes to the minimum number of sample sites required under standard and reduced monitoring.

e. Standard Monitoring

In the final rule, systems with lead or GRR service lines in their inventory on the LCRI compliance date must begin standard monitoring in the first six-month tap monitoring period after the compliance date, unless they adopt tap sampling protocols according to the final LCRI prior to the compliance date. Specifically, systems with lead and GRR service lines do not need to begin standard monitoring if they conduct sampling meeting the tap sampling protocol including the first- and fifth-liter sampling protocol at sites served by LSLs as described in § 141.86(b)(1)(ii), all sample collection requirements in § 141.86(b)(1) and (3) (such as stagnation times and sample volume), and priority tiering requirements to sample at sites served by lead and GRR service lines as described in § 141.86(a). Since there are no substantive changes to the sampling protocol and tiering criteria for systems with service lines of unknown material and/or non-lead service lines, these systems are not required to begin standard monitoring in the first full tap monitoring period after the compliance date, unless required to begin standard monitoring under other rule provisions such as exceeding the action level or changing source water or treatment. If later, these systems discover lead and/or GRR service lines in their distribution system (unless the system replaces all the discovered service lines prior to the start of the next tap monitoring period), or otherwise meet any of the criteria in

§ 141.86(c)(2)(iii)(H), they must begin standard monitoring.

The final rule's requirement to begin standard monitoring is similar to the requirement under the 2021 LCRI that all systems with lead or GRR service lines must begin standard monitoring immediately following the compliance date. The LCRI clarifies that if systems with known lead and/or GRR service lines conduct monitoring meeting the new tap sampling protocol requirements (first- and fifth-liter sampling, all sample collection requirements in § 141.86(b)(1) and (3), and priority tiering requirements of the LCRI) prior to the compliance date, they do not need to begin standard monitoring, unless their most recent 90th percentile lead and/or copper results exceed the action level. The EPA is aware of some systems, such as in Michigan, that may meet these requirements prior to the compliance date. The agency encourages all systems and States to consider early adoption of these requirements to help systems determine their 90th percentile levels under the LCRI requirements as soon as possible and to reduce the number of systems beginning standard monitoring upon the compliance date. These requirements are critical to ensuring that systems with known sources of lead in drinking water can determine as soon as practicable following the compliance date whether additional actions are needed to address situations with a higher potential of lead exposures faced by consumers.

To continue on reduced monitoring, systems must meet the criteria in § 141.86(d) based on 90th percentile lead and copper levels at or below the lead and copper action levels and/or the lead and copper PQLs. As the final LCRI lowers the lead action level to 0.010 mg/L, systems with 90th percentile lead levels above 0.010 mg/L during the tap sampling period prior to the compliance date will not be able to continue on reduced monitoring and must conduct standard monitoring in the first full tap monitoring period following the compliance date. This requirement is also clarified under § 141.86(c)(2)(ii) which requires all systems with a most recent 90th percentile lead level above 0.010 mg/L or a most recent 90th percentile copper level above 1.3 mg/L to begin standard monitoring at the compliance date.

The final LCRI also requires an update to the cross-reference under § 141.83(a)(4) regarding the requirement for systems to conduct standard monitoring following installation of source water treatment under § 141.86(c)(2)(iii)(F), due to the

revisions to this section, specifically the order of the requirements.

f. 90th Percentile Value Calculation and Inclusion of Additional Samples

For systems with a sufficient number of Tier 1 and 2 sites to meet the minimum number required, systems must only use samples collected at Tier 1 and 2 sites to calculate the 90th percentile (§ 141.80(c)(3)(ii)). These systems may not include samples from Tier 3, 4, or 5. For systems sampling at Tier 1 and 2 sites that do not have sufficient Tier 1 and 2 sites to meet the minimum required number of samples, systems must calculate the 90th percentile concentration using the highest samples from the highest tiers with available sampling sites equal to the minimum number of samples required (§ 141.80(c)(3)(iii)). For systems only sampling at Tier 3 through 5 sites, they must calculate the 90th percentile value using samples collected at the highest tiers with available sampling sites from Tiers 3 through 5 (§ 141.80(c)(3)(i)).

The EPA is clarifying in the final LCRI that additional samples collected according to the requirements for compliance samples described in § 141.86(a) and (b), must be considered for determinations, such as calculating the 90th percentile. The final LCRI requires systems (or States) to use consumer-requested samples (§ 141.85(c)) that meet the requirements of § 141.86(a) and (b) to calculate the system's 90th percentile level. Systems may collect consumer-requested samples according to different protocols than what is required for lead and copper compliance samples in § 141.86(b). However, only consumer-requested samples collected in accordance with the requirements of § 141.86(a) and (b) may be used in the 90th percentile calculation. Systems may not include samples collected as part of DSSA (see section IV.H of this preamble) or follow-up samples collected as a result of monitoring after service line replacement (see section IV.B of this preamble) in the 90th percentile calculation.

The EPA recognizes that requirements for systems to offer consumer-requested sampling may result in sampling at sites more than once during a tap sampling period. The final rule adds a requirement that systems are required to include only the highest sample from among all those collected at a site during the same tap sampling period that also meets the requirements for a compliance sample (§ 141.86(e)).

g. Wide-Mouth Bottles

In response to comments provided during the public comment period, for the final LCRI, the EPA is revising the definition of wide-mouth bottle to reduce the minimum "inner diameter" from 55 to 40 millimeters. See section IV.O.3 of this preamble for further discussion on definitions.

h. Sample Invalidation

The final LCRI includes specific language providing States opportunities to invalidate samples which were collected in a manner that did not meet the sample collection criteria under § 141.86(b)(1). The final LCRI also includes revised language to allow States to invalidate samples based on any incorrect site selection criteria under § 141.86(a), including samples collected incorrectly at sites with installed point-of-use and/or point-of-entry devices. In addition, systems may make determinations for resampling on a site-by-site basis, prior to submitting samples for analysis, for when samples are not representative of regular water usage.

i. Practical Quantitation Limit

The final LCRI retains the lead PQL of 0.005 mg/L.

F. Corrosion Control Treatment

1. Rationale and Proposed LCRI Revisions

a. Feasibility of the CCT Treatment Technique

CCT refers to methods (e.g., alkalinity/pH adjustment, addition of corrosion inhibitors) that water systems can take to reduce the leaching of lead and copper into drinking water from drinking water infrastructure, such as service lines and premise plumbing. CCT is one of the four treatment techniques the EPA promulgated in the LCR. At § 141.2, OCCT is defined as the "corrosion control treatment that minimizes the lead and copper concentrations at users' taps while ensuring that the treatment does not cause the water system to violate any national primary drinking water regulations." In the LCR, the EPA stated that CCT was an "important element of the final treatment technique [rule]" because "most of the lead and copper found in drinking water is caused by corrosion of materials containing lead and copper in the distribution system and in the plumbing systems of privately owned buildings" (56 FR 26479, USEPA, 1991). After examining the data available at the time on the effectiveness of corrosion control treatment on reducing lead in tap water,

the use of corrosion control treatment in full-scale systems, and the cost of these technologies to large water systems, the EPA concluded in the LCR that this treatment technology is feasible within the meaning of section 1412(b)(5) of SDWA (56 FR 26486, USEPA, 1991). For the LCRI, the EPA evaluated the feasibility of the CCT treatment technique in accordance with SDWA sections 1412(b)(4)(D) and 1412(b)(7) and as described in section III.D.3 of this preamble and finds CCT to be effective, affordable for large systems, technically feasible, and prevents known or anticipated health effects to the extent feasible.

First, the EPA found that CCT is effective and available for use. The EPA determined in the 1991 LCR that available data demonstrated the effectiveness of CCT for reducing lead and copper at the tap. The EPA also acknowledged the challenge of quantifying the effectiveness of CCT in terms of developing a single numeric value or specific level of treatment that is feasible for all water systems (see section IV.A of this preamble). This is in part due to water system-specific characteristics including the physical and chemical properties of the source water, the material composition of the distribution system, lead and copper content of premise plumbing, consumer water use habits, and other factors. In addition, the EPA determined that CCT had been used in water distribution systems for many years demonstrating its efficacy under field conditions (56 FR 26485–26486, USEPA, 1991). CCT also continues to be a "best technology, treatment technique[s] or other means" for use by water systems in accordance with the definition for feasibility at SDWA section 1412(b)(4)(D). As noted in the LCRI proposal, based on many years of implementation of the LCR with thousands of PWSs utilizing corrosion control strategies, the EPA determined that these treatments are still effective at reducing lead and copper levels at the tap (88 FR 84937, USEPA, 2023a). Additionally, the EPA identified research which continues to show that CCT effectively reduces lead and copper from leaching into drinking water (Hayes and Hydes, 2012; Roy and Edwards, 2020; Tam and Elefsiniotis, 2009; Vijayashanthar et al., 2023). For example, an estimated 99 percent of water systems serving more than 50,000 persons currently use CCT (chapter 3, Exhibits 3–6 and 3–7, USEPA, 2024a). Therefore, CCT is an effective treatment technique in accordance with SDWA section 1412(b)(4)(D).

Second, the EPA determined in 1991 that CCT was affordable because the

costs of alkalinity adjustment, pH adjustment, and the addition of corrosion inhibitors were reasonable for large water systems (56 FR 26485–26486, USEPA, 1991). Although not required for determining what may reasonably be afforded by large water systems to meet the feasibility standard for CCT as a treatment technique at SDWA section 1412(b)(7)(A) (see section III.D.3 of this preamble), the EPA later evaluated the affordability of compliance technologies for small systems in accordance with the 1996 amendments to SDWA and determined that CCT is affordable for all system sizes (63 FR 42039, USEPA, 1998a; USEPA, 1998b). For the LCRI, the EPA continues to find CCT affordable. In addition, the EPA evaluated the cumulative impact of the LCRI requirements as a whole to household costs by system size, which are discussed in the EPA's "Economic Analysis for the Final Lead and Copper Rule Improvements" (USEPA, 2024a) in section 4.3.7.3 of this preamble.

Third, the EPA has determined CCT is technically feasible. There are several factors the agency considered to assess technical feasibility for systems to implement CCT in accordance with SDWA. This includes considering the capacity of systems to evaluate and implement CCT. As discussed above, CCT has been shown to be a best available treatment technique, effective at reducing lead and copper in drinking water. The EPA notes that water systems of all sizes have implemented CCT under the 1991 LCR (USEPA, 2024a, chapter 3, section 3.3.3). However, there are technical challenges for water systems with regard to CCT that the agency considered when developing CCT requirements for the 1991 LCR and in the final LCRI that affect technical feasibility. As described in the proposal, CCT expertise is highly technical because corrosion chemistry is complex and theoretical predictions are rarely sufficient to fully understand treatment performance in a system (Tully et al., 2019; 88 FR 84942, USEPA, 2023a). This is because unlike technologies used to treat source water contaminants, the use of corrosion control technologies does not remove the contaminants, such as lead and copper, from drinking water directly; instead, these treatment technologies prevent these contaminants from being introduced into drinking water by corrosion of plumbing materials. As discussed in section IV.A of this preamble, factors such as the amount of lead or copper in the distribution system and premise plumbing, water chemistry, stagnation

time, and water use patterns result in variability of lead and copper levels at the tap. While the EPA determined that water systems can address water corrosivity by using corrosion control treatment, it is "technologically infeasible to ascertain whether the lead and copper level at the tap at a single point in time represents effective application of the best available treatment technology" (53 FR 31527, USEPA, 1988). In other words, corrosion control is system specific and there is no single numerical standard capable of adequately reflecting the application of the best available treatment in all systems. Lead and copper levels vary considerably both before and after the application of corrosion control treatment, between different systems, and between individual buildings within the same system (56 FR 26473–26475, USEPA, 1991). See section IV.A of this preamble for the EPA's analysis supporting setting a treatment technique for lead in lieu of an MCL. Because corrosion control treatment is system-specific, the unique factors of a system may pose particular challenges that require technical expertise including designing and conducting corrosion control studies and providing recommendations for treatment. Furthermore, as noted in the 1991 LCR, there are additional technical challenges of mitigating potential secondary effects of corrosion control treatment, including potential increased levels of disinfection byproducts and precipitation of other metals such as iron and manganese which may lead to a decrease in health protection (56 FR 26487, USEPA, 1991). Literature shows that these types of challenges continue to be a factor in applying CCT (*e.g.*, Schock et al., 2008).

In addition, the EPA is aware that some water systems may lack the expertise to design and implement CCT without assistance from outside technical experts and the State, particularly smaller water systems. These systems typically require the most extensive level of interaction with States with regards to evaluating, selecting, implementing, and overseeing OCCT. The burden on large systems is typically lower as they tend to be more sophisticated and generally require less technical support (56 FR 26492, USEPA, 1991). While larger systems serve the majority of the U.S. population, small systems comprise the vast majority of PWSs. Out of 66,947 CWSs and NTNCWSs subject to the requirements of the LCR, 62,518 (93 percent) serve 10,000 persons or fewer and 57,330 (86 percent) serve 3,300 persons or fewer

(USEPA, 2024a, chapter 3, section 3.3.1). Therefore, because many smaller water systems often require additional technical assistance and oversight from the State to implement CCT, the capacity of States to provide such assistance affects the technical feasibility for systems. Additionally, as described in the LCRI proposal, the EPA is concerned about the lack of technical experts available nationally to assist water systems in planning for and implementing OCCT on an ongoing basis, which may otherwise alleviate some of the burden on water systems and States (88 FR 84942, USEPA, 2023a). Based on years of LCR implementation, the EPA is aware that water systems, particularly small systems, face these technical challenges.

Fourth, as discussed in section III.D.3 of this preamble, the EPA considered how the technical factors regarding technical feasibility above (*i.e.*, variability of lead in drinking water, system-specific nature of CCT, technical expertise, and capacity for States to provide assistance to smaller systems) affect the EPA's ability to establish requirements for the CCT treatment technique to "prevent known or anticipated health effects to the extent feasible" in accordance with SDWA section 1412(b)(7)(A). In the LCR, for the purposes of meeting the statutory feasibility standard for a treatment technique, the EPA considered the balance of these technical factors with ensuring the CCT treatment technique was the most health protective. The EPA also clarified in the proposed LCRI how the agency considered the technical factors, including administrative burden, in developing the CCT requirements.

In the LCR, and retained in the LCRI, as described below, the EPA developed action level and tap sampling requirements, among others, to make CCT feasible for water systems, consistent with SDWA section 1412(b)(7)(A). The action levels in particular address the technical feasibility challenges detailed above. In the LCR, the EPA introduced action levels for lead and copper to simplify implementation of the rule. Specifically, these action levels were introduced "as a method to limit the number of PWSs that would need to complete a detailed demonstration that they have installed corrosion control treatment to minimize lead and/or copper levels at taps" (56 FR 26488, USEPA, 1991). The EPA discussed in the proposed LCRI (88 FR 84906–84910, USEPA, 2023a) and reaffirms in section IV.A of this preamble, that the agency established a treatment technique rule for lead and

copper because it is not “technologically feasible to ascertain the level of the contaminant” (42 U.S.C. 300g–1(b)(7)(A)) at the tap. As noted above, it is not technically feasible or possible to determine a precise level of lead and copper at the tap that represents the application of best available treatment across systems, in part due to the specific characteristics of each system (e.g., composition of the distribution system, presence of lead and copper in premise plumbing, physical and chemical water characteristics, consumer water use habits). Because the resulting lead and copper levels from application of the best available treatment is system specific, selection of the lead and copper action levels is not based on a precise statistical evaluation of treatment data for all systems. Instead, the action levels were selected based on the lead and copper levels in water systems with OCCT for the purpose of making the CCT treatment technique technically feasible (see section IV.F.4 of this preamble).

In the LCR, the EPA set the action levels for lead and copper at 0.015 mg/L and 1.3 mg/L, respectively. Because of the limitations of predicting CCT efficacy, tap sampling is necessary both before and after implementation of treatment to assess its performance (56 FR 26486, USEPA, 1991). Under the LCR, small and medium systems demonstrated they were optimized by measuring 90th percentile lead levels at or below the action level. The EPA used 90th percentile lead data from systems with OCCT to select the action level as a level the EPA determined was generally representative of what systems with OCCT were meeting. The EPA required large systems to conduct a detailed demonstration of OCCT regardless of 90th percentile levels because large systems served the greatest number of people and had “the greatest technological capabilities and access to technical support and other resources that would enable them to perform the sophisticated treatment manipulations that might further reduce lead levels” (56 FR 26492, USEPA, 1991). However, the EPA also acknowledged that some systems already at or below the action level (which was determined to be generally representative of OCCT) may not be able to reduce their lead levels further (56 FR 26492, USEPA, 1991) because of the system-specific nature of OCCT. Likewise, some systems may not be able to meet the action level even after installing OCCT, because of factors that lead to high lead variability at the tap

(e.g., water chemistry, composition and condition of the distribution system, lead content in plumbing materials). The action level is not a health-based number in that it is not established based on human health risks to lead, but rather is a tool to make the treatment technique feasible for systems. As a level that is generally representative of OCCT, the action level prompts a detailed OCCT demonstration for water systems (e.g., conducting a study, treatment recommendation). However, whenever a system is required to conduct a detailed OCCT demonstration and installation, the system must identify and apply the best technology in their system in accordance with § 141.2, and not simply apply the treatment sufficient to meet a specified level. The action level supports the public health benefits that can be realized through CCT while addressing some of the technical feasibility challenges described above, by limiting the need for detailed optimization demonstrations for small and medium systems at or below the action level. This made “implementation of the rule administratively workable” (56 FR 26492, USEPA, 1991) and thus, CCT technologically possible compared to requiring small and medium systems to conduct detailed OCCT demonstrations regardless of their tap sampling results. Tap sampling is therefore used in conjunction with the action level to address this technical challenge.

The EPA is clarifying its statement in the LCRI proposal that the action level is used to “ensure the rule is implementable for small and medium systems” (88 FR 84940, USEPA, 2023a) as the action level also triggers actions for large systems. The EPA notes that while large systems were required to conduct a detailed demonstration of optimization since LCR, systems of any size with CCT, including large systems, use the action level to prompt installation or re-optimization of OCCT (§ 141.81(a)(1)(i), (a)(2)(i), and (a)(3)(i) in the 2021 LCRR). Accordingly, the action level serves a function for all system sizes in the CCT treatment technique. Some large systems never had to conduct a detailed demonstration because their lead levels were at or below the PQL of 0.005 mg/L, and therefore, they were deemed optimized. If those large systems exceed the PQL, they must conduct a detailed OCCT demonstration. Future re-optimization of these systems is prompted by an action level exceedance. Large systems with CCT installed that have lead levels at or below the PQL but later exceed the PQL may also be required by the State

to re-optimize even if at or below the action level.

The EPA is finalizing revisions to several elements of the CCT treatment technique, including the lead action level, that support the feasibility of the CCT treatment technique as a whole, consistent with SDWA section 1412(b)(7)(A). For the LCRI, the EPA is maintaining the approach of using the action level, in addition to finalizing other revisions, in furtherance of the feasibility of the CCT treatment technique. This includes tap sampling requirements that are designed to better capture the lead levels of water in contact with sources of lead, including changes to the sampling protocol and site tiering (see section IV.E of this preamble). The EPA estimates that this change will result in more systems’ exceeding the action level and evaluating CCT compared to the LCR (88 FR 84940, USEPA, 2023a; USEPA, 2024a, chapter 3, section 3.3.5). The EPA is also requiring most systems with lead and GRR service lines to conduct standard monitoring at the compliance date (see section IV.E.3.e of this preamble). This would require systems that are most likely to have higher levels of lead in drinking water, to monitor with the updated tap sampling protocol and assess 90th percentile lead levels against the action level after the first full six-month tap monitoring period after the LCRI compliance date, to ensure timely action is taken in response to elevated lead levels, if necessary. However, the EPA is maintaining the use of tap sampling in combination with the action level to determine when systems must install and re-optimize OCCT. The agency accounted for these revised tap sampling requirements in selecting the final action level (see section IV.F.4 of this preamble). In the final LCRI, the EPA has reduced the lead action level to 0.010 mg/L. Specifically, the EPA identified 0.010 mg/L as being generally representative of OCCT based on updated data and over 30 years of LCR implementation experience (see section IV.F.4 of this preamble for a discussion on the action level analysis). In selecting this action level, the EPA considered what is technically possible for small and medium systems in light of the identified challenges that still exist, including their fewer resources and more limited technical capacity compared to large systems and a limited number of CCT experts available nationally. Therefore, the EPA has determined that an action level of 0.010 mg/L would support the treatment technique for CCT overall, in addition to

other elements of this treatment technique, and is the most health protective level technically possible; it thus meets the feasibility standard at SDWA section 1412(b)(7)(A).

In addition to reducing the action level to 0.010 mg/L, the EPA established other requirements and flexibilities that would help address some of the technical challenges with CCT to ensure the treatment technique overall is feasible, some of which are discussed in this section. For example, the LCRI includes an option for water systems that are able to complete service line replacement at a mandatory minimum annual rate within five years or less to defer OCCT evaluation, which for large and medium systems with LSLs, involves conducting pipe rig/loop studies (§ 141.81(d)(1)(i) and (e)(1)(i)). The EPA anticipates that this option will address some of the technical concerns for systems that are able to remove a significant source of lead in their system within the five-year time period and which would otherwise be required to study and implement OCCT. For those systems, OCCT evaluation may no longer be necessary after service line replacement due to the removal of the most significant contributor of lead, or the CCT evaluation would be much less complex (e.g., coupon or desktop study). During the five-year period after the compliance date for the LCRI, this provision will lead to less competition for outside corrosion control experts or system-State consultations on the appropriate corrosion control treatment as these systems complete their LSLR programs, which can ease implementation burden for systems otherwise required under the LCRI to optimize or re-optimize OCCT during this period after an action level or PQL exceedance. This is especially compelling for smaller systems that may be capable of completing service line replacement in less time, but doing so while simultaneously conducting OCCT evaluation and installation would exacerbate the existing technical challenges detailed above. Therefore, this new provision helps to ensure the technical feasibility of the CCT treatment technique, in addition to supporting the feasibility of other rule revisions, including mandatory service line replacement, and to maximize the public health protection of the LCRI as an NPDWR overall.

Additionally, the EPA is finalizing the proposed provision in § 141.81(a) that water systems that have re-optimized once after a lead action level exceedance and continually met all WQPs while they are completing their service line replacement program, are not required

to re-optimize again in response to subsequent lead action level exceedances unless or until all lead and GRR service lines have been removed or required by the State (§ 141.81(a)(1) through (3)). As noted above, the EPA is aware that there are systems with OCCT that are not capable of reducing lead levels below the action level. The EPA anticipates that this will continue to be the case for some systems under the LCRI with updated tap sampling requirements and a lower action level. Also, water distribution systems will be undergoing changes in the form of mandatory service line replacement. The re-optimization requirements in the final LCRI are intended to prevent water systems from continually conducting re-optimization studies while simultaneously implementing their service line replacement program when further reduction in lead levels is unlikely due to various water system-specific factors (e.g., water chemistry, composition of distribution system, lead in premise plumbing). This will also reduce burdens associated with the system-State interactions on re-optimized OCCT, and like the flexibility described in the paragraph above, is intended to address the technical challenges that impact the feasibility of the CCT treatment technique. Furthermore, as noted above, there may be challenges mitigating the secondary effects of CCT on drinking water quality (e.g., increased risk of other contaminants) that may limit the effectiveness of OCCT for the purposes of reducing lead and copper levels. While the EPA is not requiring water systems to re-optimize more than once while they are conducting service line replacement as described above, the agency has added the requirement for systems that have removed all lead and GRR service lines that subsequently exceed the lead action level to re-optimize. The EPA expects that with the largest source of lead in drinking water removed, the optimal corrosion control may differ and systems can more appropriately address corrosion in the changed distribution system and better address health risks from lead remaining in premise plumbing. Additionally, water systems could potentially reduce CCT costs by changing their treatment, as appropriate, due to the removal of a significant lead source. Therefore, this requirement combined with the State discretion to require water systems to re-optimize will help to ensure the CCT treatment technique is both technically feasible and protects public health to the extent feasible. The EPA is retaining the

definition of OCCT that requires water systems to minimize lead and copper concentrations at user's tap while ensuring that the treatment does not cause the water system to violate any NPDWRs (§ 141.2). The EPA also introduced in the 2021 LCRR flexibilities for small water systems to implement an alternative option to CCT if approved by the State (see section IV.I of this preamble).

Given the analysis above and in accordance with the statutory standard, the EPA finds that the CCT treatment technique for LCRI meets the feasibility standard in accordance with SDWA section 1412(b)(7)(A). CCT continues to be a best available technology effective at preventing adverse health effects from lead and copper in drinking water to the greatest extent that is both affordable and technically possible given the final requirements in LCRI.

In addition to finding the CCT treatment technique for LCRI is feasible, the EPA also evaluated the water system burden of CCT in the context of other important actions water systems will be taking to reduce lead levels in drinking water. Notably, all water systems are required to conduct LSLR regardless of lead levels (see section IV.B of this preamble), which the EPA estimates will increase both water system and State burden. Therefore, the EPA finds that the CCT requirements also help to support the feasibility of the separate but complementary treatment technique for mandatory service line replacement to address the multiple and unique sources of lead contamination as part of this NPDWR.

b. 2021 LCRR CCT Requirements

This section includes a brief summary of CCT requirements in the 2021 LCRR that are important context for the EPA's proposed and final changes in LCRI and the EPA's responses to comments, addressed in section IV.F.2 of this preamble.

Under the 2021 LCRR, medium and large systems are required to install or re-optimize OCCT in response to a lead or copper action level exceedance. Medium and large system with LSLs that exceed the lead action level are required to harvest lead pipes from the distribution system and conduct flow-through pipe rigs to evaluate options for OCCT or re-optimized OCCT. Large systems with CCT that exceed the lead PQL of 0.005 mg/L may be required to re-optimize their OCCT. Large systems without CCT that exceed the lead PQL are required to complete steps to install CCT.

Under the 2021 LCRR, in the case of a trigger level exceedance for systems

without CCT, small and medium systems must recommend their approach to CCT to their primacy agency (except for small systems that select other compliance alternatives). Unless there is a subsequent action level exceedance, small and medium water systems without CCT are not required to conduct a subsequent corrosion control study. In the 2021 LCRR, the EPA also clarified that the continued operation and maintenance of OCCT and re-optimized OCCT requirements apply to consecutive systems in § 141.82(g), including those distributing water that has been treated for corrosion control by another system. For context, a consecutive system is defined at § 141.2 as “a public water system that receives some or all of its finished water from one or more wholesale systems. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.”

c. LCRI Proposed CCT Revisions

For the LCRI, the EPA proposed several changes for CCT including removing the trigger level, lowering the lead action level, adopting regulatory flexibilities for some systems simultaneously complying with mandatory service line replacement requirements, and changing the water quality parameter monitoring requirements for medium systems. The EPA also proposed new or revised regulatory text to streamline implementation of the rule. This section includes a brief summary of these proposed changes and the agency’s primary rationale for each one. System sizes discussed below in CCT requirements include, as defined in § 141.2, small systems (serves 10,000 persons or fewer); medium systems (serves greater than 10,000 persons and less than or equal to 50,000 persons); and large systems (serves more than 50,000 persons).

Under the LCRI, the EPA proposed to eliminate the lead trigger level and to require systems to install or re-optimize OCCT after an exceedance of the proposed lead action level of 0.010 mg/L. As stated at proposal, streamlining the rule to only use an action level reduces the complexity of the rule. As a result of eliminating the trigger level, reducing the lead action level, and including a more rigorous tap sampling protocol, the EPA anticipates more systems could exceed the lead action level even when re-optimized than under the LCRR, especially in the first few years after the compliance date for LCRI where systems would also implementing the mandatory service

line replacement requirements under the proposed LCRI. Thus, the EPA proposed in § 141.81(a) that systems that have re-optimized once after the LCRI compliance date and continuously meet optimal water quality parameters (OWQPs) would not be required to re-optimize again if there are subsequent action level exceedances, unless required by the State. While the lead action level is intended to be generally representative of effective OCCT, the EPA recognizes that there may be some instances where systems would be unable to meet the proposed lowered lead action level of 0.010 mg/L because tap water lead levels can be influenced by other factors. As discussed in the proposed LCRI, lead level variability at a single site can occur due to water use patterns and physical disturbances of pipes causing particulate release (see sections V.A and V.E.1 of proposed LCRI preamble (88 FR 84878, USEPA, 2023a)). Elevated lead levels due to these factors would not be reflective of the performance of the corrosion control treatment. For systems that have already evaluated the CCT options under the re-optimization process, resources would be better devoted to other lead mitigation activities, such as replacing lead and galvanized service lines, rather than repeating the same steps. However, States may require such systems to conduct a corrosion control study. In addition, the EPA is retaining the 2021 LCRR requirements that States may require a system to conduct a corrosion control study to re-evaluate corrosion control treatment for purposes such as to obtain State approval for a long-term treatment change or addition of a new source in the LCRI. The proposed LCRI had duplicate language for the notification requirement in §§ 141.81(h) and 141.90(a)(4). The final LCRI consolidates most of the requirements in § 141.81(h) with a cross-reference in § 141.90(a)(4). The EPA also revised the second sentence in § 141.81(h) to clarify language regarding the State’s discretion to require actions to ensure that the system will operate and maintain OCCT.

As proposed, States would retain the discretion to modify previous designations of OCCT and re-optimized OCCT based on their own determination or in response to a request by a water system if the State concludes that a change is necessary to ensure the system continues to optimize corrosion control treatment (§ 141.82(h)). The EPA also proposed that States can require the system to conduct additional CCT studies. The EPA anticipates that removing sources of lead in drinking water, such as through mandatory LSLR,

would reduce the number of systems that exceed the lead action level over time. In the meantime, water systems would be required to continue to operate and maintain their re-optimized OCCT as demonstrated through monitoring for OWQPs, and comply with other proposed mitigation measures (e.g., conduct public outreach and make filters available for systems with multiple lead action level exceedances) to reduce exposure to lead in drinking water.

At § 141.81(f), the EPA also proposed to allow a system with a lead action level exceedance to defer installing or re-optimizing OCCT if the system can replace 100 percent of its LSLs and GRR service lines within five years of the date the system first exceeds the lead action level. The purpose of this proposed requirement would be to allow systems to avoid the costly and time-consuming process of conducting a harvested LSL pipe rig/loop CCT study and installing the corresponding OCCT when the identified treatment would not be tailored for the system’s long-term distribution system conditions without LSLs. As the EPA estimated at proposal, it generally takes approximately five years to complete the CCT evaluation and installation process: 30 months to construct a pipe rig/loop and conduct a treatment study followed by 30 months to install the State-approved OCCT and an additional one year to conduct follow-up monitoring (see section V.E.1 in the proposed LCRI (88 FR 84937, USEPA, 2023a)). If a system is on track to replace all its lead and GRR service lines within five years, the optimal treatment identified by a costly and time-consuming pipe rig/loop study may no longer be the optimal treatment after all LSLs and GRR service lines are replaced. This is because the pipe rig/loop studies are based on lead pipes in the water system and if all of those are replaced, the results of the pipe rig/loop study would likely be no longer relevant. Following 100 percent lead and GRR service line replacement, a different and less resource-intensive study, such as a coupon or desk study, evaluating OCCT on current conditions in the system would be more appropriate.

Under this proposed option, eligible systems would only be allowed to defer optimizing or re-optimizing OCCT if water systems meet both of the following two requirements: (1) Annually replace at least 20 percent of their remaining service lines that require replacement (in accordance with the proposed § 141.84(d)(5)(v)); and (2) have no lead, GRR, or unknown service

lines remaining at the end of the five-year period. Systems would need to ensure they have access to replace all lead and GRR service lines in their inventories and have identified all unknown service lines in their inventory. During this five-year period, eligible systems would still be required to meet all other rule requirements including public notification, public education, and if applicable, public education following multiple action level exceedances, including making filters available. Systems with CCT that elect this option would be required to continue operating their existing CCT throughout those five years.

The EPA anticipates that greater overall public health benefits could result from replacing all lead and GRR service lines within five years compared to implementing the requirement to install or re-optimize OCCT with a lower action level because the most significant sources of lead in drinking water, when present, would be removed from the system (Sandvig et al., 2008). Additionally, this proposed requirement would allow water systems to dedicate more staffing and financial resources to solely replacing lead and GRR service lines within five years rather than being required to divide these resources between completing mandatory service line replacement and conducting a pipe loop study with results that may no longer be applicable following 100 percent replacement of lead and GRR service lines.

As further provided in the proposed requirements, large and medium systems unable to replace a minimum of 20 percent of the lead or GRR service lines in a system's distribution system annually or unable to replace 100 percent of their lead and GRR service lines within five years must proceed with the harvested pipe rig/loop study and install or re-optimize OCCT. The pipe loop requirements would apply to any small system required by the State to conduct a pipe rig/loop study.

Small systems unable to replace a minimum of 20 percent of the lead or GRR service lines in a system's distribution system annually or replace 100 percent of the lead and GRR service lines in a system's distribution system within five years would be required to recommend OCCT or re-optimized OCCT; and all NTNCWSs and the subset of CWSs serving 3,300 persons or fewer would be required to propose a small system compliance option and implement the State-approved approach (see section IV.I of this preamble for further discussion on compliance alternatives for CWSs serving 3,300 persons or fewer and NTNCWSs). Water

systems that replace 100 percent of the lead and GRR service lines in this five-year period but subsequently exceed the action level (or the PQL for large systems without CCT) after the compliance date for the LCRI would be required to proceed with meeting the proposed CCT requirements for systems with only non-lead service lines.

In addition, the EPA proposed changes to expedite when States can approve CCT re-optimization treatment changes for systems. Under the 2021 LCRR, States can approve existing CCT re-optimization modifications without requiring a new CCT study for systems that have 90th percentile lead levels between the trigger level of 0.010 mg/L and the lead action level of 0.015 mg/L. For the LCRI, the EPA proposed to eliminate the trigger level and to lower the lead action level to 0.010 mg/L. Concurrently, the EPA also proposed that States may approve, without a new CCT study, a CCT re-optimization treatment change for a system that exceeds the proposed action level for lead, but which previously conducted a CCT study. In developing the CCT change, the State would be required to evaluate a water system's past CCT study results. The EPA proposed this update because it would expedite treatment changes, allowing the benefits of treatment modifications to be realized sooner and avoiding a redundant CCT study that may not produce different results from previous studies. The treatment recommendation and CCT study process can take multiple years to complete. The CCT study and State designation of re-optimized OCCT based on the results of that study under § 141.81(d)(3) and (4), respectively takes two additional years. For water systems with existing CCT, the water system may be able to alter the existing treatment (e.g., increase pH and/or orthophosphate dose) without a new CCT study on a much faster timeframe rather than waiting for study results that may indicate that same change.

The EPA proposed modifications to the CCT studies that may be required in the event of a lead action level exceedance for small systems with LSLs. Under the 2021 LCRR, small systems that chose CCT and exceed the action level are required to propose a treatment option to the State. The State may require small systems to conduct corrosion studies using a pipe rig/loop (§ 141.82(c)(3)). For the 2021 LCRR, the EPA also recommended that small systems serving 10,000 persons or fewer with LSLs that exceed the lead action level choose the LSLR small system flexibility option rather than CCT because the cost of the pipe rig/loop

studies would be approximately equal to the cost of replacing 55 LSLs (USEPA, 2020e). However, as discussed in section V.G of the proposed LCRI (88 FR 84944, USEPA, 2023a), the EPA proposed to remove the LSLR option from the small system flexibility options because LSLR would be mandatory under the proposed LCRI. Therefore, the EPA proposed under the LCRI to exclude small systems with LSLs serving 10,000 persons or fewer from having to conduct a pipe rig/loop study because these systems often lack the technical expertise required to design and construct and operate the pipe rig/loop. Instead, these small systems could better focus limited resources on replacing lead and GRR service lines, that would otherwise be dedicated to a pipe rig/loop if they exceed the lead action level and are required to identify OCCT or a small system compliance flexibility option. Under the proposed LCRI, the State may require a pipe rig/loop study for a small system if the State determines that the small system has the technical capabilities to conduct such a study (see § 141.82(c)(3) for large and medium systems with LSLs and other systems as required by the State to conduct pipe rig/loop studies).

In addition, the EPA proposed to require that States designate OWQPs for medium systems that must install or re-optimize OCCT after exceeding the lead action level (§ 141.81(a)(2)(i)). The EPA also proposed that States designate OWQPs for medium systems with CCT that have not exceeded the action level (§ 141.81(a)(ii)). While the State could require medium systems with OCCT to meet OWQPs in the 2021 LCRR, the EPA proposed in the LCRI that States must establish OWQPs for medium systems with CCT and that these systems must meet their OWQPs. This proposed requirement would allow States to better assess whether these types of medium systems are maintaining their OCCT or re-optimized OCCT, as well as provide better day-to-day process control since source water quality can vary both daily and seasonally.

The EPA proposed to streamline some requirements in § 141.80, which resulted in the EPA proposing to move a 2021 LCRR provision from § 141.80(d)(4) to § 141.81(h). This requirement is for systems to notify the State before a long-term treatment change or the addition of a new source, and that States must review and approve the change or addition before it can be implemented by the system. This allows the State to require the water system to take additional actions to control corrosion. However, the EPA

notes the provision remains unchanged in substance from the 2021 LCRR.

2. Summary of Comments and the EPA's Response

a. Consecutive Systems

The EPA received comments about consecutive systems and the responsibilities for wholesale versus distribution systems related to CCT and DSSA requirements. Commenters asked the EPA to clarify which systems were supposed to monitor WQPs in the distribution system and which system is responsible if parameters are outside the designated range. Commenters also requested the EPA clarify which system would be required under the LCRI to conduct CCT studies and which system would be required to install it.

To respond to these comments, it is important to first provide additional context for consecutive systems requirements and the EPA guidance beginning with the 1991 LCR that goes beyond the specific rule areas and changes proposed for LCRI. In the preamble of the 1991 final LCR rule, the EPA strongly discouraged States and systems from using § 141.29 to modify monitoring requirements, noting that § 141.29 allows a State to modify the monitoring requirements imposed by specific regulations when a public water system supplies water to one or more other public water systems if the interconnection of the systems justifies treating them as a single system for monitoring purposes. EPA did not believe that modification by States of the monitoring requirements of the rule, as provided in § 141.29, would be appropriate because the primary source of high lead or copper levels at the tap is materials within the distribution system itself. Treating multiple water suppliers as one system would not distinguish between the different systems that may have different amounts of lead or copper materials in the distribution system and thus require different treatment strategies to reduce these levels. This contrasts with other contaminants where the contaminant level is uniform throughout the distribution system. EPA did not envision situations where multiple water systems should be considered as one system for purposes of § 141.29 and, therefore, strongly discourages States from allowing the modification to the monitoring requirements. (56 FR 26513, USEPA, 1991)

After the 1991 LCR was published, the EPA received proposals from several States and water systems to consolidate tap water and water quality parameter monitoring in consecutive water

systems under § 141.29. In response to the proposals, the EPA issued a water supply guidance on January 10, 1992, entitled "Consecutive Systems Regulated under the National Primary Drinking Water Regulation for Lead and Copper" (USEPA, 1992). This guidance discusses the elements the EPA recommends should be included in the consecutive system agreements for the lead and copper rule, including those related to CCT. This guidance indicates that State proposals should identify the systems that would be responsible for completing the CCT requirements. In the guidance, the EPA states the agency expects that the wholesale or "parent" supply would be responsible for corrosion control throughout the entire service area. However, the EPA also notes that depending upon contractual agreements, the size and configuration of the satellite system(s), and the distance from the parent treatment facility, individual CCT may need to be installed at a point or points other than the parent plant.

While the EPA recognizes the implementation confusion raised by commenters with regard to CCT requirements for wholesale versus consecutive systems, as defined at § 141.2, the EPA disagrees with the commenters' requests to make changes to the LCRI to address these concerns. These questions are better addressed at the State level for the following reasons.

In the more than 30 years since the guidance was published, the EPA has promulgated or revised a number of regulations that can impact CCT. In particular, disinfection, disinfection by-products, and filtration treatment strategies can impact CCT. Given this additional complexity and the previously stated configuration factors in the guidance, the roles and responsibilities of the wholesale and consecutive systems regarding CCT should be worked out, on a system specific level, with the State. The EPA recommends any updates to a consecutive system agreement should discuss updated roles and responsibilities and also include how they relate to the DSSA under § 141.82(j), including water quality parameter monitoring in the distribution system, follow-up tap sampling at sites that exceed 0.010 mg/L, the treatment recommendation required under § 141.82(j)(3), and any distribution system actions or modifications of corrosion control treatment that result from the DSSA process. The EPA plans to update guidance on these topics after the LCRI is finalized.

b. Pipe Rig/Loop Studies

The EPA received comments related to pipe rig/loop studies. Some commenters claimed the EPA was being overly prescriptive by mandating when pipe rig/loop studies must occur noting they did not think harvested pipe rigs were necessary to assess OCCT. Other commenters suggested that pipe rig/loop studies should be optional or at a State's discretion or requested that the use of pipe rigs/loops be scaled back in the final rule because of the cost and complexity of pipe rig/loop studies (both in conducting the study and reviewing results from the study). Several commenters stated the mandatory pipe rig/loop requirements in the proposed LCRI should not apply to small systems because they believed pipe rig/loop studies are too costly and complex for small systems. Some commenters objected to the use of coupon studies because they asserted coupon studies do not evaluate the impact of corrosion control alternatives on the existing pipe scale in the distribution systems, which is evaluated in a harvested lead pipe rig/loop study.

Under the 2021 LCRR, small systems can choose a small system flexibility option, including LSLR and OCCT, but due to mandatory LSLR for all systems, the flexibility to choose LSLR was not included in the proposed LCRI. Therefore, the EPA proposed under the LCRI to exclude small systems with LSLs serving 10,000 persons or fewer from having to conduct a pipe rig/loop study because these systems often lack the technical expertise required to design and construct and operate the pipe rig/loop and they could better focus limited resources that would be dedicated to a pipe rig/loop on replacing their LSLs. However, the EPA stated in the proposed LCRI preamble that States could require small systems to conduct a pipe rig/loop study if the State determines that the small system has the technical capabilities to conduct such a study.

The EPA disagrees with commenters that suggested pipe rig/loop studies for all systems should be optional or at a State's discretion. The EPA is retaining the mandatory pipe rig/loop study requirements as proposed in the LCRI under § 141.81(d)(1) and (e)(1) for the subset of medium and large systems that will need to install or re-optimize OCCT (except those that meet the requirements under § 141.81(f) to replace all lead and GRR service lines in five years or less, or § 141.81(d)(1)(iv) for systems waived by the State that meet specific requirements). Systems, such as those with source water or treatment changes,

need to understand how changes in their corrosion control affect the existing pipe scale of LSLs. A pipe rig/loop study using harvested lead pipe from the distribution systems effectively demonstrates how that scale will interact with the CCT options and will provide vital information to determine the OCCT option. The EPA agrees with commenters that stated that coupon studies should have a limited role when evaluating impacts of corrosion control alternatives on existing pipe scales. The EPA proposed that coupon studies can be used to reduce the number of options that are evaluated in the harvested pipe rig/loop study, but cannot be used instead of the pipe rig/loop study because they do not evaluate the impact of the CCT options on the existing scale (§ 141.82(c)(3)).

In response to the commenter raising concerns about small systems' conducting mandatory pipe rig/loop studies, this was not a proposed requirement. The EPA excluded small systems from the proposed LCRI requirements for systems that must conduct a mandatory pipe rig/loop study because they often lack the technical knowledge and expertise to design and construct and operate the pipe rig. However, the EPA maintains that States could require small systems to conduct a pipe rig/loop study if the State determines that the small system has the technical capabilities to conduct such a study under 40 CFR 141.82(c)(3).

c. Re-Optimization for Systems Meeting Optimal Water Quality Parameters

Many commenters supported the proposed revisions from the 2021 LCRR in § 141.81(a)(1) through (3) to no longer require systems, unless required by the State, to re-optimize OCCT if they have already conducted CCT studies to re-optimize once following the compliance date for LCRI, continue to meet OWQPs designated by the State, and continue to operate and maintain their existing OCCT. The reasons cited by these commenters include that re-optimization takes extensive study and review and systems need to focus on other aspects of the rule and that it could become a paperwork exercise as systems are only able to control things at the entry point to the distribution system. Some commenters asked the EPA to provide States discretion to require systems to re-optimize OCCT even if they meet the criteria in § 141.81(a)(1)(i), (a)(2)(i), and (a)(3)(i) because the system might not be truly optimized or the treatment might not be effective at addressing lead or copper issues at that particular system. Some commenters did not support this change

in the proposed LCRI and wanted the EPA to continue to require systems to re-optimize after action level exceedances, unless the State has determined after a full and carefully documented consideration that re-optimization is not needed. The reasons cited by the commenters include that EPA's rationale assumes that the water system and the State properly identified the single optimal CCT for the system in the one re-optimization process. The commenters also noted that the EPA's rationale describing that repeated action level exceedances may result from factors other than the performance of CCT is at odds with the EPA's rationale for setting the action level at 0.010 mg/L, which is supported by data as being generally representative of OCCT.

The EPA agrees in part with commenters who supported removing the requirement to re-optimize OCCT in certain instances. The EPA also agrees with commenters who support providing States with discretion to require systems to re-optimize even if they meet the criteria in § 141.81(a)(1) through (3). The EPA finalized the requirements in § 141.81(a)(1) through (3) and added language to each section clarifying that the State may require a system to re-optimize under § 141.82(h). The EPA agrees that under some circumstances, treatment could be re-evaluated and adjusted, and States are in the best position to determine whether a system must re-optimize. As discussed in the preamble to the proposed LCRI, States have the ability in LCRR to require re-optimization under § 141.82(h), which allows for the State to modify treatment decisions for OCCT and re-optimized OCCT. The EPA has added clarifying language in § 141.81(a)(1) through (3) that the State can require a system to re-optimize under the existing provision in § 141.82(h). The State can modify its decision for either OCCT or the OWQPs for OCCT. Under § 141.82(h), States can require a system to conduct a CCT study to support modification of the existing treatment. Water systems or other interested parties can also request a modification of the determination of OCCT with supporting documentation under this section of the rule. For the final LCRI, the EPA made edits to § 141.81(a)(1) through (3) to clarify that States have the discretion to require systems to re-optimize under § 141.82(h).

The EPA added a re-optimization requirement in the final LCRI for systems that exceed the lead action level after completing the removal of all lead and GRR service lines and have no lead status unknown service lines remaining

in their inventory (§ 141.81(a)(1)(iii), (a)(2)(iii), and (a)(3)(iii)). The EPA added the requirement for systems that have removed all lead and GRRs service lines that subsequently exceed the lead action level to re-optimize because the EPA expects that after removing the most significant source of lead in drinking water, optimal corrosion control may change and systems may need to adjust their CCT once the most significant source of lead has been removed following study of corrosion control. While this long-term treatment change would also be covered by the requirements in § 141.81(h), there could be situations where the scaled-back CCT leads to an action level exceedance and the need for that OCCT to be re-optimized. Therefore, the EPA made this change for the final LCRI in partial response to commenters by trying to balance the need for the realities of re-optimizing CCT and the need for re-optimization during and after service line replacement given competing system requirements and the changes in the distribution system. This is similar to the requirement in § 141.81(f) for systems deferring OCCT while completing a LSLR program within five or less years.

The EPA disagrees in part with commenters who want the EPA to continue to require systems to re-optimize unless the State has determined after a full and carefully documented consideration that re-optimization is not needed. Under this provision, eligible systems will have already performed two optimizations, their initial optimization and the re-optimization under LCRI, which includes specific benchmarks that must be evaluated. The EPA anticipates repeating the same steps using the same tools more than once after the LCRI compliance date in systems with LSLs is unlikely to produce different results. Water systems with LSLs completing their replacement program may only qualify for this provision if they have already re-optimized once after the compliance date for LCRI, continue meeting their OWQPs designated by the State, and continue to operate and maintain their OCCT. Systems that experience a long-term change in treatment or source water must notify the State, and the State may require additional monitoring or take other actions, such as treatment studies, to ensure water systems maintain minimal levels of corrosion control in the distribution system. In addition, as discussed above, the EPA also included a requirement in the final LCRI for systems that have replaced all lead and

GRR service lines to re-optimize again if they exceed the lead action level, in addition to the ability for States to require systems re-optimize under § 141.81(h).

As noted in the proposed LCRI, the EPA recognizes that there may be some instances where systems may be unable to meet the proposed lowered lead action level of 0.010 mg/L because tap water lead levels can be influenced by other factors. As discussed in the proposed LCRI, lead level variability at individual sites can occur due to water use patterns and physical disturbances of pipes causing particulate release. Elevated lead levels due to these factors may not reflect the performance of CCT. The resources of systems that have already evaluated the CCT options under the re-optimization process would be better devoted to other mitigation activities (e.g., conduct public outreach and make filters available for systems with multiple lead action level exceedances) rather than repeating the same steps.

d. Deferred OCCT

Many commenters supported the proposed OCCT deferral option if a system removed 100 percent of service lines within five years, but others expressed concern that the option required systems to replace portions of lead or GRRs service lines that are beyond their control, which would conflict with the requirements under SDWA.

To address the confusion about replacing lines beyond the control of the water system the agency is clarifying the final rule language at § 141.81(f) to confirm that systems must conduct full replacement of all lead and GRR service lines to be eligible and that no lead, GRR, or unknown service lines remain in the system's service line inventory at the end of the five-year-or-less period (§ 141.81(f)(1)(iii)). The OCCT deferral option is a compliance alternative for systems that have or can obtain access to all lead, GRR, and unknown lines; nothing in the rule requires systems to exercise this option.

Instead, the EPA strongly encourages systems that would like to exercise this deferral option to work to obtain control to replace each lead and GRR service line in order to take advantage of this provision. The EPA recommends systems identify ways to address some of the potential challenges typically associated with service line replacement, including obtaining access to a customer's property where consent is required and overcoming potential funding and financing barriers to complete customer-side replacements.

Potential strategies could include community outreach to promote the service line replacement program to increase participation. While neither SDWA section 1412 nor the LCRI require water systems to pay for customer-side replacements (see section IV.B.4 of this preamble), the EPA also encourages systems to pursue financing to remove 100 percent of service lines within five years or less. For example, some systems utilizing this OCCT deferral option will no longer need to conduct the mandatory pipe rig/loop study, which the EPA estimates to cost between \$308,000 and \$377,000 depending upon the complexity of the study, if they complete 100 percent service line replacement within the five-year-or-less period (USEPA, 2024a, chapter 4, section 4.3.3). Those systems may be able to allocate the funds that would have been used for pipe rig/loop studies to replace customers' portions of lines instead, similar to what the City of Madison, Wisconsin did regarding potential avoided sewage costs for phosphorus removal if orthophosphate had to be added for corrosion control (Sandvig et al., 2008).

The EPA also received comments questioning whether the proposed regulatory language "within five years" only applied to systems completing their programs in five years or would also apply to systems completing those programs in less than five years. Other commenters expressed concerns about a system's ability to replace lines on a schedule less than five years. The EPA also received comments that were concerned whether a water system could use the full five-year period to avoid optimizing or re-optimizing OCCT during that period when it is feasible for them to complete 100 percent service line replacement in less than five years.

The EPA agrees with commenters that "within five years" is somewhat ambiguous and could create implementation confusion or be unnecessarily limiting to only apply to systems completing their programs in five years. For the final LCRI, the EPA is clarifying that the requirement encompasses systems completing 100 percent service line replacement in five years or less by modifying the regulatory text at § 141.81(f)(1)(i)(A) and (B) to read "in five years or less" instead of "within five years." This approach is consistent with the EPA's rationale at proposal. Specifically, the five-year timeframe is based on the time it would take for a system to construct and conduct a pipe rig/loop study, make a treatment recommendation based on that study, and install and operate the State-approved OCCT (88 FR 84937, USEPA,

2023a). The results of a pipe loop study may no longer be applicable following 100 percent replacement of lead and GRR service lines. The EPA anticipates that there will be greater health benefits from replacing all lead and GRR services line in five years or less compared to if the system were required to complete the CCT steps and take longer than five years to complete LSLR, because a significant source of lead will be removed from the system (see section IV.F.1.a of this preamble). Like systems completing their LSLR program in five years, systems completing their programs in less than five years would be less far along in the optimization/re-optimization process. The costs to conduct a pipe rig/loop study would be best used to accelerate the LSLR program.

With respect to the concern that water systems may use the full five years even if it is feasible for the system to complete 100 percent service line replacement in less than five years, the State must set a faster replacement rate if feasible (§ 142.16(d)(6)) and the agency does not intend for the deferral option in § 141.81(f) to supersede a determination that it is feasible for a system to complete replacement in less than five years. Accordingly, the EPA revised the regulatory language for the final LCRI to specify how systems with a replacement timeframe of less than five years will be required to proceed under this option and how to calculate their annual replacement rate to ensure the systems meet their shorter replacement deadline. Systems must replace their lead or GRR service lines in less than five years if the State determines that a replacement deadline of less than five years is the fastest rate feasible or if they have less than five years left to complete their replacement program, based on their applicable mandatory replacement deadline.

This clarification necessitated additional changes to the regulatory text at § 141.81(f) to ensure this provision, as whole, was consistent throughout the rule and consistent with a parallel requirement for shortened service line replacement program deadlines, at § 141.84(d)(5)(v). In addition, these changes make the OCCT deferral option more workable for systems and States. For systems that can replace lead or GRR service lines in less than five years, the mandatory minimum annual replacement rate percentage to achieve 100 percent replacement at the end of their five-year-or-less period would not be 20 percent. Therefore, the EPA changed the 20 percent mandatory minimum annual replacement rate to an annual replacement rate in

§ 141.81(f)(1)(ii) based on the total number of years for replacement in § 141.81(f)(1)(i). This corresponds with and gives meaning to the modification clarifying that systems completing 100 percent service line replacement in less than five years will need a different minimum annual rate to add up to 100 percent. This will make it easier for systems to adopt a mandatory minimum annual replacement rate depending on their replacement program and LSL inventories. For example, systems removing 100 percent of their service lines in four years must do so at an annual minimum rate of 25 percent of those service lines each year, compared to a system completing service line replacement in three years at a minimum annual rate of 33 percent of service lines each year, barring the need to replace lines faster, as provided in the requirements at § 141.81 and discussed below.

As discussed in section IV.B.6 of this preamble, the EPA recognizes that some water systems will be able to replace service lines faster than the 10-year replacement deadline, such as systems that have few lead and GRR service lines. The EPA identified multiple water systems that have completed or are expected to completely replace all lead or GRR service lines within five years (USEPA, 2024d), which corresponds to a 20 percent or greater annual replacement rate. The EPA expects that these types of systems may elect to use this OCCT deferral option. The EPA also anticipates this option being used by systems that are replacing their lines at an annual rate less than 20 percent, but could exceed the lead action level later in their service line replacement program. Therefore, these systems may be able to feasibly replace at least 20 percent of their remaining lead and GRR service lines annually.

Further, to make this deferral option more consistent with the service line replacement provisions at § 141.81(f)(4) and provide States with the ability to monitor and ensure system compliance, the EPA revised the provision to require that systems provide written documentation to the State about the number of lead and GRR service lines replaced. In addition, to ensure that systems' service line replacement programs maximize public health protection and avoid the need for a system to allocate limited resources to conduct a pipe rig/loop study to install or re-optimize OCCT when a system's service line composition is changing, the final rule clarifies that systems must complete their service line replacement program as fast as is feasible at § 141.81(f)(1)(i). This text also helps to

clarify that the requirement for systems on a shortened service line replacement deadline at § 141.81(f)(1)(i)(C) applies for systems availing themselves of this deferral option, but in a way that is consistent with the requirements of § 141.81(f)(1). Since the maximum length of the replacement program under § 141.81(f) is five years and all lead and GRRs service lines must be replaced, different annual replacement rates must be applied to these systems than those under § 141.84(d)(5). The EPA also added dates and reference points mirroring other parts of the proposed and final LCRI service line replacement and inventory requirements to make this provision clearer and more implementable.

e. Long-Term Source or Treatment Change

The EPA also received comments stating the language in § 141.81(h) on notification requirements for upcoming long-term change in treatment or source is confusing. In the proposed LCRI, language from § 141.90(a)(3) under the 2021 LCRR was moved to § 141.81(h) as it relates to the notification and approval requirements before a long-term treatment change or addition of a new source. The proposed LCRI changed some of the 2021 LCRR language and made an inadvertent error stating that actions could be required to ensure that the system maintains minimal levels of corrosion control rather than to ensure the system will operate and maintain optimal corrosion control treatment. To reduce confusion, in the final LCRI, the EPA has reverted back to the 2021 LCRR language related to OCCT in § 141.81(h) and has included the examples of long-term treatment changes in §§ 141.90(a)(4) and 141.81(h) to ensure these examples are considered long-term treatment changes.

3. Final Rule Requirements

The EPA is finalizing most CCT requirements as proposed, except for clarifying some regulatory text in light of public comments received. In addition, the EPA is making some changes to the OCCT deferral option for systems that can complete 100 percent replacement of full lead and GRR service lines in five years or less at a minimum annual rate in response to comments raising questions about eligibility requirements and how this option would be implemented by systems and States, among others. The EPA is also including a requirement for systems without lead and GRR service lines to re-optimize again if they exceed the lead action level after completing their service line replacement program.

The final LCRI requires water systems that exceed the action level to optimize or re-optimize their OCCT. Consistent with the proposal for LCRI, the EPA is eliminating the 2021 LCRR trigger level and finalizing revisions to expedite when States can approve an existing CCT modification for re-optimization under § 141.81(d)(1)(iv). Systems, depending on their size, must either conduct treatment studies or consult with the State to determine the most appropriate treatment steps. The EPA is maintaining the 2021 LCRR requirement in § 141.82(g) for continued operation and maintenance for OCCT and re-optimized OCCT for all systems, including consecutive systems.

The EPA is also finalizing the requirement that large and medium systems with LSLs that must optimize or re-optimize OCCT, and cannot meet the existing treatment modification or the five-year or less replacement of all lead and GRR service lines requirements in § 141.81(d)(1)(iv) or (f), will need to conduct a mandatory harvested pipe rig/loop study (§ 141.81(d)(1)(i) and (e)(1)(i)). Under the final LCRI § 141.82(c)(3), small systems would not be required to conduct a harvested pipe rig/loop study, unless required to do so by the State.

In addition, the EPA is finalizing the requirements at § 141.81(a)(1)(i)(A), (a)(2)(i)(A), and (a)(3)(i)(A) that systems with lead and GRR service lines must only re-optimize once after the compliance date of the rule if they meet the following criteria listed in of § 141.81(a)(1)(i) and (ii), (a)(2)(i) and (ii), and (a)(3)(i) and (ii) of the rule: the system has already once re-optimized OCCT, currently meets OWQPs designated by the State, continues to operate OCCT, and the State is not requiring re-optimization under § 141.82(h). The EPA also included a requirement under § 141.81(a)(1) through (3) for systems that have completed their service line replacement program and have no lead, galvanized requiring replacement, or lead status unknown service lines remaining in their inventory to re-optimize again if they exceed the lead action level. In addition, the EPA also added § 141.81(a)(1)(ii), (a)(2)(ii), and (a)(3)(ii) to ensure it is clear that States have the discretion to require systems to re-optimize based on § 141.82(h).

The EPA is finalizing the OCCT deferral option for systems that can remove all lead and GRR service lines in five years or less at § 141.81(f). For the final LCRI, the EPA is clarifying some regulatory text from the proposal, and adding some associated requirements for the OCCT deferral

option for systems that can complete lead and GRR service line replacement in five years or less. These changes address concerns raised by commenters that systems could use the full five years to avoid optimizing or re-optimizing OCCT when it is feasible for them to complete 100 percent service line replacement in fewer than five years (see § 141.81(f)(1)). For a more in-depth discussion of the final LCRI requirements for the OCCT deferral option, please see section IV.F.2.d of this preamble.

The EPA is finalizing the revisions to the existing treatment modification that States can allow without an additional CCT study under § 141.81(d)(1)(iv) for re-optimization for some systems. The EPA is finalizing the revisions under § 141.81(a)(2) that medium systems with CCT (except those that meet § 141.81(b)(3)) need to demonstrate OCCT by meeting OWQPs (as discussed in section IV.G of this preamble). The EPA is also finalizing other non-substantive textual and structural changes, as proposed, that streamline and clarify the rule language in order to improve implementation of the requirements. For example, the EPA has reverted back to the 2021 LCRR language related to OCCT in § 141.81(h) and has included the examples of long-term treatment changes in §§ 141.90(a)(4) and 141.81(h) to ensure these examples are considered long-term treatment changes.

4. Lead Action Level and Trigger Level

a. Rationale and Proposed LCRI Revisions

In the 1991 LCR, the EPA set the action levels for lead and copper at 0.015 mg/L and 1.3 mg/L, respectively. As discussed in section IV.F.1 of this preamble, the EPA introduced lead and copper action levels in the LCR as a tool to limit the number of PWSs that would need to complete a detailed CCT demonstration and/or install OCCT. The EPA stated that its selection of values for the action levels “reflects EPA’s assessment of a level that is generally representative of effective corrosion control treatment and [it] is therefore, useful as a tool for simplifying the implementation of the treatment technique” (56 FR 26490, USEPA, 1991). In 1991, the EPA evaluated treatment data from 39 medium size systems without LSLs and 11 with LSLs and selected a 90th percentile lead level of 0.015 mg/L that was “generally representative” of OCCT, while acknowledging that some systems may not be able to achieve that level. Not only is there no precise level of lead and

copper at the tap that reflects application of effective CCT in water systems nationally, but the EPA further noted that CCT demonstration studies “cannot be expected to predict the precise lead and copper levels at the tap” and that “relying solely on laboratory studies to predict the effectiveness of corrosion control treatment would not indicate the levels of lead or copper at taps” (56 FR 26486, USEPA, 1991). Accordingly, the EPA relied on tap sampling data to characterize CCT performance for reducing lead and copper levels at the tap.

Under the LCR, systems serving 50,000 persons or fewer systems demonstrated they were optimized by meeting the action level of 0.015 mg/L as the level generally representative of effective corrosion control treatment. Systems serving over 50,000 persons were required to conduct a detailed demonstration of OCCT regardless of 90th percentile levels unless they measured 90th percentile lead levels below the PQL of 0.005 mg/L and were deemed optimized. As noted in section III.C of this preamble, the EPA introduced the lead trigger level of 0.010 mg/L in the 2021 LCRR to prompt water systems to take proactive actions prior to an action level exceedance, including studying and/or re-optimizing OCCT. Additionally, systems of any size with CCT are required under the 2021 LCRR to re-optimize if they exceed the action level.

For the LCRI, the EPA proposed to eliminate the lead trigger level and lower the lead action level to 0.010 mg/L. These changes were proposed to address priorities identified in the LCRR review, including reducing the complexity of the rule and re-evaluating options to consolidate the action level and trigger level, as well as feedback the EPA heard during the development of the proposed LCRI (86 FR 71578–71579, USEPA, 2021b). As described in the proposed LCRI preamble, the EPA evaluated the trigger level with respect to complexity, implementation, and the public communication challenge associated with two lead levels. Additionally, the EPA considered lowering the lead action levels in the context of other proposed changes in the LCRI, including service line replacement irrespective of lead levels and a revised tap sampling protocol designed to better characterize lead levels in drinking water (88 FR 84939, USEPA, 2023a).

In the proposed LCRI preamble, the EPA evaluated potential lead action levels of 0.015 mg/L, 0.010 mg/L, and 0.005 mg/L (88 FR 84939–84942,

USEPA, 2023a). The EPA considered several factors when selecting the proposed lead action level of 0.010 mg/L. Specifically, the EPA selected an action level of 0.010 mg/L as the preferred alternative at proposal because it is supported by past CCT performance data as being generally representative of OCCT when adjusted for the LCRI tap sampling protocol. The EPA found that the ability of systems to limit the corrosivity of water in the distribution system has greatly improved over the past 30 years of LCR implementation and that more recent data supports a lower level as being a more appropriate screen for determining which small systems and medium systems without CCT are required to conduct a detailed OCCT demonstration, and for which all systems with CCT, including large systems, are required to re-optimize. The EPA also considered factors affecting technical feasibility that the action level concept is intended to address for the purposes of making the CCT treatment technique feasible (see section IV.F.1 of this preamble). These factors include the administrative burden on water systems required to install or re-optimize OCCT after a lead action level exceedance, the availability of technical experts to support CCT implementation, and the technological limitations of reliably measuring lead levels (*i.e.*, the PQL) (88 FR 84941–84942, USEPA, 2023a). These technical feasibility considerations are in addition to the agency’s evaluating requirements for the CCT treatment technique in the context of other actions that would be required by systems in the LCRI, including service line replacement.

b. Summary of Comments and the EPA’s Response

i. Lead Action Level

The EPA received a range of comments on the value for the lead action level. Many commenters supported reducing the lead action level to 0.010 mg/L stating that it is a reasonable level for evaluating CCT and would prompt more water systems to take actions to reduce lead levels. Other commenters disagreed and stated that the EPA should maintain the current lead action level at 0.015 mg/L. Some of these commenters indicated that the EPA did not demonstrate in the proposal that water systems can reliably achieve 0.010 mg/L and that the requirements are not feasible, specifically when combined with the proposed changes to the tap sampling protocol, sample site tiering, and 90th percentile calculation instructions. Other commenters supported a

reduction in the lead action level but stated that the EPA must reduce the level to 0.005 mg/L or lower, citing public health benefits that would result from actions taken at lower levels and stating that there is no safe level of lead in drinking water. The EPA also received comments that disagreed with the agency's analyses used to support proposing a lower action level of 0.010 mg/L and not 0.005 mg/L, including that the EPA used past CCT performance data that does not reflect how effective CCT can be, stating that systems have not been trying to reduce lead and copper levels in drinking water to "as low as possible" under the LCR, and that the CCT requirements in the LCR do not reflect advances in corrosion control science. Additionally, a few commenters stated that the EPA must use a different percentile other than the 90th percentile to compare against the action level. Specifically, some stated that the EPA must use a higher percentile (e.g., 95th, 98th, 99th) or a maximum level because doing so would result in more systems having action level exceedances and therefore be required to take actions. They added that the 90th percentile allows lead levels to be higher than the action level at more individual sites than a higher percentile would and noted that the water system is not required to take action at those sites. Another commenter stated that the EPA should use a measure of central tendency (e.g., median) because the 90th percentile is too conservative in the context of other risk reduction measures in the LCRI including public education and LSLR.

The EPA disagrees with commenters who stated that the EPA must set the lead action level at a level that is "reliably achievable" by water systems. These commenters misconstrue the function and purpose of the lead action level. The action level is used to evaluate CCT, and it is set at a level that the EPA determined is generally representative of optimized CCT such that the overall treatment technique for CCT is feasible in accordance with SDWA section 1412(b)(7)(A). The action level is not independently evaluated for feasibility. The action level is one element of the treatment technique. The EPA evaluates the entirety of the treatment technique (*i.e.*, CCT) for feasibility. Based on the plain reading of the statutory requirements for determining the feasibility of a treatment technique, the action level supports the agency's feasibility determination for CCT (see section IV.F.1 of this preamble) but it is not required to meet the feasibility standard

at SDWA section 1412(b)(7)(A) on its own. For further discussion see the regulatory history section on feasibility in section III.D.3 of this preamble.

Additionally, water systems are not required to achieve the action level under the LCRI; the action level is not an MCL and serves a different purpose than an MCL. Notably, the action level is not a health-based level and it does not determine the compliance status of a system like an MCL does. If a system fails to meet the action level either initially or after the installation of treatment, the system is not in violation of the rule providing the water system complies with the CCT requirements (e.g., CCT has been optimized or re-optimized). It is for the same reason that the EPA disagrees with commenters who stated that the EPA must set the action level to a level as close to the MCLG of 0 mg/L as feasible. As discussed in detail in section IV.A of this preamble, the EPA established a treatment technique rule for lead and copper because it is not "economically or technologically feasible to ascertain the level of the contaminant" (42 U.S.C. 300g-1(b)(7)(A)). The action level is not an MCL and is not required to adhere to the statutory standard applied to MCLs.

The EPA notes that there were comments both for and against the EPA's proposed action level of 0.010 mg/L. For the final LCRI, the EPA is setting the lead action level at 0.010 mg/L. The EPA considered several factors when selecting its proposed lower lead action level of 0.010 mg/L. The EPA's primary consideration was the finding that an action level of 0.010 mg/L is supported by past CCT performance data as being generally representative of OCCT. More recent and higher quality lead data are available from over 30 years of implementing LCR, which allowed the EPA to reassess which level is generally representative of OCCT using data from systems with CCT. The EPA disagrees with commenters who argued that past CCT performance data do not reflect effective CCT in part because systems were not required under the LCR to reduce lead levels to "as low as possible." The EPA reasoned that 90th percentile lead levels from systems with CCT, collected through LCR reporting, is the best available data for determining a revised action level. As discussed in section IV.F.1 of this preamble, while CCT is effective at reducing lead and copper levels in drinking water, there are other secondary effects of treatment which may prevent a water system from reducing lead levels to "as low as possible" with CCT, including that the treatment could lead to increased levels

of other compounds which are also public health risks. The EPA defines OCCT as the "best" treatment technique for the purposes of this rule (see SDWA section 1412(b)(4)(D)) as "corrosion control treatment that minimizes the lead and copper concentrations at users' taps while ensuring that the treatment does not cause the water system to violate any National Primary Drinking Water Regulations" (§ 141.2). When the State evaluates the CCT studies and sets OWQPs, they are required to do so in a manner to reduce lead and copper concentrations as low as technically possible while ensuring compliance with other NPDWRs. Historical data from systems with CCT collected through LCR reporting reflect real world conditions that account for protecting public health from other contaminants in addition to lead and copper. Specifically, systems that have installed OCCT under the LCR are controlling corrosion to reduce lead and copper concentrations accounting for the unique characteristics of their water system, such as water chemistries and other potential contaminants.

Furthermore, these commenters did not offer alternative data for the EPA to consider, nor detail how the EPA should account for how lead and copper concentrations at the tap would differ based on if the LCR had included a different set of requirements (e.g., a different definition of OCCT in § 141.2). Additionally, it is not possible for the agency to predict how lead and copper levels would be different based on theoretical studies. As noted in the 1991 LCR, "relying solely on laboratory studies to predict the effectiveness of corrosion control treatment would not indicate the level of lead or copper at taps" (56 FR 26486, USEPA 1991). More recent literature shows that theoretical predictions may not align with real-world conditions. For example, Tully et al. (2019) evaluated model predictions of LSL systems and found that 13 out of 22 systems evaluated did not follow model predictions of scale formation and lead release, demonstrating the importance of pilot studies to evaluate and optimize CCT and corresponding tap sampling for demonstrating performance. Therefore, the EPA used 90th percentile lead levels from systems with CCT, collected through LCR reporting, for determining a revised action level and to inform a determination of OCCT feasibility because it is the best available data.

To inform the selection of the lead action level, the EPA identified a 90th percentile lead level that is generally representative of OCCT. As discussed in section IV.F.1 of this preamble the

action level is not based on a precise statistical evaluation of treatment at all systems. Rather, the EPA considered 90th percentile lead levels reported to the EPA’s Safe Drinking Water Information System (SDWIS) over the years 2012–2020 for community water systems (of all sizes) with known LSL and CCT status (*i.e.*, information on whether a system has LSL sites and whether the system has installed CCT). For the final LCRI, the EPA updated the number of evaluated systems from 6,529 in the proposal to 6,551 systems (see USEPA, 2024a, chapter 3, sections 3.3.3–3.3.5 for how the agency determined LSL and CCT status and lead 90th percentile values for these systems). While the agency considered data from all systems with known CCT and LSL status, the data from systems with CCT installed is particularly relevant in identifying a level generally representative of OCCT. The available lead 90th percentile data were collected using the tap sampling protocol and tiering criteria in the LCR. Contrary to the suggestion of some commenters, in selecting a lower action level, the EPA took into account that changes to the tap sampling protocol and site selection criteria in the LCRI will likely affect

some water systems’ 90th percentile lead levels. To account for the differences in the tap sampling requirements under the LCR and the LCRI, the EPA developed adjustment ratios. The EPA developed an adjustment ratio using first- and fifth-liter tap sample data from the State of Michigan to account for the LCRI requirement for LSL systems to collect both first- and fifth-liter samples and use the higher value to calculate the 90th percentile. An analysis of LCR compliance data in Slabaugh et al. (2015) that compared lead 90th percentile values from samples collected from all LSL sites to lead 90th percentiles from samples collected from both lead and non-LSL sites was used to develop an adjustment ratio to account for the requirement introduced in the 2021 LCRR and retained in the final LCRI that LSL systems collect all samples from LSL sites where possible. The reported 90th percentile values were multiplied with the adjustment ratios to estimate what the values would be if they were collected in accordance with the LCRI. This adjustment accounts for changes in the sampling protocol and tiering and this methodology has the benefit of being

applicable to a large set of data to evaluate a level of generally representative OCCT. The action level analysis conducted in the LCRI is more robust than what was available to the agency when it first selected a lead action level of 0.015 mg/L (56 FR 26484, USEPA, 1991). See the final LCRI Economic Analysis (USEPA, 2024a, chapter 3, section 3.3.5) for additional details about the multiplier approach and the associated uncertainties.

The EPA categorized the 6,551 systems based on combinations of LSL and CCT status using their highest 90th percentile lead level (as adjusted for the LCRI sampling protocol) reported over the 2012 to 2020 analysis period to estimate the percentage of systems at or below the potential lower action levels (“Analysis of reported 90th percentile values from 2012–2020 for final LCRI.xlsx” in the LCRI docket). The EPA specifically evaluated 0.015 mg/L, 0.010 mg/L, and 0.005 mg/L because they correspond to the LCR lead action level, the 2021 LCRR lead trigger level, and the lead PQL, respectively. Their estimates are presented in Exhibit 2 by LSL and CCT status.

EXHIBIT 2—PERCENT OF SYSTEMS BY LSL AND CCT STATUS WITH LEAD LEVELS AT OR BELOW POTENTIAL LEAD ACTION LEVELS ADJUSTED FOR THE FINAL LCRI SAMPLING PROTOCOL
[2012–2020]

LSL and CCT status (number of systems) ¹	P90 ² ≤ 0.015 mg/L (%)	P90 ² ≤ 0.010 mg/L (%)	P90 ² ≤ 0.005 mg/L (%)
No LSLs/CCT (2,062)	95	92	82
LSLs/CCT (1,277)	73	60	38
No LSLs/No CCT (2,731)	95	91	78
LSLs/No CCT (481)	80	64	37

¹ Data from 6,551 community water systems with known CCT and LSL status. See “Analysis of reported 90th percentile values from 2012–2020 for final LCRI.xlsx” in EPA–HQ–OW–2022–0801.
² Systems categorized based on their highest lead 90th percentile (P90) value reported (SDWIS 2012–2020).

When accounting for the final LCRI sampling requirements, the EPA estimates between 60 and 92 percent of the 6,551 systems evaluated are at or below the revised action level of 0.010 mg/L (Exhibit 2). The EPA notes that while up to 82 percent of non-LSL systems with CCT are estimated to be at or below 0.005 mg/L, only 38 percent of the evaluated systems with LSLs are expected to be at or below that level. This is far below half of the 1,227 LSL systems with CCT that the EPA evaluated. Therefore, 0.005 mg/L is not generally representative of OCCT, particularly for LSL systems. The EPA also discussed in the LCRI proposal how the action level cannot be set below the lead PQL of 0.005 mg/L, which

represents the limitations of reliably measuring lead levels (88 FR 84942, USEPA, 2023a). The EPA received comments which agreed that the action level should not be set lower than the lead PQL. The EPA also received comments requesting the agency re-evaluate if 0.005 mg/L should remain the PQL for lead. See section IV.E.2.i of this preamble for further discussion of the PQL and the public comments received.

The EPA acknowledges that a higher percentage of systems are estimated to meet the previous action level of 0.015 mg/L (*i.e.*, 73 to 95 percent); however, a large and generally representative number of systems can also meet 0.010 mg/L and therefore, it is also technically

possible for systems to meet an action level of 0.010 mg/L as part of the treatment technique for CCT. Additionally, while the action level is not an MCL, an action level of 0.010 mg/L would trigger more systems into detailed optimization demonstrations or re-optimization than an action level of 0.015 mg/L and will likely contribute to a greater reduction in lead levels at those systems, thereby supporting more public health benefits that can be realized through CCT. Because the EPA finds that both 0.010 mg/L and 0.015 mg/L are technically possible for systems based on the data, the EPA cannot maintain an action level of 0.015 mg/L. Given the best available and most recent information, 0.015 mg/L would

not support the greatest level of health protection to the extent feasible for the CCT treatment technique compared to 0.010 mg/L. Additionally, because the EPA is removing the lead trigger level in the LCRI, a lead action level higher than 0.010 mg/L would result in CCT requirements applying for systems at higher lead levels relative to the 2021 LCRR (see section III.E of this preamble for the agency's anti-backsliding analysis).

Furthermore, a lead action level of 0.010 mg/L is supported by the available data. As noted in the proposal, the EPA acknowledges that when the agency selected 0.015 mg/L as the action level in the 1991 LCR, a small percentage of LSL systems with CCT in the dataset were able to meet this level. However, at that time, the EPA acknowledged the limitations of the available data including the small sample size (*e.g.*, 39 systems without LSLs and 11 systems with LSLs), and challenges of "extrapolating generalized estimates of treatment performance . . . which are collected from relatively few, like-sized systems operated under relatively favorable natural water quality conditions" (56 FR 26491, USEPA, 1991). Also, the EPA noted that the systems evaluated for the LCR were not yet attempting to minimize lead levels per the definition of OCCT in § 141.2. For the LCRI, the dataset to evaluate the action level is a much larger dataset compared to the 1991 LCR dataset, comprised of 90th percentile values collected under the requirements of the LCR, from systems of various sizes and OCCT and LSL status and is informed by analysis of lead samples that are all collected at LSL sites and a dataset from the State of Michigan that includes a similar sampling protocol as the LCRI. Therefore, this recent larger dataset is of higher quality than the 1991 LCR dataset for selection of the action level in LCRI, and the EPA finds that 0.010 mg/L is reasonably representative of lead levels that can be achieved in systems after they install OCCT.

The EPA also disagrees with commenters indicating that the EPA must use a different statistic to compare against the action level. In 1991, the EPA chose a 90th percentile statistic to simplify the LCR's requirements. Specifically, the EPA had considered using a 95th percentile but chose a 90th percentile value so that systems would not be required to perform a more complex calculation based on the results of the monitoring. For example, the 95th percentile of 30 samples is the 28.5th highest sample result whereas the 90th percentile is the 27th highest result. Additionally, water systems have

decades of experience using and calculating 90th percentile values and submitting that information to States.

For these same reasons, the EPA does not agree that a measure of central tendency should be used in the rule. While the commenter claims that CCT efficacy can be evaluated through a central tendency statistic, changing the metric for evaluating CCT efficacy after over 30 years for implementation would likely cause confusion and compatibility issues with past datasets. Retaining a 90th percentile statistic maintains consistency, which enhances implementability. Furthermore, as discussed in section IV.F.1 of this preamble and in this section, an action level of 0.010 mg/L based on a 90th percentile supports the technical feasibility of the CCT treatment technique.

The EPA also disagrees with using a maximum lead value (*i.e.*, the highest collected sample) for comparison with the lead action level. Using a maximum value against the action level would mean that a single sample would prompt an action level exceedance. As discussed in section IV.A of this preamble, lead and copper levels at the tap are highly variable due to a variety of factors and a single tap sample at a single site is not necessarily representative of conditions in the system. As described in section IV.F.1 of this preamble, the purpose of the action level is to evaluate the CCT of the system. Therefore, using a single sample to prompt systemwide actions would not be appropriate.

The EPA notes that commenters suggesting a higher percentile state that doing so would result in more action level exceedances. In the LCRI, the EPA is finalizing requirements that will result in more action level exceedances relative to the LCR, including reducing the lead action level to 0.010 mg/L and new tap sampling protocol and tiering requirements. The EPA has considered the feasibility of the CCT treatment technique as a whole in the context of these changes (see section IV.F.1 of this preamble). Additionally, the agency disagrees with commenters who assert that water systems are not required to take actions when a percentage of collected samples are higher than the level used for the action level (*i.e.*, up to 10 percent of samples in a 90th percentile). The LCRI includes requirements at both individual sites and systemwide that are not dependent on the 90th percentile level. For example, water systems are required to conduct Distribution System and Site Assessment at sites exceeding 0.010 mg/L including when the system's 90th

percentile is at or below the lead action level (see section IV.H of this preamble). Additionally, water systems are required to conduct public education independent of the water system's 90th percentile lead levels, such as providing information to consumers at all sites that are sampled regardless of the individual lead result (see section IV.J.4.b of this preamble) and including information about lead in the CCR (see section IV.O.1.c of this preamble). And importantly, under the LCRI, water systems must now also conduct lead and GRR service line replacement regardless of tap sample results (see section IV.B of this preamble).

ii. Additional Factors Supporting Selection of the Lead Action Level

The EPA also received comments on the anticipated benefits and tradeoffs of a lower action level, including for public health and administrative burden on systems and States. Some commenters supported an action level of 0.010 mg/L but noted that the lower action level will increase the number of systems required to conduct CCT actions, thereby increasing the burden on States and water systems. Some of these commenters expressed concern with reducing the action level below 0.010 mg/L, citing technical challenges including the administrative burden on systems and States and the need to consider resources to implement other aspects of the rule including service line replacement. The commenters believed these issues would be exacerbated if the EPA selected an action level of 0.005 mg/L. Some noted factors such as the lack of national CCT expertise. Several States provided information about burden estimates for their States and impact to their operating budget for CCT requirements if the EPA were to decrease the action level to 0.005 mg/L. Some commenters disagreed, stating that because there is no safe level of lead, the public health benefits should be considered over any administrative burden or lack of expertise. A few commenters indicated that the EPA must base its determination of an action level based on what is both affordable for large metropolitan systems and technically possible to achieve and base a determination on every single water system, and that the EPA may not consider administrative burden or availability of technical experts as factors under the statute for selecting an action level. The commenters noted that even if there are concerns about the capacity of smaller water systems to study and install CCT, small systems are permitted to select an alternative compliance option besides CCT.

The EPA disagrees with commenters that the agency cannot consider factors such as administrative burden, availability of technical experts, and other technical factors in selecting the action level. In section IV.F.1 of this preamble, the EPA discussed the factors that impact technical feasibility, and how the agency introduced the concept of the action level, among other requirements, such that the CCT treatment technique is feasible in accordance with SDWA section 1412. The EPA is not evaluating the feasibility of the action level as an independent component, but rather in the context of the treatment technique as a whole (see section III.D.3 of this preamble). For the LCRI, the EPA considered technical challenges including administrative burden, availability of national experts, and the technological limitations of reliably measuring lead levels when selecting an action level that supports the overall feasibility of the CCT treatment technique. The final LCRI clarifies how the agency evaluated these factors consistent with the statutory feasibility standard (see section IV.F.1 of this preamble). The EPA disagrees that only large systems, compared to other size systems, must be considered for the purposes of determining what is feasible. While SDWA legislative history and case law specifies that a NPDWR must be affordable “relative to a large regional or metropolitan water system,” there is no such limitation for determining what is technically possible; and therefore, the best interpretation of the statute is the EPA should evaluate what is “technically possible” relative to all size systems. See section III.C of this preamble for the background on statutory authority and discussion of feasibility.

For the LCRI, the EPA considered the administrative burden on systems and States with respect to a lower action level, specifically for smaller systems that lack the technical resources of large systems and require additional State input and technical assistance. As discussed in section IV.F.1 of this preamble, the EPA found that requiring all water systems to study and install OCCT without considering their tap levels would “impose an unworkable administrative burden on States” (56 FR 26492, USEPA, 1991). This was particularly compelling for small and medium systems because of the technical challenges many of those systems may face meaning they “generally will require the most extensive input from States in evaluating, selecting, and overseeing implementation of optimal corrosion

control treatment” (56 FR 26492, USEPA, 1991). Therefore, State capacity to provide this input and support to water systems affects the feasibility of the CCT treatment technique for water systems.

For the LCRI, the EPA used data from the 6,551 water systems of all sizes with known CCT and LSL status and reported 90th percentile values in SDWIS from 2012–2020 (see Exhibit 2) to select 0.010 mg/L as a level that is generally representative of OCCT as the lead action level. To further inform whether the selected level of 0.010 mg/L supports the action level’s purpose of addressing the technical feasibility of the CCT treatment technique, the EPA used the same data to estimate how many CWSs are likely to exceed various potential action levels nationally to demonstrate the estimated burden on systems and States (see Exhibits 4.1 and 4.2, USEPA, 2024d).

CCT requirements may take systems several years to complete and include multiple interactions with the State. The administrative burden for the State includes activities, such as reviewing CCT study results, setting OWQPs, and reviewing OWQP data (USEPA, 2024a, chapter 4, section 4.4.3). Particularly for LSL systems, CCT studies can require additional time and technical expertise (e.g., conducting pipe rig/loop studies), which in turn will likely require additional State oversight. The EPA estimated that a higher percentage of systems are estimated to exceed 0.010 mg/L than 0.015 mg/L nationally, but it is not a significant increase (see Exhibit 4.2, USEPA, 2024d). While this will increase burden on systems and States relative to retaining an action level of 0.015 mg/L, more benefits can be realized through more systems evaluating and installing CCT. Conversely, the number of systems expected to exceed 0.005 mg/L is almost double that of 0.010 mg/L and triple that of 0.015 mg/L. Systems are expected to exceed in each system size category, and the EPA expects the number of systems to exceed 0.005 mg/L would exacerbate existing technical challenges for both systems and States. Thus, lowering the action level beyond 0.010 mg/L could affect the State’s ability to provide meaningful input to individual systems and adequately oversee OCCT implementation statewide and consequently impact the technical feasibility for water systems. Based on updated data and over 30 years of LCR implementation experience, the EPA finds that while a lead action level of 0.010 mg/L will increase the burden on water systems relative to 0.015 mg/L, that burden is technically possible to

the extent feasible to support the EPA’s determination that the CCT treatment technique is feasible in accordance with SDWA (see section IV.F.1 of this preamble).

As discussed in the LCRI proposal, the EPA also considered that the significant State resources required to oversee OCCT studies and implementation could affect the State’s ability to oversee other proposed requirements in the LCRI (88 FR 84942, USEPA, 2023a). Specifically, the EPA is concerned that if the agency sets the action level at a level that may not be generally representative of OCCT (e.g., 0.005 mg/L), that too many water systems would be required to conduct a detailed demonstration to determine OCCT, which would impact their ability to reduce lead levels through service line replacement and other actions under the rule due to competing resources, and that this could result in less public health protection overall. For example, if a significant number of small water systems were simultaneously required by the State to conduct CCT studies and take other actions associated with an action level exceedance, it could strain State resources to simultaneously oversee requirements for full lead and galvanized service line replacements, which are the most significant source of lead in drinking water, where present. The EPA estimates that a higher percentage of systems with LSLs (both with and without CCT) nationally, will exceed each of the action levels evaluated as compared to those without LSLs, and may require additional technical assistance (Exhibit 4.1., USEPA, 2024d). This is especially compelling at 0.005 mg/L because the EPA has estimated that 0.005 mg/L is not generally representative of OCCT, particularly for systems with LSLs (see Exhibit 2). Therefore, water system resources would be better directed towards reducing lead levels through service line replacement, and therefore, achieving greater health protection, rather than attempting to optimize or re-optimize OCCT when above 0.005 mg/L because it may not lead to a reduction in lead levels for system who are optimized above 0.005 mg/L. Conversely, almost twice the percentage of the systems with LSLs and CCT in Exhibit 2 meet 0.010 mg/L compared to 0.005 mg/L, so there is a higher potential for lead reduction in systems optimizing or re-optimizing OCCT when above 0.010 mg/L. The EPA notes that regardless of the value of the lead action level, States will also have an increased level of administrative burden in the

final LCRI relative to the current rule due to requirements for water systems to conduct service line replacement along with other additional public education requirements (USEPA, 2024a, chapter 4, sections 4.4.4 and 4.4.6). Additionally, while large systems are typically more technologically sophisticated and have access to more resources than small and medium systems, there will be large systems with LSLs that will need to conduct pipe rig/loop studies as a result of the rule. Commenters representing States and water systems have noted that few States and systems have experience with these types of complex studies, which likely will also require additional oversight (see section IV.F.1 of this preamble for discussion of CCT study requirements).

In the proposed LCRI, the EPA discussed the national availability of technical experts as an additional factor to consider in setting the action level in terms of how the action level prompts systems to conduct detailed demonstrations of OCCT (88 FR 84942, USEPA, 2023a). The EPA is concerned that constraints on the availability of expertise would pose significant challenges if the action level were reduced to 0.005 mg/L. The EPA notes that some States and water systems indicated that lack of technical expertise was one reason why the agency should not lower the action level to 0.005 mg/L. As discussed in section IV.F.1 of this preamble, small systems are unlikely to have in-house experts to design corrosion control optimization and may lack staff with relevant experience in installing and operating OCCT. The ability to hire outside experts is limited by national availability. The EPA received comments offering suggestions for actions the EPA can take to incentivize additional training of CCT experts. However, the commenters did not explain how this gap could be addressed by the LCRI rule compliance date. The EPA notes that knowledge of relevant chemistry alone is usually not sufficient to perform comprehensive CCT studies and operation. Experts typically rely on knowledge gained through practical on-the-job experience that cannot otherwise be replicated. The EPA anticipates that systems and States would encounter challenges acquiring this technical expertise, if too many systems are simultaneously conducting CCT evaluations, such as with an action level of 0.005 mg/L.

The EPA notes that some States provided their own estimates of administrative burden based on action level exceedances in public comments in support of these considerations. One State noted that there are 640 water

systems in their State subject to lead and copper sampling. They noted that there have been 117 action level exceedances since 2013 (18.3 percent of systems), but that if the action level were 0.005 mg/L, almost half of their water systems would have been required to study and install CCT. They also noted that CCT requires higher certification levels for operators and additional on-going training. Another State indicated that a lower action level would require more systems to conduct detailed OCCT demonstrations and thereby increase the need for State interaction by two to five times depending on the final action level, thus requiring additional staff and increases to State operating budget for CCT requirements alone. Specifically, they stated that a decrease in the action level to 0.005 mg/L would lead to a six percent increase in their personnel and indirect cost budget that would require additional funding. As discussed in section IV.F.1 of this preamble, the action level construct is intended to address the technical challenges associated with CCT. The EPA has determined that an action level of 0.010 mg/L would support the treatment technique for CCT, in addition to other elements of this treatment technique, in meeting the feasibility standard at SDWA section 1412(b)(7)(A). For the reasons discussed above, the EPA has determined that if the agency set the action level at 0.005 mg/L, the action level would not function as intended to address the described technical challenges in a way that makes the CCT treatment technique feasible. The EPA has considered these additional factors relating to technical feasibility and for the reasons described above is revising the action level to 0.010 mg/L and not 0.005 mg/L, and is not retaining the LCR action level of 0.015 mg/L.

Removal of Lead Trigger Level

The EPA received comments indicating almost universal support for removing the lead trigger level. Commenters generally agreed that the trigger level increased the rule complexity and some noted the confusion of explaining two separate lead levels to the public.

For the final LCRI, the EPA is removing the lead trigger level. The EPA introduced the lead trigger level in the 2021 LCRR to take certain actions including optimizing or re-optimizing OCCT, replacing LSLs, and educating or notifying the public. The purpose of the trigger level was to prompt proactive actions including conducting CCT studies, re-optimizing OCCT, and conducting goal-based LSLR to prepare

for a more rapid response should they later exceed the lead action level (88 FR 84939, USEPA, 2023a). The EPA agrees with commenters that the trigger level increased the complexity of the rule and that explaining the purpose and function of trigger level would likely be challenging for water systems and confusing to the public. The EPA also notes the redundancy of several of the actions in LCRI, including the new requirement for water systems to conduct mandatory lead and galvanized service line replacement regardless of lead levels, with actions that would have resulted if the agency kept the trigger level from the 2021 LCRR.

Separate Action Level for Public Education

In the proposed LCRI, the EPA requested comment on whether the agency should use a different action level to trigger public education activities compared to CCT. Many commenters disagreed with the concept of establishing a separate action level for public education, with some noting that it would increase complexity of the rule. However, many commenters also emphasized that the action level is not a health-based level and that the MCLG is set at 0 mg/L, while citing the health benefits of public education at lower levels. One commenter supported the selection of 0.010 mg/L as an appropriate level to prompt CCT evaluation but supported selection of a lower level for water systems to be required to conduct public education activities for that reason.

The EPA agrees that establishing a separate action level for public education would increase the complexity of the rule. In the final LCRI, the EPA is finalizing a single lead action level at 0.010 mg/L. The EPA agrees with commenters that the action level is not a health-based level but rather is set at a level that is generally representative of OCCT. The EPA noted in the LCR that while water system actions including CCT are expected to reduce lead drinking water levels, “there are situations where elevated lead levels will persist at consumers’ taps during or even after these efforts” (56 FR 26500, USEPA, 1991). For the LCRI, the EPA requires the use of the action level for some systemwide public education activities but has added new requirements that are intended to strengthen the public education requirements. These include clear statements that there is “no safe level of lead” in public education materials, and additional public education requirements that are not associated with the action level that are intended

to reduce exposure to lead in drinking water. Public education requirements that are not triggered by a lead action level exceedance include information about lead in the CCR, notification of lead, GRR, and unknown service lines, and notification of tap sample results. These communications include information on the health effects of lead and steps consumers can take to reduce exposure. See section IV.J.1 of this preamble for a discussion of the feasibility of the public education treatment technique and sections IV.J.4 and IV.O.1 of this preamble for a discussion of the final LCRI public education and CCR requirements, respectively.

c. Final Rule Requirements

For the LCRI, the EPA is finalizing the lead action level of 0.010 mg/L. The EPA is also finalizing the revision to remove the lead trigger level of 0.010 mg/L that was previously introduced in the 2021 LCRR, such that there is a single level used to prompt water system actions in the final rule for LCRI. For discussion about the specific CCT, public education, and tap sampling requirements that water systems will be required to follow based on lead action levels, see sections IV.F.2, IV.F.3, IV.J, and IV.E of this preamble, respectively.

G. Water Quality Parameter Monitoring

1. Rationale and Proposed LCRI Revisions

Water quality parameters (WQPs) are an important component of the treatment technique for CCT because they are monitored to gauge CCT implementation to ensure its continued effectiveness. WQPs can include pH, alkalinity, orthophosphate, and silicate. OWQPs are the values of the WQPs that are associated with optimized or re-optimized OCCT. Systems must monitor WQPs at taps and at entry points to the distribution system for pH and, when applicable, alkalinity, orthophosphate, silica, and any additional parameter set by the State.

Under § 141.87, the proposed LCRI would require all systems with OCCT serving 10,001 to 50,000 persons to monitor for WQPs regardless of the lead and copper levels, except those systems whose 90th percentile lead level is at or below the PQL of 0.005 mg/L, in accordance with § 141.81(b)(3). This proposed change would increase the number of water systems conducting WQP monitoring. Systems serving greater than 50,000 persons are already required to monitor for WQPs regardless of lead and copper levels, unless deemed optimized under § 141.81(b)(3).

By extending this requirement to all water systems with OCCT serving greater than 10,000 persons, any changes in WQPs could be evaluated more quickly to determine if re-optimizing OCCT is warranted; this could reduce the time needed for water systems serving between 10,001 and 50,000 persons to evaluate and optimize OCCT under the LCRI. The EPA proposed to maintain the authority for States to require any system, including a system serving 10,000 persons or fewer, to monitor WQPs more frequently and/or with more parameters beyond the minimum requirements of the rule.

Also, the proposed LCRI clarified that States can designate additional WQPs to determine the effectiveness of CCT (*i.e.*, in addition to pH or an orthophosphate residual). While this requirement was included in the LCR (and maintained in the LCRR) under § 141.82, the proposed LCRI revisions were intended to clarify the implementation of this already available option by including the designation of State-specified parameters in the list of required parameters under § 141.87.

The proposed LCRI did not change the 2021 LCRR requirement to add WQP monitoring sites to the sites that must be sampled by a system in each WQP monitoring period when those sites are sampled as a result of activities under DSSA in § 141.82(j). The purpose of keeping these new sites in the monitoring pool, until the pool is at least twice the number of minimum monitoring sites required under § 141.87(b)(1)(i), is to ensure that sites with previous high lead levels are fully benefitting from installed CCT.

2. Summary of Public Comments and the EPA's Responses

The EPA received comments recommending the EPA require WQP monitoring for more systems, such as requiring all systems, regardless of CCT status, to conduct WQP monitoring. The EPA disagrees with requiring systems without OCCT installed to monitor for WQPs because the purpose of monitoring for WQPs is to ensure optimal operating parameters for CCT. Monitoring for WQPs in systems without OCCT would have little benefit since there would be no State-approved parameters that would represent the optimal range for CCT performance as developed through a prerequisite CCT study; therefore, there would be no baseline parameters for comparison. Another commenter requested that small systems be required to continue WQP monitoring once they have started, such as following a lead action level exceedance. The EPA recognizes that

continuous WQP monitoring can be beneficial for some small systems with OCCT by offering more frequent feedback regarding their CCT implementation. Therefore, in the LCRI, the EPA has maintained the authority for States to require small systems with or without designated OWQPs to start or continue WQP monitoring beyond the minimum requirements of the rule (§ 141.87(b)(4)(iv) and (b)(3)(iii), respectively). However, the EPA disagrees with requiring small systems to continue to conduct WQP monitoring regardless of lead levels due to the limited resources of small systems. WQP monitoring and compliance lead and copper tap sampling are two methods for monitoring OCCT. To balance the trade-off between monitoring and burden, all small systems are required under the LCRI to continually monitor lead and copper through tap sampling (see section IV.E of this preamble). In comparison, only those small systems with CCT with the most concerns of high lead or copper levels, by exceeding a lead or copper action level, are required to monitor WQPs under LCRI (§ 141.87(b)(4)(ii)). Additionally, any system with individual sites exceeding the action level must add those sites to the ongoing list of locations monitored for WQP parameters (§ 141.87(b)(1)(i)). Under LCRI, small systems that are allowed to stop WQP monitoring and subsequently restart must sample at the list of locations that includes added sites, thus offering added public health protection to ensure that installed CCT is reaching all sites within the distribution system. Lastly, since not all small systems will need to install CCT following an ALE, such as those opting for small system flexibility, continued WQP monitoring would cause undue burden on those systems which, due to a lack of WQP baseline based on designated CCT, receive no benefit from WQP monitoring. The WQP monitoring requirements for small systems in the final LCRI allow small systems to prioritize limited resources for determining whether WQPs are within designated OWQP ranges in a way that is technically possible for these size systems in contrast to larger systems and ensure protection of public health by prioritizing small systems with the highest lead and copper concerns.

The EPA received comments stating that calcium, conductivity, and temperature should be re-added to the list of required parameters for WQP monitoring for the reason that these parameters have the potential to affect lead release. The 2021 LCRR removed

calcium carbonate stabilization as an option for CCT and therefore, the requirement to monitor associated WQPs related to calcium hardness (*i.e.*, calcium, conductivity, and temperature) were also eliminated. In the 2021 LCRR, the EPA agreed with commenters that said calcium carbonate stabilization has not been shown to be an effective corrosion control treatment strategy (USEPA, 2020e). The EPA continues to agree there is a lack of support in the available literature for the use of calcium carbonate stabilization in reducing tap lead levels. For LCRI, the EPA is incorporating the 2021 LCRR determination to remove calcium carbonate stabilization as an option for CCT and excluding calcium, conductivity, and temperature from WQP monitoring. As described in the preamble to the 2021 LCRR, systems that have State-designated OCCT based on calcium carbonate stabilization can continue to rely on the designated treatment, including monitoring of any State-designated parameters in addition to the minimum rule requirements (86 FR 4230, USEPA 2021a). However, as calcium carbonate stabilization is no longer an option for OCCT as finalized in the 2021 LCRR, systems that exceed the action level may not re-optimize using calcium carbonate stabilization. With the removal of the treatment option, calcium, conductivity, and temperature are not relevant for most systems and requiring monitoring of these parameters is unnecessary. The EPA also received comments to streamline and simplify the list of required parameters, further supporting the EPA's decision to not add previously removed parameters.

The EPA received comments on the requirement at § 141.87(b)(1)(i) for systems to add WQP monitoring sites to the standard minimum number of sites required to be sampled during each WQP monitoring period when those sites were sampled for WQP parameters under the DSSA. These commenters cited concerns that this requirement could result in a continuously changing minimum sampling pool and increase overall rule complexity for systems. The EPA disagrees with removing this requirement because the relatively few number of sites that could be added as a result of monitoring under DSSA is technically possible for systems and a reasonably ensures that the public health protection associated with ensuring OCCT is fully implemented throughout the distribution system. The standard number of monitoring sites for WQPs ranges from one site for systems serving 500 or fewer persons to 25 sites

for systems serving greater than 100,000 persons. The maximum possible number of required monitoring sites is 50, which the EPA finds to be technically possible for the largest systems. The additional number of added sites is capped at not more than twice the minimum number of sites per system size. Therefore, the EPA is retaining the 2021 LCRR requirement to require systems to conduct ongoing sampling at added sites to monitor OCCT implementation at sites in the distribution system with past elevated lead levels. The EPA disagrees that the minimum sites would be continuously changing or overly complex for systems since sites are only added as a result of DSSA, and changes to the monitoring pool require a State determination to switch out sites for newer ones that can better assess effectiveness and/or remove sites during sanitary survey evaluation of OCCT § 141.82(j)(1)(ii)(B).

The EPA also received comments requesting that WQP monitoring generally play a larger role in the rule, such as being used to assess CCT in place of lead and copper tap sampling. The EPA disagrees that WQP monitoring should be used in lieu of lead and copper tap sampling because the agency continues to find that both lead and copper tap sampling and WQP monitoring must be used to evaluate CCT performance in accordance with the LCRI requirements for systems. Tap sampling and WQP monitoring provide systems and States with different data points that are critical to inform different aspects of CCT. WQP monitoring provides data to evaluate if OCCT is implemented with sufficient levels of corrosion control throughout the distribution system. Lead and copper tap sampling offers direct data about OCCT effectiveness; namely, the levels of the contaminants for which corrosion is being controlled. Thus, the EPA maintains that WQPs alone are not sufficient for evaluating OCCT performance for any system, and that lead and copper tap sampling continues to be a necessary component of the LCRI and NPDWRs for lead and copper to evaluate CCT.

The EPA also received comment requesting systems be required to make WQP monitoring results publicly available to increase system transparency and public accountability. The EPA disagrees that making WQP monitoring results publicly available would result in meaningful benefits for public awareness and education because interpreting WQP results requires technical and system-specific knowledge of the CCT as designed. Communicating to the public-at-large

how to interpret WQP monitoring data would require additional information and potential technical support. More relevant to consumers is information about whether the system has met their designated OWQP range; systems with more than nine OWQP excursions, that is, WQP readings outside the designated range, in a monitoring period must issue a Tier 2 public notification in accordance with § 141.203 and must report the violation in their CCR. Thus, the EPA finds that the burden on systems to make WQP results publicly available in a meaningful way along with the necessary context for interpretation of the results would outweigh the potential benefits.

Commenters requested that systems be required to collect additional information under WQP monitoring to better inform them about their CCT, including by monitoring for WQP parameters at taps more frequently, such as monitoring for WQPs during each tap sampling period or increasing WQP monitoring at taps to quarterly. Commenters also recommended additional monitoring requirements for WQP parameters in untreated source water (*i.e.*, at the point of water intake). The EPA does not agree to changes to WQP monitoring at taps because the LCRI requires systems to sample at a regular frequency throughout the monitoring period for consistent and continuous monitoring of WQPs and to reflect seasonal variability of source water quality (§ 141.87(a) through (c)). While CCT is designed to account for seasonal variability, sampling for WQPs at one point in time does not offer information about CCT implementation at another point in time. Unanticipated interactions between seasonal factors, source water quality, and CCT implementation can result in WQP excursions even when previous samples fall within OWQP ranges. The LCRI also continues to require the addition of monitoring sites when systems sample sites under Distribution System and Site Assessment, with a maximum number of sites twice the standard minimum required (§ 141.87(b)(1)(i)). These requirements ensure that system monitoring is prioritized by establishing sampling sites and a sampling frequency that targets information collection most beneficial to monitoring OCCT implementation. The EPA has also previously heard in public comments for the LCRR review that conducting distribution system sampling of WQPs within homes is difficult, particularly because certified samplers are required. The EPA does not agree that benefits from further increasing the WQP tap

sampling requirements will outweigh the additional burden of in-home sampling. Lastly, the EPA does not agree that mandatory monitoring for WQP parameters at the water intake is necessary to ensure proper implementation of OCCT because OCCT is designed to alter the composition of treated water. WQPs in untreated water are neither an indication of corrosivity in the finished water, nor an indicator of the effectiveness of OCCT implementation. Independently, system operators may choose to monitor water at the point of intake to assist implementation of OCCT, but the EPA does not agree that such monitoring should be required of all systems with OCCT. The EPA agrees that switching source water can raise issues with OCCT; therefore, the LCRI requires systems with an upcoming addition of new source water or long-term change in treatment to notify States and to resume standard monitoring for lead and copper (§§ 141.90(a)(4) and 141.86(c)(2)(iii)(G), respectively). This allows States to modify designated CCT, as necessary.

3. Final Rule Requirements

The final LCRI requires all medium systems with OCCT to continually monitor WQPs, with an exception for medium systems whose 90th percentile lead level is at or below the PQL of 0.005 mg/L, in accordance with § 141.81(b)(3). In the final rule, large and medium systems (systems serving greater than 10,000 persons) with OCCT are required to conduct WQP monitoring, and small systems serving 10,000 or fewer persons with OCCT must conduct WQP monitoring after exceeding the action level. The final rule maintains the 2021 LCRR provision that provides State authority to set additional WQPs beyond those specified in the rule, and to require any system with OCCT to conduct WQP monitoring more frequently and/or for more parameters than those required by the rule.

The final rule also incorporates the 2021 LCRR requirements for systems with OCCT conducting WQP monitoring for DSSA under § 141.82(j) (formerly known as “find-and-fix”) to add those sites to the WQP monitoring sampling pool. Systems are not required to add DSSA sites if the number of sites in the sampling pool is at least twice the standard minimum number of samples. See section IV.H of this preamble for further discussion on DSSA requirements.

H. Distribution System and Site Assessment

1. Rationale and Proposed LCRI Revisions

In the 2021 LCRR, the EPA introduced the “find-and-fix” provision for the first time in a lead and copper NPDWR to potentially identify the cause of and actions to address localized elevated lead levels in drinking water. More specifically, this provision requires water systems to collect follow-up tap samples at sites where lead levels exceed 0.015 mg/L under the LCRR tap sampling. The 2021 LCRR requires water systems to collect follow-up lead tap samples no more than 30 days after they receive the results of the sample that exceeds 0.015 mg/L. The water system must also sample at a new WQP site that is on the same size water main in the same pressure zone and located within a half mile of the location with the action level exceedance within five days of receiving the sample results. Small water systems without CCT have up to 14 days to collect the samples. Water systems must also attempt to determine the cause of the exceedance and propose an action or a “fix” to address the cause of the exceedance. Further, States have six months to approve any action recommended by a system or require the system take an alternative action.

For the LCRI, the EPA proposed to maintain the requirement for systems to collect follow-up tap samples at sites that exceed the lead action level, specified as 0.010 mg/L. The EPA heard concerns in the LCRR review and stakeholder engagements held to inform the agency’s development of the proposed LCRI that the term “find-and-fix” is an inaccurate title for this section and should be changed because it implies the water system will or be able to implement the “fix” in all cases (USEPA, 2023i). For example, one stakeholder commented on how the cause of the lead level could be a premise plumbing issue that the water system may not be authorized to “fix.” Recognizing that the “fix” to address the exceedance may be outside of the control of the water system, among other potential implementation challenges, the EPA proposed to rename this section, “Distribution System and Site Assessment”, to more accurately reflect these requirements. Consistent with the EPA’s proposed change to the lead action level for the LCRI, systems would be required to conduct the DSSA requirements for any sampling site that exceeds 0.010 mg/L.

In addition, the EPA proposed to clarify the requirements under the 2021

LCRR for assessing CCT under Step 1 at § 141.82(j)(1). Specifically, the EPA proposed that systems would be required to identify a DSSA WQP sample location within a half-mile “radius” of each site with a test result above 0.010 mg/L. The 2021 LCRR required sample locations be within a half-mile of the location with an action level exceedance of 0.015 mg/L. The proposal added “radius” and clarified the lead action level of 0.010 mg/L.

The proposed LCRI also maintained the requirement from the 2021 LCRR that systems serving 10,000 persons or fewer without CCT can have up to 14 days from the date they receive sample results above the action level to take WQP samples in the distribution system as opposed to the other systems serving more than 10,000 persons that only have 5 days (§ 141.82(j)(1)).

2. Summary of Public Comments and the EPA’s Responses

The EPA received comments noting concern for the number of systems, especially small systems, that would be triggered into this requirement from individual tap samples exceeding 0.010 mg/L. Commenters requested that States be provided discretion to forego this requirement for small systems if the underlying cause of the action level is clear by evaluating monthly reporting. Other commenters noted the DSSA requirement should be triggered by a lower level of lead, such as the PQL. The EPA disagrees that States should be provided discretion to forego the DSSA requirements. Identifying sources of lead in drinking water is a critical component to mitigating lead and improving public health protection. Also, a system may not exceed the lead action level, but can still have 10 percent of tap samples above 0.010 mg/L and it is important to understand whether it is a localized problem or is due to water quality issues in the distribution system. To reduce the burden of the DSSA requirements the EPA is maintaining the 2021 LCRR provision that caps the number of distribution system WQP sites in response to DSSA requirements that must be added to twice the minimum number of required WQP sites. The final LCRI also removes requirements for WQP monitoring for systems without CCT. In addition, the EPA is maintaining the provision that systems in the process of optimizing or re-optimizing do not need to submit treatment recommendations to the State as they are already undergoing treatment processes to reduce lead exposures in drinking water.

The EPA received comments requesting that the DSSA WQP monitoring be scaled back from the requirements proposed in LCRI. Some commenters suggested States should be given discretion to require when systems take DSSA actions. The EPA disagrees with scaling back DSSA WQP monitoring actions beyond the proposed requirements or leaving the decision to the State because the EPA finds that all of the current requirements are necessary to evaluate elevated levels of lead. As described in the 2021 LCRR, the intent of the required WQP sample for water systems with CCT is to help determine if CCT is optimized, if additional WQP sites are needed, and/or if WQPs set by the State are being met (86 FR 4235; USEPA 2021a). However, the EPA notes the DSSA requirement includes provisions that address some concerns raised by commenters. The minimum number of required sites ranges from 1 to 25 sites, therefore doubling leads to a range of 2 to 50 sites as the maximum. This is less than the required number of monitoring sites for total coliform in the distribution system; therefore, this requirement is not requiring water systems to sample at a number of sites that they have not already shown to be capable of handling. The proposed and final rule language provides States with discretion to determine whether these additional newer sites can better assess the effectiveness of CCT once the system has reached the cap (§ 141.82(j)(1)(ii)(B)).

Other commenters requested that the rule clarify whether only systems required to meet OWQPs to demonstrate OCCT would need to potentially add new sites under DSSA requirements in § 141.82(j)(1)(ii)(B). The addition of WQP sites under § 141.82(j)(1)(ii)(B) only applies to systems required to meet OWQPs to demonstrate OCCT. Therefore, the EPA revised the final DSSA rule requirements to include a statement that systems without CCT do not have to collect WQP data. These systems would not typically have OCCT or any pH, alkalinity adjustment, or inhibitor addition processes. Since they would not be adjusting these parameters in response to a sample over 0.010 mg/L, the EPA expects WQP monitoring would be unlikely to catch any short-term variations of these parameters in the natural water quality, especially up to 14 days after the system receives the tap sampling results. In addition, these systems would not have any State-designated optimized WQPs to compare against new WQP sampling results.

3. Final Rule Requirements

The EPA is finalizing the revision to rename this section, “Distribution System and Site Assessment” to more accurately reflect these requirements. The EPA is finalizing the clarification under Step 1 for assessing CCT that requires water systems to take a DSSA WQP sample at a location within a half-mile “radius” of each site with a lead result above 0.010 mg/L. In addition, the EPA revised the final LCRI to exclude small systems without CCT from conducting the WQP monitoring under Step 1 of the DSSA process. These systems are still required to conduct the other steps of the DSSA process.

I. Compliance Alternatives for a Lead Action Level Exceedance for Small Community Water Systems and Non-Transient Non-Community Water Systems

1. Rationale and Proposed LCRI Requirements

In the 2021 LCRR, the EPA included alternative compliance options for systems serving 10,000 or fewer persons and all non-transient non-community water systems (NTNCWS) where a State or Tribe that has primacy elects to adopt the alternative compliance provision. Systems that exceed the lead trigger level must choose among four compliance options: replace all lead service lines within 15 years, install and maintain optimal CCT, install and maintain point-of-use treatment devices at each household or building, or replace all lead-bearing plumbing materials on a schedule specified by the State but not to exceed one year. States seeking primacy are not required to adopt the compliance alternative provision in which case systems must comply with the requirements for OCCT and LSLR in the 2021 LCRR. While the EPA previously determined that OCCT is an affordable technology for water systems of all sizes (see section IV.F.1.a of this preamble) (USEPA, 1998b), small systems may still have technical difficulties implementing this technology. The agency recognizes that it is often difficult for smaller systems to find operators that have the advanced skills to implement and maintain OCCT. Additionally, smaller systems may face challenges retaining those operators once they have acquired advanced skills. Because maintaining OCCT is an ongoing process and finding and retaining skilled operators can be especially challenging for very small systems (systems serving 3,300 or fewer persons), point-of-use filtration and plumbing replacement options may be better options for some systems.

Operator turnover or poor oversight of OCCT can reduce the effectiveness of the system’s ability to prevent lead corrosion, even resulting in increases of lead in drinking water (USEPA, 2016b). Because of the challenges that small systems face in implementing OCCT, point-of-use devices and plumbing replacements can be effective alternative compliance technologies for small systems, and therefore, the rule allows systems the option to seek State approval to use one of them as an alternative to OCCT.

The EPA proposed in the LCRI to maintain a compliance flexibility provision in § 141.93 with some modifications. The EPA proposed to lower the eligibility threshold for CWSs from those serving 10,000 or fewer persons to 3,300 or fewer persons. Due to the proposed LCRI requirement to replace all LSLs irrespective of lead levels, the EPA also proposed to remove LSLR as an option for small system compliance flexibility. The proposed LCRI compliance alternatives to OCCT include installing and maintaining point-of-use devices or replacement of all lead-bearing plumbing. If a system chooses, and a State approves the point-of-use device compliance option, the system would be required to provide, install, and maintain the device(s) in each household and each building served by the water system, including monitoring one third of the point-of-use devices each year, with all devices being monitored within a three-year cycle. In addition, the system must provide public education regarding how to use the device. If the system has control over all plumbing in its buildings, and is not served by lead, galvanized requiring replacement, or unknown service lines it may seek State approval to implement the replacement of lead-bearing plumbing compliance option. In that case, the water system would be required to replace all plumbing that does not meet the definition as “lead free” on a schedule established by the State not to exceed one year.

In the LCRI, the EPA proposed to make these alternatives available to CWSs serving 3,300 persons or fewer persons and all NTNCWSs that have had an action level exceedance. This is because the EPA has determined that the point-of-use device and replacement of lead-bearing plumbing options are impractical for systems serving 3,301 to 10,000 consumers (88 FR 84878). If systems that request the use of an alternative have OCCT, they would still be required to operate and maintain it until the State determines, in writing, that it is no longer necessary.

The EPA also proposed to consolidate the small system flexibility provisions in § 141.93 and remove cross-references to § 141.93 in other rule sections (except for those in § 141.90). This approach comports with the EPA's goal in the 2021 LCRR review notice of simplifying the rule and streamlining rule requirements. It also recognizes that States seeking primacy for the LCRI are not required to adopt the small system compliance flexibility provision. It will be helpful for the small system flexibility provision in the Federal rule to be separate and therefore severable from the remainder of the LCRI because it would allow those States to incorporate the LCRI by reference without the need for extensive revisions to the remainder of the LCRI.

2. Summary of Comments and the EPA's Response

Some commenters agreed with maintaining small system flexibility because of the financial, administrative, and economic challenges small systems may face and how the LCRI addresses this by giving small systems the option to choose either point-of-use device installation or replacement of lead-bearing plumbing instead of re-optimizing OCCT. One comment expressed concern that small system flexibility provisions would be more burdensome as small systems would need more expertise to implement the alternative compliance options. Another comment stated that alternative compliance options are less stringent and that small systems should still implement CCT and LSLR.

The EPA agrees with commenters supporting the inclusion of a small system flexibility and disagrees that it would be a burden for small systems to implement. Small CWSs and NTNCWSs tend to have more limited technical capacity to implement complex treatment technique rules such as the LCR (USEPA, 2011b). For instance, great expertise is needed for systems to identify the OCCT and WQP monitoring to assure that lead and copper levels are reduced to the extent feasible. The determination of the OCCT is specific to each water system because it is based on the specific chemistry of the system's source water and must be designed and implemented to take into account treatments used to comply with other applicable drinking water standards (56 FR 26487, USEPA, 1991). System operators that do not already have it may be required to obtain advanced certification to properly operate and maintain OCCT.

Many small CWSs face challenges in reliably providing safe drinking water to

their customers and consistently meeting the requirements of SDWA and NPDWRs (USEPA, 2011b). Long-term compliance challenges affect public health protection. Therefore, small system flexibility provides small systems alternatives to CCT that may be more easily implementable while still being effective in minimizing lead in water.

The EPA disagrees that the alternative compliance options would not be as protective as OCCT. While the EPA has determined that CCT is a feasible treatment technique for all system sizes, for systems serving 3,300 or fewer persons, the EPA determined point-of-use filtration and replacement of all lead-bearing plumbing can be as effective as CCT in minimizing exposure to lead in water for small systems (88 FR 84945, USEPA 2023a; SDWA section 1412(b)(7)(A)).

Commenters provided feedback on the EPA's proposed eligibility threshold for the small system flexibility alternatives. Some commenters were in favor of the proposed threshold of 3,300. Other commenters noted 3,300 was too high of a threshold for systems to effectively implement the compliance alternatives. Some of these commenters recommended a threshold closer to 500 persons. Other commenters prefer a threshold of 10,000 as in the 2021 LCRR. One stated justification for raising the threshold to 10,000 was that it maintained the flexibility for systems that could implement the alternatives and that systems would not implement the alternatives if not feasible for them. Commenters also stated the EPA should not set a threshold for CWSs as the agency did not set a size threshold for NTNCWSs.

The EPA agrees with commenters that support a small system threshold of 3,300 and agrees with commenters stating it is not likely practical or effective for systems serving more than 3,300 persons to implement the compliance options remaining after the removal of LSLR. In addition, the point-of-use provision and the replacement of all lead-bearing plumbing compliance alternatives are not easily implementable by water systems serving over 3,300 persons. In the LCRI proposal, the EPA described an example scenario in which a system that serves 3,301 consumers would have to provide and maintain approximately 1,000 point-of-use devices (88 FR 84878, USEPA, 2023a). Every year, at least 300 point-of-use devices would have to be monitored by the water system, which would require a significant coordination effort and over 300 household visits by the water system. The burden required

to undertake this compliance alternative and implement it correctly would be difficult for a water system serving more than 3,300 persons to carry out given financial, administrative, and technical limitations. To implement the replacement of lead-bearing plumbing, the system would have to own or have access to replace all premise plumbing in the residences and buildings they serve, which the EPA expects would be highly unlikely for water systems serving over 3,300 persons. The final small system compliance options are impractical for systems serving more than 3,300 persons and will not likely be effectively implemented as an alternative to OCCT as system size increases.

The EPA disagrees with commenters advocating for a lower eligibility threshold in the LCRI, however, nothing in the LCRI precludes States from using a lower eligibility threshold. The EPA determined the small system alternatives could be effectively implemented by systems serving up to (and including) 3,300 consumers. Nevertheless, this may not be the case for some small systems, which is also why the State must approve any small system alternative. For instance, point-of-use devices have been recognized by the EPA as effective and affordable variance technologies for water systems serving up to 3,300 consumers (USEPA, 1998b). These treatment techniques are as effective at lead risk reduction for this category of systems as OCCT. For replacement of lead-bearing plumbing, for many small systems serving 3,300 persons or under, it is more likely they may control or have access to all the water infrastructure to make any necessary replacements compared to systems serving more than 3,300 persons. In contrast, systems serving more than 3,300 persons are less likely to face the same challenges with maintaining CCT than smaller systems, but they would face more challenges in implementing a system-wide point-of-use or plumbing replacement option than systems serving 3,300 or fewer persons that meets the requirements associated with those options. Given those implementation challenges, for systems serving more than 3,300 persons, unlike smaller-sized systems, these options are unlikely to be as effective as OCCT. The EPA also disagrees that CWSs should not have a threshold since NTNCWSs do not have a threshold. NTNCWSs are much more likely to control their entire system and the buildings they serve; therefore it is more likely that they can effectively implement the small system flexibilities

when serving populations greater than 3,300 persons.

Some commenters expressed concern about the possibility of point-of-use filters underperforming, potentially due to the unique water chemistry of each drinking water system. Other comments expressed skepticism that a filter program could be an adequate alternative to OCCT. The EPA disagrees with commenters expressing concern that the installation of point-of-use devices is not an effective alternative to OCCT at systems serving 3,300 persons or less. As explained above, because of the challenges that small systems face in implementing OCCT, point-of-use devices can be an effective alternative compliance technology for small systems. While the EPA recognizes that drinking water chemistry does vary by system, the final LCRI has device installation and maintenance requirements that water systems must follow to ensure that point-of-use devices are consistently working properly. For instance, the final LCRI requires that filters be independently certified by a third party to meet the ANSI standard applicable to the specific type of point-of-use unit to reduce lead in drinking water. This is to ensure that filters are of an adequate quality prior to installation. The LCRI also requires that the devices must be maintained in accordance with the manufacturer's recommendations to ensure the filter continues to be effective. This can include ensuring filter cartridges are changed as appropriate and resolving any operational issues. The devices must also include mechanical warnings to inform the user if the device is having operational problems. The final rule also includes regular testing requirements to ensure the filters' continued efficacy. Specifically, water systems must monitor one-third of all point-of-use devices every year, such that every three years all installed devices will have undergone monitoring (§ 141.93(c)(1)(iv)). The samples must be taken after water passes through the POU device to assess the device's performance. If any sample does exceed 0.010 mg/L, the water system must notify the persons served by the POU device and/or building management no later than one business day of receiving the tap sample results. The system must then document and complete corrective action within 30 days after the detected exceedance to ensure that filters are back to adequately performing. In addition, the LCRI requires systems that implement the point-of-use device option to provide instructions upon

delivery of the device to help ensure consumers use the devices properly.

Commenters noted the challenge of notifying persons served by the POU device and/or building management no later than 24 hours after the results are received by the water system if the samples exceed the lead action level, as proposed in the LCRI for systems utilizing the point-of-use compliance option in § 141.93(c)(1)(iv). The EPA agrees that there are situations when the point-of-use monitoring results may be challenging to provide within 24 hours, such as if results are received over a weekend. Therefore, the EPA is revising the final LCRI to require water systems conducting point-of-use monitoring under § 141.93(c)(1)(iv) to provide notification to consumers within one business day of receiving a sample that exceeds 0.010 mg/L instead of 24 hours as proposed. The EPA also notes the point-of-use devices are required to include mechanical warnings to ensure consumers are notified of operational problems under § 141.93(c)(1)(iii). Therefore, consumers would know if their point-of-use device is not performing properly immediately, not just based on a sample result, and can contact the water system and take other appropriate steps to prevent exposure while the issue is addressed.

Commenters highlighted that some NTNCWS serve industrial facilities that may use potable water for non-consumptive uses (*i.e.*, cooling water). In these cases, commenters suggested that premise plumbing replacement that transports water not consumed by humans be exempt from replacement because the water would not be consumed by humans and therefore, allegedly, no humans would be exposed to lead from drinking water. The EPA recognizes that there may be a diverse range of water uses across NTNCWS, including for non-potable uses. The EPA provides two alternative compliance options: point-of-use filters or the replacement of lead-bearing plumbing. In this case, the NTNCWS could choose the option to install point-of-use filters at every tap that is used for cooking and/or drinking in non-residential buildings. A commenter suggested that NTNCWS should be exempt from LSLR if it installs point-of-use devices. The EPA disagrees with exempting NTNCWSs from LSLR. As noted in the LSLR section (section IV.B), LSLs, when present, are the most significant source of lead in drinking water, and it is essential that they be replaced as quickly as feasible. LSLR removes the source of lead exposure whereas point-of-use devices reduce exposures to lead.

The EPA also received comments supporting strengthened public education requirements to ensure people use point-of-use devices appropriately. The EPA agrees with commenters that support requiring public education to ensure proper use of point-of-use devices. In addition to requiring public education along with point-of-use devices that informs users how to properly use a point-of-use device, the EPA is adding a new requirement in § 141.93(c)(1)(v)(A) for the final LCRI that public education materials must also meet requirements of § 141.85(a)(1)(ii) through (iv) that includes information on health effects of lead, sources of lead, and steps the consumer can take to reduce their exposure to lead in drinking water.

3. Final Rule Requirements

The EPA is finalizing revisions in the LCRI to lower the eligibility threshold to CWSs serving 3,300 or fewer persons and all NTNCWSs, and removing LSLR as a compliance option. The EPA is adding a revision to § 141.93(c)(1)(iv) in the final LCRI for the water system to notify consumers, customers, and/or building management when a point-of-use sample exceeds 0.010 mg/L within one business day (rather than 24 hours). The final rule also finalizes the consolidation of the small system flexibility provisions in § 141.93 and removes cross-references to § 141.93 in other rule sections. In addition to requiring public education along with point-of-use devices that informs users how to properly use a point-of-use device, the EPA is adding a new requirement in § 141.93(c)(1)(v) for the final LCRI that public education materials must also meet requirements of § 141.85(a)(1)(ii) through (iv).

J. Public Education

1. Rationale and Feasibility of Public Education

Public education is one of the four components of the treatment technique rule the EPA promulgated in 1991, in addition to LSLR, CCT, and source water treatment (56 FR 26500, USEPA, 1991). As described in section III.D of this preamble, in establishing treatment technique requirements, the Administrator is required to identify those treatment techniques "which, in the Administrator's judgment, would prevent known or anticipated adverse effects on the health of persons to the extent feasible." 42 U.S.C. 300g-1(b)(7)(A). "Feasible" is defined in section 1412(b)(4)(D) of SDWA as "feasible with the use of the best technology, treatment techniques and

other means which the Administrator finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are available (taking cost into consideration).” See section III.D.3 of this preamble for discussion of how the EPA considers feasibility.

Public education is effective for reducing lead exposure in drinking water. In the 1991 LCR, the agency explained that while actions such as CCT and LSLR will address a “large portion of the lead problem in drinking water,” there are “situations where elevated lead levels will persist at consumers’ taps during or even after these efforts. In these cases, it will be important for consumers to take actions in their homes (such as flushing tap water or replacing fixtures) to reduce their exposures to lead” (56 FR 26500, USEPA, 1991). Public education was not intended to substitute for the other treatment techniques of the LCR, but rather to supplement and support them. Public education, particularly when combined with other actions and policies to reduce public health hazards, is an effective way to improve public health by influencing people’s knowledge, beliefs, and behaviors. It may also promote service line replacement by encouraging property owners, including landlords of multi-family residences, to allow access for replacements. In developing the 1991 LCR, the EPA conducted pilot studies to evaluate the effectiveness of public education in reducing consumer exposure to lead in drinking water (56 FR 26500, USEPA, 1991). The agency found that “well-designed and effectively implemented programs can change the knowledge and/or behavior of audiences and thereby reduce individual exposures” (56 FR 26501, USEPA, 1991). The EPA concluded that public education is an “effective method for reducing exposure to lead in drinking water by raising consumers’ awareness of the problem and, consequently, modifying behavior that reduces their exposure” (56 FR 26501, USEPA, 1991). By reducing exposure, public education thereby reduces the risk of experiencing adverse health effects. The literature continues to support the effectiveness of public education programs for risk reduction for a variety of contaminants (Harding and Anadu, 2000; Jordan et al., 2003; Greene et al., 2015; Brown et al., 2017; Lilje and Mosler, 2018; Neri et al., 2018).

It is feasible for PWSs to conduct public education. Since 1991, water systems have demonstrated that it is technically possible to conduct various

lead public education activities, including both systemwide activities following an ALE (public education, consumer-requested sampling programs) and focused outreach to particular groups (e.g., individual customers at sites sampled for lead, organizations that serve pregnant people, infants, and young children) as required by the original rule and subsequent revisions. The final LCRI requirements both rely on and build upon similar types of actions in the LCR, including notifying and conducting consumer-requested sampling to subsets of consumers (e.g., people served by known or potential LSLs). Therefore, the EPA does not anticipate water systems will experience new technical challenges in conducting the LCRI public education requirements. Additionally, the EPA found in the 1991 LCR that public education is affordable for large systems (56 FR 26501, USEPA, 1991). The total national annualized costs for the LCRI public education requirements are estimated to range from \$234.3 to \$244.5 million in 2022 dollars, discounted at two percent (see the final LCRI Economic Analysis (USEPA, 2024a), chapter 4, section 4.3.6).

Public education, whether conducted after a lead action level exceedance or independent of a water system’s lead levels, also prevents known or anticipated adverse health effects. The 1991 LCR required water systems to conduct public education after an ALE as “a supplemental program either while the PWS is working to reduce lead levels through corrosion control, source water treatment, or LSLR, or after such actions fail to meet the lead action level” (56 FR 26500, USEPA, 1991). In the LCRI, the EPA is retaining public education requirements following a lead action level exceedance. As discussed in the LCRI proposal, a systemwide lead action level exceedance triggers water systems to take action to reduce lead levels, such as installing or re-optimizing OCCT. While the tap sampling protocol was designed to assess CCT efficacy and not typical exposure (see section IV.E of this preamble), lead levels in individual tap samples could potentially represent water being consumed by individuals, given the potential for consumption of water that has been stagnant and in contact with leaded materials, especially in the mornings and upon returning home from work or school when the water has not been used for some time. Although the action level is not health-based (there is no safe level of lead; see section IV.F of this preamble) and the 90th percentile is not

a good metric for determining individual health risks associated with lead exposure, an ALE indicates higher lead levels systemwide and potential corrosion issues, and therefore, public education can help consumers take steps to reduce their exposure to potentially higher lead levels at their tap. In addition, because actions such as OCCT and LSLR may take years to implement and systems may repeatedly exceed the lead action level during that time, the EPA is introducing additional requirements for water systems with recurring lead action level exceedances to further enhance public education on how consumers can reduce their exposure (see section IV.K of this preamble for discussion).

The EPA is also strengthening public education requirements unassociated with specific lead levels in the LCRI. On the one hand, the EPA understands that requiring additional systemwide public education in response to a level lower than the action level may reduce its efficacy. For example, in the 2000 Public Notification (PN) Rule, the EPA discussed limiting the number of instances of violations or situations that require Tier 1 PN to increase the effectiveness of those notices thereby leading to greater health protection (65 FR 25995, USEPA, 2000b). Similarly, the EPA noted that the use of urgent language in lower tiered notices could hinder the effectiveness of the more immediate notices (65 FR 25995, 26001, USEPA, 2000b). As introduced under the 2021 LCRR, a lead action level exceedance also requires Tier 1 public notification within 24 hours. The requirements in the LCRI are intended to ensure the effectiveness and impact of the public education requirements without overwhelming consumers with information.

On the other hand, the EPA recognizes that public education irrespective of the lead action level prevents known or anticipated adverse health effects. Drinking water can contain lead, sometimes at very high levels, and may cause adverse health effects whether or not there is a systemwide action level exceedance. Exposure to lead in drinking water can vary between individual homes, and sampling conducted to evaluate CCT performance may not reflect risks at every site. Therefore, public education only associated with action level exceedances is not sufficient. Consumers can take actions to reduce their individual exposure to lead in drinking water, especially at sites with significant sources of lead (e.g., LSLs). Furthermore, public education directed at consumers with known or potential

LSLs supports the LSLR requirements by increasing consumer awareness and engagement. The EPA requires water systems to conduct public education independent of lead levels in a variety of contexts (*e.g.*, individual notices of tap sample results, notifications to people served by known or potential LSLs, lead information in the CCR, and public education and sampling in schools and child care facilities) because public education not associated with the action level can produce benefits by prompting consumers to take actions that reduce their exposure.

Therefore, the EPA is retaining systemwide public education requirements based on the lead action level and strengthening public education requirements unassociated with specific lead levels in the LCRI. These public education requirements are feasible and prevent known or anticipated adverse health effects to the extent feasible.

2. Proposed LCRI Revisions

The EPA proposed in the LCRI to retain the overall framework of the public education provisions in the 2021 LCRR with some revisions. The public education requirements under the 2021 LCRR include providing public education with consumers' individual lead tap sampling results; notification and public education for consumers served by a lead, GRR, or lead status unknown service line; public education to persons affected by a disturbance to a lead, GRR, or lead status unknown service line; and public education about the system's goal-based LSLR program when a system exceeds the lead trigger level. The 2021 LCRR also requires water systems to conduct public outreach activities if they exceed the trigger level and fail to meet their LSLR goal rate. Systems must also conduct several public education actions if they exceed the lead action level, including delivering public education materials to customers, public health agencies, and organizations that serve pregnant people and children, as well as other public education activities. In addition, all CWSs must conduct annual outreach to local and State health agencies about "find-and-fix" (renamed as Distribution System and Site Assessment in the LCRI). Small CWSs and NTNCWSs that select point-of-use devices as their compliance option in response to a lead action level exceedance must provide public education materials to inform users how to properly use point-of-use devices to maximize the units' effectiveness in reducing lead levels in drinking water. These public education provisions are required under § 141.85

of the 2021 LCRR. There are also public education related requirements in other parts of the 2021 LCRR, which are described further in other sections of this preamble. For example, § 141.92 requires lead sampling and public education in schools and child care facilities (see section IV.L of this preamble). In addition, § 141.84(d) and (e) of the 2021 LCRR include requirements for water systems to provide public education to consumers during partial and full LSLR. There are also requirements for a CCR, which must include information about lead and copper in drinking water under the CCR Rule (see section IV.O.1 of this preamble), and public notification for lead action level exceedances and violations to the LCR under the PN Rule (see section IV.O.2 of this preamble).

For the LCRI, the EPA proposed to retain the overall framework of the public education provisions in the 2021 LCRR with revisions to (1) increase the likelihood that the public education activities are effective in preventing adverse effects of lead on the health of persons to the extent feasible, and (2) conform to proposed changes to other aspects of the rule such as the removal of the lead trigger level. The EPA also proposed new public education requirements for copper. These proposed changes are described below.

a. Service Line Related Outreach

i. Required Public Education To Encourage Participation in Full Service Line Replacement

Because there is no trigger level in the LCRI, the EPA proposed to remove the 2021 LCRR's public education requirements related to service lines that apply as a result of a trigger level exceedance (§ 141.85(g) and (h) of the 2021 LCRR).

The EPA proposed in the LCRI to require outreach activities to encourage customer participation in LSLR for water systems that fail to meet the proposed LCRI's mandatory replacement rate (§ 141.85(h)). These water systems would be required to conduct outreach at least once in the year following the failure to meet the mandatory service line replacement rate and annually thereafter until the water system meets the replacement rate or until there are no lead, GRR, or unknown service lines remaining in the inventory, whichever occurs first. (See section V.H.2 of the proposed LCRI preamble (88 FR 84947, USEPA, 2023a) for a description of the proposed activities.)

Under the proposed LCRI, water systems with lead, GRR, or unknown

service lines would also be required to provide information about the service line replacement program to consumers through other public education including materials provided after a lead action level exceedance and the notification of service line material; CWSs would also provide this information in the CCR (see section IV.O.1 of this preamble for information about CCR requirements).

Findings from a study on voluntary LSLR grant programs in Trenton, NJ suggest that programs are more effective at increasing customer participation in LSLR when they use extensive public outreach and education (*e.g.*, community meetings, door-to-door visits, mailings, and social media) (Klemick et al., 2024). As described in the proposed LCRI preamble, Chelsea, MA and Detroit, MI provide additional examples demonstrating how effective public education and community engagement can be to support service line replacement efforts (LSLR Collaborative, n.d.d; City of Detroit, 2023). The EPA's proposed requirement for additional outreach for systems that fail to meet the mandatory service line replacement rate similarly seeks to help water systems to engage their communities and raise awareness about risk from lead and GRR service lines and their replacement program to encourage greater participation in the service line replacement program. As described in the proposed LCRI preamble, many of the activities the EPA proposed in the LCRI are consistent with recommendations from AWWA and the LSLR Collaborative for outreach to encourage customer participation in LSLR (AWWA, 2022; LSLR Collaborative, n.d.e). Some of these activities are also responsive to feedback heard during the National Drinking Water Advisory Council (NDWAC) consultation for the proposed LCRI, in which NDWAC members described the importance of engaging with community members and community groups to provide public education (NDWAC, 2022, see section on "Consultation on Proposed National Primary Drinking Water Regulation: Lead and Copper Rule Improvements").

ii. Notification of Service Line Material

Under the LCRI, the EPA proposed revisions to the requirements for notification of a lead, GRR, or unknown service line (§ 141.85(e)). Specifically, the EPA proposed requiring the same notification content requirements for LSLs and GRR service lines since both increase the risk of exposure to lead. In the 2021 LCRR, only notices to households with LSLs are required to

include information about programs that provide financing solutions to assist property owners with replacement of their portion of the service line, and a statement that the water system is required to replace its portion of the service line when the property owner notifies the system that they are replacing their portion of it. The EPA proposed in the LCRI to require water systems to include this information in notices for households with either lead or GRR service lines. In addition, the EPA proposed to require water systems to include information in all notices (households with lead, GRR, and unknown service lines) on how to obtain a copy of the service line replacement plan, or view the plan on the internet if the system is required to make the plan available online, neither of which are required under the 2021 LCRR. The EPA proposed to require all notices to include steps consumers can take to reduce exposure to lead in drinking water that meet the requirements of § 141.85(a)(1)(iv), which contains proposed content updates, including information about using a filter certified to reduce lead. The EPA also proposed that the notices for persons served by a lead or GRR service line include instructions for consumers to notify the water system if they think the material categorization is incorrect (e.g., if the service line is categorized as lead in the inventory but is actually non-lead). The EPA proposed that water systems follow up with consumers who notify the water system that they think the material is incorrect, verify the correct service line material, and update the inventory (see section IV.D of this preamble). In addition, to help ensure that consumers are aware of the EPA's proposed requirement in § 141.85(c) that water systems must offer to sample the tap of any consumer served by a lead, GRR, or unknown service lines who requests it (see section IV.J.2.c.i of this preamble), the EPA proposed that the notice of service line material include a statement about this requirement.

iii. Notification of a Service Line Disturbance

The EPA proposed revising the requirement for notification of a disturbance to a lead, GRR, or unknown service line (§ 141.85(g) of the proposed LCRI) to also include disturbances from actions such as physical actions or vibrations that could result in pipe scale dislodging and associated release of particulate lead. This is consistent with the type of disturbances that could be caused due to inventorying efforts, such as potholing, and conforms with the recommendations in the LCRR

inventory guidance (USEPA, 2022c). The EPA also proposed revisions to clarify that reconnecting a service line to the water main is an example of an action that could cause a disturbance requiring notification and requested comment on whether to require distribution of filters for this type of disturbance. The EPA also proposed requiring the notification of a disturbance to be provided to both the customer and the persons at the service connection.

b. Individual Notification of Tap Sampling Results

i. Lead

The EPA proposed requiring consumer notification of an individual's lead tap sampling results within three calendar days of the water system receiving the results, regardless of whether the results exceed the lead action level (§ 141.85(d)). In contrast, the 2021 LCRR requires notification within three calendar days only for results that exceed 0.015 mg/L (the 2021 LCRR lead action level), while water systems have 30 days to notify consumers of results at or below 0.015 mg/L. The EPA proposed this change in response to stakeholder concerns about the lead action level being incorrectly interpreted as a health-based level. Because there is no safe level of lead in drinking water, setting delivery time frames based on how an individual sample compares to the lead action level is likely to contribute to this misinterpretation. The EPA's proposed delivery within three calendar days would allow all consumers whose taps were sampled for lead to be quickly notified of their results and informed of steps they can take to reduce exposure. Water systems would be required to deliver the notice either electronically (e.g., email or text message), by phone, hand delivery, by mail (postmarked within three days of the system learning of the results), or by another method approved by the State. Water systems that choose to deliver the notice by phone would be required to follow up with a written notice hand delivered or postmarked within 30 days of the water system learning of the results; the EPA notes that while the proposed LCRI preamble correctly described the EPA's intent, the regulatory text of the proposed rule incorrectly referred to written follow-up being required after either phone or electronic delivery and incorrectly referred to the time frame for written follow-up as three days. As noted in the proposed LCRI preamble, written follow-up would allow greater information accessibility and would

allow consumers to keep a copy of their results to use as a reference in the future, including the steps they can take to reduce exposure to lead in drinking water, and the other information provided in the notice. This written follow-up would also enable States to verify the content of the notice, which would be difficult to do if the notice were only delivered by phone.

ii. Copper

Under the LCRI, the EPA proposed to require water systems to provide consumer notice of an individual's copper tap sampling results (§ 141.85(d)). The proposed content requirements for this notice are described in section V.H.3 of the proposed LCRI (88 FR 84949, USEPA, 2023a), along with the EPA's rationale for introducing this new copper public education requirement. The EPA proposed the same three-calendar-day time frame and delivery methods for notification of copper tap sampling results as for lead. This allows for simplicity and administrative ease. In cases where copper samples are collected at the same time as lead, the EPA proposed to allow systems to combine the lead and copper results and required information into a single notice. This further simplifies implementation and reduces administrative burden.

c. Other Public Education Materials

i. Supplemental Monitoring and Notification

The EPA proposed to require systems to offer to sample the tap water for lead for any consumer served by a lead, GRR, or unknown service line that requests it (§ 141.85(c)). Since LSLs and GRR service lines increase the risk of exposure to lead in drinking water, the EPA believes this proposed requirement would encourage more people who are at greater risk of lead exposure to have their tap sampled to find out if there is lead in their drinking water and what actions they can take to reduce their risk of exposure. The EPA also proposed to require the system to notify consumers of the results of supplemental tap sampling so they are informed and can decide to take any needed steps to reduce their exposure to lead in their drinking water. Systems would be required to provide consumers with these results in the same three-day time frame required for results of compliance tap sampling in accordance with § 141.85(d).

ii. Public Education After a Lead Action Level Exceedance

Under the LCRI, the EPA proposed that water systems must conduct the public education activities under § 141.85(b)(2) for CWSs and § 141.85(b)(4) for NTNCWSs within 60 days of the end of the tap sampling period in which a lead action level exceedance occurred, even if an exceedance also occurred in the previous tap sampling period (*i.e.*, “a consecutive action level exceedance”). This would ensure that consumers receive information following every lead action level exceedance, instead of waiting 12 months where two lead action level exceedances were consecutive.

The EPA also proposed to clarify that water systems must repeat the public education activities until the system is at or below the lead action level, and that the calculated 90th percentile level at or below the lead action level must be based on at least the minimum number of required samples under § 141.86 in order for the system to be able to discontinue public education.

The EPA proposed to allow a State that grants an extension for a water system to conduct the public education activities, to make the deadline no more than 180 days after the end of the tap sampling period in which the lead action level exceedance occurred. The EPA also proposed to restrict the extension such that it would only apply to the public education activities in § 141.85(b)(2)(ii) through (vi) (*i.e.*, delivery of public education materials to public health agencies and other organizations; submitting a press release; implementing additional activities like public meetings) and would not apply to delivery of public education materials to consumers under § 141.85(b)(2)(i).

Under the LCRI, the EPA proposed to require the public education materials be delivered to every service connection address served, in addition to the bill paying customer. The EPA proposed this change to better ensure that renters receive this important information so that they can decide to take any needed steps to reduce their exposure to lead in drinking water.

The EPA also proposed revisions to clarify that CWSs must deliver “written” public education materials to customers and service connections, rather than limiting the delivery to only printed materials. Similarly, the EPA proposed revisions to clarify that the required content of public education materials would not only apply to printed materials, but written materials

more broadly. Written materials can include printed as well as digital materials delivered via email. The EPA proposed this update given the increasing use of electronic methods for accessing information and so that water systems can choose the most appropriate format for providing public education to the persons they serve.

The EPA proposed that States would only be allowed to approve changes to the content requirements of the public education materials if the State determines the changes are more protective of human health. The EPA proposed this revision to ensure that information provided in public education materials is most protective of human health and in recognition that some water systems may need to provide more tailored information to their community in order to provide greater public health protection (*e.g.*, systems with many lead, GRR, or lead status unknown service lines).

The EPA proposed to require the public education materials to include information about lead, GRR, and unknown service lines for systems that have lead, GRR, or unknown service lines. In addition to the required LSL information, the EPA proposed that systems must include information about replacing GRR service lines, identifying the material of unknown service lines, and accessing the service line replacement plan. Systems with known lead connectors or connectors of unknown material in their inventory would be required to include information in the public education materials about how consumers can access the inventory. The EPA also proposed to require that the public education materials include instructions for consumers to notify the water system if they think the service line material classification is incorrect. The EPA proposed to require all water systems, including NTNCWSs, to include information in the public education materials about lead in plumbing components and about how consumers can get their water tested, including information about the proposed provision of supplemental monitoring and notification in § 141.85(c).

The EPA also proposed requiring public education materials to include additional steps that consumers can take to reduce their exposure to lead in drinking water, including explaining that using a filter certified by an ANSI accredited certifier to reduce lead is effective in reducing lead levels in drinking water. (See section V.H.4 of the proposed LCRI (88 FR 84950, USEPA, 2023a) for additional revisions the EPA proposed to the public education

content requirements.) The EPA’s proposed revisions to the mandatory lead health effects language are described in section IV.J.2.d.i of this preamble.

iii. Public Education for Small System Compliance Flexibility Point-of-Use Devices

The EPA proposed moving the public education requirements for small water system compliance flexibility point-of-use devices from § 141.85 to § 141.93, so that the small system compliance flexibility provisions are all in the same rule section (see section IV.I of this preamble).

d. Requirements for Language Updates and Accessibility

i. Lead Health Effects Language

The EPA proposed to require the lead health effects language in public education materials to begin with a statement that there is no safe level of lead in drinking water. This was proposed to address concerns about water systems with detectable lead levels below the lead action level making statements that downplay or detract from the health effects language. The EPA reiterates that the lead action level is not a health-based level and there is no safe level of lead in drinking water. The agency previously established an MCLG for lead of zero.

The EPA also proposed revisions to the language to clarify that it identifies some and not all the health effects of lead, and to encourage consumers to consult their health care provider for more information about their risks. Health care providers are an important, trusted source of information about lead for consumers and are influential in encouraging consumers to take actions, particularly for those at highest risk from lead in drinking water (Jennings and Duncan, 2017; Griffin and Dunwoody, 2000). In addition to noting the risk to all age groups, the EPA proposed adding language to highlight the risks to pregnant people, infants (both formula-fed and breastfed), and young children. The EPA also proposed revisions to simplify the language so that it is easier for consumers to understand. The EPA proposed the following revised mandatory lead health effects language in the proposed LCRI:

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior

problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.

The same wording would be required for use in the health effects description in the public notifications for a lead action level exceedance and treatment technique violations as well as in the CCR.

ii. Translation Requirements

To ensure greater protection of consumers with limited English proficiency, the EPA proposed to require all the public education materials under 40 CFR 141.85 to include: (1) Information in the appropriate language(s) for the community the water system serves regarding the importance of the materials, and (2) contact information for persons served by the water system to obtain a translated copy of the materials or assistance in the appropriate language, or the materials must be translated into the appropriate language. This would be required for systems that serve a large proportion of consumers with limited English proficiency, as determined by the State.

3. Summary of Comments and the EPA's Response

a. Feasibility of Public Education Requirements

In the proposed LCRI, the EPA requested comment on the proposed determination that the public education treatment technique is feasible and prevents known or anticipated adverse health effects to the extent feasible. While some commenters agreed, others thought the proposed public education requirements did not go far enough to protect public health while still others thought they may overwhelm consumers and that the proposed time frames of some of the public education requirements (e.g., consumer notices of tap sampling results) were not feasible for many water systems. In light of these comments, the final LCRI includes revisions that make public education more health protective without reducing its efficacy, for example, by clarifying the required text about the risks of lead in drinking water and requiring more frequent public messaging about those risks and steps consumers can take to protect their health (see section IV.J.3.f of this preamble). The agency is also adjusting the time frame for consumer notices of tap sampling results to three business days (instead of the proposed

three calendar days) to be feasible for water systems, given the significant increase in notices required, while still ensuring that consumers receive information as quickly as feasible (see section IV.J.3.d of this preamble).

b. Streamlining Public Education Requirements

The EPA requested comment on additional ways to streamline public education and associated certification requirements. Commenters expressed concerns about the complexity of the public education and associated reporting requirements and the burden on water systems to conduct them. Some commenters suggested ways to simplify or streamline the public education and associated certification requirements by reducing the number of public education requirements or aligning due dates for public education reporting requirements. The EPA disagrees with reducing the number of public education requirements because they are necessary to inform consumers and prevent adverse health effects and the agency determined they are feasible (see section IV.J.1 of this preamble). However, the EPA agrees that streamlining public education reporting requirements would ease administrative burdens for both water systems and States. Thus, the EPA is combining deadlines for when water systems must report information about public education to the State (see section IV.N.1 of this preamble for the reporting requirements).

Some commenters suggested the EPA provide communication templates for water systems to assist them with conducting the public education requirements. The EPA agrees with this recommendation and intends to provide public education resources and templates to assist water systems and States.

Some commenters recommended requiring water systems to develop and submit a public education plan or communication strategy to the State to streamline regulatory reporting and State review and approval. Some commenters stated this would also help systems to have public education materials prepared ahead of time. While the EPA agrees that a public education plan could be helpful to water systems and encourages water systems to do so where appropriate, the agency is not introducing such a requirement at this time due to the additional administrative burden for water systems and States. In addition, the timing and need for certain public education can vary such as public education following a lead action level exceedance or

multiple lead action level exceedances, and it may not make sense for systems and States to spend limited resources on public education plans that will not be implemented.

c. Service Line Related Outreach

i. Required Public Education To Encourage Participation in Full Service Line Replacement

In the proposed LCRI, the EPA requested comment on whether the types and timing of outreach activities proposed for systems failing to meet the mandatory service line replacement rate are appropriate and whether other activities should be considered. Some commenters supported the proposed activities; some recommended requiring systems to do more of these activities than proposed and to require that at least one activity involve face-to-face contact. Some commenters requested more information on the required outreach activities, such as the options of conducting a social media campaign and visiting targeted customers. Some commenters cautioned against the EPA being overly prescriptive on the types of required activities, recommending that systems have flexibility to tailor outreach and community partnerships to their community, similar to some comments received regarding the additional proposed activities for systems with multiple lead action level exceedances (see section IV.K.2 of this preamble).

The EPA encourages water systems to conduct additional public outreach; however, the agency disagrees with requiring systems to conduct a greater number of activities than proposed because requiring water systems to conduct at least one additional activity if they do not meet the LSLR rate is sufficient to encourage customer participation in the service line replacement program without detracting from water systems' efforts to meet the other public education requirements and requirements of the LCRI more broadly. The proposed LCRI includes several other public education requirements that provide consumers with information about lead, GRR, and unknown service lines described in section IV.J.2.a of this preamble. Therefore, the EPA is finalizing the number and types of activities as proposed.

The EPA agrees with commenters about the effectiveness of direct customer and consumer contact in community outreach. AWWA's 2022 Lead Communications Guide and Toolkit and the LSLR Collaborative describe direct customer and/or

consumer contact as particularly effective methods of communicating about LSLR (AWWA, 2022; LSLR Collaborative, n.d.e). That is why the LCRI includes several options for face-to-face activities, including conducting a public meeting, participating in a community event, and visiting targeted customers. However, the EPA also agrees with commenters that the requirements should not be overly prescriptive and that water systems should have flexibility to develop an activity that works best for their community. During the Small Business Advocacy Review for the proposed LCRI, the EPA also received feedback that face-to-face contact is particularly effective for engaging smaller communities, especially those with a higher percentage of older adults (USEPA, 2023j). However, this might not be the most appropriate option for a larger system, which might determine that a social media campaign and visiting targeted customers is more appropriate. Therefore, the LCRI offers a variety of activities for systems to choose from so that they can tailor the outreach to the community they serve.

While some commenters requested more information about what kind of social media campaign would meet the outreach requirement (e.g., the number or frequency of social media posts, the types of social media networks), the EPA decided not to prescribe this level of detail as it will depend on the water system and community as well as the social media platform chosen to distribute information. A water system may consider collaborating with community partners and/or conducting a focus group with community members to determine what kind of social media campaign would be most effective for the community it serves.

Some commenters recommended removing the options to visit targeted customers or to send certified mail to all customers and consumers served by LSLs and GRR service lines, noting that these would be time intensive and expensive for water systems. Some commenters also noted that customers ignore certified mail rendering it ineffective. Given the benefits of face-to-face contact, the EPA disagrees with commenters who recommended removing visiting targeted customers as an option. Water systems for which this option is not feasible have many other options to choose from in the rule. The EPA also disagrees with recommendations to remove certified mail as an option; the purpose of certified mail as an option is to offer another opportunity for mailed public education about the replacement

program and to ensure that the consumer receives it. Systems that find certified mail not to be an effective method of outreach in their communities can choose another option. The EPA is retaining these options because they are necessary to provide flexibility for system outreach that best meets the needs of their community.

Some commenters said the number of outreach activities required should depend on system size. The EPA proposed and maintained in the final LCRI requirements based on system size including that systems serving 3,300 or fewer persons must conduct at least one of any of the activities listed in § 141.85(h) while systems serving more than 3,300 persons must conduct at least one of the activities from § 141.85(h)(2)(i) through (iv) or at least two of the activities from § 141.85(h)(2)(v) through (viii).

Some commenters requested clarification on when systems can discontinue the outreach activities. The EPA notes that a water system can discontinue the activities once the system meets the required replacement rate or after there are no lead, GRR, or unknown service lines remaining in the inventory, whichever occurs first. For example, a water system that has only replaced 35 percent by Year 4 of the LSLR program would not meet the required rate and therefore would have to start conducting the additional outreach activities. The water system would have to be back on track with at least 50 percent replaced by the end of Year 5 to discontinue the activities.

Some commenters expressed concerns with the proposed requirement for additional outreach being imposed as a penalty for systems that fail to meet the replacement rate. The EPA clarifies that the purpose of the additional outreach is to help water systems achieve greater customer participation in their LSLR programs so that they can get back on track towards replacing all LSLs in 10 years. LSLR programs that incorporate extensive community outreach have demonstrated how effective public education can be in increasing LSLR participation (Klemick et al., 2024; City of Detroit, 2023; LSLR Collaborative, n.d.d). To clarify this intention in the final rule, the EPA is calling this requirement “Outreach activities to encourage participation in full service line replacement” rather than the proposed “Outreach activities for failure to meet the lead service line replacement rate.”

ii. Notification of Service Line Material

The EPA requested comment on whether to require additional public

education requirements to encourage service line replacement faster than the 10-year replacement deadline. Some commenters recommended maintaining the notification of a lead, GRR, or unknown service line requirement as annual, while some commenters recommended increasing the frequency to every six months. In contrast, some commenters questioned whether increased frequency of this notification would have an impact on public health. In the final rule, the EPA is maintaining the notification as annual. Between this annual notification and other requirements for water systems to provide information about the publicly available service line inventory and service line replacement plan (e.g., CCR, public education after a lead action level exceedance) and the requirement for systems to offer to sample the tap for lead for any consumer served by a lead, GRR, or unknown service line who requests it, the EPA believes these public education requirements will encourage swift service line replacement without overburdening water systems and detracting from their efforts to identify and replace LSLs.

The EPA also requested comment on whether the agency should require systems to annually notify consumers if they are served by a lead connector, similar to the required notifications for sites with lead, GRR, or lead status unknown service lines. Some commenters recommended requiring notification of a lead connector. Some commenters said if lead connectors are required in the service line inventory, notifying the consumer should also be required. However, some commenters said if lead connectors are not actively required to be replaced, then systems should not be required to notify consumers of their presence. In the final rule, the EPA is not requiring annual notification of lead connectors to individuals served by lead connectors. For the final LCRI, the EPA is requiring water systems to include identified connectors in their service line inventory (see section IV.D.1 of this preamble). Consumers have access to the publicly available service line inventories to determine if they are served by a lead connector. Information about how to access the service line inventory is required in notifications of a service line that is known to or may potentially contain lead, public education materials provided after a lead ALE (see section IV.J.4.c of this preamble), and the widely distributed CCR (see section IV.O.1 of this preamble). The EPA is also maintaining the requirement for water systems to

replace lead connectors as encountered (see section IV.B of this preamble). Given the differences in how service lines and connectors are required to be identified and replaced and their associated risks of lead exposure, the EPA determined that it is sufficient to require water systems to provide consumers with information on how they can access the inventory to find out if they are served by a lead connector rather than requiring an annual notification of connector material. The EPA is requiring notifications for persons served by a lead, GRR, or lead status unknown service line to raise awareness to consumers that they are consuming drinking water served by a service line that may contribute lead to drinking water, educate them about identification and replacement (therefore likely increasing replacement participation), and steps they can take to reduce exposure to lead in drinking water. The EPA is not requiring water systems to identify all lead connectors in their distribution system, unless they can be identified through available information, and is requiring water systems to replace lead connectors when encountered. This is because lead connectors are expected to contribute less to exposures from lead in drinking water when compared to LSLs because they are shorter in length and to enable water systems to prioritize funding and staffing resources towards replacement of lead and GRR service lines and identifying unknown service lines. Providing direct notification to consumers with lead connector materials would provide limited information in terms of location (for those with unknown connectors) and replacement opportunities.

iii. Notification of a Service Line Disturbance

The EPA received comments on the requirement for notification of a disturbance to a lead, GRR, or unknown service line. The EPA proposed in the LCRI to require notification, including providing public education materials and flushing instructions, to customers and persons served by the water system that are served by a lead, GRR, or unknown service line following actions taken by a water system that cause a disturbance to the service line. The EPA proposed that this includes actions that result in a shut off or bypass of water to an individual or group of service lines such as operating a valve on a service line or meter setter, or reconnecting a service line to the main. The EPA proposed that water systems must provide filters when the disturbance results from the

replacement of an inline water meter, water meter setter, or connector, and requested comment on whether to require provision of filters for disturbances resulting from replacement of a water main, in addition to the proposed requirement for public education materials and flushing instructions. Some commenters expressed support for providing filters for disturbances caused by water main replacement, noting that lead releases from these disturbances are unpredictable and flushing would not suffice. Other commenters were opposed to any notification requirement for disturbances caused by water main replacement, expressing concerns that water systems would have to provide notification on multiple occasions since water main replacement can be a multi-day process.

The EPA is requiring that when the water main replacement results in a service line being physically cut, water systems must provide persons served at that service connection with a pitcher filter or point-of-use device certified by an ANSI accredited certifier to reduce lead, instructions to use the filter, and six months of filter replacement cartridges, in addition to the proposed public education materials and flushing instructions. Water systems would provide the filters to consumers at the same time as the public education materials and flushing instructions so such a requirement would not require any additional outreach effort. In the final rule, the EPA is requiring provision of filters for disturbances to a lead, GRR, or unknown service line caused by replacement of an inline water meter, water meter setter, connector, or water main to increase public health protection since all these replacements involve cutting pipe, which can cause lead releases in the water when LSLs or GRR service lines are present (Lewis et al., 2017; Camara et al., 2013; Del Toral et al., 2013).

Some commenters supported the proposed revision to add significant disturbances caused by inventorying efforts to the types of disturbances that would require notification. However, other commenters perceived this designation as being too open-ended, stating that compliance would be infeasible and that there is not a technical basis for this proposed requirement. For these reasons, they recommended removing the proposed regulatory text “or other actions that cause a disturbance to a service line or group of service lines, such as undergoing physical action or vibration that could result in pipe scale dislodging and associated release of

particulate lead.” The EPA is maintaining the proposed requirement in the final rule. First, the EPA disagrees with the claim that there is no technical basis for this requirement. Field methods used for inventory efforts can disturb a service line or group of service lines such that lead is released and puts consumers at risk of exposure to lead in drinking water (Hensley et al., 2021). The regulatory text specifies actions that result in “pipe scale dislodging and associated release of particulate lead” that would put consumers at increased risk of lead exposure and therefore necessitate notifying consumers so they can decide to take precautions to prevent adverse health effects. It is for these same technical reasons that the EPA included recommendations in the agency’s LCRR inventory guidance to notify consumers about the potential for temporarily elevated lead levels and provide them with information about reducing lead levels following an LSL or GRR disturbance during excavation (USEPA, 2022c). Second, the EPA believes it is feasible for water systems to notify consumers when there is a disturbance to a service line or group of service lines that could result in pipe scale dislodging and associated release of particulate lead and disagrees that this type of disturbance is too broad for water systems to comply with the requirement. However, the EPA is making the following small correction to the punctuation in the final regulatory text “or other actions that cause a disturbance to a service line or group of service lines, such as undergoing physical action or vibration, that could result in pipe scale dislodging and associated release of particulate lead” to clarify that the agency is specifically referring to disturbances resulting in pipe scale dislodging and associated release of particulate lead whereas the proposed regulatory text could have been interpreted as any disturbances to a service line or group of service lines.

Some commenters expressed concerns about the feasibility of notifying a customer before returning the line to service or within 24 hours if the customer does not reside at the service connection (e.g., a customer who is a property owner and renting their property). The EPA agrees with these concerns, and in the final rule, the agency is allowing water systems up to 30 days after the disturbance to notify customers who are not at the service connection (i.e., non-resident property owner) since they would not likely be consuming the water and therefore would not likely be exposed to the potentially elevated lead levels caused

by the disturbance. Although a non-resident customer may not be at risk of exposure (such as a rental property owner), it is appropriate to notify the customer if infrastructure work is conducted on their property. In addition, there may be situations where the non-resident customer could consume drinking water at their property. Water systems must still notify persons at the service connection of the disturbance before the service line is returned to service or within 24 hours of the disturbance if service was not shut off or bypassed.

d. Individual Notification of Tap Sampling Results

In the proposed LCRI, the EPA requested data, analyses, and comments on the proposed determination that water systems are capable of providing consumer notices of individual tap sampling results within three calendar days of learning of those results, regardless of whether the results exceed the lead or copper action level, or if a longer time frame is needed (e.g., three business days, seven calendar days, 14 calendar days). Many commenters expressed concerns with the feasibility of the proposed three calendar-day time frame, particularly if a system receives results before a weekend or holiday, and recommended the EPA extend the deadline for systems to deliver consumer notice of lead and copper tap sampling results, including on-request. Suggested time frames included three business days, five business days (or seven calendar days), 10 days, 14 days, or 30 days for all results. Some commenters recommended allowing more time for results that do not exceed the action level or the practical quantitation limit. On the other hand, some commenters recommended maintaining the proposed three calendar days for notification of all results or shortening the time frame to 24 hours.

The EPA disagrees with including different timeframes based on lead levels found as there is no safe level in drinking water and consumers should be made aware of any lead in their individual tap sample results as soon as possible. There is no safe level of lead in drinking water and while the tap sampling protocol is designed to inform assessment of CCT, as discussed above an individual tap could potentially represent water being consumed by individuals and therefore individual results are useful to provide to the consumer. Recognizing implementation concerns, the EPA determined having a single time frame for delivery of notifications simplifies implementation and reporting. In addition, providing all

tap sample results in the same, timely manner is important to build trust with consumers who often must be willing to participate in the sampling. After considering public comments and the increased number of consumer notifications of tap sampling results required under the LCRI, the EPA has determined that it may not be feasible for water systems to provide consumer notification within three calendar days. Therefore, the final rule requires water systems to provide consumer notice of lead or copper tap sampling results as soon as practicable but no later than three business days of the system learning of the results. Three business days rather than three calendar days alleviates concerns raised about notification requirements on weekends and holidays, recognizing water systems may not have staff available to conduct notification. This is the same time frame regardless of lead or copper levels and includes both tap sampling results from lead and copper tap water monitoring carried out under the requirements of § 141.86 as well as consumer-requested tap sampling results from supplemental tap water monitoring carried out under the requirements of § 141.85(c). The EPA notes that there are many approved delivery methods for this notification, including electronic delivery (e.g., email, text message, notification in water system portal) so that water systems can choose the most suitable option for the persons they serve and so that they are able to meet the three business day time frame.

Some commenters noted a discrepancy between the preamble and regulatory text with regards to the proposed written follow-up that would be required for systems that deliver the notice orally by phone. The preamble to the proposed rule correctly stated that written follow-up would be required for notices delivered by phone within 30 days of the system learning of the results. The regulatory text incorrectly referred to this written follow-up as being required for notices delivered by phone or electronically, and also incorrectly stated that it would be required within three days of the system learning of the results. The EPA corrected this in the final rule which requires written follow-up only for notices delivered by phone call or voice message since this would be an oral communication and consumers need access to a written copy of the results and other information such as steps to reduce their risk of exposure to lead in drinking water. The purpose of allowing water systems to deliver the notification by a voice phone call is to make it easier

for systems to notify consumers of their tap sampling results as quickly as possible within three business days, since some systems may not be able to deliver the notice using other methods such as mail within this time frame or other methods such as electronic delivery may not be appropriate for their community. The final rule requires this written follow-up within 30 days, and not three days, as the latter would defeat the purpose of the phone delivery option and would be redundant with a system simply delivering the written notice within three business days, which is already an option.

Some commenters requested clarification on when the delivery time frame begins, and specifically when a water system is considered to have “learned of” the results. This can vary for water systems depending on how the water system learns of the results. Some systems have their own labs where they know the results as soon as their labs analyze the samples. Other systems send their results to private labs, and the systems would learn of the results potentially by mail, fax, email, or other means. The EPA is not prescribing how systems must learn of the results. In any case, once the system learns of the results, it then has up to three business days to deliver the consumer notice. Some commenters requested clarification on the time frame for copper tap sampling results and on-request sampling results. The EPA notes that the same notification time frame applies to all lead and copper sampling results. In cases where copper samples are collected at the same time as lead, systems can combine the lead and copper results and required information into a single notice. The EPA expects that this would simplify implementation by allowing systems to deliver both the lead and copper results and associated required information at the same time.

Some commenters appeared to conflate the notice of individual tap sampling results with the Tier 1 public notification that is required within 24 hours of a systemwide lead action level exceedance (based on the 90th percentile calculation). The EPA notes that this requirement concerns tap sampling results from an individual site and is different from the 90th percentile calculation of a system’s lead levels, which requires 24-hour public notification (see section IV.O.2 of this preamble), and public education within 60 days when there is a systemwide lead action level exceedance (see section IV.J.4.c.ii of this preamble).

e. Supplemental Monitoring and Notification

In the proposed LCRI, the EPA requested comment on whether the proposed requirement for water systems to offer lead sampling to consumers with lead, GRR, or unknown service lines in the notice of service line material is effective at reducing adverse health effects. The EPA also requested comment on the proposed requirement for water systems to deliver consumer-initiated test results within three calendar days of obtaining those results. Some commenters agreed that offering lead sampling is effective at reducing adverse health effects. However, some commenters expressed concerns with the burden on water systems relative to the level of risk reduction the proposed requirement could achieve. Some noted that it would be difficult for water systems to budget for an uncertain amount of sampling and recommended a cap on the number of samples that the water system would have to pay for or a cap on water system spending on consumer-requested sampling. Some commenters recommended only offering sampling to persons served by LSLs and GRR service lines, but not unknowns. Some commenters requested clarification on what exactly it means for a water system to “offer” sampling and whether the water system would be required to pay for analyzing the sample. Some commenters stated that the rule should specify that this sampling be done at no charge to the individual consumer. The EPA also requested comment on the proposed requirement for water systems to deliver consumer-initiated test results within three calendar days of obtaining those results. Some commenters supported the three-day time frame proposed for delivery of consumer-requested sampling results, while others expressed concerns noting that it would disincentivize systems from offering free lead testing to consumers.

The EPA agrees with commenters that offering lead tap sampling to consumers with lead, GRR, or unknown service lines is effective at reducing adverse health effects and disagrees with commenters that it has limited risk reduction relative to the burden on water systems. As stated in the proposal, lead and GRR service lines can increase the risk of exposure to lead in drinking water (88 FR 84878, 84950, USEPA, 2023a). This requirement will encourage more people who are at greater risk of lead exposure to have their tap sampled to find out if there is lead in their drinking water and what actions they can take to reduce their risk

of exposure, thereby reducing adverse health effects. The EPA disagrees with withholding the offer for lead sampling from consumers served by unknown service lines as they may also potentially contain lead which increases the risk of exposure for these consumers. The EPA does not agree that this requirement has limited risk reduction relative to the burden on water systems. This requirement could be implemented similarly to other lead tap sampling regularly conducted by the water system such as providing consumers with sampling materials and instructions, collecting tap samples, analyzing samples in-house or commercially, and informing consumers of the results. The rule also provides that consumer-requested sampling does not have to conform to compliance sampling requirements to provide flexibility and meet the needs of consumer requests; however, at sites served by a lead, GRR, or lead status unknown service line the samples must capture both water in contact with premise plumbing and water in contact with the service line. With regards to who bears the cost of consumer-requested sampling, as described in the LCRI proposal, the requirement to offer sampling does not address how a water system would cover the cost of the sampling. The EPA does not direct how a water system covers the costs of compliance with a NPDWR as this is, at its core, a matter of State and local law. State and local governments regulate how water systems allocate costs for services provided to their customers. Therefore, the final rule does not include any specifications as to the entity responsible for the cost of consumer-requested sampling. (See section IV.J.4.b of this preamble about the time frame for delivery of lead tap sampling results).

f. Public Education After a Lead Action Level Exceedance

In the proposed LCRI, the EPA requested comment and supporting data on the capacity of water systems to conduct some or all of the required public education activities in 30 days, or another period of time that is less than 60 days, after the end of the tap sampling period in which a systemwide lead ALE occurs. Most commenters recommended maintaining the time frame as 60 days after the end of the tap sampling period in which the lead ALE occurred, stating that a shorter time frame of 30 days would be difficult or would not be feasible for many systems. However, some commenters stated it would be feasible to conduct the public education requirements within 30 days.

Some commenters recommended that the EPA consider increasing the time frame to 90 days. Some commenters recommended requiring different time frames based on the size of the system and also different time frames for the different public education activities required after a lead ALE (e.g., different time frames for delivery of public education materials to consumers and organizations, submitting a press release, etc.).

The EPA is maintaining the 60-day time frame for conducting public education after a lead ALE. The EPA believes that systems need the 60 days after the end of the tap sampling period to develop and/or update public education materials, consult with the State, identify the organizations that they need to share these materials with, plan activities (e.g., public meetings, public service announcements) in consultation with the State, and submit a press release, among other public education tasks required under § 141.85(b)(2) for CWSs and § 141.85(b)(4) for NTNCWSs. Given the increase in lead ALEs that may occur as a result of the reduced lead action level and revised tap sampling protocol, water systems will likely have more ALEs leading to the need to conduct more public education, in addition to the 24-hour Tier 1 public notification of a lead ALE. For this reason, the EPA disagrees with shortening the deadline for conducting public education. In addition, since the PN Rule requires all water systems to conduct public notification within 24 hours of the system learning of a lead ALE, consumers will have already received information about the situation, potential adverse health effects, and actions they should take. The EPA disagrees with increasing the time frame to 90 days as water systems have demonstrated for decades their ability to conduct the public education requirements within 60 days, and the rule already allows water systems to apply to States for an extension if they are unable to meet this time frame. The extension would only apply to the activities in § 141.85(b)(2)(ii) through (vi) for CWSs (or § 141.85(b)(4)(i) and (ii) for NTNCWSs) and would not apply to delivery of public education materials directly to consumers under § 141.85(b)(2)(i) because, as demonstrated by the many years this requirement has been in place, it is feasible for systems to distribute public education materials to consumers within 60 days. The EPA disagrees with requiring different time frames for conducting the public education

requirements based on system size as the rule already includes fewer public education requirements for systems exceeding the lead action level that serve 3,300 or fewer persons (see § 141.85(b)(9) of the LCRI).

The EPA received many comments on the content of public education materials, including both public education materials after a lead ALE as well as other public education materials that require some of the same content. Some commenters expressed concerns about water systems including incorrect or misleading information in public education materials about the safety of their drinking water. The EPA notes that the rule specifies that if water systems include additional information in public education materials beyond what the EPA has required, this additional information must be consistent with the required information. Any changes made to required information must be approved by the State as more protective of human health. In addition, water systems are required, and have been required since 2007, to provide States with a copy of all public education materials required under § 141.85 prior to delivery, in accordance with § 141.85(a)(1). This means that States should be aware of any incorrect or misleading statements that systems include in public education materials and have a chance to intervene to ensure the information is corrected prior to delivery to consumers. Additionally, the State may require the system to submit for review and approval the content of the materials prior to delivery. This is specified under § 141.85(a)(1) of the rule; however, there is not a corresponding reporting requirement in § 141.90(f), which may lead systems and States to overlook this requirement. To ensure systems and States are aware of this existing requirement and thereby encourage stronger rule implementation, in the final LCRI the EPA has added a reporting requirement to § 141.90(f) that reiterates this same requirement for systems to submit copies of public education materials to the State prior to delivery. This State oversight should be adequate to help ensure that public education materials do not include inaccurate information about lead in drinking water and thereby provide for greater public health protection. The EPA also believes that the proposed revisions made to the lead health effects language that the EPA is finalizing, including requiring an explicit statement that there is no safe level of lead in drinking water, will help ensure that consumers have a more accurate

understanding of the risks of lead in their drinking water.

Some commenters recommended adding language to public education materials about the risk of lead exposure even when tap results at a given point in time do not detect lead. The EPA also heard these concerns from some NDWAC members in the NDWAC Public Meeting on the final LCRI (NDWAC, 2024). In response to commenters' concerns, the EPA has updated the content requirements for public education materials in § 141.85(a)(1)(iii)(B) to require water systems to explain that lead levels may vary and therefore lead exposure is possible even when tap sampling results do not detect lead at one point in time, in addition to the requirements to provide information on the sources of lead in drinking water. This information would apply to any public education materials that are required to meet the content requirements of § 141.85(a)(1)(iii)(B), which include the consumer notice of lead tap sampling results, public education distributed after a systemwide lead action level exceedance, and public education distributed by systems that do not meet the mandatory LSLR rate. The EPA is also requiring the CCR to include similar information in its informational statement about lead. The EPA believes that this added information will also help to ensure that consumers have a more accurate understanding of the risks of lead in their drinking water so they can decide whether to take additional protective measures and which ones are appropriate for their situation (*e.g.*, remove lead plumbing, remove LSL, use a filter certified to reduce lead).

The proposed LCRI would have required CWSs to deliver public education and DSSA information to local and State health agencies by mail or another method approved by the State, similar to the 2021 LCRR (see § 141.85(i)). Some commenters recommended that water systems be allowed to deliver these materials by email, noting that email would make it easier to reach the appropriate person and attach data. The EPA agrees with commenters that email delivery of this information would facilitate data sharing and therefore the agency has added email as an allowed delivery method in the final rule.

g. Translation of Public Education Materials

The EPA proposed to require all public education materials under § 141.85 to include (1) information in the appropriate language(s) regarding

the importance of the materials, and (2) contact information for persons served by the water system to obtain a translated copy of the materials, request assistance in the appropriate language, or the materials must be translated into the appropriate language.

Many commenters supported the proposed translation requirements to help overcome language barriers and make public education materials about lead in drinking water more accessible and understandable to a wider community, noting that they would support greater environmental justice. Some commenters requested clarification on the meaning of a "large proportion" of consumers with limited English proficiency. The rule specifies that this proportion is determined by the State; moreover, this phrase has been a part of the LCR since 2007 (72 FR 57782, USEPA, 2007a) and the same phrase has been used in the CCR Rule (§ 141.153(h)) and PN Rule (§ 141.205(c)(2)) translation requirements after which this provision was originally modeled. Some commenters requested clarification on what constitutes "limited English proficiency." As stated in the proposed LCRI preamble, individuals with limited English proficiency include those who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English.

In the proposed LCRI, the EPA requested information and data on when a system provides translated materials to consumers with limited English proficiency, what resources are used to translate materials (*e.g.*, State resources, community organizations), and what barriers water systems may face in providing accurate translated materials. The EPA also requested comment on whether the agency should require States, as a condition of primacy, to provide translation support to water systems that are unable to do so for public education materials to consumers with limited English proficiency.

Some commenters supported requiring States to provide translation assistance to systems, while others were opposed and expressed concerns about cost and expertise for many States. Some commenters noted States have had difficulty with acquiring translation services for public notices and also expressed concern with the accuracy of translation services that water systems obtain on their own. Some commenters said it would be infeasible for States to provide translated public education materials to consumers without additional EPA assistance. The EPA received many comments requesting

that the agency provide translation resources and translated templates to assist water systems and States. The EPA intends to provide templates of public education materials that provide greater accessibility to consumers, including in multiple languages to assist water systems. In response to commenters' concerns about States' capacity to provide translation support, the EPA is requiring that States provide technical assistance to systems in communities with a large proportion of consumers with limited English proficiency, as a condition of primacy for the LCRI. This is consistent with the EPA's Final CCR Rule Revisions, which include a similar requirement (89 FR 45980, USEPA, 2024c). The EPA believes that it should be feasible for States to provide technical assistance to water systems. Depending on the State's capacity, this could be as simple as providing resources for water systems to translate their public education materials, including EPA-provided translations of required content for public education materials (*e.g.*, health effects language, definitions) and translated templates of public education materials through a website. This can also include providing water systems with information on how consumers can contact the State for translation assistance upon request.

4. Final Rule Requirements

a. Service Line Related Outreach

i. Required Public Education To Encourage Participation in Full Service Line Replacement

In the final LCRI, the EPA is requiring, as proposed with minor revisions, outreach activities to encourage customer participation in full service line replacement for CWSs that do not meet the mandatory service line replacement rate calculated across a cumulative period as required under § 141.84(d)(5). For the final LCRI, the EPA is revising the proposed requirement to account for the change from a rolling three year period to a cumulative period (see section IV.B of this preamble). These water systems must conduct the outreach at least once in the year following the calendar year for which the system does not meet their cumulative average replacement rate and annually thereafter until the water system meets the replacement rate or until there are no lead, GRR, or unknown service lines remaining in the inventory, whichever occurs first. The EPA is also revising the proposed requirement to specify that it only applies to CWSs, whereas the proposed requirement would have applied to all

water systems that do not meet the service line replacement rate. In the final rule, CWSs serving more than 3,300 persons must conduct at least one of the following activities to discuss their service line replacement program and opportunities for replacement and to distribute public education materials:

- Conduct a public meeting;
- Participate in a community event to provide information about its service line replacement program;
- Contact customers by phone call or voice message, text message, email, or door hanger; or
- Use another method approved by the State to discuss the service line replacement program and opportunities for replacement.

Alternatively, CWSs serving more than 3,300 persons must conduct at least two of the following activities:

- Send certified mail to customers and persons served by LSLs or GRR service lines to inform them about the water system's service line replacement program and opportunities for replacement;
- Conduct a social media campaign;
- Conduct outreach via the media including newspaper, television, or radio; or
- Visit targeted customers (*e.g.*, customers in areas with lower service line replacement participation rates) to discuss the service line replacement program and opportunities for replacement.

CWSs serving 3,300 persons or fewer must conduct at least one activity from either set of options. The final rule excludes NTNCWSs from this requirement as a NTNCWS would likely own its entire system and therefore would not likely have consumers to engage with. In the proposed rule, one of the activities included conducting a townhall meeting; the final rule revised this to be a public meeting more generally since a townhall meeting may imply government involvement. The option to send certified mail to customers and persons served by lead or GRR service lines to inform them about the water system's service line replacement program and opportunities for replacement is separate from, and cannot be substituted by, the notification of service line material required under § 141.85(e).

ii. Notification of Service Line Material

In the LCRI, the EPA is finalizing the clarifications to the requirement for water systems with lead, GRR, or unknown service lines in their inventory to notify customers and consumers if they are served by one of these service lines, as proposed. The

EPA is requiring the same notification content requirements for lead and GRR service lines since both increase the risk of exposure to lead. In addition, all notices (lead, GRR, and unknown service lines) are required to include information about accessing the service line replacement plan and steps consumers can take to reduce exposure to lead in drinking water. These notices must meet the requirements of § 141.85(a)(1)(iv) which contains finalized revisions to update content requirements, including information about using a filter certified to reduce lead. The public education materials for lead and GRR service lines must include instructions for consumers to notify the water system if they think the material categorization is incorrect (*e.g.*, if the service line is categorized as lead in the inventory but is actually non-lead). Water systems must follow up with consumers that notify the water system that they think the material is incorrect, verify the correct service line material, and update the inventory as appropriate (see section IV.D of this preamble). In addition, the notice must include a statement that water systems must offer to sample the tap water of any consumer served by a lead, GRR, or unknown service line who requests it in accordance with § 141.85(c).

iii. Notification of a Service Line Disturbance

Notification of service line disturbance is required following actions taken by a water system that cause a disturbance (§ 141.85(g) of the proposed LCRI but updated to § 141.85(f) in the final LCRI). This includes actions that result in a shut off or bypass of water to an individual service line or a group of service lines (*e.g.*, operating a valve on a service line or meter setter, or reconnecting a service line to the main). This can also include other actions that cause a disturbance to a service line or group of service lines, such as undergoing physical action or vibration, that could result in pipe scale dislodging and associated release of particulate lead (*e.g.*, disturbances following inventorying efforts). For these disturbances, water systems are required to provide persons at the service connection with public education materials and instructions for a flushing procedure to remove particulate lead.

For some disturbances, water systems are required to provide persons at the service connection with public education materials and pitcher filters or point-of-use devices certified by an ANSI accredited certifier to reduce lead, along with filter instructions and filter

replacement cartridges. This is the case when the disturbance results from the replacement of an inline water meter, water meter setter, or connector. Under the final rule, the EPA has added a requirement that water systems must also provide filters when the disturbance results from the replacement of a water main whereby the service line pipe is physically cut (§ 141.85(f)(2)). The EPA is requiring distribution of filters in these situations because disturbances that involve physically cutting a service line that is known to or may potentially contain lead are particularly at risk of causing elevated lead levels in the drinking water (Lewis et al., 2017; Camara et al., 2013; Del Toral et al., 2013). In the final rule, the EPA is also requiring that water systems provide instructions for a flushing procedure to remove particulate lead for these disturbances so that persons at the service connection are provided this additional information for reducing lead in drinking water.

In the final rule, the public education materials provided after a disturbance must meet the content requirements in § 141.85(a)(1)(ii) through (iv), which describe health effects of lead and steps consumers can take to reduce their exposure, as proposed. The EPA is also requiring the public education materials to include the information on lead, GRR, and unknown service lines specified in § 141.85(a)(1)(vi) so that customers and persons at the service connection receive information about opportunities for replacing lead and GRR service lines and identifying the material of unknown service lines.

Water systems that cause a disturbance to a lead, GRR, or unknown service line are required to notify persons both at the service connection and customers. Water systems must notify persons at the service connection of the disturbance before the service line is returned to service or within 24 hours of the disturbance if service was not shut off or bypassed. In the final rule, the EPA is providing water systems up to 30 days after the disturbance to notify customers who do not reside at the service connection (e.g., a customer who is a property owner and renting their property) since they would not be consuming the water and therefore would not be exposed to the potentially elevated lead levels caused by the disturbance but should still be notified since the disturbance affects their property.

b. Individual Notification of Tap Sampling Results

i. Lead

The EPA is finalizing the requirement for water systems to provide notification to consumers of their individual lead tap sampling results within three business days of learning of the results. The EPA revised the proposed requirement from three calendar days to three business days for the final rule. This includes notification of results from compliance tap sampling as well as consumer-requested sampling in accordance with § 141.85(d) and (c), respectively. The same time frame applies to all lead levels, regardless of whether an individual sample's lead levels exceed 0.010 mg/L (the lead action level). Water systems can deliver the notice either electronically (e.g., email or text message), by phone call or voice message, hand delivery, by mail (postmarked within three business days of the system learning of the results), or by another method approved by the State. Water systems that choose to deliver the notice orally by phone would be required to follow up with a written notice hand delivered or postmarked within 30 days of the water system learning of the results. In addition to including the proposed content requirements, the final rule also requires the notice of lead tap sampling results to include information about possible sources of lead in drinking water that meets the requirements of § 141.85(a)(1)(iii)(B), which includes explaining that lead exposure from drinking water is still possible even if tap sampling results do not detect lead at one point in time. This is in addition to the other information that the EPA is requiring in the final LCRI, including the mandatory lead health effects language provided in § 141.85(a)(1)(ii) and steps consumers can take to reduce their risk of exposure provided in § 141.85(a)(1)(iv), among other information.

ii. Copper

Water systems must also provide notification to consumers of their individual copper tap sampling results within three business days of learning of the results. The EPA is requiring the same delivery methods for notification of copper tap sampling results as for lead. In cases where copper samples are collected at the same time as lead, systems can combine the lead and copper results and required information into a single notice. Similar to the notice of lead tap sampling results, the notice of copper tap sampling results must include the results of copper tap water

monitoring for the tap that was tested, an explanation of the health effects of copper as provided in appendix B to subpart Q of part 141 (Standard Health Effects Language for Public Notification), a list of steps consumers can take to reduce exposure to copper in drinking water, and contact information for the water system. The notice must also provide the MCLG and the action level for copper, both of which are 1.3 mg/L, and the definitions for these two terms from § 141.153(c).

c. Other Public Education Materials

i. Supplemental Monitoring and Notification

The EPA is finalizing the requirements, as proposed, for water systems to offer to sample the tap for lead for any consumer served by a lead, GRR, or unknown service line that requests it. Systems must deliver results of this on-request sampling in the same time frame of three business days required for results of compliance tap sampling. The EPA revised the proposed requirement from three calendar days to three business days. The EPA is finalizing flexibility for water systems to determine the sampling protocol for this supplemental monitoring, as proposed in the LCRI. For sites with a lead, GRR, or unknown service line, the sampling must capture the water stagnant in the service line as well as any premise plumbing (e.g., first- and fifth-liter samples, sequential sampling, flush samples); however, the water system can determine the particular sampling protocol to capture water in the service line and premise plumbing.

The EPA is also clarifying in the final rule that when there is a systemwide lead action level exceedance, water systems must offer to sample the tap for lead for any consumer that requests it, and not just customers. As noted above, results of this on-request sampling must be delivered within three business days.

ii. Public Education After a Lead Action Level Exceedance

Under the final LCRI, CWSs that exceed the lead action level must deliver public education materials to bill paying customers and every service connection address served, as proposed. The public education materials must be written, meaning they can be printed (i.e., delivered by mail or hand) or electronic (i.e., delivered by email) materials. However, the public education cannot be oral (i.e., delivered by phone call or voice message), unless this is done in addition to one of the other allowed delivery formats. The

EPA is requiring CWSs to conduct the public education activities under § 141.85(b)(2) and NTNCWSs to conduct the public education activities under § 141.85(b)(4) within 60 days of the end of the tap sampling period in which the exceedance occurred (*i.e.*, June 30 or December 31 for standard monitoring, or September 30 or the last day of an alternative four-month tap sampling period approved by the State for annual and reduced monitoring). The public education activities must always be conducted within this 60-day time frame, instead of allowing systems to wait 12 months to conduct public education when there are consecutive action level exceedances as previously required. If a State grants an extension for a water system to conduct the public education activities, the deadline must not extend beyond six months after the end of the tap sampling period in which the lead action level exceedance occurred. Extensions can only be granted for the activities in § 141.85(b)(2)(ii) through (vi) for CWSs and the activities in § 141.85(b)(4)(i) and (ii) for NTNCWSs. The proposed rule inadvertently left out this extension provision for NTNCWSs; therefore, the final rule includes a technical correction to reinstate the extension provision for NTNCWSs. These requirements in the final LCRI are the same as proposed, with the technical correction.

In the final LCRI, the EPA also revised the regulatory language in § 141.85(b)(2)(ii)(A) and (B) to clarify that the purpose of the requirements for community water systems to deliver public education materials to local public health agencies and other organizations after a lead action level exceedance is to reach “consumers” (*i.e.*, people who drink the water) who are most at risk rather than “customers” of the water system who may be paying the bill but not drinking the water (*i.e.*, a customer who is a property owner and renting their property). This is a clarifying edit which does not impact the activities that community water systems must conduct.

The EPA is finalizing the proposed content requirements with some additional required content in response to comments received on the proposed LCRI. Public education materials must include information about lead, GRR, and unknown service lines not only if the system has LSLs, but also GRR and unknown service lines. In addition to required LSL information, systems must include information about replacing GRR service lines and identifying the material of unknowns as well as information on how to access the system’s service line replacement plan.

Where the water system intends for customer payment for a portion of the replacement where it is required or authorized by State or local law or a water tariff agreement, the notice must also include information about financing solutions to assist property owners with replacement of their portion of a lead or GRR service line. Systems with known or unknown lead connectors in their inventory must also include information in the public education materials about accessing the inventory. The public education materials must include instructions for consumers to notify the water system if they think the material classification is incorrect.

All water systems, including NTNCWSs, must include information in the public education materials about lead in plumbing components and about how consumers can get their water tested, including information about the provision of supplemental monitoring and notification in § 141.85(c). In response to comments received on the proposed LCRI, the EPA is requiring the public education materials to explain that lead levels may vary and therefore lead exposure is possible even when tap sampling results do not detect lead at one point in time (§ 141.85(a)(1)(iii)(B)).

The EPA is requiring public education materials to include additional steps that consumers can take to reduce their exposure to lead in drinking water, including explaining that using a filter certified to reduce lead by an ANSI accredited certifier is effective in reducing lead levels in drinking water. Water systems must emphasize additional measures to reduce exposure to lead in drinking water for pregnant people, infants, and young children since they are at higher risk of adverse health effects from lead exposure. Water systems must also provide additional information about flushing the pipes, including noting that consumers served by LSLs and GRR service lines may need to flush for longer periods. In addition, water systems must include contact information for the State and/or local health department so that consumers can contact them for more information about lead. States may only approve changes to the content requirements of the public education materials if the State determines the changes are more protective of human health. This information is required not only in public education after a lead action level exceedance but any of the public education requirements that cite the steps for reducing exposure to lead in drinking water in § 141.85(a)(1)(iv), such as the consumer notice of lead tap

sampling results and the notification of service line material.

iii. Public Education to Local and State Health Agencies

For the final LCRI, the EPA is allowing CWSs to provide local and State health agencies with public education and DSSA information via mail, email, or another method approved by the State (see § 141.85(i)).

d. Requirements for Language Updates and Accessibility

i. Lead Health Effects Language

For the final LCRI, the EPA is requiring the revised lead health effects language in public education materials, as proposed and previously described in section IV.J.2.d.i of this preamble.

ii. Translation Requirements

The EPA is requiring in the final rule all public education materials under § 141.85 to include (1) information in the appropriate language(s) regarding the importance of the materials, and (2) information where persons served by the water system may obtain a translated copy of the materials, or request assistance in the appropriate language(s), or the materials must be translated into the appropriate language(s). For the final rule, the EPA is also adding a requirement that States, as a condition of primacy for the LCRI, provide technical assistance to systems in meeting the requirement to provide translation assistance in communities with a large proportion of consumers with limited English proficiency. This can include providing water systems with contact information for inclusion in the system’s public education materials where consumers can contact the State for translation assistance upon request. Other examples of technical assistance include providing resources for water systems to translate their public education materials, including EPA-provided translations of required content for public education materials (*e.g.*, health effects language, definitions) and translated templates through a website.

K. Additional Requirements for Systems With Multiple Lead Action Level Exceedances

1. Rationale and Proposed LCRI Revisions

While water systems must take actions to reduce lead levels in response to a systemwide lead ALE, such as installing or re-optimizing OCCT, these actions can take several years to be fully implemented. Consequently, the LCRI proposed requiring water systems to

conduct public education activities and make filters that are certified to reduce lead available to consumers in the event of multiple lead action level exceedances. These actions are intended to provide greater public health protection to drinking water consumers by educating consumers about filters and increasing the likelihood of their use. The EPA proposed requiring water systems to take additional actions in response to three lead ALEs within a rolling five-year period. Multiple ALEs are indicative of recurring high lead levels that warrant additional measures while OCCT and mandatory service line replacement are being implemented, or that longer-term measures are not effective at reducing lead levels below the action level (*e.g.*, a system that has re-optimized once and is meeting optimal water quality parameters). The EPA proposed the five-year period because it generally takes systems that long to conduct an OCCT study and to install treatment.

Three lead ALEs (in five years) is also used to identify water systems with a pattern of higher lead levels over time. Many water systems have one or two ALEs and do not have another, so three action level exceedances are a better indicator of longer-term problems. See the final LCRI Economic Analysis (USEPA, 2024a) chapter 3, section 3.3.5, Exhibit 3–31 for additional information on the percent of systems with two ALEs that go on to experience three ALEs. In addition, having three or more lead ALEs within five years is a sign that consumers are being continually exposed to elevated lead levels.

To prevent known or anticipated adverse health effects to the extent feasible, the EPA believes that while these water systems are taking actions to reduce lead in drinking water and continue to experience higher lead levels, they must provide additional public education on lead in drinking water and steps consumers can take to reduce their exposure, including how to properly use a filter, and make filters available to their consumers. Public education is effective for reducing lead exposures in drinking water, by influencing individuals' knowledge, beliefs, and behaviors, for example by making them aware of lead in their drinking water and actions they can take to reduce their exposure (see section IV.J.1 of this preamble). In addition, recent filter effectiveness studies conducted by the EPA have shown that properly installed and operated filters certified by an ANSI accredited certifier to reduce lead are effective at reducing lead in drinking water (Bosscher et al., 2019; Tang et al., 2023; Tully et al.,

2023). Access is one factor that influences uptake of public health interventions. When filters or point-of-use devices and instructions on their proper use are made more accessible, consumers are more likely to use them (Reese et al., 2023; Mulhern et al., 2022). The EPA is requiring the public education materials to discuss the use of filters certified to reduce lead as one of the steps people can take to reduce their exposure to lead. Making filters available to consumers when a water system has multiple action level exceedances enhances existing public education messaging and reduces lead exposure if the filters are used properly. The EPA also finds that it is affordable and technically possible for water systems to make filters available for their consumers, as demonstrated by numerous systems that have provided filters to some or all consumers or as part of service line replacement programs, many of these at no direct cost to the consumer. Examples of communities that have implemented filter programs include Newark, New Jersey (City of Newark, n.d.); Pittsburgh, Pennsylvania (City of Pittsburgh, n.d.); Kalamazoo, Michigan (City of Kalamazoo, 2023); Benton Harbor, Michigan (Berrien County Health Department, 2023); Elgin, Illinois (City of Elgin, 2023); and Denver, Colorado (City of Denver, 2023). Furthermore, the EPA has made adjustments in the final LCRI to require water systems to start developing a plan for making filters available earlier so that the provision of filters to consumers is not unnecessarily delayed (see section IV.K of this preamble).

Under the proposed LCRI, if during a rolling five-year period there are three systemwide lead action level exceedances, a water system would be required to make available to all consumers pitcher filters or point-of-use devices that are certified by an ANSI accredited certifier to reduce lead, six months of replacement cartridges, and instructions for use within 60 days after the end of the tap sampling period in which it met the criteria for multiple lead action level exceedances. Replacement cartridges would be made available until there are no longer three action level exceedances in a rolling five-year period. No later than 30 days after the system has third ALE during a rolling five-year period, the water system would be required to provide a filter distribution plan to the State, and the State would be required to review and approve the plan within 15 days. If there is a subsequent ALE, the system would not be required to submit another

filter plan unless the State requires it or if there are any changes to the filter plan. The filter plan would include a description of which methods the system will use to make filters and cartridges available and a description of how the system will address any barriers to consumers obtaining filters. In addition, the water system would be required to carry out at least one community outreach activity. This activity must discuss the multiple lead ALEs, the steps the system is taking to reduce lead in drinking water, and measures consumers can take to reduce their exposure to lead. The EPA proposed the following community outreach activities for systems with multiple ALEs: (1) conducting a townhall meeting; (2) participating in a community event where the system can make information about ongoing lead exceedances available to the public; (3) contacting customers by phone call or voice message, text message, email, or door hanger; (4) conducting a social media campaign; and/or (5) using another method approved by the State. The water system would be required to conduct at least one of the aforementioned activities once every six months. The EPA included these outreach requirements to increase transparency and protect public health by providing consumers information on how to minimize their risk of lead exposure. Water systems would be able to discontinue these measures when they no longer have met the criteria of three ALEs within a rolling five-year period.

2. Summary of Comments and the EPA's Response

The EPA received comments both in support and opposed to the proposed requirement for water systems to conduct additional measures (*i.e.*, outreach activities and making filters available) in response to multiple ALEs. Some thought the proposed requirement should provide greater public health protection by requiring delivery of filters to all consumers, including at no charge. Others recommended that the EPA require water systems to make water filters available to only those customers served by lead, GRR, and unknown service lines, due to the cost of the filters as well as logistical challenges associated with making filters available to all consumers, especially for large water systems.

The EPA disagrees with the recommendation to limit the requirement to make point-of-use devices and pitcher filters only available to households or consumers that are currently being served by a lead, GRR,

or unknown service line. The EPA recognizes that LSLs are a significant source of lead in drinking water; however, lead can also enter drinking water from other sources, such as premise plumbing, affecting persons with or without LSLs. Therefore, availability of point-of-use devices and pitcher filters to all consumers ensures greater protection of the public from lead exposure in communities with recurring high lead levels.

The EPA recognizes the possible economic and logistical challenges that some systems may face in making available point-of-use devices or pitcher filters to all consumers. The EPA disagrees with comments that assumed or recommended water systems provide filters directly to all consumers. The proposed LCRI regulatory text at § 141.85(j) regarding the requirement for systems to make available to all consumers pitcher filters or point-of-use devices does not mean that systems are required to deliver filters, although that would be one option for a system to meet the requirement to make filters available. The rule allows systems (with the approval of the State) to determine the most appropriate way to meet the requirements, without prescribing specifically how systems must meet that requirement. For example, a system may decide to use more than one way to make filters available, such as operating a distribution center combined with providing at-home delivery on request, to accommodate consumers with different accessibility needs based on transportation and other considerations.

The EPA requested comment on using the proposed criteria of three ALEs in a rolling five-year period to identify systems with “multiple ALEs.” Some commenters raised issues with setting the criteria for “multiple ALEs” at three ALEs in five years and suggested alternative criteria. For example, a commenter suggested that the number of exceedances in the “multiple ALEs” criteria should be based on the number of customers. Another commenter stated that the three ALEs in five years metric would be “at odds” with these same systems’ ability to remove LSLs over the same five-year period because systems would have to allocate limited resources to simultaneously implement both requirements. On the other hand, some commenters stated that three ALEs is “too lenient” or that the filter provision should be required after a single lead ALE, rather than three.

After consideration of these comments, the EPA is finalizing the criteria for multiple lead ALEs consistent with the proposal; specifically, a system with at least three

lead ALEs in a rolling five-year period must meet the public education treatment technique requirements at § 141.85(j). The five-year timeframe was selected because it typically takes five years to study, select, install, and operate OCCT. The EPA disagrees with requiring filters be made available after one ALE as the system will be undertaking multiple activities following a single ALE including public education described in section IV.J.4.c of this preamble that will advise consumers to take actions to reduce their exposure, among other ongoing public education activities (see section IV.J.4 of this preamble). Following the ALE the system will be involved in activities to install or re-optimize OCCT, as appropriate (see section IV.F.3 of this preamble). Three ALEs is a more accurate indicator of sustained high lead levels that would not be timely reduced by new or re-optimized CCT and which therefore merits the rule requirement to make filters available to reduce these exposures over a sustained period.

Some commenters recommended requiring water systems to submit the filter plan after the second ALE rather than the third ALE. Similarly, another commenter recommended requiring water systems to start working on filter plans earlier than the proposed 30 days after the third ALE to have more time to provide filters. The EPA agrees with comments that recommend requiring submission of a filter plan after the second ALE instead of the third ALE. This provides water systems more time to prepare to make filters available by requiring water systems to submit the filter distribution plan to the State within 60 days after the second ALE in five years rather than within 30 days of the third ALE. The State will also have 60 days to review and approve the plan, rather than the proposed 15 days. This provides States with time to engage with the systems on their filter plans, as appropriate, and coordinate to address challenges with making filters available to consumers. By requiring systems to submit the filter plan after the second ALE, systems will be more likely to successfully implement the plan should the water system have a third ALE.

Following approval of the filter plan, the water system will have time to resolve any potential logistical and financial challenges in advance of when they may need to implement the filter plan should the water system exceed the lead action level for a third time in a five-year period. The EPA encourages systems to plan for making filters and cartridges available at no direct cost to low-income consumers, at a minimum. In addition, the water system has 60

days from the end of the tap sampling period when the third ALE occurs to implement the plan and make filters available to all consumers.

Some commenters raised concerns about the proposed 60-day timeframe for water systems to make filters available after multiple ALEs. Specifically, some commenters questioned whether it would be feasible for water systems to make filters available to all consumers within 60 days. In particular, some commenters mentioned that pitcher filters would be hard to obtain and provide to consumers within that timeframe. Another commenter requested that water systems be allowed to request a time extension to make filters available. In contrast, the EPA also received comments requesting a shorter timeframe for making filters available as proposed. A commenter suggested that water systems should be able to deliver filters in 30 days.

The EPA disagrees that 60 days may not be enough time for water systems to obtain and make filters available to consumers. The final LCRI requires filters be made available 60 days after the end of the tap sampling period when the third ALE occurs (§ 141.85(j)(2)). Since systems will have already prepared the filter plan following the second ALE, with the 60-day time limit in mind, they will be prepared to implement it, such as procuring the initial allocation of filters and handling the logistics of making them available to their consumers quickly. As a result, 60 days is a feasible amount of time needed to make filters available to consumers. Also, the EPA disagrees with shortening the time to make filters available to 30 days because that may not provide water systems sufficient time to implement their plan.

The EPA requested comment on the market’s ability to correct for potential material shortages and provide enough filters to comply with the proposed LCRI. For the proposed LCRI, the EPA assumed that the market would correct for any potential shortages, including for filters, in the three years before the LCRI compliance date. The EPA received comments from a filter manufacturer and a filter certification association supporting the EPA’s assumption that the market would correct for potential shortages, noting that water systems would be able to purchase many types of filters in large quantities. The EPA also found additional data on the growing water filtration market that confirms the EPA’s assumption in the proposed rule that the market would correct on its own to meet the demands expected as a result of the LCRI requirements (ICF, 2024c).

Some commenters raised concerns about the supply of filters if many water systems have to implement these measures at the same time, but did not provide any information to support the concern. Therefore, for the final LCRI, the EPA affirms its assumption at proposal that the market has the ability to correct for potential material shortages and provide enough filters for systems to with multiple ALEs meet the requirement to make filters available to all consumers.

Some commenters provided input on the proposed public education activities for systems with multiple lead ALEs. A commenter suggested increasing the use of public awareness campaigns. Another commenter suggested requiring water systems with multiple ALEs to conduct at least two public education activities rather than only one additional activity as proposed to be able to reach more people. Another commenter suggested that the required outreach activity in the rule should be based on system size; larger water systems should be required to conduct more frequent and more extensive outreach than small systems (*e.g.*, media campaigns) since they serve a larger population.

The EPA recognizes the importance of public education, which is why the LCRI requires systems with multiple ALEs to conduct a community outreach activity in § 141.85(j)(4)(i) through (v) in addition to the public education activities that are required in the event of each single lead ALE in § 141.85(b). The EPA expects this additional community outreach activity will better protect public health than the public education required by a single ALE alone by prompting consumers to take voluntary actions to reduce their exposure to lead during periods of recurrent action level exceedances by providing information to consumers about the multiple ALEs, steps the water system is taking to reduce lead, how consumers can minimize their lead risks, and how to obtain a filter certified to reduce lead. As provided in the final LCRI at § 141.85(j)(4), the community outreach activity must: (1) discuss the multiple ALEs that have occurred; (2) lay out the steps the water system is taking to reduce lead in drinking water; (3) inform consumers of measures they can take to reduce their risk; and (4) provide information on how to obtain a filter. The EPA disagrees with requiring two additional outreach activities, instead of one additional activity every six months, for water systems with multiple ALEs because these water systems are already required to conduct three other outreach activities and other public education tasks following every

lead ALE in accordance with § 141.85(b)(2). The EPA believes the requirement for at least one additional outreach activity every six months and making filters available in accordance with § 141.85(j), along with the other public education requirements under § 141.85(b)(2), will ensure consumers have access to information and resources to reduce their risk of lead exposure while water systems are working to address the underlying problem through longer-term efforts like OCCT and LSLR. However, the EPA notes that these requirements do not prohibit water systems from implementing additional and other types of outreach activities from the list in § 141.85(j)(4). Systems may do more outreach than required to best meet the needs of their community. In addition, the EPA disagrees with specifying the type and frequency of the outreach activity based on system size because the agency does not want to limit water system's ability to choose the most effective activity, as the water system is in the best position to determine how to reach all their consumers, based on the community they serve. Therefore, the final LCRI provides water systems the flexibility to consider community-specific information, such as water system size, to inform which one of the five outreach options for outreach activities offered in the LCRI the water system chooses to conduct. As noted above, the agency believes requiring at least one outreach activity every six months is sufficient and the water system may conduct additional activities as needed.

The EPA requested comment on whether to allow systems with multiple lead action level exceedances to consult with the State on alternative requirements and for States to determine the appropriate action. Most commenters supported authorizing the State to determine appropriate actions as alternatives to the LCRI requirements. The main justification provided by commenter is that States have a better understanding of the unique situations of water systems and determine more appropriate actions tailored to the water system.

The EPA does not agree with these comments. The EPA determined that when any systems has multiple ALEs, additional public education is needed and making filters available to consumers will prevent adverse public health impacts as a result of the sustained ALEs. Systems are free to implement additional measures appropriate for their community. As there is no safe level of lead exposure from drinking water, a sustained ALES

is indicative of the need for these specific additional actions to help expeditiously reduce exposure to lead in drinking water while the system works to comply with the OCCT requirements triggered by the ALE, or if longer-term measures to control corrosion and remove service lines are not effective at reducing systemwide lead levels to below the action level. Nevertheless, the EPA agrees that some level of State involvement is important to help ensure the water system has an appropriate plan in place and therefore, is requiring the State to approve the system's filter plan. In the final rule, the requirement of state approval of the filter plan will give the State an opportunity to work with the water system to develop a plan to make filters available for all consumers.

The EPA requested comment on whether to include a provision where the State has discretion to allow systems to discontinue actions to address a sustained ALE sooner than otherwise required if the system has taken tangible actions to reduce lead levels in response to multiple ALEs. In the proposed LCRI preamble, the EPA gave the example of a system that has taken actions "*e.g.*, installs OCCT or re-optimized CCT, completed mandatory service line replacement and is at or below the lead action level for two consecutive monitoring periods." Commenters generally supported the approach to provide the State with that discretion; one commenter disagreed with it. Another commenter recommended changing the LCRI to allow water systems to discontinue the actions.

The EPA agrees with commenters that States should be able to allow water systems with multiple ALEs to discontinue the required actions if the water system is at or below the lead action level for two consecutive tap monitoring periods and if the water system has taken actions to reduce lead levels. The EPA is including this discretionary authority in the final LCRI because the additional actions taken to reduce lead levels, such as re-optimized OCCT or completed LSLR program, and lack of ALEs are indications that lead corrosion is being controlled. Therefore, the final rule adds a provision to give States the discretion to allow a water system to discontinue the required actions under § 141.85(j) taken after multiple ALEs earlier if: (1) the system has taken actions to reduce lead levels, such as re-optimized OCCT or completed LSLR; and (2) the system is at or below the lead action level for two consecutive tap monitoring periods.

3. Final Rule Requirements

For the LCRI, the EPA is finalizing requirements for water systems related to multiple lead action level exceedances at § 141.85(j). Water systems are required to take additional actions if the system exceeds the lead action level three times during a rolling five-year period. The first rolling five-year period ends five years after the compliance date specified in § 141.80(a)(3) followed by assessments every six months thereafter. No later than 60 days after the tap sampling period in which a water system meets the criteria described above, a water system must make available to all consumers pitcher filters or point-of-use devices certified by an ANSI accredited certifier to reduce lead, six months of replacement cartridges, and instructions for use. A water system must continue to make replacement cartridges available until the system meets the requirements to discontinue actions as described below.

To provide additional time for systems to prepare for filter availability, the final LCRI requires water systems to submit a filter plan to the State no later than 60 days after the system exceeds the lead action level for the second time in a rolling five-year period (§ 141.85(j)(3)). This plan would include: (1) a description of the methods that would be used to make filters and filter cartridges available to consumers and (2) a description of how the system will address any barriers in making these filters available. The State must review and approve the system's filter plan within 60 days. This provides time for the State to engage with the water system on the filter plan, as needed, and time for the system to make any necessary updates before the need to implement the plan.

In addition to providing filters, following the third action level exceedance in a five-year rolling period, the final LCRI requires water system to conduct at least one community outreach activity in addition to the required outreach specified in the public education section (see § 141.85(b)(2)) for systems that exceed the lead action level. The EPA is clarifying for the final LCRI that water systems must conduct at least one of the activities within six months of the start of the tap monitoring period after the most recent lead ALE. In the proposed rule, one of the activities included conducting a townhall meeting; the final rule revised this to be a public meeting more generally since a townhall meeting may imply government involvement.

Under the final LCRI, water systems may discontinue making filters or point-of-use devices available and conducting community outreach activities when there are no longer three ALEs in a five-year period (§ 141.85(j)(6)). The final LCRI provides States discretion to allow a water system to discontinue these additional requirements earlier if the system is at or below the action level for two consecutive tap monitoring periods and the water system has taken actions to reduce lead levels (e.g., re-optimized OCCT, completed LSLR) (§ 141.85(j)(6)).

L. Lead Sampling at Schools and Child Care Facilities

1. Rationale and Proposed LCRI Revisions

For LCRI, the EPA proposed to retain many of the 2021 LCRR requirements in § 141.92 for CWSs to conduct public education and sample for lead in the schools and licensed child care facilities they serve. Children are especially vulnerable to lead exposure and spend a significant amount of time in these facilities. While the EPA is aware that some States have requirements for lead sampling in schools and child care facilities, including several States that have passed new laws since the LCRR was promulgated, the EPA is also aware that some schools or child care facilities have not been or are not being tested under existing State or local requirements or through other voluntary programs (USGAO, 2018; USEPA, 2023a, chapter 3, section 3.3.10). Accordingly, many schools or child care facilities may not have experience with lead in drinking water testing. The EPA promulgated these requirements in the 2021 LCRR as part of the public education treatment technique in order to educate schools and licensed child care facilities about the risk from lead in premise plumbing and the importance of sampling for lead in drinking water, to provide these entities with some experience testing for lead in drinking water, and to help inform their decisions to mitigate lead risks, including by establishing their own sampling programs (86 FR 4232, USEPA, 2021a; USEPA, 2020e). This includes providing schools and child care facilities with the EPA's "3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities—A Training, Testing and Taking Action Approach (3Ts)," which was developed to assist schools, child care facilities, and States with addressing lead exposure (USEPA, 2018).

While larger buildings such as schools are not likely to be served by LSLs, premise plumbing may contain lead.

Additionally, large buildings, such as schools, can have a higher potential for elevated lead levels. This is because, even when large buildings are served by a water system with well-operated OCCT, they may have lead in drinking water due to lead in premise plumbing, larger and more complex plumbing configurations, and inconsistent water use patterns (e.g., summer, holiday, or other breaks) that can result in longer stagnation times (88 FR 84956, USEPA, 2023a; Barn et al., 2014; Deshommes et al., 2016; Proctor et al., 2020). As described in the proposed LCRI preamble, due to these factors, a water system's 90th percentile lead level is not necessarily reflective of lead levels in schools, and water system adjustments to OCCT will likely not address elevated lead levels in schools. Therefore, setting additional treatment technique requirements for corrosion control would not be effective (88 FR 84957, USEPA, 2023a). Therefore, the EPA has determined that public education and sampling at schools and child care facilities is an element of the treatment technique rule for public education and not CCT. Accordingly, the EPA determined the public education treatment technique is feasible for the reasons cited in section IV.J.1 of this preamble, including for CWSs to conduct public education and sampling at these facilities to contribute to increased awareness of lead in drinking water in these facilities (88 FR 84957, USEPA, 2023a). Also see section IV.L.2 of this preamble for a discussion of the EPA's authority to require CWSs to conduct these activities.

For LCRI, the EPA proposed to retain the requirements from the 2021 LCRR for CWSs to conduct public education and sampling in the schools and licensed child care facilities that they serve. The EPA proposed minor changes to clarify the intent of the provisions and proposed two new waiver provisions in § 141.92(h) to increase the flexibility of States to waive sampling requirements for CWSs where they would be duplicative of alternative sampling programs that would meet the requirements. The EPA also proposed to reduce the time frame from annually to 30 days for when CWSs must submit sampling results to the State and State and local health agencies.

In developing public education and sampling requirements for schools and child care facilities under the 2021 LCRR and LCRI, the EPA is authorized under SDWA to establish NPDWRs that are legally enforceable standards for PWSs as defined in SDWA section 1401(4) and § 141.2. The EPA does not have the authority under SDWA section

1412 to require schools and child care facilities that are not regulated as PWSs to act under an NPDWR. The EPA did not propose public education and sampling requirements for schools and child care facilities that are regulated as PWSs because these facilities must comply with NPDWRs, including the LCRI, unlike schools and child care facilities that are not PWSs. This includes requirements to monitor for lead and copper in drinking water (§ 141.86), conduct public education (§ 141.85), conduct mandatory LSLR (§ 141.84), optimize or re-optimize OCCT (§§ 141.81 and 141.82) or implement a small system flexibility as applicable (§ 141.93). Requiring schools and child care facilities that are regulated PWSs to comply with the requirements of § 141.92 would be duplicative. The EPA intended for these requirements to only apply to CWSs as part of the public education treatment technique to educate the schools and licensed child care facilities they serve on the risks of lead in their buildings so that schools and child care facilities can take voluntary actions.

2. Summary of Public Comments and the EPA's Response

a. General Requirements

The EPA received comments stating that the school and child care sampling requirements should be removed from the final rule because the EPA does not have the authority under SDWA to require PWSs to sample at these locations. Conversely, the EPA received comments requesting that the EPA require water systems to take additional actions in schools and child care facilities, including installing filters certified to reduce lead in drinking water and more frequent and comprehensive tap sampling. These commenters indicated that the proposed requirements are not effective as a component of the public education treatment technique because they will not protect children's health. They stated that the sampling would be only voluntary and limited, and would not require water systems to take remediation actions or publicly post results. In turn, they provided corresponding suggestions for new or more stringent requirements for addressing lead in schools and child care facilities.

The EPA disagrees with commenters who stated that the EPA does not have the authority to include requirements for school and child care lead sampling under SDWA. The EPA notes that it is not accurate for commenters to frame the EPA's school and child care

sampling requirements under LCRI as regulating those facilities in lieu of water systems. As stated above, the EPA is authorized under SDWA section 1412 to establish NPDWRs that are legally enforceable standards for PWSs as defined in SDWA section 1401(4) and § 141.2. Therefore, the EPA has the authority under SDWA section 1412 to require CWSs, which are a subset of PWSs, to comply with lead tap water requirements, which include conducting public education and sampling for lead in schools and child care facilities as part of the treatment technique for public education. Further, the EPA's authority to promulgate the requirement for CWSs to conduct public education and sampling at these facilities is under the EPA's authority to promulgate a treatment technique rule to "prevent known or anticipated adverse effects on the health of persons to the extent feasible" (SDWA section 1412(b)(7)(A)). As noted above, children are especially vulnerable to lead exposure and spend a large portion of their day in schools and child care facilities. As part of the feasibility demonstration for public education (see section IV.J.1 of this preamble) and in accordance with SDWA section 1412(b)(7)(A), the EPA determined it is feasible for CWSs to conduct public education and sampling at these facilities to contribute to their increased awareness of lead in drinking water and thus facilitate actions that the schools and child care facilities, or the families of children who attend, can take to reduce lead exposures. Therefore, the EPA is authorized to and made the requisite determination under SDWA section 1412(b)(7)(A) to promulgate a treatment technique for public education and to include water system sampling requirements at schools and child care facilities that are feasible and can reduce lead exposures. In addition, consistent with every lead and copper NPDWR, CWSs already routinely conduct public education activities to customers within their service area and have experience with conducting consumer-requested sampling (see § 141.85(c), 56 FR 26500–26503, USEPA, 1991). As described in section IV.L.1 of this preamble, the sampling requirements are part of public education to educate schools and child care facilities and their users about the risks from lead in premise plumbing and the importance of sampling for lead in drinking water, to provide them with some experience testing for lead in drinking water, and help inform their decisions to mitigate lead risks, as appropriate, including potentially

establishing their own testing program for which Federal funding is available (see section III.G of this preamble).

The EPA also disagrees with commenters who stated that the EPA should require water systems to install filters in all schools and child care facilities either in lieu of or in addition to sampling. As discussed in section IV.L.1 of this preamble, elevated lead levels in larger buildings such as schools are generally due to conditions outside of the water system's control (e.g., complex premise plumbing arrangements, inconsistent water use patterns), and persist even in systems with well-operated OCCT. While it is within the control of water systems to conduct public education activities and sampling, water systems are typically not in control of premise plumbing in schools and child care facilities. While water systems could have access to drinking water outlets in schools and child care facilities to install and maintain filters (e.g., if a school or child care facility gives a PWS permission to access the property for this purpose), the EPA notes that premise plumbing is typically not part of the PWS distribution system and CWSs typically are therefore not responsible for taking such actions. Notably, the "filter-first" legislation cited by commenters impose requirements on schools and child care facilities, not on PWSs, to install filters, conduct sampling, and ensure maintenance (e.g., City of Philadelphia, 2022; State of Michigan, 2023).

Additionally, requiring water systems to install and maintain filters in all the schools and child care facilities they serve would impose a significant financial and technical burden on water systems. While commenters argue that installing and maintaining filters is more cost effective than a sampling program, the agency notes that the commenters assumed a sampling program that included sampling of all outlets used for human consumption twice a year and replacement of 40 percent of the faucets sampled with lead-free components in the first year. This assumption is significantly more expansive than the requirements for CWSs under § 141.92. See section IV.L.2.d of this preamble for a discussion on the scope and frequency of sampling. Furthermore, as stated in section IV.L.1 of this preamble, the purpose of these requirements is to provide public education to schools and child care facilities in the form of information about the risks of lead in their facilities, experience with how to sample for lead, and the 3Ts guidance to inform potential actions (e.g., additional sampling, remediation,

installation of filters). Installation and maintenance of filters in all schools and child care facilities served by a water system is outside of the intended scope of the requirements and is not necessary to fulfill the stated purpose of the requirements as a public education program under the public education treatment technique. Therefore, schools and child care facilities and not water systems are generally responsible for addressing premise plumbing and remediation actions within their buildings, including installing filters and/or bottle filling stations. For further discussion and additional reasons supporting the EPA's decision not to require water systems install and maintain filters in addition to sampling requirements as part of public education, see discussion of remediation in section e. below.

The EPA also disagrees that the requirements will not be effective for the purposes of providing public education to schools and child care facilities because the LCRI does not include a specific frequency or number of samples (e.g., semi-annually or annually, all taps used for cooking and drinking), or requires remediation activities, or specific reporting requirements, as suggested by the commenters. In promulgating these requirements as part of LCRI, the EPA does not intend for them to be a replacement for more comprehensive testing in schools and child care facilities. The EPA anticipates they will be effective to achieve their intended purposes of providing schools and child care facilities information about lead risks in their buildings and experience with testing for lead to help inform decisions for addressing lead, as stated above. As noted in section V.L.1 of this preamble, the EPA is aware that many schools and child care facilities are not knowledgeable about drinking water lead risks and currently do not receive direct information from an entity such as the water system or the State about lead in drinking water and approaches to reduce risk (USGAO, 2018; final LCRI Economic Analysis (USEPA, 2024a), section 3.10.10). Furthermore, as noted above, many schools and child care facilities do not have direct experience with sampling. The EPA previously developed guidance for schools and child care facilities (*i.e.*, the 3Ts) to assist in addressing lead in drinking water. There have been significant Federal resources provided to States to support voluntary programs (88 FR 84957, USEPA, 2023a). The EPA anticipates that the requirements in § 141.92 will build upon these non-

regulatory efforts and increase school and child care facility awareness of lead in drinking water in their buildings and provide them with tools to take additional actions. For a discussion on the limitations of requiring schools and child care facilities to participate in sampling, see the below section c on public education and outreach.

b. Applicability

The EPA received public comments about which schools and child care facilities are covered by the requirements for school and child care sampling in § 141.92(a). The EPA received comments supporting the proposed revision for water systems to submit an initial list of the schools and child care facilities that they serve to the State by the LCRI compliance date. However, some commenters indicated that States should not be required to review the list for accuracy, stating that State drinking water programs do not have enough information or resources to assess the validity of the list. The EPA also received public comments requesting clarification as to whether schools and child care facilities not covered under the requirements in § 141.92(a) must be included on the list. The EPA also received comments that the EPA should not exclude schools and child care facilities that were constructed or had full plumbing replacement after January 1, 2014 or the date a State adopted standards that meet the definition of lead free in accordance with section 1417 of SDWA; these comments noted that lead-free plumbing materials could still contain lead. The EPA received comment that schools and child care facilities that are served by a lead, GRR, or unknown service line should not be excluded. The EPA also received comments stating the agency should require schools and child care facilities that are regulated as NTNCWSs to take additional actions, such as installing filters on all outlets used for cooking and drinking.

The EPA is finalizing the proposed requirement for water systems to submit the initial list of schools and child care facilities to the State by the LCRI compliance date in § 141.92(b)(1). The EPA proposed this requirement because while the 2021 LCRR required CWSs to develop a list of schools and child care facilities that they serve by the rule compliance date and to send an updated list to the State or certify that the list has not changed at least once every five years, there was no initial requirement to submit the list to the State by the compliance date. The submission of the initial list at the time systems must begin to comply with the requirements

of § 141.92 rather than five years later is a necessary prerequisite for State oversight and to ensure compliance with regulatory provisions that support health protection and public education in schools and child care facilities (88 FR 84956, USEPA, 2023a). The EPA disagrees with commenters who indicated that the State should not review the list for accuracy. While States may not be able to confirm every individual entry on the list, States must ensure that systems have appropriately applied the definitions of schools and child care facilities in § 141.2 to identify the schools and child care facilities they serve. Additionally, the EPA anticipates that State drinking water programs may be able to access information about schools and licensed child care facilities from other State or local agencies to assist CWSs in developing the lists. The EPA anticipates States may be in a good position to help systems, hence, this requirement facilitates that support. The expectation for State review is described in § 142.16(d)(12). See section V.C of this preamble for more discussion about the special primacy requirements associated with § 141.92.

While § 141.92(a) exempts CWSs from conducting public education and sampling in schools and child care facilities based on the date of adoption of the revised "lead-free" definition in accordance with section 1417 of SDWA, the EPA agrees that it is ambiguous whether these excluded facilities must be included on the list of schools and child care facilities served by the CWS in § 141.92(b). The provision in § 141.92(a)(1) requires CWSs to conduct public education and lead monitoring at the schools and licensed child care facilities they serve with the stated exceptions. The list is intended to assist CWSs in fulfilling the public education and sampling requirements of § 141.92 and for State oversight. The EPA did not intend for CWSs to include schools and licensed child care facilities on the list that are excluded under § 141.92(a). The agency notes the requirements for conducting public education in schools and child care facilities in § 141.92(c) and sampling in § 141.92(d) and (e) all reference the schools and licensed child care facilities identified in the list in § 141.92(b). To be responsive to these commenters and provide clarity, the EPA added the phrase "that meet the criteria of paragraph (a)" in § 141.92(b)(1) in the final LCRI.

The EPA disagrees with commenters who said that water systems should conduct public education and school sampling in facilities regardless of construction date. The EPA excluded facilities based on the date of adoption

of the revised “lead-free” definition in accordance with section 1417 of SDWA because these facilities are not likely to contain significant lead sources (USEPA, 2020c). As noted in section IV.A of this preamble, plumbing certified as “lead free” may still have an allowable level of lead; however, contribution of lead to drinking water from these sources is low. Additionally, plumbing replacement with new plumbing materials is frequently conducted as a remediation approach to address sources of lead. Water system resources are best used for public education and sampling in schools and child care facilities with more significant sources of lead rather than at sites with lead-free plumbing. If schools or child care facilities that are newly constructed or have conducted plumbing replacements to remove sources of lead have potential concerns about lead in drinking water, those facilities can choose to conduct their own sampling. However, the EPA is not requiring CWSs to conduct public education and lead sampling at these schools and child care facilities in the final LCRI.

The EPA agrees that any school or child care facility that has undergone full plumbing replacement or were constructed after the date of the “lead free” definition was adopted should not be excluded if they are served by LSLs. LSLs were generally not constructed with an interior diameter greater than two inches, therefore they are typically connected to single family homes or buildings with limited number of units (USEPA, 2022c). While larger schools and child care facilities are therefore unlikely to be served by an LSL, it would be inconsistent to exclude schools and child care facilities on the basis of meeting the “lead free” definition unless the service line is also non-lead. The EPA notes that this is consistent with the criteria for full plumbing replacement for small systems under § 141.93(c)(2). The EPA is revising § 141.92(a)(1) in the final LCRI to add a clause § 141.92(a)(1)(ii), which specifies that the schools and child care facilities that were constructed or had full plumbing replacement after the “lead free” date are not served by a lead, GRR, or unknown service line.

The EPA disagrees with commenters who suggest the EPA set different requirements for schools and child care facilities that are regulated as NTNCWSs. The EPA notes these commenters did not provide sufficient information supporting their recommendations about specific requirements for the agency to be able to evaluate how or why these water

systems should be regulated differently. In the 2021 LCRR and in the LCRI proposal, the EPA did not propose requiring NTNCWSs that are also schools and child care facilities to meet the requirements of this section. The purpose of the requirements in § 141.92 is to further public education for schools and child care facilities that are served by CWSs. Schools and child care facilities that are regulated as PWSs already have knowledge about lead sources in their buildings and experience with actions like sampling and remediation. The agency notes that these NTNCWSs are required to take other actions under the LCRI as applicable that would address lead in these facilities including public education, service line replacement, and potential installation of treatment or implementation of a small system flexibility. Therefore, the requirements of § 141.92 would be duplicative and would not provide the public education benefits as intended for schools and child care facilities that are not PWSs. Based on the EPA’s intent to regulate all NTNCWSs the same across the LCRI and the lack of information submitted, the final rule does not include different requirements for schools that are NTNCWSs.

c. Outreach to Schools and Licensed Child Care Facilities

Some commenters disagreed with the agency’s different proposed approaches for outreach to elementary schools and child care facilities versus secondary schools for the first five years after the compliance date. Some commenters stated that all schools and child care facilities should be treated the same, with the more direct outreach that is required for elementary schools and child care facilities to be extended to secondary schools. Others suggested only requiring CWSs to offer sampling on request and not require systems to attempt to schedule sampling for the elementary schools and child care facilities during the first five years following the LCRI compliance date, stating that it would simplify the rule. These commenters indicated that all sampling is “voluntary” because elementary schools and child care facilities can decline sampling or not respond to outreach when contacted by the water system during the first five years. Some commenters stated that the EPA should make the sampling mandatory such that all schools and child care facilities are sampled, stating that a voluntary program will lead to schools and child care facilities not being sampled for lead. The EPA also received comments suggesting that the

EPA allow CWSs to only conduct outreach to a school district or central office that manages child care facilities instead of each individual site, stating that individual outreach would circumvent official lines of communication. Still others requested that the agency specify that CWSs are not required to provide information related to a lead action level exceedance under the requirement in § 141.92(c) for CWSs to provide information to schools and licensed child care facilities consistent with § 141.85(a)(1), stating such information would not be relevant.

The EPA disagrees with commenters who stated that all schools and child care facilities should be treated the same under § 141.92. The EPA notes that the primary difference between the CWS requirements for elementary schools and child care facilities and secondary schools is the type of outreach that the system must conduct. The EPA is maintaining different requirements for CWS outreach to elementary schools and child care facilities compared to secondary schools during the first five years following the LCRI compliance date because children under the age of six are at the greatest risk of adverse health effects due to lead exposure (CDC, 2022a). Requiring CWSs to conduct more intensive outreach to elementary schools and child care facilities relative to secondary schools during the first five years after the LCRI compliance date prioritizes sampling in the facilities serving children with the greatest risks associated with lead exposure and provides this group of schools and child care facilities with the opportunity to have more direct information. Specifically, the final LCRI requires water systems to provide more direct outreach to these schools and child care facilities in the first five years by mandating the water system make at least two separate outreach attempts to schedule sampling. Conversely, CWSs are required to provide an annual notice to secondary schools who must request sampling. This approach will reduce the overall burden on CWSs to conduct outreach and enable them to focus on facilities with the subpopulation most susceptible to experiencing health risks from lead while still maintaining an opportunity for secondary schools to be sampled if they request it. It is for these same reasons that the EPA disagrees with commenters who say that CWSs should only offer sampling on request to the elementary schools and licensed child care facilities as required for the secondary schools. While the EPA agrees with commenters who said that the sampling requirements are voluntary

on the part of the school or child care facility, the EPA estimated in the 2021 LCRR that the more extensive outreach for elementary schools and child care facilities was likely to result in a higher level of participation relative to sending out letters offering sampling to schools and child care facilities (86 FR 4232, USEPA, 2021a). Regardless of the outreach required, all schools and licensed child care facilities served by the systems have the same opportunity to be sampled and at the same frequency.

The EPA acknowledges that some schools and child care facilities will decline or not respond to CWS outreach. However, the EPA disagrees with commenters that the agency can require that all schools and child care facilities be sampled. The EPA is authorized under SDWA to establish NPDWRs that are legally enforceable standards that apply to PWSs as defined in SDWA section 1401(4) and § 141.2. The EPA does not have the authority under SDWA section 1412 to require schools and child care facilities that are not regulated as PWSs to act under an NPDWR to either allow CWSs to sample within the schools and child care facilities or to require the facilities themselves to conduct sampling or undertake other actions. Therefore, the EPA does not have the authority to require a school or child care facility to allow a CWS to conduct sampling. Schools and child care facilities may not consent to tap sampling in their buildings and CWSs do not have control over these facilities. Additionally, a CWS cannot be in violation of the LCRI where a school or child care facility declined to participate in lead sampling because CWSs do not generally have control over these facilities.

The EPA disagrees with commenters who stated that CWSs should only be required to conduct outreach to administrative entities, such as school districts or central offices, instead of individual schools and child care facilities. As described in section IV.L.1 of this preamble, these requirements are part of the public education treatment technique. As such, it is important that each school and licensed child care facility receive the required information about lead in drinking water directly from the CWS. While CWSs may wish to and can choose to involve an administrative entity as part of school and child care facility outreach, such as copying these entities on the outreach materials or working with them in some way, the EPA does not agree that offering this information to individual facilities would overstep the administrative chain of command. For

example, individual schools typically have their own school-specific administration and facilities management in addition to school district-wide administration. Schools and child care facilities can determine for themselves if they must consult with a central office or other administrative entity before proceeding with lead sampling. Additionally, neither the EPA nor the CWS can require an entity such as a school district or central office to disseminate information to individual schools and child care facilities. The requirements are intended to provide each school and child care facility with information about the health risks of lead, the 3Ts, and information about sampling. The agency notes that there may be instances where collaborating with school districts or other entities may help encourage participation and build connections between schools and child care facilities and water systems. However, the agency also anticipates that information may not be disseminated to the individual schools and child care facilities and that coordinating sampling and answering questions through an intermediary may be inefficient. While a CWS may choose to include outreach to an administrative entity (*e.g.*, a school district), the agency is not allowing CWSs to conduct outreach to these entities in place of outreach to the schools or child care facilities they serve. The EPA is concerned that the suggested revision would reduce the effectiveness of the requirements by reducing the likelihood that individual schools and child care facilities would receive the information.

The EPA agrees with the comment that the information about health risks that CWSs are required to be provided schools and child care facilities under § 141.92(c)(1) should not include information that refers to a lead action level exceedance, because it is not relevant for the purposes of § 141.92. Therefore, the EPA is revising § 141.92(c)(1) in the final LCRI to specify CWSs must provide information about health risks from lead in drinking water consistent with § 141.85(a)(1)(ii) through (iv) and (vi). This omits only the content in § 141.85(a)(1) that is directly related to a lead action level exceedance. The agency notes that a school or child care facility would receive public education that includes all of the information in § 141.85(a)(1) if the system has an action level exceedance in accordance with § 141.85(b).

d. Sampling

The EPA requested comments about whether the agency should require

CWSs to collect more samples and/or more frequently in schools and child care facilities. The EPA received many comments stating that the EPA should require more frequent sampling at more taps. Suggestions included requiring water systems to sample at all taps used for human consumption, and increasing the frequency to three years, annually, or every six months. Some of these commenters stated that limited sampling is not useful as a public education tool because the samples are not representative of the entire building and could lead to a false sense of security if lead is not detected. Conversely, many commenters also stated that the EPA should not increase the required minimum number of samples of five samples per school and two per child care facility, or the sampling frequency, for reasons including that the proposed provisions are sufficient for public education purposes and increased burden on water systems may distract from other actions under the LCRI. Some commenters supported the proposed requirements stating that the purpose of the requirements is public education. Some commenters also indicated that schools and child care facilities can conduct additional sampling, if desired. The EPA also received comments stating that sampling is not necessarily effective as a public education tool due to variability in lead levels over time and suggested different requirements for the EPA to require CWSs to install filters certified to reduce lead in schools and child care facilities with periodic sampling to ensure efficacy.

In the final LCRI, the EPA is maintaining the requirements for CWSs to collect at least five samples per school and two per child care facility when sampling for lead. The EPA agrees with commenters that samples at one tap are not representative of all taps within a building but disagrees that the sampling will lead to a false sense of security. The purpose of the requirements in § 141.92 are for public education. Tap sampling is one but not the only way to provide information to schools and child care facilities about lead in their buildings. The sampling in § 141.92 serves as an initial sample set for lead risks within schools and child care facilities and coupled with the public education materials (*e.g.*, the EPA's 3Ts guidance), are intended to encourage schools and child care facilities to take additional actions, including additional comprehensive sampling. As noted in section V.L.1 of this preamble, the EPA is aware that many schools or child care facilities

lack knowledge and experience regarding lead sampling in schools and child care facilities. CWSs are required to provide schools and child care facilities with a copy of the EPA's 3Ts guidance prior to sampling. The EPA's 3Ts guidance clearly encourages schools and child care facilities to conduct comprehensive sampling as part of routine building maintenance and provides tools to assist them in these efforts. Additionally, the EPA is concerned that increasing the number of required samples and frequency of sampling will place an increased burden on water systems and divert time and resources from other requirements under the LCRI, such as LSLR. The EPA received comments from water systems noting the large number of schools and child care facilities they serve. For example, one system stated that they serve approximately 2,000 elementary schools and child care facilities and would be required to collect up to 1,000 samples per year under § 141.92 if the schools and child care facilities agree to be sampled. They noted that this sampling effort is a significant increase over what is required for compliance (e.g., 400 samples per year under standard monitoring if collecting first- and fifth-liter samples at each site). The EPA notes that increasing sampling to all taps used for human consumption and/or increasing the frequency would significantly increase burden and likely make this provision unworkable. Rather, the initial sampling offered by the water system coupled with the information in the 3Ts is sufficient to educate schools and child care facilities on the steps they can take to reduce lead risks in their facilities, including steps such as routine sampling and installation of filters. The EPA does not agree that additional samples are needed to fulfill the intent of the requirements and therefore is not increasing the number of samples or sampling frequency in the final LCRI.

e. Remediation

Some commenters stated that the EPA should set a school-specific action level that would require either schools and child care facilities or CWSs to take actions based on the sampling results, asserting that otherwise, the requirements would not protect children from lead exposure. Some of these commenters highlighted existing State requirements that include action levels for schools and require remediation, citing these as support for the EPA to consider requiring similar actions. Some commenters stated that the EPA should require CWSs to install filters certified to reduce lead, such as

bottle filling stations, in all schools and child care facilities, citing "filter-first" legislation adopted in States, such as Michigan. These commenters indicated that lead may be present in drinking water regardless of tap sample results due to variability, and that filters are necessary to protect public health. Other commenters agreed with the EPA's proposed approach for CWSs to provide schools and child care facilities with the results and remediation recommendations consistent with the EPA's 3Ts.

The EPA does not agree that § 141.92 should include an action level for use at schools and child care facilities whereby systems are required to take remediation actions if the level is exceeded. Commenters included a range of suggestions for how such a level would function, including various suggestions for levels (e.g., 0.010 mg/L, 0.005 mg/L, 0.001 mg/L), who would be responsible for the remediation action (e.g., the school or child care facility, the water systems), and how it would be applied (e.g., to individual taps, not specified). See the discussion on the public education purpose of § 141.92 in section IV.L.2.a of this preamble for why water systems are not required to conduct remediation activities as part of these requirements. The examples of State-level requirements that include "action levels" to require remediation or filter-first legislation offered by commenters do not impose requirements on PWSs. These laws require schools and child care facilities to conduct sampling and/or take specific actions, such as installing and maintaining filters certified to reduce lead. These examples of State requirements are fundamentally different than the proposed requirements for the LCRI because PWSs are generally not the entities required to carry out these actions. Further, since the EPA can only regulate PWSs in NPDWRs under SDWA section 1412, the examples are not consistent with the EPA's authority. Even if the EPA did set an action level for use by schools or child care facilities in the LCRI, the EPA would not have the authority under SDWA section 1412 to require schools and child care facilities that are not regulated as PWSs to take specific actions at that level. Therefore, it would be unenforceable and likely cause confusion. Instead, the EPA is requiring CWSs to provide schools and child care facilities with the 3Ts, which includes resources to help schools and child care facilities identify potential lead sources and reduce their lead levels. The 3Ts recommends that

schools and child care facilities reduce their lead levels to the lowest levels possible, recognizing there is no safe level of lead in drinking water. While not required under § 141.92, the EPA encourages schools and child care facilities to prioritize any remediation efforts based on the highest results or areas of concern (e.g., older fixtures, classrooms serving younger children). However, the EPA recognizes the authority of States to impose requirements on schools and child care facilities and included a waiver provision in § 141.92(h) for States to waive requirements for CWSs when schools and/or child care facilities are otherwise sampled, including through State laws and regulations on schools and child care facilities. See the section g on waivers below for discussion on State ability to offer waivers for alternative requirements.

f. Providing Results

The EPA requested comment on if CWSs should be required to make the school sampling results publicly available. Some commenters stated that the EPA should not require CWSs to make results public stating that schools and child care facilities are responsible for communicating results. A few commenters indicated that if the public learns the sampling results from the water system rather than from the school or child care facility, that it would establish an adversarial relationship between the water system and the school or child care facility. Other commenters disagreed and stated that schools and child care facilities may not share results with staff and users of the building and their families and that CWSs should be required to disseminate results to the public. Some commenters agreed with the EPA's proposed approach for CWSs to include a statement in the CCR informing the public that sampling is available to schools and child care facilities and direct them to contact their school or child care facility for more information, while others disagreed (see section IV.O.1 of this preamble for more information on this proposed requirement).

The EPA acknowledges the concerns from commenters about whether sampled schools and child care facilities will share results and other information with occupants of the buildings and the public. The EPA did not propose for CWSs to make results public due to the additional time and resources such a requirement would impose (88 FR 84959, USEPA, 2023a). Additionally, CWSs would not likely be in the best position to answer questions from the

public, including about why a school or child care facility declined or did not opt to participate in sampling or what the school or child care facility is doing to address any lead issues in their buildings. The EPA has heard from some commenters that schools and child care facilities should communicate with the users of their buildings. While the EPA does not have the authority under SDWA section 1412 to require schools and child care facilities that are not PWSs to take this action, the EPA strongly encourages them to share results and other relevant information as outlined in the 3Ts guidance. The EPA expects that many schools and child care facilities have experience with sharing such information (88 FR 84959, USEPA, 2023a). However, to increase public transparency, the EPA proposed and is finalizing a requirement for CWSs to include a statement in the CCR about school and child care facility lead sampling and direct members of the public to their local school or child care facility for information. The EPA received many comments supporting the proposed provision. The EPA intends for this requirement to help raise awareness among the general public and to incentivize schools and child care facilities to be proactive about sharing information. See section IV.O.1 of this preamble for further discussion of the final CCR requirement.

The EPA is also requiring in the final rule for CWSs to submit any sampling results to the State and to State and local health agencies within 30 days, but as soon as practicable, after CWSs receive the results. The EPA reduced the time from annually under the 2021 LCRR to within 30 days in the final LCRI such that the State, and State and local health agencies would know about sampling results in a timely manner, especially if the school or child care facility does not share the results. These State and local agencies can use this information to determine if they should take additional steps such as working with schools and child care facilities to address lead in their buildings or establishing requirements such as those as discussed below. The EPA notes that States may voluntarily choose to disseminate sampling results to the public (*e.g.*, posting on a website).

g. Waivers

The EPA received many comments detailing existing State requirements for school and/or child care facility sampling and requested that the EPA allow States to waive the sampling requirements for water systems. Many commenters stated that the EPA should

provide flexibility for States to issue waivers for recent or ongoing alternative programs. Some commenters also requested clarification on conditions for waivers and when they can be obtained. The EPA requested comment on two new waiver provisions in the proposed LCRI. The EPA received comments on whether the EPA should allow States to waive the sampling requirements of § 141.92 in schools and child care facilities that had been sampled between January 1, 2021 and the LCRI compliance date for the first five-year sampling cycle after the compliance date. Many commenters supported this provision but stated that the EPA should extend this date to as early as January 1, 2014, citing the new lead-free standards and stating that sampling conducted over this time period should “count” towards compliance with the LCRI.

The EPA also requested comment on the agency’s proposal to allow States to waive the sampling requirements of § 141.92 in schools and child care facilities that install and maintain filters on all outlets used for cooking and drinking. Additionally, the EPA requested comment on whether this should only be allowed if the schools and child care facilities are required by State or local law to install and maintain them. Some commenters did not support limiting the waivers based on State or local law stating that the provision should be flexible to maximize the number of eligible CWSs. Other commenters did not support the requirement as proposed, with some noting that it would be difficult for a water system to know which schools and child care facilities maintain filters. Some States indicated they would not offer waivers for schools and child care facilities that use filters without an existing requirement, stating sampling or other maintenance requirements are necessary to determine efficacy.

The EPA is aware that some States have requirements for lead sampling in schools and child care facilities (see the final LCRI Economic Analysis (USEPA, 2024a, chapter 3, section 3.3.10.2.1)). Many of these regulations require recurring sampling of all outlets used for cooking and drinking and may require remediation actions (*e.g.*, Minnesota Statutes 2023, section 121A.335; New Jersey Administrative Code [N.J.A.C.], section 6A:26–12.4; 10 New York Codes, Rules and Regulations [NYCRR] Subpart 67–4; State of Vermont, 2019). The majority of these existing laws impose requirements directly on schools and child care facilities, and do not involve PWSs. The EPA included waiver provisions in the

LCRR recognizing that it would be duplicative to require CWSs to conduct public education and sampling in schools and child care facilities that are already being sampled under an alternative program. The EPA also included provisions for waivers to cover schools and child care facilities sampled under voluntary programs, including those funded under SDWA section 1464(d). The EPA also emphasizes that the alternative voluntary programs are not required to involve the water system or be administered by the State drinking water program for the State to issue a waiver. For example, in some States, the Department of Education may administer voluntary sampling efforts using a grant awarded under SDWA section 1464(d).

The EPA notes several commenters cited various State requirements and asked the agency if they would qualify for a waiver. Other commenters requested flexibility to offer waivers even if the sampling was not conducted in alignment with the requirements of § 141.92. The EPA has included criteria in § 141.92(h) for States to determine if the alternative program is at least as stringent as the sampling requirements in § 141.92. Although commenters’ requests that the agency evaluate whether any programs would qualify for a waiver under the final LCRI, the final rule leaves this to the State and includes flexibilities in sample frequency, number, and protocol provided the overall program is at least as stringent as the requirements in LCRI. For example, a State requirement for all schools to be sampled once every six years but all outlets used for cooking and drinking are sampled and some remediation is required could be eligible for a waiver. Similarly, a program using a different sampling protocol may qualify for a waiver if outlets are sampled and remediation is required. The EPA also clarified that waivers can apply to groups of schools and licensed child care facilities (*e.g.*, all public elementary schools), may not exceed the time period covered by the sampling conducted under an alternative program, and automatically expire at the end of any 12-month period during which sampling is not conducted. Once a school or child care facility is no longer covered under a waiver, the CWS must fulfill the sampling requirements of § 141.92 at that site. Additionally, States can issue waivers at any time given that laws or programs may be established after the LCRI compliance date.

As described above, many commenters requested that the EPA require actions such as requiring all

schools and child care facilities to participate in sampling (*i.e.*, mandatory sampling), require remediation actions, and filter installation. As discussed in section V.L.1 of this preamble, the EPA does not have the authority under SDWA to require schools and child care facilities that are not regulated as PWSs to take these actions. However, there are many examples of States under State law that have successfully adopted such requirements (see the final LCRI Economic Analysis (USEPA, 2024a, chapter 3, section 3.3.10.2). Other Federal agencies may also issue requirements under their statutory authorities. In 2019, 14 Federal and non-Federal partners signed a Memorandum of Understanding (MOU) on Reducing Lead Levels in Schools and Child Care Facilities to voluntarily support and encourage schools and child care facilities to conduct sampling, remediation, and communication activities to reduce lead risks in their facilities (USEPA, 2019b). The signatories to the MOU agreed to encourage schools and child care facilities to take actions to address lead in their facilities, which could include regulations promulgated under their respective legal authorities or other non-regulatory initiatives like public education and outreach and technical assistance. Notably, on August 21, 2024, the Administration for Children and Families within the U.S. Department of Health and Human Services (HHS) issued a final rule “Supporting the Head Start Workforce and Consistent Quality Programming,” which requires Head Start programs in facilities where lead may exist to develop a plan to prevent children from being exposed to lead in water, including sampling and inspection at least every two years, and remediation as needed (89 FR 67720, USHHS, 2024). Additionally, on March 24, 2023, the EPA and the HHS issued a joint letter to governors, encouraging State and local governments to use Federal funding to address lead in schools and child care facilities. Specifically, the letter encourages governments to “establish or strengthen child care licensing and monitoring requirements to test for and address lead in early childhood settings along with funding to support the associated costs” and promote the use of the EPA’s 3Ts guidance (USEPA and USHHS, 2023). The EPA strongly encourages States to adopt lead testing requirements for schools and child care facilities, using a variety of means, including incorporating requirements in State and local licensing of schools and child care facilities. States are likely better

positioned than the EPA to administer lead testing and remediation programs because States can establish regulations for schools and child care facilities that would provide for greater consistency of education, testing, remediation activities, and public communication across all schools and child care facilities throughout a State. Additionally, States can directly apply for and have access to funding to support schools and child care facilities that may not be available to CWSs. If a State chooses to adopt requirements for schools and child care facilities, the State may waive the sampling requirements of § 141.92 for CWSs in the schools and licensed child care facilities covered by the alternative requirements. In the final rule, the EPA has provided a range of criteria for waivers such that States have the flexibility to establish alternative programs (§ 141.92(h)).

The EPA proposed allowing States to waive water systems from the sampling requirements in § 141.92 for the first five years after the LCRI compliance date in schools and child care facilities that had been sampled between January 1, 2021 and the LCRI compliance date. As proposed in LCRI, CWSs would be required to sample at the request of any school or child care facility they serve after the first five-year cycle (*i.e.*, starting five years after the rule compliance date) unless the State grants a waiver for an ongoing alternative program. The EPA notes general support for this concept and is finalizing the requirement. The EPA disagrees with extending the cut-off date to as early as January 1, 2014. The EPA proposed to limit the cut-off date to January 1, 2021. While the EPA recognizes that some schools and child care facilities may have been sampled under a one-time requirement or voluntary program as early as 2014, extending the cut-off date would result in an extended time period in which a school or child care facility would not be eligible for sampling under the LCRI. For example, if a school that had been last sampled in 2014 was covered by a waiver for the first five-year sampling period, the school would not receive an offer for sampling from the CWS until six years after the LCRI compliance date, or almost 15 years from when they were last sampled. In contrast, schools and licensed child care facilities have the opportunity to be sampled at least once every five years by their CWS under the LCRI. Additionally, the EPA proposed a cutoff date prior to the LCRI compliance date in response to concerns that many schools and child care facilities are

currently being tested for lead under existing State or local requirements and through WIIN grant funded efforts and should be allowed to “count.” Specifically, such a provision is intended to ensure that the final LCRI will not incentivize the delay of any voluntary school or child care facility lead sampling efforts in order to align with the LCRI compliance dates. The EPA encourages States to use available Federal funding, including WIIN grants, to conduct sampling in school and child care facilities as soon as practicable. Federally funded efforts could reduce the burden on CWSs, particularly during the first five-year cycle after the LCRI compliance date. Additionally, many schools and child care facilities were closed in 2020 due to the COVID-19-related shutdowns. The agency estimates that any data collected during 2020 COVID-19-related closures would be unrepresentative due to low water usage and longer than normal stagnation times. Based on the reasons described above, the EPA is not extending the January 1, 2021, cut-off date in the final rule. The EPA notes that CWSs are not required to sample if a school or child care facility declines or does not respond to the offer to sample. Schools or child care facilities that have previously been sampled and may have taken steps to address lead in their buildings may likely not respond to the offer for sampling.

The EPA is finalizing the provision allowing States to waive the sampling requirements of § 141.92 for CWSs in schools and child care facilities that install or maintain filters certified to reduce lead on all outlets used for cooking and drinking as proposed. The EPA proposed this requirement to account for regulatory and voluntary efforts to install filters certified to reduce lead in schools and child care facilities. The EPA is aware that some States have specific requirements including requirements to periodically sample or maintain filters, or for schools to only install filters if results are above a certain threshold (*e.g.*, 0.005 mg/L). The EPA requested comment on whether waivers should only be issued if there is a State or local requirement for installation and maintenance but decided to finalize the provision as proposed to maximize flexibility. The EPA acknowledges the implementation concerns raised by commenters, including that States or water systems may not be aware of which schools or child care facilities may be utilizing filters. However, the waiver will apply where the water system is aware of such school and child care facilities and will

encourage voluntary and proactive actions to reduce lead in drinking water. The EPA expects that water systems will work with their States if they are aware of schools and child care facilities that have taken actions to install and maintain these devices. States may also choose to issue waivers if the State has enacted “filter-first” legislation, which require filters to be installed and maintained.

3. Final Rule Requirements

a. Applicability

For the final LCRI, the EPA is requiring all CWSs to conduct public education and lead sampling in all schools and licensed child care facilities they serve (§ 141.92). The EPA is finalizing the proposed revisions clarifying the exclusion for schools and licensed child care facilities that were constructed or had full plumbing replacement after January 1, 2014 or the date the State adopted standards that meet the definition of lead free in accordance with section 1417 of SDWA, whichever is earlier and is renumbering this provision from § 141.92(a)(1) to § 141.92(a)(1)(i). The EPA is adding a revision in the final LCRI to specify that the excluded schools and licensed child care facilities must not be served by a lead, GRR, or unknown service line as a new clause in § 141.92(a)(1)(ii). The EPA is finalizing the revisions specifying that these requirements do not apply to NTNCWSs, including schools and child care facilities that are regulated as PWSs (§ 141.92(a)(2)). The EPA is also finalizing the proposed reorganization of § 141.92 that clarifies the requirements of this section compared to the 2021 LCRR and more clearly states the requirements in plain language.

All CWSs are required to develop a list of all elementary and secondary schools and licensed child care facilities they serve. The EPA is adding a revision in the final LCRI to clarify in § 141.92(b)(1) that schools and licensed child care facilities that are excluded under § 141.92(a) are not required to be included on the list. The EPA is finalizing the proposed requirement for CWSs to submit the initial list to the State by the LCRI compliance date in accordance with § 141.92(b). CWSs are not required to include schools and child care facilities on the list that do not meet the applicability requirements in § 141.92(a), such as a school constructed after January 1, 2014. CWSs must update the list at least once every five years following the LCRI compliance date and submit it to the State or certify that no changes have

been made to the list in accordance with § 141.92(b)(2).

b. Outreach to Schools and Licensed Child Care Facilities

All CWSs must conduct public education about the health risks of lead in drinking water to all elementary schools, secondary schools, and child care facilities on their list in accordance with § 141.92(c) at least annually. The EPA is adding a revision in the final LCRI to clarify that the information on the health risks in drinking water must be consistent with the content requirements of § 141.85(a)(1)(ii) through (iv) and (vi). Within the first five years following the LCRI compliance date, CWSs must notify the elementary schools and licensed child care facilities they serve that they are eligible for lead sampling (§ 141.92(c)(2)(i)). The notice must include a proposed schedule for the water system to conduct the sampling and a copy of the EPA’s 3Ts guidance. CWSs must provide this notice to at least 20 percent of the elementary schools and child care facilities they serve per year such that each elementary school and child care facility on the list receives the outreach during the first five-year sampling cycle after the rule compliance date (§ 141.92(d)(1)). Additionally, CWSs must notify all secondary schools annually that they may request lead sampling from the water system (§ 141.92(c)(2)(ii)). Starting in the sixth year following the rule compliance date, all CWSs must annually notify all the elementary schools, secondary schools, and licensed child care facilities they serve that the water system will sample at the request of the school or child care facility (§ 141.92(c)(3)).

c. Sampling Frequency

The EPA is retaining requirements from proposal for water systems to conduct sampling in 20 percent of the elementary schools and 20 percent of the licensed child care facilities they serve per year for the first five years after the rule compliance date until all facilities are sampled or are considered non-responsive (§ 141.92(d)(1)). If an elementary school or licensed child care facility either declines the offer for sampling or is non-responsive after at least two outreach attempts, the CWS may count the facility under the 20 percent for that year (§ 141.92(d)(1)(i)). However, the CWS must include information about the schools and child care facilities that either did not respond or declined sampling in a report submitted to the State as described in § 141.90(i)(3) (see section

IV.N of this preamble). Starting in the sixth year following the compliance date, CWSs must sample any elementary school or licensed child care facility that requests sampling. Starting with the rule compliance date, CWSs must sample any secondary school if requested (§ 141.92(e)). When conducting sampling on request, CWSs are not required to sample more than 20 percent of the schools or licensed child care facilities they serve per year and may defer requests above 20 percent to the next year (§ 141.92(d)(2)(i) and (e)(2)). A CWS is not required to sample an eligible school or child care facility more than once in a five-year period. If a school or child care facility is added to the list in § 141.92(b), the CWS must conduct the outreach in § 141.92(c)(1) such that all elementary schools and child care facilities receive one round of proactive outreach from the water system prior to only being offered sampling on request (§ 141.92(d)(3)).

d. Sampling

The EPA is retaining the proposed sampling protocol requirements in the final LCRI in § 141.92(f). When conducting sampling, CWSs must collect at least five samples per school and two samples per child care facility in accordance with § 141.92(f)(1). If there are not enough taps available to meet the required minimum number of samples, CWSs must collect a sample from all the taps used to provide water for human consumption. Samples may be collected from outlets with point-of-use devices only if there are point-of-use devices on all outlets typically used to provide water for human consumption. Samples must be collected according to the protocol in § 141.92(f)(2). Samples may be collected by the CWS, the school or child care facility staff, or another appropriately trained individual (§ 141.92(f)(3)).

e. Providing Sample Results

The EPA is finalizing the proposed requirements in § 141.92(g)(1) for water systems to provide results to the sampled school or child care facility, the State and local health agencies and the State as soon as practicable but within 30 days of receiving the results. See section IV.N of this preamble for school and child care facility reporting and section IV.O.1 for requirements for CWSs to include information about school and child care facility sampling opportunities in the Consumer Confidence Report. The EPA is retaining the requirements for water systems to provide information about remediation (e.g., the EPA’s 3Ts or other related materials) to the sampled schools and

child care facilities along with sample results in § 141.92(g)(1)(i)).

f. Waivers

The EPA is finalizing the proposed provision in § 141.92(h)(5) allowing States to waive the sampling requirements for water systems in § 141.92 for the first five years following the final LCRI compliance date for any schools or child care facilities that were sampled between January 1, 2021 and the LCRI compliance date that meet the requirements of this section. CWSs must conduct the sampling requirements of § 141.92 for all other eligible schools and licensed child care facilities. Additionally, CWSs must conduct the sampling requirements in all the schools and licensed child care facilities on the list in § 141.92(b) starting in the sixth year after the LCRI compliance date, unless those facilities are covered by a different waiver under § 141.92(h).

The EPA is also finalizing the proposed provision allowing States to waive the sampling requirements for water systems in § 141.92 for any schools or licensed child care facilities that install and maintain filters certified to reduce lead (§ 141.92(h)(1)(iv)). The EPA is retaining the other waiver provisions introduced in the 2021 LCRR and proposed for LCRI including allowing States to waive sampling requirements for water systems to sample in schools and child care facilities that are covered by alternative testing programs that are at least as stringent as the sampling requirements in § 141.92 as provided in § 141.92(h). CWSs are required to fulfill all the requirements of § 141.92 in the subset of schools and licensed child care facilities they serve that are not covered by a waiver or once a waiver no longer applies (§ 141.92(h)(2) and (3)).

M. Copper

1. Rationale and Proposed LCRI Requirements

Copper is an essential trace element required for several metabolic processes; however, excess copper intake is toxic and linked to various adverse health effects. Acute gastrointestinal conditions are the most common adverse health effects observed among adults and children. Chronic exposure to copper is particularly a concern for people with Wilson's disease, an autosomal recessive genetic disorder of copper metabolism affecting 1 in 30,000 individuals (Ala et al., 2007). These individuals are prone to copper accumulation in body tissue, which can lead to liver damage, neurological, and psychiatric symptoms (Dorsey and

Ingerman, 2004). Additional information on the health effects associated with copper are available in appendix E of the final LCRI Economic Analysis (USEPA, 2024a).

Under the LCRI, the EPA proposed to require water systems to provide customer notice of an individual's copper tap sampling results. Similar to the notice for lead tap sampling results, the notice for copper tap sampling results must include the results of copper tap water monitoring for the tap that was tested, an explanation of the health effects of copper as provided in appendix B to subpart Q of part 141 (Standard Health Effects Language for Public Notification), a list of steps consumers can take to reduce exposure to copper in drinking water, and contact information for the water system. The EPA proposed that systems must provide all consumer notices of individual copper tap sampling results as soon as practicable but no later than three calendar days after the water system learns of the tap monitoring result and any notifications conducted by mail must be postmarked within three days. The EPA proposed the notice must also provide the MCLG and action level for copper, both of which are 1.3 mg/L and the definitions for these two terms from § 141.153(c). The EPA proposed to allow systems to combine the lead and copper results and required information into a single notice in cases where copper and lead samples are collected at the same time. This would also include notification of results from on-request tap sampling required under § 141.85(c).

2. Summary of Comments and the EPA's Response

The EPA received several comments on the proposed LCRI about the regulation of copper. The EPA received comments focused on creating separate sampling requirements for lead and copper. Commenters requested that water systems collect copper and lead samples from different locations, with copper samples focusing on locations with expected high concentrations of copper (*i.e.*, sites with newly installed copper service lines). Commenters noted the proposed LCRI targets sites most likely to have elevated lead levels and not necessarily sites that may have elevated copper levels.

The EPA disagrees with creating separate sampling pools for lead and copper. The sample site selection criteria at § 141.86(a)(4) require sampling from sites with the highest risk (lead) followed by sites that have copper pipes (Tier 4 sites). Tier 5 includes sites that are representative of

sites throughout the distribution system that can include sites served by copper pipes. Commenters also noted the challenges with recruiting volunteers to collect tap samples, which would further be exacerbated by requiring additional separate sites for copper. In addition, maintaining two sample pools, one for lead and one for copper, would further complicate the rule. Recognizing the inherent complexity of the tap sampling requirements for the LCR, the agency did not develop a separate tiering structure for copper sites to ease implementation.

Moreover, because the sources of lead and copper in drinking water are generally the same (*i.e.*, corrosion from fixtures of pipes containing the metal), and because the treatment technology for elevated copper levels is also the primary treatment for lead (*i.e.*, reducing corrosion in the distribution system), it is rational to group these two contaminants into a single rule (56 FR 26490, USEPA 1991). Additionally, both lead and copper require sampling at taps, rather than at the entry point of the distribution. While the EPA did not propose many revisions to address copper, the rule revisions will also reduce copper levels. Treatments to control for lead are also effective at controlling for copper, such as pH and alkalinity adjustment and orthophosphate inhibitors. For example, installing and re-optimizing OOCCT for systems above the lead action level will likely reduce copper levels. Although the tiering structure for the final LCRI has not changed with regard to copper, Tier 4 includes sites with copper lines; thus sampling will occur at higher-risk copper sites when the higher risk lead sites are no longer available.

Additional comments on copper included encouraging the EPA to reassess public education requirements for copper. These comments requested the EPA require water systems to inform their users when a system exceeds the copper action level, in a manner similar to how water systems are required to inform their users when a system exceeds the lead action level. The EPA disagrees with requiring water systems to inform their users of a copper ALE. The LCRI requires water systems to issue Tier 2 Public Notification if the system has a treatment technique violation in response to a copper ALE. In addition, a water system must report copper tap sampling compliance information in its CCR under § 141.153(d), along with the new requirement for water systems to provide notification to consumers of their individual copper tap sampling results under § 141.85(d). The EPA

expects that elevated copper levels may be addressed by CCT, in addition to systems' providing the appropriate health effects language to consumers through public notification or the CCR, thus protecting individuals at most risk of adverse health effects due to copper exposure (*i.e.*, those with Wilson's Disease). Additionally, the health impacts of acute copper exposure versus acute lead exposure are vastly different. Exposure to lead poses serious health risks to the brain and nervous system of children, while copper exposure causes gastrointestinal distress for a majority of the population, except for those with Wilson's Disease who should be aware of all potential exposure sources of copper. Therefore, the EPA finds it is reasonable to rely on these requirements for public health protection from copper for purposes of the treatment technique for public education in lieu of adding others, as requested by commenters.

3. Final Rule Requirements

The final LCRI retains the proposed changes to copper including the timing of the notification for an individual's copper tap sampling result. Water systems must provide notification of the tap sampling result as soon as practicable but no later than three business days and any notifications by mail must be postmarked within three business days of the system's learning of the tap sampling results as stated in § 141.85(d)(2). In cases where copper samples are collected at the same time as lead, systems are permitted to combine lead and copper results and required information into a single notice. The EPA expects that this will simplify the implementation of the rule by allowing systems to deliver both the lead and copper results and associated required information at the same time.

N. System Reporting and Recordkeeping

1. System Reporting Requirements

a. Rationale and Proposed LCRI Revisions

The EPA proposed in the LCRI to revise water system reporting requirements in accordance with other proposed changes to the LCRI (§ 141.90). The proposed revisions to these sections were primarily driven by the changes and additions to the corresponding requirements in other sections of the proposed LCRI to ensure consistency and completeness of reporting requirements. Revisions proposed in other parts of the rule affect reporting of tap sampling results for LSL sites, documentation requirements for customer refusals, reporting requirements for systems with multiple

lead action level exceedances, compliance with the service line inventory and replacement requirements, and reporting requirements for systems with schools and child care facilities. System reporting requirements should match the LCRI requirements to inform State decision-making and improve implementation and oversight.

The EPA proposed modifying the tap sampling reporting requirements for systems sampling at LSL sites to report both first- and fifth-liter sample results in accordance with the updated tap sampling protocol.

In the 2021 LCRR, systems are required to report summary numbers of lead, GRR, and unknown service lines when they submit their service line material inventory. The LCRI proposal expanded the inventory reporting requirements to include lead connectors and non-lead service lines, beginning with the baseline inventory due by the LCRI compliance date.

Under the 2021 LCRR, systems with LSLs are required to begin conducting standard tap monitoring within one year of the rule compliance date, and submit a site sample plan to the State for review prior to the start of the first tap monitoring period. In LCRI, the EPA proposed to expand this requirement to start standard monitoring to all systems with lead, GRR, and/or unknown service lines.

The EPA proposed to require that all systems conducting service line replacement report their compliance with the service line inventory and replacement requirements to the State. Each year, systems would be required to submit inventory summary information, including the current number of LSLs, GRR service lines, unknown service lines, non-lead service lines, and lead connectors. They would also be required to report information on their replacement program, including the total number and street addresses of locations where full, partial, and GRR service lines and lead connectors were replaced. The EPA also proposed that systems report the total number of unknown service lines determined to be non-lead and the street address of any service line inventoried as non-lead that is later discovered to be a lead or GRR service line. Under the LCRI proposal, systems would be required to certify to the State the number of service lines not replaced due to property owners not providing consent to conduct service line replacement.

As part of the reporting requirements, systems must certify that various requirements have been completed. The EPA proposed two required

certifications for systems conducting public education and making filters available following multiple lead action level exceedances. First, they must certify to the State that they conducted at least one required outreach activity in the previous year. Second, they must certify that they complied with filter availability requirements in the previous year by providing a copy of the filter distribution plan and the number of filters provided each tap sampling period.

The EPA proposed improvements to the reporting requirements for water systems with schools or child care facilities. The EPA proposed to require systems to submit the initial list of schools and child care facilities they serve by the rule compliance date. The EPA also proposed to require systems provide the results of school and child care sampling to the State within 30 days of receiving them (see section IV.L of this preamble). The 2021 LCRR requires water systems to submit a summary report to the State containing information about school and child care sampling during the prior calendar year, including the number of schools and child care facilities sampled and the number of elementary schools and child care facilities that declined or did not respond to attempts for sampling. The EPA proposed in the LCRI that the report must also include the names of the schools and child care facilities. The EPA anticipated that this would help States identify which schools and child care facilities have not been sampled and why.

b. Summary of Comments and the EPA's Response

The EPA received comments stating there were too many system reporting requirements and recommended the EPA remove requirements or decrease the number of requirements. These commenters stated that multiple and different types of reporting requirements are too burdensome both on the systems that must complete the reporting requirements and on the States that must review them.

In response to these comments, the EPA reviewed all system reporting requirements for the LCRI. The EPA disagrees with these commenters because the agency determined that each of the reporting requirements in the proposal provide information that is essential to public health protection or the implementation of the rule. The EPA acknowledges that there are several reporting requirements associated with this rule. However, the LCRI is a complex rule with multiple components that requires adequate system reporting

to provide the necessary data for public health protection and effective oversight and enforcement.

The EPA received comments stating that there were too many dates throughout the year when systems would be required to report information to the State. Reporting requirements in the proposed LCRI included reporting sampling results, service line inventory information and certifications that required actions had been taken by systems. To reduce complexity and administrative burden, some of these commenters suggested the final rule should align the frequency of some of the certifications to streamline the reporting requirements. The EPA agrees with these commenters that a more streamlined set of reporting dates would help ease confusion and reduce burden for systems and States. For the final LCRI the EPA has limited the total number of dates throughout the year when reporting will be required by aligning the reporting schedules to the greatest extent possible. Specifically, the EPA adjusted the reporting deadlines in § 141.90(a)(1)(ii), (a)(3)(i), (e)(3) through (10) and (13), and (f)(3), (6) through (8), and (10). The majority of the reporting elements are now required on either the date three years after the compliance date, 10 days after the tap sampling period, or annually by January 30. Other reporting elements retain different reporting dates due to the specific nature of those reporting requirements.

The items that must be reported on the date three years after the compliance date are generally items that are associated with the service line inventory. Examples of this are the initial inventory and documentation of previous inventory validation efforts that have been completed by the system prior to the LCRI. These items are necessary at the compliance date because they provide information that systems will need to comply with the LCRI.

The items that must be reported 10 days after the tap sampling period are generally associated with tap sample results from that tap sampling period. These results provide information vital to understanding public health risk, such as concentrations of lead and copper in drinking water at consumers' taps. The reporting results can also lead to system requirements for taking action to protect public health triggered by the 90th percentile lead and copper values, such as follow up sampling and public education. Since this information may lead to actions by systems or individuals to protect public health, these items must be reported relatively quickly.

The items that must be reported annually by January 30 are generally related to the LSL replacement program, the service line inventory, public education summaries, or other certifications provided by systems that they are meeting the various requirements of the LCRI. These items are less time sensitive and therefore can be reported on an annual basis. The date of January 30 was selected because many reporting items in the proposal and the 2021 LCRR would already occur on this date. The emphasis of January 30 meant that for the final LCRI, the EPA changed some reporting items, mostly certifications associated with public education and outreach, from a July 1 date to January 30. The EPA maintained the annual frequency for these items because the EPA did not receive comments stating that the frequency was inappropriate. However, the EPA aligned the reporting dates to respond to comments that suggested that a more streamlined approach would reduce confusion and burden for systems and States.

In addition, the EPA modified the regulatory language describing the January 30 date in some instances for clarity and consistency, without changing the reporting date. For example, the proposal used terms such as "30 days after the end of the calendar year" or "30 days after the end of the program year" to describe January 30. This could result in confusion about the actual reporting deadline, when the EPA intends for all applicable reporting requirements to be met annually by January 30. Hence, for the final LCRI, the EPA amended language in § 141.90 of the rule to consistently say "annually by January 30."

The EPA also adjusted reporting requirements to match the change from proposal in the designation of the program year. The agency made this change to reduce implementation burden. For the final LCRI, the EPA added the definition for program year to §§ 141.90(e) and 141.84(d)(5)(iii) to clarify that the first mandatory service line replacement "program year" is from the compliance date specified in § 141.80(a)(3) to the end of the next calendar year and that every subsequent program year is aligned with the calendar year. This means that the first program year will be slightly longer than one calendar year and subsequent program years will be one calendar year long. All program years, including the first program year, will end on December 31. The reporting deadlines for many items in the proposal were dates stated in relation to the program year (e.g., "no later than 30 days after

the end of each program year"). The EPA changed many of these deadlines to cite specific days throughout the year (e.g., "annually by January 30") for clarity. While the language describing the date has changed, these systems still have the same amount of time for reporting since they are still 30 days after the program year. The revised language and the alignment of program year to calendar year responds to comments that a more streamlined approach will reduce confusion and burden.

Finally, there are some reporting requirements that have different reporting dates. These types of requirements generally fall into two categories. This first category is items that require fast action, often sooner than 10 days, due to an interest in public health protection, such as certification that public education materials were delivered appropriately after a lead action level exceedance. Public health is protected by quick reporting because the reporting can result in action taken by the system or the public to protect from the risk of lead or copper contamination in their drinking water. The second category is an item that is relatively uncommon but will lead to a major change in the system's requirements under the rule, such as the discovery of an LSL in a system that was previously thought to be free of LSLs. In these cases, the system will often need to take action to modify their operations and it would not be appropriate to wait for up to a year to begin. These specific circumstances are not appropriate for the agency to make changes in the final LCRI to align these requirements with the other more common ones previously discussed.

The EPA received comments concerning the requirement to report tap sampling results within 10 days of the end of the tap sampling period, which is the period when systems must collect samples within the tap monitoring period. Some commenters felt that it would not be possible to meet this deadline, and instead this reporting should be tied to the tap monitoring period. These commenters reasoned that for samples taken near the end of the tap sampling period, there is not sufficient time for systems to send them to a laboratory, receive the results, perform the 90th percentile calculations, and report to the State all within ten days. The EPA disagrees with these commenters because there is a high public health value of having systems report results to States within 10 days of the tap sampling period. This is because high levels of lead or copper, as

indicated by tap sample results, require quick action by water systems to protect public health. These actions include conducting public education so consumers can take informed actions to protect their health and reducing exposure to these contaminants through CCT. In addition, ensuring the State receives the 90th percentile data within 10 days will allow the State to provide oversight should actions need to be taken to protect public health. The EPA also notes water systems have flexibility as to when tap sampling occurs within the tap sampling period. Systems do not need to wait to the last day of the tap sampling period if the system is concerned about receiving laboratory results in time to calculate the 90th percentile and provide results to the State within 10 days. Therefore, the EPA determined 10 days is an appropriate timeframe.

The EPA received several suggestions for minor technical changes to the reporting requirements in the areas of system reporting, mainly for consistency with other sections of the rule, clarity, and understandability of the regulatory text. The EPA agrees that consistency, clarity and understandability are important goals for the LCRI. Therefore, the EPA agrees with advancing these goals and adjusted the LCRI accordingly. In general, these changes did not substantially impact the requirements of the rule.

For example, the EPA received comments noting that in many locations in § 141.90, some language was used inconsistently. In the proposal, words like “certify,” “document,” and “demonstrate” were used interchangeably. The EPA agrees that terminology should be used consistently to ease implementation of the LCRI. Therefore, for the final LCRI, the EPA revised § 141.90 to consistently use “certify” to document whether a system has completed a rule requirement when data or other details are not required. This revision occurs at § 141.90(a)(2)(iii) and (f)(4) and (7). Conversely, in § 141.90(e)(10), the EPA changed the language from “certify” to “submit” to reflect that the reporting requirement is the number of service lines, not simply to notify the State that the requirement has been met.

In the proposal language in § 141.90(a)(2)(iii), commenters noted that the requirement for systems to document that the results of monitoring will be made publicly available was presented in a way that could be perceived to require documentation of an action that would happen in the future and that this would be difficult to document and enforce. The EPA

agrees with these comments that the way this requirement was worded would be challenging for systems to implement. Therefore, the EPA has revised the final requirement to be a certification of an action that has occurred in the previous tap monitoring period.

c. Final Rule Requirements

The final LCRI contains minor textual revisions to enhance the clarity of § 141.90 and to ensure that all the reporting requirements are consistent with other provisions of the rule. The EPA also streamlined many of the reporting requirements of the rule.

For the final LCRI, the EPA revised the reporting requirements for tap monitoring for lead and copper and for distribution system and entry point monitoring for water quality parameters to provide clarifications and update references. The EPA also made changes to clarify that the tap sampling protocol must meet the requirements of § 141.86(b) and to clarify that if a system modifies its protocol, it must be submitted to the State prior to the next tap sampling period (§ 141.90(a)(1)(ii)).

The EPA revised § 141.90(a)(2)(iii) to require the system to certify that they made the results from the preceding tap monitoring period publicly available. The proposed LCRI required the system to certify they would make the results public in the future, which would have been difficult to enforce. The EPA also revised this section to be consistent with the rest of the LCRI by replacing the word “documentation” with “certification.”

For the final LCRI, the EPA added a provision (§ 141.90(a)(2)(viii)) to require systems to report the number of sites with non-responsive customers or customer refusals during the tap sampling. The agency is adding this clarification to be consistent with requirements in § 141.86(a)(4).

The final LCRI added a requirement for systems qualifying under § 141.86(b)(3) to submit updated documentation when there are changes to standing times and/or locations for substitute compliance tap samples (§ 141.90(a)(3)(i)). The agency is adding this clarification to be consistent with other requirements in § 141.86(b)(3).

In the proposal, § 141.90(a)(4) contained language that described system and State requirements when implementing a new source or a long-term treatment change. The EPA determined this language is substantive language about system and State requirements beyond reporting. Therefore, the EPA added this language to § 141.81(h), because § 141.81 contains

requirements concerning corrosion control treatment requirements, which are most closely related to requirements concerning implementing a new source or a long-term treatment change. The EPA has also retained identical language in § 141.90(a)(4) to reflect the importance of the requirement and to emphasize both the substantive and reporting aspects of the requirement.

The EPA added language to § 141.90(c)(5), which applies to systems that choose to defer OCCT because they can complete service line replacement in five years or less at a minimum annual rate, as described in § 141.81(f). The language in the proposal stated that these systems must certify that they have completed their mandatory service line replacement program. The EPA added language to clarify that the system may also certify that they have met the minimum annual replacement rate calculated under § 141.81(f)(1)(ii). The agency added this text for clarity and it does not change the requirements of this section from the proposal.

For the final LCRI, the EPA added a description of “program year” to the service line inventory and replacement reporting requirements (§ 141.90(e)) to provide clarity and ease implementation. This description is also provided under the service line replacement requirements (§ 141.84(d)(5)(iii)). The EPA is adding this description for clarity and ease of implementation.

The final LCRI requires systems to submit a baseline inventory that includes a summary of the total numbers of each of the following (§ 141.90(e)(2)): lead, GRR, unknown, and non-lead service lines, lead connectors, and connectors of unknown material. The EPA is adding this clarification to be consistent with other requirements in § 141.84(a)(2) through (4).

For the final LCRI, the EPA added a requirement (§ 141.90(e)(3)(ii)) for systems to certify annually that there have been no changes to their service line replacement program, or if there have been changes, they must submit a revised service line replacement plan. This requirement is necessary to give States appropriate awareness and oversight on any potential changes to the plan. This reporting requirement is consistent with the new requirement in the LCRI for systems to annually update their replacement plan (§ 141.84(c)). For more information on this requirement, see section IV.C of this preamble.

For the final LCRI, the EPA added a provision (§ 141.90(e)(3)(iii)) that requires systems eligible for the deferred deadline provisions for LSLR to report

updated service line replacement plan information to the State at intervals described in § 141.84(d)(5)(vi) (see section IV.C of this preamble). The EPA added this language to be consistent with the requirements in § 141.84(d)(5)(vi).

The LCRI proposal required systems to submit the updated LSL inventory to the State. The EPA added clarifying language to § 141.90(e)(4) stating that a water system may provide instructions to the State on how to access the updated LSL inventory online instead of submitting the entire inventory to the State. The EPA expects this will help reduce the administrative burden associated with this requirement on systems and States.

The EPA included a new requirement at § 141.90(e)(8)(i) for systems to report the number of connectors of unknown material as part of their inventory. The EPA added this language to be consistent with requirements in §§ 141.84(b)(2)(iv) and 142.15(c)(4)(iii)(D). For more information about the documenting connectors of unknown material in the inventory, please see section IV.D.1 of this preamble.

The EPA included a requirement in the final LCRI in § 141.90(e)(9) for systems to submit to the State the specific version (including the date) of the service line inventory used to determine the number of non-lead service lines used when the number of non-lead service lines in the validation pool was determined. The EPA included this requirement to be consistent with requirements found in § 141.84(b)(5)(v). For more information on requirements for inventory validation, please see section IV.D.4 of this preamble.

The EPA modified § 141.90(e)(10) to enhance the clarity of the language. Specifically, the text now makes it clear that the system must provide documentation of service lines not replaced for systems that lack access, as described in § 141.84(d)(2). In addition, the language clearly states that for systems that lack access because of lack of owner consent where consent is required by State or local law, the system must provide documentation of each reasonable effort conducted by the system as described in § 141.84(d)(3). The EPA also moved the requirement to report the total number of lead and galvanized requiring replacement service lines not replaced because the system does not have access to conduct full service line replacement from § 141.90(e)(10) to § 141.90(e)(8)(ix) because it is summary information that is similar to the other items in the latter section. The EPA moved this provision

for clarity and the move does not substantively impact the requirement.

For the final LCRI, the EPA added clarifying language to the public education reporting requirements (§ 141.90(f)(1)) for systems to submit a copy of all written materials to the State prior to delivery. The EPA also added a provision to provide the State discretion to require approval of the written materials prior to their delivery. This language is consistent with the language in § 141.85(a)(1) of the LCRI. In addition, the EPA clarified that systems that have previously submitted to the State a list of newspapers, radio stations, television stations, and facilities and organizations to which the system delivered public education materials, do not need to resubmit this list, unless required to do so by the State (§ 141.90(f)(2)).

The EPA added clarifications to § 141.90(f)(3) on the reporting requirement to send an example copy of the consumer notification of tap sampling results to the State along with a certification that the notification has been distributed in a manner consistent with the requirements of § 141.85(d). This requirement applies to all tap sampling results, including those used to calculate the 90th percentile value as described in § 141.86 and consumer-requested samples outside the tap sampling period for systems on reduced monitoring. The new text clarifies that some items must be reported 30 days following the end of the tap sampling period and that some items must be reported annually by January 30. The different schedules are necessary because certain types of tap sampling, such as consumer-requested samples, may occur outside the tap sampling period. The EPA made this change for clarity and to allow for deadlines that made sense for samples that may be taken outside the tap sampling period.

For the final LCRI, the EPA reordered the school and child care facility sampling at § 141.90(i) to clarify that if systems report they do not serve schools or child care facilities, they must continue to certify that they do not serve schools or child care facilities. If they do begin to serve one or more schools or child care facilities, they must meet the requirements of the rest of the section. The EPA made this change because language in the proposal could be read to provide that the systems would not be required to monitor for new schools or child care facilities after initially reporting none served. The EPA finds it critical that all new or newly identified schools and child care facilities are subject to the remaining reporting requirements of this section. In

addition, the EPA reorganized sections § 141.90(i)(3)(iii) through (vi) to make the sections more readable and understandable. However, the EPA did not make substantive changes to these sections for the final rule.

O. Other Proposed Revisions to 40 CFR Part 141

1. Consumer Confidence Report Rule (40 CFR Part 141, Subpart O)

a. Rationale and Proposed LCRI Revisions

All CWSs are required by SDWA to provide their customers at least once a year with a CCR, a drinking water quality report that summarizes the state of their drinking water supply. The CCR must include information about the water system, sources of water, detected contaminants including lead, compliance with drinking water rules including the lead and copper rules, as well as other information. CCR requirements are described in the CCR Rule (40 CFR part 141, subpart O), which is part of the 1996 Right to Know provisions of SDWA. On May 24, 2024, the EPA published a final rule to strengthen the CCR Rule (89 FR 45980, USEPA, 2024c). The EPA revised the CCR Rule in accordance with America's Water Infrastructure Act (AWIA) of 2018 and to improve the readability, clarity, and understandability of CCRs as well as the accuracy of the information presented, improve risk communication in CCRs, incorporate electronic delivery options, provide supplemental information regarding lead levels and control efforts, and require systems who serve 10,000 or more persons to provide CCRs to customers biannually (twice per year). Under the LCRI, the EPA proposed to revise the lead and copper related requirements of the CCR to further enhance risk communication and provide additional information about sampling in schools and child care facilities and the service line replacement plan. These proposed revisions are described below.

i. Lead Information Statement

All CWSs are required to include an informational statement about lead in drinking water in their CCRs. The lead information statement is intended to help ensure vulnerable populations or their caregivers receive information at least once a year on how to reduce their risk of exposure to lead in drinking water. In the LCRI, the EPA proposed to revise the lead information statement. The proposed revisions included providing information about the risks of lead to all age groups, additional measures consumers can take to reduce

exposure to lead in drinking water, new language recommending flushing for water used in cooking and formula feeding, and using filters properly. Revisions to the lead information statement were in response to various stakeholder comments, including feedback received as part of the LCRR review engagements, public meetings on environmental justice considerations and other stakeholder meetings held to support the development of the proposed LCRI (USEPA, 2023g; USEPA, 2023h), written public comments submitted to the LCRI docket following the environmental justice meetings (Docket ID EPA-HQ-OW-2022-0801), and written comments submitted on the proposed CCR Rule Revisions (Docket ID EPA-HQ-OW-2022-0260). The proposed revised information statement about lead was as follows and as described in the proposed LCRI:

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and home plumbing. [INSERT NAME OF UTILITY] is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in the plumbing in your home. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requirement replacement service line you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact [INSERT NAME OF UTILITY and CONTACT INFORMATION]. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

ii. Mandatory Lead Health Effects Language

Under the CCR Rule Revisions, CWSs are required to include in the report the mandatory lead or copper health effects language listed in appendix A to subpart O of part 141 when they fail to take one or more actions prescribed by § 141.80(d), § 141.81, § 141.82, § 141.83, § 141.84, or § 141.93. With the LCRI, the

EPA proposed to require CWSs to include the mandatory lead or copper health effects language when they fail to take one or more actions prescribed by §§ 141.80 through 141.93. This would expand the requirement to apply to more situations, such as failing to meet the public education requirements in § 141.85 or requirements for sampling in schools and child care facilities under § 141.92, so that consumers are more informed of the health effects of lead and copper. Additionally, the proposed LCRI revised the mandatory lead health effects language as described in the LCRI proposal and provided in section J.2.d of this preamble to clarify health effects in all age groups and include information about contacting your health care provider for more information. The EPA proposed the same health effects language in public education and public notification about lead in the proposed LCRI.

iii. Other Requirements

The EPA proposed, under § 141.153, to require that water systems include in the CCR a statement that the water system is required to sample for lead in schools and licensed child care facilities as requested by the facility, in accordance with § 141.92 of the proposed LCRI, to direct relevant members of the public to contact their school or child care facility for further information about potential sampling results.

In the LCRI, the EPA proposed to require water systems to make their service line replacement plan publicly available. Accordingly, the EPA also proposed to require CWSs with lead, GRR, or unknown service lines in their inventory to include in the CCR information on how to obtain a copy of the service line replacement plan or for systems serving more than 50,000 persons, how to view the plan on the internet. Including information about how to access the plan in the CCR would further increase transparency about the service line replacement process, accessibility of the plan, and consumer awareness about service line replacement in their community.

The EPA proposed in the LCRI to expand the 2021 LCRR requirement to include a statement on the service line inventories to also include information on known lead connectors or unknown connectors.

b. Summary of Comments and the EPA's Response

i. Comments on Language About the Safety of Water in the CCR

The EPA received comments concerning systems using misleading language in the CCR about the safety of the water in relation to lead and copper. Commenters were concerned that water systems have used language in the CCR suggesting a community's water was safe with respect to lead because it met the lead action level or was in compliance with the rule. Commenters argued this suggestion contradicted the EPA's messaging that there is no level of lead without health risks. Some commenters also expressed concerns with the language about consumers having their water tested if they are concerned about lead, noting that a one-time test could be misleading. In response to commenters' concerns about statements indicating the water is safe if the system's sampling results are below the lead action level and in regulatory compliance, the EPA has updated the lead information statement (§ 141.154(d)(1)) required in the CCR to note that there is still a risk of lead exposure even when tap results at a given point do not detect lead. The EPA also notes that the existing CCR Rule in § 141.153(h)(5) states that systems may include such additional information as they deem necessary for public education consistent with, and not detracting from, the purposes of the report. As noted in the Final CCR Rule Revisions, "the EPA interprets these provisions as precluding misleading statements by water systems because such statements would detract from the purpose of the report by downplaying the situational information and potential risks to consumers served by the system" (89 FR 45980, USEPA, 2024c). In addition, as noted in the Final CCR Rule Revisions, the EPA intends to work with stakeholders on developing CCR communication tools and guidance to continue to support CCRs that are accurate, clear, understandable, and readable with regards to lead as well as other contaminants (89 FR 45980, USEPA, 2024c).

Some commenters wrote that the CCR should include information about how common lead is not only in service lines but in premise plumbing and that the CCR should discuss all sources of lead in drinking water. The EPA notes that the lead information statement has included, since the 2007 LCR revisions and maintained in the LCRI, language that service lines and home plumbing are the primary sources of lead in

drinking water. The EPA requires the statement to include information on sources of lead exposure recognizing there could be sources beyond the control of the water system, such as premise plumbing, to help inform the consumer of all potential lead drinking water risks so they can take proactive steps to protect their health. The lead information statement recommends that consumers identify and remove any lead plumbing parts from their home and includes additional steps to help reduce their exposure to lead in drinking water such as using a filter certified to reduce lead.

Some commenters asked the EPA to adopt language in the CCR lead informational statement that recommends all consumers at all times use a filter certified to remove lead. The EPA disagrees with these commenters because not all consumers have lead plumbing or are served by service lines that are known to or potentially contain lead. However, the EPA notes that the lead information statement includes filters as an effective option for reducing lead exposure and emphasizes their proper use (§ 141.154(d)(1)).

Some commenters expressed concerns with the CCR's proposed lead information statement being too long, particularly the added steps for consumers to reduce their exposure to lead in drinking water. Some commenters recommended including this information in guidance instead so that water systems have more flexibility in how they present the information. The EPA disagrees with removing this mandatory language from the CCR as it is necessary to inform consumers of actions they can take to reduce their risk of exposure to lead in drinking water and thereby prevent known or anticipated adverse health effects to the extent feasible. In addition, the rule has allowed, since the 2007 LCR revisions, water systems to write their own informational statement in consultation with the State in accordance with § 141.154(d)(2). Under the scope of the revised CCR Rule, the EPA revised § 141.154(d)(2) to require approval of an alternative educational statement from the CWS's primacy agency to use in the CCR. Therefore, water systems may make adjustments to the way they present the information with approval of the State.

ii. Comments on Inclusion of Replacement Plan Information in the CCR

The EPA proposed in the LCRI to require CWSs with lead, GRR, or lead status unknown service lines to include in the CCR information about the

service line replacement plan and how to obtain a copy of the replacement plan. The EPA received comments supporting the inclusion of this information in the CCR and is retaining these requirements in the final LCRI. The final rule states that for systems with lead, GRR, or lead status unknown service lines in the systems inventory pursuant to § 141.84(a) and (b), the CCR must include information on how to obtain a copy of the service line replacement plan or view the plan on the internet if the system is required to make the service line replacement plan available online (§ 141.153(h)(8)(iii)).

iii. Comments on Including Statement About School Sampling in the CCR

The EPA requested comment in the proposed LCRI on the proposed requirement for systems to provide an informational statement in the CCR about school and child care sampling requirements and that consumers can contact the school or child care facility about any potential sampling results. The EPA received mostly supportive comments for this provision to be included in the final LCRI. The EPA also received comments noting the inclusion of this information in the CCR could potentially make the CCR more confusing due to the report already being complicated. While the EPA acknowledges commenters' concerns about the amount of information in the CCR, the agency is maintaining this requirement in the final rule given the public health benefit this information provides. Since the EPA does not have the authority under SDWA to require schools and child care facilities to share their sampling results, the agency is requiring this CCR provision to help ensure that consumers are aware of the school and child care sampling requirements and that they can reach out to the school or child care facility about any potential sampling results. Directing consumers to contact the school or child care facility connects the consumer with the entity who can better respond to any follow-up questions as well such as questions regarding next steps including any remediation actions.

The final rule retains the proposed requirement to include an informational statement in the CCR about school and child care sampling requirements with a slight modification to be clearer that the system should direct consumers to contact the school or child care facility for further information about potential sampling results as stated in § 141.153(h)(8)(v).

c. Final Rule Requirements

i. Lead Information Statement

In the final LCRI, the EPA is revising the lead information statement with minor modifications in response to comments that recommended adding language to the CCR about the risk of lead exposure even when tap results at a given point in time do not detect lead. The EPA is finalizing the below lead information statement that includes changes made in the proposed LCRI as well as additional changes made in response to comments received on the proposed LCRI:

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. [INSERT NAME OF SYSTEM] is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact [INSERT NAME OF SYSTEM and CONTACT INFORMATION]. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

ii. Mandatory Lead Health Effects Language

In the final rule, the EPA is finalizing the mandatory health effects language, as proposed, listed in appendix A to subpart O of part 141 to be included in the CCR when a CWS fails to take one or more actions prescribed by §§ 141.80 through 141.93. Additionally, the rule finalizes the lead health effects language, as proposed and provided in section IV.J.2.d of this preamble.

iii. Other Requirements

The final LCRI requires water systems to include in the CCR a general statement that the CWS is required to sample for lead in schools and licensed child care facilities in accordance with § 141.92 (see § 141.153(h)(8)(v)). This provision will help ensure that consumers are aware of the school and child care sampling requirements and that they can reach out to schools or child care facilities about any potential sampling results. Due to comments received on the proposed LCRI, this language has been modified for the final LCRI to be clearer that the system should direct consumers to contact the school or child care facility for further information about potential sampling results in accordance with § 141.92. The school and child care facility can provide additional information to the sampling results including next steps such as any remediation actions.

The final rule requires that the CCR expand the service line inventory statement to include information on known and unknown lead connectors such that the statement describes that a service line inventory (including inventories with no lead, GRR, lead status unknown, known lead connectors or unknown connectors) has been prepared and the statement must include instructions on how to access the inventory (§ 141.153(h)(8)(ii)).

The final LCRI requires water systems to make the service line replacement plan publicly available (see section IV.C of this preamble for more information about the replacement plan). Additionally, CWSs with lead, galvanized requiring replacement, or lead status unknown service lines in their inventory are required to include in the CCR information on how to obtain a copy of the service line replacement plan or for systems serving more than 50,000 persons, how to view the plan on the internet (§ 141.153(h)(8)(iii)).

The CCR Rule Revisions (89 FR 45980, USEPA, 2024c) moved the CCR requirement for a service line inventory statement from § 141.153(d)(4)(xi) to § 141.153(h)(8)(ii) and the requirement for information about accessing complete lead tap sampling data from § 141.153(d)(4)(xii) to § 141.153(h)(8)(i) of the CFR. Therefore, the final LCRI is also moving other requirements that were proposed in § 141.153(d)(4) to § 141.153(h)(8); these include the statement about the service line replacement plan and school sampling. In addition, the CCR Rule Revisions added a requirement for information about corrosion control efforts in

§ 141.153(h)(8)(iii) which the final LCRI moved to § 141.153(h)(8)(iv) in order to keep the requirements related to information on the service line inventory and replacement plan together.

2. Public Notification Rule (40 CFR Part 141, Subpart Q)

a. Rationale and Proposed LCRI Revisions

The EPA promulgated a Public Notification (PN) Rule in 40 CFR part 141, subpart Q, in 2000 (65 FR 26035, USEPA, 2000b). This PN Rule implements section 1414(c)(1) and (2) of SDWA. The PN Rule requires water systems to provide public notification of any failure of the water system to comply with a maximum contaminant level, a prescribed treatment technique, or failure to perform required water quality monitoring, or testing procedures; any variance or exemption the system has been granted, or failure to comply with the requirements of any schedule set under a variance or exemption; or reporting and recordkeeping violations under subpart Y; and certain specified situations such as the occurrence of a waterborne disease outbreak or emergency and the availability of unregulated contaminant monitoring data (see § 141.201, table 1).

In 2016, Congress amended sections 1414(c)(1) and (2) of SDWA, in the Water Infrastructure Improvements for the Nation (WIIN) Act, to require the EPA's implementing regulations to "specify notification procedures for" public notice no later than 24 hours after the water system learns of each exceedance of the action level for lead prescribed under § 141.80(c) of 40 CFR part 141, "or a prescribed level of lead that the Administrator establishes for public education or notification in a successor regulation promulgated pursuant to section 1412" if the exceedance "has the potential to have serious adverse effects on human health as a result of short term exposure" (42 U.S.C. 300g–3(c)(1)(D) and (c)(2)(C)). In the 2021 LCRR rulemaking, the EPA determined that "such exceedances [of the lead action level] have the potential to have serious adverse health effects on human health as a result of short-term exposure" and therefore warranted the same treatment as other situations currently categorized as Tier 1 violations subject to the 24-hour notification requirements (86 FR 4239–4240, USEPA, 2021a). Under the revisions to subpart Q introduced in the 2021 LCRR, CWSs and NTNCWSs with a lead action level exceedance must provide public notice to persons served

by the system within 24 hours of learning of the action level exceedance; that is, within 24 hours of the system receiving and calculating the 90th percentile value, or after the data is submitted to the State and the State calculates the 90th percentile. The notice must be in a form and manner reasonably calculated to reach all persons served, as described in the PN Rule (§ 141.202(c)). A copy of the notice must also be sent to both the State and the EPA Administrator in accordance with the public notification reporting requirements of § 141.31(d), which was also amended in the 2021 LCRR. This notice to the Administrator for a lead action level exceedance is needed because section 1414(c)(2)(C)(iii) of SDWA was amended by the WIIN Act to require that such notifications be provided to the Administrator in addition to the State to allow the EPA to identify whether the agency must provide notice where required in section 1414(c)(2)(D). It provides that if a State with primacy enforcement responsibility or the water system has not issued a notice for a lead action level exceedance that has the potential to have serious adverse effects as a result of short-term exposure, the Administrator is required to issue the notice. Because the EPA does not have any obligation to issue a Tier 1 public notice for violations of other drinking water standards in States with primacy, there is no need for the EPA to be notified in those other Tier 1 situations.

In addition to lead action level exceedances, there are violations that also require public notification for both lead and copper (see appendix A to subpart Q of part 141). Tier 2 public notification is required for a treatment technique violation for both lead and copper no later than 30 days after the system learns of the violation. Under the revisions to subpart Q introduced in the 2021 LCRR, this includes violations to §§ 141.80 through 141.84, which describe compliance dates of the rule, the action level, CCT, source water treatment, and service line inventory and replacement requirements; however, § 141.80(c), which describes exceedances of the lead action level, is excluded from the Tier 2 public notification requirements since lead action level exceedances require Tier 1 public notification. Tier 2 public notification is also required for violations to § 141.85(a) through (c) and (h), which concern the content of public education materials and inclusion of information for consumers with limited English proficiency, delivery of public education after a lead action level

exceedance, supplemental monitoring for lead when there is a systemwide lead action level exceedance, and outreach activities for community water systems that fail to meet the LSLR goal under the 2021 LCRR. In addition, Tier 2 public notification is required for violations to § 141.93, which describes flexibilities for small water systems to comply with the rule.

As described in section IV.J.2.c of this preamble, the EPA proposed in the LCRI to require consumer notification of supplemental monitoring results for lead under § 141.85(c)(3); the EPA proposed to exclude this from the Tier 2 public notification requirements in subpart Q as this pertains to notification of supplemental sampling conducted at individual tap sampling sites, rather than systemwide. In addition, as discussed in section IV.J.2.a of this preamble, the EPA proposed in the LCRI to revise § 141.85(h) to require outreach activities for systems that fail to meet the average annual replacement rate, instead of the goal LSLR rate as required under the 2021 LCRR. Violations to this proposed requirement would require Tier 2 public notification under the proposed LCRI. The EPA also proposed to revise subpart Q to require Tier 2 public notification for violations to the proposed additional public education and filter requirements for water systems with multiple lead action level exceedances under § 141.85(j). See section IV.J of this preamble for more information about the proposed public education requirements. Tier 3 public notification is required for monitoring and testing procedure violations for both lead and copper no later than one year after the system learns of the violation or begins operating under a variance or exemption. These include violations to §§ 141.86 through 141.90 of the 2021 LCRR and proposed LCRI. The EPA also proposed to require Tier 3 public notification for violations to § 141.92; as with violations to other monitoring and testing requirements, the EPA believes that the public should be notified when water systems fail to conduct required sampling in schools and child care facilities.

The EPA also proposed to make conforming changes to the PN Rule as a result of changes the agency proposed to make in the proposed LCRI and the CCR related to the standard health effects language for lead in appendix B to subpart Q of part 141, to be consistent with the proposed revised lead health effects language required in public education and the CCR. See section IV.J.2.d of this preamble for more information about the proposed revised mandatory lead health effects language.

b. Summary of Comments and the EPA's Response

Some commenters opposed the Tier 1 24-hour public notification requirement for a lead action level exceedance. Some commenters recommended only requiring Tier 1 public notification for a lead action level exceedance to customers served by a lead, GRR, or lead status unknown service line. The EPA notes that the PN Rule requires water systems to provide public notices to “persons served by the water system.” The EPA also believes it is important for all persons served by a water system to be notified of a systemwide lead action level exceedance in the same time frame. While people served by a lead, GRR, or unknown service line are at higher risk of exposure to lead in drinking water than those who are not, other people may also be exposed through lead-containing plumbing, particularly if there is a systemwide issue such as increased corrosivity of the water. Therefore, it is important for all persons served by the system to be notified so they can decide whether to take protective actions to reduce their potential exposure to lead in drinking water.

Some commenters disagreed with the Tier 1 designation for a lead action level exceedance, arguing that lead does not pose “acute” public health risks like other Tier 1 situations and expressed concerns with lead ALEs being determined based on the 90th percentile. The EPA has determined that exceedances of the lead action level have the potential to have serious adverse health effects on human health as a result of short-term exposure and therefore warrant the same treatment as other situations currently categorized as Tier 1 violations subject to the 24-hour notification requirements. While the lead action level is not a health-based level, there is no safe level of lead in drinking water and the MCLG for lead is zero. In addition, there are life stages (*e.g.*, early childhood) where any lead exposure is especially problematic (USEPA, 2013; American Academy of Pediatrics, 2024).

Some commenters requested that systems start the process to distribute the public notice of a lead action level exceedance within 24 hours, but not have to complete delivery within 24 hours. The EPA notes that the PN Rule requires systems to deliver all Tier 1 public notices within 24 hours; this requirement is not limited to lead action level exceedances as other situations also can require a Tier 1 public notice (see § 141.202). Moreover, the EPA has determined that it is feasible for water

systems to provide Tier 1 public notice of a lead action level exceedance within 24 hours of the system learning of the exceedance. The EPA notes that the PN Rule provides water systems with several delivery options to ensure the Tier 1 public notice reaches all persons served within 24 hours, including use of broadcast media, posting the notice in conspicuous locations throughout the service area, hand delivery of the notice, or using another method approved by the primacy agency (§ 141.202(c)). Systems can prepare to provide the notice by creating a notification template in advance and may choose from several options for distribution of a public notification that make it feasible to provide the notice to all persons served by the system within 24 hours of learning of the exceedance.

Some commenters requested that to ensure consistent messaging in public notifications, the EPA standardize the language or provide resources and materials. They stated that this would also reduce the burden on systems to develop the notices and on States to ensure their quality and accuracy. The PN Rule includes minimum requirements for what kind of information must be included in public notices (see § 141.205(a) and (b)) for many drinking water contaminants, including standardized health effects language for lead and copper as well as other standardized language that applies to any drinking water contaminants. States have the authority to implement their own requirements for additional standardized language (see § 142.16(a)(1)). In addition, the EPA has already provided public notification resources and templates to assist water systems and States with the revisions to subpart Q introduced in the 2021 LCRR. These templates provide consistent language that also enables water systems to provide system-specific information about the sources of lead in their community and the actions the water system is taking to reduce lead levels. See https://www.epa.gov/dwreginfo/lead-and-copper-rule-implementation-tools#TIER_1. The EPA also intends to provide updated resources, templates, and example public notification materials to assist water systems and States with the revisions to subpart Q introduced in the LCRI.

Some commenters requested that the materials should use plain language and be translated to different languages. The PN Rule requires that the public notices do not include overly technical language (§ 141.205(c)(1)). The PN Rule also includes multilingual requirements for public notices (§ 141.205(c)(2)). The PN Rule requires water systems serving

a large proportion of non-English speaking consumers, as determined by the primacy agency, to contain information in the appropriate language(s) regarding the importance of the notice or contain a telephone number or address where persons served may contact the water system to obtain a translated copy of the notice or to request assistance in the appropriate language.

Some commenters stated that failure to sample for lead in schools and child care facilities, in accordance with § 141.92, should not be a Tier 3 violation. The EPA disagrees and notes that monitoring and testing procedure violations constitute Tier 3 violations, therefore it is appropriate for this to include violations to monitoring requirements for lead in schools and child care facilities. As noted earlier, the EPA believes that the public should be notified when water systems fail to conduct required sampling in schools and child care facilities. Tier 3 violations require public notification no later than one year after the system learns of the violation. The EPA notes that if the State has issued a waiver under § 141.92(h), the water system would not be in violation for not sampling in the schools and child care facilities covered by the waiver (see section IV.L.2 of this preamble for a discussion on waivers for school and child care facility sampling).

c. Final Rule Requirements

Under the LCRI, a lead action level exceedance will continue to trigger the requirement for Tier 1 public notification as required in section 1414(c)(2)(C) of SDWA. The EPA has concluded that lead action level exceedances have the potential to have serious adverse effects on human health as a result of short-term exposure. SDWA mandates that notice in such a situation be distributed “as soon as practicable, but not later than 24 hours after the PWS learns of the violation or exceedance.” While the feasibility analysis the EPA conducts in establishing a NPDWR is not a prerequisite to implementation of this statutory mandate, water systems have been complying with the Tier 1 24-hour notice requirement for other situations besides a lead action level exceedance since the May 6, 2002, compliance date of the PN Rule, and therefore should also be able to do so for lead action level exceedances.

Because the EPA is not prescribing a level of lead for public notification in the LCRI that is different from the lead action level in § 141.80(c), the EPA is updating appendix A to subpart Q of

part 141 to reflect the agency’s revised lead action level of 0.010 mg/L in the contaminant description in the left column (see section IV.F.4 of this preamble for more information about the action level). As noted in the proposed LCRI (88 FR 84968, USEPA, 2023a), water systems must comply with this provision starting October 16, 2024. Beginning on that date, systems must comply with the Tier 1 PN requirement for a lead action level of 0.015 mg/L, and beginning on the final LCRI compliance date, systems must comply with the revised lead action level of 0.010 mg/L (see section IV.F.4 of this preamble).

Water systems required to conduct Tier 1 public notification for a lead action level exceedance must send a copy of the notice to the Administrator and head of the primacy agency within 24 hours of learning of the exceedance in accordance with § 141.31(d)(2). Within 10 days of completing the public notification requirements, the water system must also send certification of compliance along with a copy of the distributed notice to the primacy agency (§ 141.31(d)(1)); this reporting requirement also applies to all other public notices required under the PN Rule (40 CFR part 141, subpart Q).

When the EPA amended § 141.31(d) in the 2021 LCRR to add the requirement for providing a copy of the Tier 1 public notice of a lead action level exceedance to the Administrator and head of the primacy agency within 24 hours of learning of the exceedance (§ 141.31(d)(2)), the agency inadvertently removed the pre-existing requirement in § 141.31(d)(1) to provide copies of Tier 1 public notices for violations and situations involving drinking water contaminants other than lead (e.g., violations of the MCL for *E. coli*, waterborne disease outbreaks, etc.) to the primacy agency. The 2021 LCRR amendment also inadvertently left out a requirement for water systems to provide a copy of the distributed Tier 1 public notice for a lead action level exceedance when certifying compliance to the primacy agency. In the LCR, prior to the revisions introduced by the 2021 LCRR, a copy of all distributed public notices was required to be provided with certification to the primacy agency within 10 days of completing the public notification requirements. For the final LCRI, the EPA is making technical corrections to the requirements by restoring the text that was deleted in the 2021 LCRR version of § 141.31(d)(1) to prevent these errors introduced in the 2021 LCRR from being implemented. This technical correction will ensure that representative copies of all

distributed public notices must be provided to the primacy agency with certification within 10 days of completing the public notification requirements, in addition to requiring a copy of Tier 1 public notices of lead action level exceedances to the Administrator and head of the primacy agency within 24 hours. The EPA is requiring water systems to continue to comply with § 141.31(d)(1) as codified on July 1, 2020, between October 16, 2024, and the LCRI compliance date to avoid any lapse in requirements (see section V.B of this preamble for discussion of compliance dates).

The EPA is finalizing revisions to the lead and copper violations that require Tier 2 and Tier 3 public notification in appendix A to subpart Q of part 141. Water systems must conduct Tier 2 public notification for treatment technique violations to §§ 141.80 (except paragraph (c)) through 141.84 and 141.85(a) through (c) (except paragraph (c)(3)), which describe compliance dates of the rule, CCT, source water treatment, service line inventory and replacement requirements, the content of public education materials and inclusion of information for consumers with limited English proficiency, delivery of public education after a lead action level exceedance, and supplemental monitoring for lead. As noted earlier, § 141.80(c) which describes exceedances of the lead action level is excluded from the Tier 2 public notification requirements since lead action level exceedances require Tier 1 public notification. The EPA is also excluding from the Tier 2 public notification requirements violations to § 141.85(c)(3), which requires a water system to notify a consumer of their supplemental lead sampling results under the LCRI. In addition, Tier 2 public notification is required for violations to § 141.93, which describes flexibilities for small water systems to comply with the rule. The EPA is finalizing requirements for water systems to conduct Tier 2 public notification for violations to § 141.85(h), which requires outreach activities for systems that do not meet the mandatory service line replacement rate, and § 141.85(j), which requires additional public education and filter requirements for water systems with multiple lead action level exceedances under the LCRI. Tier 3 public notification will be required for lead and copper monitoring and testing procedure violations to §§ 141.86 through 141.90 and 141.92, which concern tap water monitoring, water quality parameter monitoring,

source water monitoring, analytical methods, reporting requirements, and sampling for lead in schools and child care facilities.

The EPA is finalizing conforming changes to the PN Rule as a result of changes the agency is making in the LCRI and the CCR related to the standard health effects language for lead in appendix B to subpart Q of part 141, to be consistent with the revised lead health effects language required in public education and the CCR. See section IV.J.2.d of this preamble for more information about the revised mandatory lead health effects language.

3. Definitions

a. Rationale and Proposed Requirements

In accordance with the EPA's goal to simplify the LCRI, the EPA proposed new and revised definitions for inclusion in § 141.2 (USEPA, 2023a). The EPA proposed new definitions to conform to new regulatory requirements and updated existing definitions to conform to changes made to existing requirements. For the LCRI, the EPA proposed new and updated definitions for "action level," "child care facility," "connector," "Distribution System and Site Assessment," "find-and-fix," "galvanized requiring replacement," "lead service line," "lead status unknown service line," "newly regulated public water system," "partial service line replacement," "service line," "small water system," "tap monitoring period," "tap sampling period," and "wide-mouth bottle." The EPA proposed to remove the definition of "full service line replacement," "gooseneck, pigtail, or connector," "partial lead service line replacement," "trigger level," and "tap sample monitoring period." The EPA also proposed minor revisions to select definitions for "elementary school," "galvanized service line," "pitcher filter," "secondary school," "medium-size water system" (renamed and updated as "medium water system"), "optimal corrosion control treatment," "tap sampling protocol," and "system without corrosion control treatment." The LCRI proposal contains how the EPA proposed to add, revise, or remove the definitions listed above.

b. Summary of Comments and the EPA's Response

Commenters suggested various revisions to the proposed definition of "service line," which was defined as "a portion of pipe which connects the water main to the building inlet. Where a building is not present, the service line connects the water main to the

outlet." Commenters noted that there may be some situations where a water main does not exist in the system (*e.g.*, a single building with a service line connecting the wellhouse to the building), and, therefore, the definition should be revised accordingly to accommodate for other distribution system configurations. The EPA acknowledges that water mains may not be present in all cases where there are service lines, as described in the EPA's "Developing and Maintaining a Service Line Inventory: Small Entity Compliance Guide" (or LCRR Small Systems Guidance) guidance document, which includes examples of service lines that are not connected to a water main (*e.g.*, connected to a pressure tank or if they draw water directly from a well) (USEPA, 2023n). Thus, the EPA is defining service line in the final rule to reflect that service lines may be connected to a "water main" or "other conduit for distributing water to individual consumers or groups of consumers." The reference to "water main" in the proposed definition was for descriptive purposes, and commenters did not identify a technical, policy, or legal reason to exclude service lines in the absence of a water main. This addition to the definition clarifies that the descriptive term "water main" was not intended to reduce the scope of the service line inventory or replacement requirements that apply to all services lines (*i.e.*, the lines that distribute water from the PWS's conduit for moving water from its source to its customers and consumers).

Commenters recommended that the EPA exclude pipes not anticipated for potable use from the service line definition because they would not result in human lead exposure. The EPA disagrees with this recommendation. The service lines covered by the rule may be used for the distribution of potable water regardless of whether that is their intended use. Water lines used exclusively for non-potable applications does not preclude the possibility that the water lines could in fact be used for human consumption as well. An NPDWR provision that applies only to where the water is actually used for human consumption is administratively unworkable and difficult to implement. See section IV.D.1 of this preamble for information related to inventorying all service lines in a water system's service area regardless of intended potable or non-potable applications.

Commenters suggested that the EPA clarify whether water lines in a community downstream from a master meter or other single point of connection meet the proposed

definition of "service line." In some situations, an apartment complex, manufactured housing community, or other multi-family entity will have a master meter at the property line of the community. If these communities are considered part of or within a CWS or NTNCWS service area, then that water system is required to inventory all service lines, even if they are beyond a master meter, just as the system is required to inventory service lines between a water main and a single-family residence regardless of the presence of a meter between the water main and the building inlet. See section IV.D.1 of this preamble for information related to master meters and inventorying all service lines in a water system's service area.

Some commenters disagreed with the EPA's proposed deletion of references to ownership in the service line definition. Commenters were concerned that without mention of ownership, water systems could define a service line in multiple parts, such as the portion that is system owned. The EPA disagrees with these comments because the ownership is not relevant to the system's ability to inventory or replace service lines; instead, it is based on control, which the final rule equates to access. Additionally, statements about access or control are related to regulatory requirements, are included in § 141.84, and are less suited for inclusion in the service line definition. See section IV.B of this preamble for further discussion on access and control. The EPA also notes that the final definition includes the entire service line, stating that the service line connects to the building inlet (or the outlet where a building is not present).

Commenters recommended that the EPA clarify or define the term "building inlet" within its service line definition. Because there are a multitude of plumbing configurations that can exist, it can be challenging to encapsulate all potential configurations in a single, national-level definition. However, the term "building inlet" best encapsulates these configurations. Commenters expressed concerns with use of the term "building inlet" because systems may interpret the definition in a way that results in short service line segments remaining in place past the building inlet after full service line replacement. The final LCRI mandates full LSLR, which requires the removal of all lead material along the service line and associated lead connector.

While some commenters agreed with the proposed connector length of two feet in their comments on the proposed rule, others stated that their water

system uses connectors greater than two feet (*e.g.*, three, four, and five feet) and recommended the EPA update the connector definition to account for these longer connectors. While no commenter provided additional data beyond anecdotes from their system and State, the EPA evaluated data on connector length from current manufacturers websites and historical sources while considering the lengths recommended by commenters (The Cadmus Group, 2024a; 2024b). Many recent sources define lead connectors at two feet; however, it is unclear if these sources cite this length because it was included in the EPA's LCRR Inventory Guidance (USEPA, 2022c). The EPA did not find connectors currently sold by manufacturers, instead finding information suggesting connectors are not currently used in drinking water infrastructure because modern flexible alternatives for piping eliminate the need for them. While the EPA found generally limited data, one historical plumbing and heating materials catalogue showed lead connectors sold and widely distributed at lengths ranging from 18 to 36 inches (USEPA, 2022c). Thirty-six inches (three feet) was one of the pipe lengths recommended by commenters. Accordingly, the EPA chose to update the connector definition to encompass lead pipes up to three feet in length. While individual water systems indicated in their comments use of connectors in greater length, one of the primary goals of the LCRI is to replace lead and GRR service lines as quickly as feasible. Lead pipes are anticipated to contribute more lead into drinking water with increasing length (Deshommes et al., 2016; Sandvig et al., 2008), so defining these longer lead pipes as connectors instead of LSLs would exclude them from the system's service line replacement program, resulting in potentially delayed replacement from these significant lead sources.

Commenters also stated that the connector definition should exclude reference to a specific length, as water systems may not know the length of connectors in their distribution system. The EPA acknowledges that some systems may lack records which indicate connector length; however, other commenters supported the clarity that a defined length provides for water systems and States to distinguish whether a lead pipe is subject to requirements for lead connectors or LSLs (*i.e.*, inventorying, replacement, tap sampling, and public education). Additionally, the EPA is concerned that

lack of a clear definition could create a loophole by which systems avoid replacing LSLs as part of their service line replacement program by classifying them as connectors. Thus, the final LCRI defines connector as piping limited to three feet that can be bent and is used for connections between service piping, typically connecting the service line to the main.

The EPA received comments suggesting that the EPA should remove the clause that galvanized service lines that "ever were" downstream of an LSL be considered GRR, or the GRR definition should not include galvanized service lines where systems are unable to show no upstream LSL has ever been in place. Such commenters argued that the lead exposure risks to public health decrease over time and that systems should be permitted to conduct studies and adapt their replacement strategy based on observed GRR service line lead levels and site-specific conditions in their water system. One commenter provided sampling data from GRR service lines in its system showing lead levels similar to non-lead lines in that system to demonstrate the lower risk of lead release of GRR service lines. The EPA disagrees that galvanized service lines that were ever downstream of an LSL stop being a risk of lead exposure after any period of time. In the proposed LCRI, the EPA referenced a study showing that galvanized service lines downstream of LSLs could trigger lead releases over the remaining pipe lifetime depending on the depth of the lead scales in the pipes (McFadden et al., 2011). Thus, even low lead levels measured during a GRR service line's lifetime may not indicate the end of a public health risk, and future water quality changes or disturbances could still cause release of lead. These lead particulate releases may not be captured by tap sampling referenced by the commenter. Therefore, the EPA is finalizing the requirements for this definition to include galvanized service lines that were ever downstream of an LSL, regardless of how long ago the LSL may have been replaced.

The EPA recognizes that some systems may lack records demonstrating there never was an upstream LSL. The final LCRI includes these galvanized service lines in the definition of an GRR service line due to the importance of ensuring all GRR service lines are replaced. While this may result in the replacement of some galvanized service lines that were never downstream of an LSL, this broad approach ensures that all GRR service lines, which can contribute significant lead into drinking

water, are replaced as quickly as feasible. In this scenario, the final LCRI's definition of GRR service lines include these service lines as GRR to ensure these potentially significant lead sources are not left out of the system's service line replacement program. The EPA expects that as water systems' inventories improve, they may gain additional information that can help identify which GRR service lines were never downstream of an LSL, avoiding the costs to replace galvanized service lines that were never downstream of an LSL. The LCRR Inventory Guidance recommends that water systems treat the inventory as a "living dataset that is continuously improved over time as the inventory is updated" (USEPA, 2022c). As water systems gain experience with their inventory and utilize additional methods to categorize service line materials, such as predictive modeling, water systems may be able to better distinguish between galvanized service lines that are GRR service lines and those which are non-lead.

The EPA disagrees that galvanized service lines with upstream lead connectors should be classified as GRR service lines. While any source of lead, including lead connectors, can potentially contribute lead which can adsorb onto downstream galvanized service lines, the final rule's service line replacement requirements are designed to prioritize replacement of the most significant contributors of lead into drinking water (*i.e.*, LSLs and GRR service lines) as quickly as feasible. Galvanized service lines downstream of an LSL, which may be tens of feet long, are likely to contribute more lead into drinking water than a galvanized line downstream of a lead connector, which the final rule defines as no greater than three feet in length. Additionally, the proposed rule notes that the poor condition of galvanized lines may result in these pipes breaking or bursting during construction following repressurization after main replacement or replacement of a service line or connector, necessitating replacement of the entire service line. Replacing galvanized service lines downstream of a lead connector (including replacing the lead connector as encountered) in conjunction with other infrastructure work, as opposed to replacing them as part of the system's mandatory service line replacement program in the LCRI, would not only allow systems to prioritize removing the most significant lead sources (*i.e.*, LSLs and GRR service lines) as quickly as feasible, it would also facilitate a more cost-efficient approach to update drinking water

infrastructure that would allow more resources to be devoted to replacement of lead and GRR service lines.

The EPA is revising the proposed definition of “wide-mouth bottles.” While the proposed definition used outer diameter to specify the minimum mouth width, commenters noted that inner diameter is the more typical specification. Commenters also raised concerns about the supply and commercial availability of bottles using the proposed 55-millimeter outer diameter threshold and colored or tinted bottles, the latter which some water systems use to better distinguish between the first- and fifth-liter samples from the second, third, and fourth liters for sampling at LSL sites. The EPA agrees with multiple commenters’ recommendations for the EPA to use the inner-diameter and to reduce the size to 40 millimeters. The final rule’s definition includes a reduced inner-diameter mouth width of 40 millimeters. This revision addresses commenters’ concerns about using more common diameter specifications as well as concerns about adequate bottle availability while maintaining sufficient width for sample collection at full flow when lead is most likely to be detected.

One commenter also noted that the proposed rule retained the 2021 LCRR definition for “first draw sample;” however, under the proposed LCRI, the phrase “first draw” is found in just one portion of the regulatory language, under § 141.92(f)(2)(i), and that in all other locations where “first draw” is used in the 2021 LCRR, the term “first draw” is replaced with “first-liter.” The commenter recommended that the EPA delete the definition for “first draw sample” and provide a definition for “first-liter sample” instead. The EPA agrees with the commenter and, therefore, made this change for the final LCRI, adding that it would improve rule implementation and be consistent with having a definition which specifies “fifth-liter sample.”

c. Final Rule Requirements

For the final rule, the EPA is making several revisions to the proposed definitions proposed for § 141.2. The EPA is revising the proposed definition of “service line” to include pipes which are not connected to water mains, as service lines may be connected to other conduits for distributing water to individual consumers or groups of consumers (e.g., a direct connection from a well to a single building). The EPA is increasing the proposed defined connector length from two to three feet. The EPA is also revising the proposed definition of “wide-mouth bottle” to

reduce the diameter from 55 millimeters to 40 millimeters, and to specify that the diameter refers to the inner diameter.

The EPA is maintaining the following new or updated definitions from the proposed LCRI: “action level,” “child care facility,” “Distribution System and Site Assessment,” “galvanized requiring replacement service line,” “lead service line,” “lead status unknown service line,” “newly regulated public water system,” “partial service line replacement,” “small water system,” “tap monitoring period,” and “tap sampling period.”

The EPA is also maintaining proposed minor revisions to the following definitions: “elementary school,” “galvanized service line,” “pitcher filter,” “secondary school,” “medium-size water system” (revised as “medium water system”), “optimal corrosion control treatment,” “tap sampling protocol,” and “system without corrosion control treatment.” The final rule eliminates the following definitions: “find-and-fix,” “full service line replacement,” “gooseneck, pigtail, or connector,” “partial lead service line replacement,” “lead trigger level,” and “tap sample monitoring period.”

In the final LCRI, the EPA is adding a new definition for “first-liter sample” and eliminating the definition for “first draw sample.” The definitions are worded slightly differently but similarly reference the first one-liter sample of tap water collected in accordance with the rule’s required tap sampling protocol.

V. Rule Implementation and Enforcement

A. General

1. Rationale and Proposed Requirements

The United States Environmental Protection Agency (EPA) proposed requirements to the National Primary Drinking Water Regulation (NPDWR) for lead and copper to improve its oversight and enforcement. For example, the EPA proposed to eliminate the trigger level, (see section IV.F.4 of this preamble), simplify the small system flexibility provision (see section IV.I.1 of this preamble), streamline public education following elevated lead measurements (see section IV.J.2 of this preamble), increase reporting by both States (see section V.D of this preamble) and systems (see section IV.N of this preamble), and require enhanced sampling for detecting corrosion control issues in lead service line (LSL) systems (see section IV.L.1 of this preamble). The EPA intends to develop guidance and support materials to support implementation and enforcement of the Lead and Copper Rule Improvements

(LCRI). The agency has already developed materials and technical assistance to support service line inventory and lead service line replacement (LSLR) including guidance on service line inventories. Additionally, the EPA has launched several technical assistance programs specifically to assist with LSLR, including the Lead Service Line Replacement (LSLR) Accelerators and the Get the Lead Out (GLO) Initiative.

2. Summary of Comments and the EPA’s Response

Commenters expressed general concern that the proposed rule placed additional workload burden on States and that more resources in the form of funding, staffing, and time would be needed to effectively implement the rule. The EPA has estimated the additional costs for States to implement and enforce the rule in the proposed and final rules. See the final LCRI Economic Analysis (USEPA, 2024a) chapter 4, section 4.4 for more information about State costs and chapter 6 of the final LCRI Economic Analysis for the overall costs and benefits of the final rule. The EPA worked to streamline State requirements for the final LCRI wherever possible (see section V.D of this preamble for a discussion on reporting and recordkeeping). While States will have additional responsibilities under the final LCRI compared to previous versions of the rule, the rule will also provide greater health risk reduction benefits and thus justifies the associated costs (see chapter 3, section 6.3 of the final LCRI Economic Analysis). See section III.G of this preamble for information on available funding sources to support implementation of the LCRI requirements.

Commenters also expressed concerns that the additional burdens on States would be compounded by additional burdens associated with the EPA’s final NPDWR for six per- and polyfluoroalkyl substance (PFAS), which had yet to be finalized at the time the comment period was open for the LCRI. The EPA notes that Safe Drinking Water Act (SDWA) section 1412(b)(3)(C)(i)(III) requires that the agency consider the costs and benefits that will result solely a result of compliance with the proposed rule and not resulting from other proposed or final regulations. Therefore, the EPA did not include costs and benefits associated with the PFAS rule in the final LCRI Economic Analysis. However, the agency did consider the costs to States and regulated water systems of implementing the new PFAS rule in the

Economic Analysis for the PFAS NPDWR (USEPA, 2024f, Section 5).

Commenters noted that the complexity of the reporting and recordkeeping requirements on both States and systems in the LCRI require an appropriate data system to manage the data requirements of the LCRI. Some commenters also specifically mentioned the need for updates to the Safe Drinking Water Information System (SDWIS) to match the reporting requirements of the LCRI. Commenters also expressed a concern that these updates would not be possible in time for LCRI implementation. The EPA remains committed to providing high quality tools to assist States with their implementation of the LCRI. The EPA intends to support states' data management needs through both SDWIS/State and the development of Drinking Water State Federal Tribal Information Exchange System (DW SFTIES). The EPA intends to have SDWIS State available for State use by the compliance date of the LCRI. The EPA is currently developing the DW SFTIES, which is an updated system that will replace SDWIS. The EPA will also work closely with State program and information technology staff on LCRI needs for DW SFTIES development. The EPA intends to provide LCRI Data Entry Instructions, which will provide detailed guidance to States regarding the LCRI monitoring, recordkeeping, and reporting requirements.

Commenters recommended that the EPA strengthen reporting requirements to increase enforcement of the LCRI provisions. Some commenters noted the LCRI must have timely and transparent reporting requirements to ensure compliance. For the final rule, the EPA carefully considered all reporting requirements to ensure that the required reporting elements provide value to the State and/or the EPA for oversight or enforcement, and do not create unnecessary burdens. (See section IV.N of this preamble for discussion on reporting and recordkeeping requirements of the final LCRI.) Commenters suggested that the LCRI should require direct electronic reporting of sample results from labs and/or systems to a database shared by the EPA and the States. The EPA requires reporting by the States to submit quarterly and annual reports in a format prescribed by the agency in § 142.15(a). At this time, States use SDWIS/Fed to meet these reporting requirements. While the EPA does not require direct electronic reporting of sample results from systems, the EPA recently promulgated the Consumer

Confidence Report (CCR) Rule Revisions to require States to submit compliance monitoring data to the EPA (89 FR 45980, USEPA 2024c).

3. Implementation and Enforcement of the Final Rule

The final rule will provide for improved oversight and enforcement of the NPDWR for lead and copper relative to the Lead and Copper Rule (LCR) and 2021 Lead and Copper Rule Revisions (LCRR). The EPA intends to develop and provide guidance and tools to support rule implementation. The EPA provides water technical assistance (WaterTA) which supports communities to build technical, financial, and managerial capacity that results in more communities with applications for Federal funding, quality water infrastructure, and reliable water services. The EPA has also launched the GLO Initiative in light of the ongoing success of the LSLR Accelerator pilot to expand LSLR technical assistance to communities across the country. The EPA additionally outlines funding that can be used for LCRI implementation such as through the Drinking Water State Revolving Fund (DWSRF), Reducing Lead in Drinking Water grants, the Water Infrastructure Finance and Innovation Act (WIFIA) program, and other Federal and State funding opportunities (see section III.G of this preamble).

B. What are the rule compliance dates?

1. Rationale and Proposed LCRI Revisions

In the LCRR review notification published on December 17, 2021, the agency stated its intention to propose revisions to the 2021 LCRR compliance deadlines "only for components of the rule that the Agency will propose to significantly revise" (86 FR 71580, USEPA, 2021b) in the LCRI. In the proposed LCRI, the EPA proposed to replace most of the 2021 LCRR with the LCRI and proposed to require certain 2021 LCRR requirements to apply between the 2021 LCRR's October 16, 2024, compliance date and the final LCRI compliance date.

The EPA proposed a compliance date of three years after the promulgation of the final LCRI and proposed for water systems to continue to comply with the LCR (§§ 141.80 through 141.91) until that date, except for the 2021 LCRR's initial LSL inventory, notification of service line material, and the associated reporting requirements. The EPA also stated that the agency was not changing the compliance date for the Tier 1 public notification (PN) requirement for

a lead action level exceedance under subpart Q that was introduced under the 2021 LCRR, and that systems must comply with that provision starting October 16, 2024. The EPA did not propose to change the compliance date of the revisions to 40 CFR part 141, subpart O, that were included under the 2021 LCRR. With these noted exceptions, the EPA proposed a direct transition from the LCR to the LCRI for all rule provisions so that States and water systems could focus their resources on preparing and updating service line inventories and conducting Tier 1 PN's following lead action level exceedances, in addition to preparing for LCRI requirements, such as preparing their service line replacement plan (88 FR 84967, USEPA, 2023a).

The EPA requested comment on these proposed compliance dates and also whether it is practicable for water systems to implement any of the proposed LCRI requirements sooner than three years from the date the LCRI is finalized. Specifically, the EPA requested comment on whether water systems should be required to conduct the risk mitigation measures after full and partial service line replacement and service line disturbances and related reporting requirements (§§ 141.84(h), 141.85(g), and 141.90(e)(6) and (f)(6) of the proposed LCRI). The EPA received a range of comments on these issues including requests for both earlier and later LCRI compliance dates.

2. Summary of Public Comments and the EPA's Response

a. Requirements for Water Systems Between October 16, 2024, and the LCRI Compliance Date

The EPA received comments supporting the EPA's proposal to have water systems continue to comply with the requirements of the LCR, except for the few requirements introduced in the 2021 LCRR that the EPA proposed to maintain, until the LCRI compliance date. According to commenters, complying with requirements introduced in the 2021 LCRR that the EPA proposed to replace in the LCRI would not be an appropriate use of resources and could distract water systems from preparing to comply with the LCRI. Commenters stated that the EPA should delay the compliance date for submitting the initial inventory to provide water systems more time to accurately identify service line material according to the EPA guidance. Several commenters also requested that EPA clarify the compliance dates for the LSLR and tap sampling plans and the

compliance tap sampling requirements introduced in the 2021 LCRR.

The EPA also received comments from water systems and utility organizations asking the agency to delay the provisions that water systems will not be required to comply with starting on October 16, 2024, by at least one year, prior to finalizing the LCRI. The commenters stated that until the final LCRI is promulgated, water systems will assume they are required to comply with all the requirements of the 2021 LCRR starting October 16, 2024, and may invest time and resources on requirements that may be revised in the final LCRI.

The EPA notes the broad commenter support for requiring water systems to transition directly from the LCR to the LCRI. Commenters cited wasted time and resources complying with parts of the LCRR that will be replaced with the LCRI instead of preparing for implementation of the LCRI. The EPA agrees that water systems should continue to comply with the pre-2021 LCR until the LCRI compliance date, with the exceptions identified in § 141.80(a) (*i.e.*, the initial LSL inventory, notification of service line material, and the associated reporting requirements, and Tier 1 PN following a lead action level exceedance). The EPA is finalizing significant changes relative to the 2021 LCRR meaning that many requirements in the 2021 LCRR will be rendered obsolete upon the LCRI compliance date. For example, in the final LCRI, the EPA is removing the lead trigger level and many of the associated actions that are required after a trigger level exceedance, including reporting to States, which could demand significant resources. Additionally, as discussed in the proposed rule, many of the 2021 LCRR requirements are interrelated, so changes to one rule area impact other areas (see 88 FR 84967–84968, USEPA, 2023a). Accordingly, the EPA is not requiring water systems to comply with requirements under the 2021 LCRR that will be replaced under the final LCRI prior to the LCRI compliance date, because of the significant level of effort required of water systems to plan for compliance with the LCRI, as well as the complexity of the 2021 LCRR. Because of the limited time and resources available to water systems and States, their time and resources are better spent complying with the specifically identified 2021 LCRR requirements with a compliance date of October 16, 2024 (as noted above), preparing to implement the final LCRI, and voluntarily replacing LSLs ahead of the LCRI compliance date using resources that are currently available,

such as the Bipartisan Infrastructure Law (BIL) funding. Requiring water systems and States to implement the 2021 LCRR in its entirety between October 16, 2024, and the compliance date of the LCRI would waste these limited resources and compromise the ability of systems and States to effectively implement the LCRI, and thereby delay the greater public health benefits associated with implementation of the LCRI. For example, by focusing States' and systems' efforts on establishing service line replacement programs rather than implementing 2021 LCRR provisions that have been changed or eliminated, the LCRI will result in systems removing more lead and galvanized requiring replacement (GRR) service lines, which, where LSLs are present, they are the most significant source of drinking water lead exposure.

The EPA is maintaining the October 16, 2024, compliance date for selected requirements first promulgated in the 2021 LCRR rulemaking that the agency is not significantly revising in the final LCRI. Some minor changes were made to ensure consistency across requirements. In the final rule, the EPA is correcting the citations in § 141.80(a)(4)(i) for the reporting requirements associated with notifications of a known or potential LSL as codified on July 1, 2023 (§ 141.90(e)(13) and (f)(4)). Additionally, for the final LCRI, the EPA is not requiring water systems to comply with § 141.84(a)(6) as codified on July 1, 2023. This requirement references submitting an updated inventory to the State in accordance with § 141.90(e)(3) and requires water systems to update the publicly available inventory no less frequently than the required updates to the State. The requirement in § 141.90(e)(3) as promulgated in the 2021 LCRR ties the timing of submission of the inventory to the State to the applicable tap monitoring frequency. Under the LCRI, systems are required to prepare and submit the baseline inventory by the compliance date of the LCRI, and all systems will be required to update that inventory on an annual basis (§§ 141.84(b)(1) and 141.90(e)(4)). Implementation of a requirement to update the LCRR inventory based on monitoring schedules for only the three years before the LCRI compliance date would be challenging for States and systems to manage while also preparing the updated initial inventory to comply with the LCRI. Many systems are on reduced monitoring and therefore, many systems would only submit an update once, if at all during those three years. For example, water systems that do not

monitor between submitting an initial inventory and the LCRI compliance date would not be required to submit an updated inventory, or water systems who are on triennial monitoring would only be required to submit an update once. Additionally, water systems will be preparing to submit the LCRI baseline inventory by the LCRI compliance date, and submission of updates to the 2021 LCRR initial inventory would likely distract from that effort. State resources are best directed towards the LCRI baseline inventory and service line replacement. Additionally, not requiring an annual update of the 2021 LCRR inventory until the LCRI compliance date would not decrease public health protection in the short-term. The EPA notes that between October 16, 2024, and the LCRI compliance date, water systems are required to identify and track service line materials in the inventory on an ongoing basis (§ 141.84(a)(5) as codified on July 1, 2023) and comply with the public education requirement to notify persons served by a lead, GRR, or unknown service line. Because these requirements will remain applicable prior to the LCRI compliance date, public health protection will not be diminished by the EPA not requiring water systems to submit an updated version of the 2021 LCRR initial service line inventory to the State prior to the LCRI compliance date. The EPA encourages water systems to continue to identify unknown service lines and conduct replacements prior to the LCRI compliance date while developing the LCRI baseline inventory. Water systems that update their initial LCRR inventory during this interim period to identify the material of any unknown service lines will reduce their burden if any of the lines are non-lead because they would no longer be required to provide annual notification of service line material to persons served by that service line.

The EPA is not changing the October 16, 2024, compliance date for Tier 1 PN following a lead action level exceedance for the reasons provided in the LCRI proposal (88 FR 84968, USEPA, 2023a). Between October 16, 2024, and the LCRI compliance date, water systems are required to conduct Tier 1 PN following an exceedance of the lead pre-LCRI action level of 0.015 mg/L. The EPA notes that the compliance date for the new lead action level of 0.010 mg/L is three years from the date the final LCRI is published. In the final LCRI, the EPA is retaining the October 16, 2024, date for additional associated provisions, such as the use of the mandatory health

effects language in § 141.85(a)(1)(ii) as introduced in the 2021 LCRR starting October 16, 2024. This change will ensure consistency in messaging between the Tier 1 PN notices after a lead action level exceedance and any public education materials that are distributed prior to the LCRI compliance date. The EPA also notes that systems must comply with the reporting requirements in § 141.31(d)(2) as codified on July 1, 2023, which requires the water system to provide a copy of the Tier 1 notice for a lead action level exceedance to the Administrator and to the head of the primacy agency as soon as practicable, but not later than 24 hours after the system learns of the exceedance. However, in the final LCRI, the EPA is requiring water systems to continue to comply with § 141.31(d) as codified on July 1, 2020, between October 16, 2024, and the LCRI compliance date. This is to correct an error introduced in the 2021 LCRR that inadvertently removed the requirement for water systems to submit a representative copy of other types of Tier 1 notices to the State when certifying the system has complied with the notice requirements. See section IV.O.2 of this preamble for further discussion. Additionally, in the final LCRI, the EPA is also retaining the October 16, 2024, compliance date for the reporting requirement in § 141.90(h)(3) as codified on July 1, 2023. This provision requires States to provide the results of the 90th percentile lead and copper calculations, in writing, to the water system within 15 days of the end of the tap sampling period in instances where the State calculates the water system's 90th percentile level. The EPA is maintaining the October 16, 2024, compliance date for this provision in the final LCRI to facilitate timely compliance with the Tier 1 PN requirement for a lead action level exceedance.

In the final LCRI, the EPA is also adding specific citations in § 141.80(a)(4)(i) to identify which requirements apply during the time period between October 16, 2024, and the LCRI compliance date that relate to the provisions discussed in the proposal. For example, the EPA is clarifying that between October 16, 2024 and the LCRI compliance date water systems must comply with the definitions in § 141.2 as codified on July 1, 2020, that correspond to the requirements in §§ 141.80 through 141.91 as codified on July 1, 2020. See section V.B.3, § 141.80(a)(4), and section II.C of this preamble for additional information.

The EPA disagrees with commenters who indicate that the agency should change the compliance date for submitting the initial inventory. Water systems and States are aware of and should be prepared to meet this deadline. The EPA provided *Guidance for Developing and Maintaining a Service Line Inventory* in August 2022 (USEPA, 2023n). The EPA's December 17, 2021, **Federal Register** notification on the review of the LCRR and the December 6, 2023, proposed LCRI specifically stating that the agency expected systems to submit an initial inventory by October 16, 2024 (86 FR 71574, 71579, USEPA, 2021b; 88 FR 84968, USEPA, 2023a). Inventories are critical to support lead reduction efforts because they help systems identify the location of lead and GRR service lines, allow customers to know if they are served by those lines, and evaluate the extent of these sources in the drinking water system. With the inventory, water systems will be able to conduct the required notification of persons served by a lead, GRR, or unknown service line and provide them with steps they can take to reduce their lead exposure. Additionally, the inventory is integral to help water systems take actions that will facilitate compliance with the LCRI: identify sampling locations; determine the extent of lead and GRR service lines within their systems; plan for service line replacement, including applying for grants and loans; and replace lead and GRR service lines.

The EPA also disagrees with commenters requesting that the agency formally delay the 2021 LCRR requirements prior to the final LCRI. Formally delaying the 2021 LCRR prior to the final LCRI is unnecessary because the final LCRI largely replaces provisions in the 2021 LCRR in this action. Additionally, a delay of the 2021 LCRR requirements would have required a separate rulemaking and diverted agency resources from other actions, including finalizing the LCRI. It is also unnecessary because the final LCRI largely replaces the 2021 LCRR in this action. The EPA disagrees that water systems must assume they must comply with the 2021 LCRR starting October 16, 2024. The EPA recognizes the uncertainty caused by the LCRI rulemaking, but also notes the agency's efforts to help water systems and States make informed decisions in light of the uncertainty. For example, in the December 17, 2021, **Federal Register** notification, the agency stated it did not intend to change the compliance dates for the initial service line inventory, notification of service line material, or

the Tier 1 PN notice for a lead ALE. Similarly, the EPA stated that the agency "also expects to propose to delay the October 16, 2024, deadline for submitting LSLR and tap sampling plans so that systems can incorporate any potential revisions made through the LCRI rulemaking" (82 FR 71580, USEPA, 2021b). The EPA provided additional clarity in the proposed LCRI by proposing for water systems to continue to comply with the LCR between October 16, 2024, and the LCRI compliance date, with limited exceptions. Additionally, on April 17, 2024, the EPA released a fact sheet and frequently asked questions document on the 2021 LCRR compliance and encouraged water systems to focus resources on complying with the provisions introduced in the 2021 LCRR for which EPA did not intend to change the October 16, 2024, compliance date (USEPA, 2024g; USEPA, 2024h).

b. LCRI Compliance Date

The EPA received comments supporting the agency's proposal for setting the LCRI rule compliance date three years after the rule is finalized, noting the complexity of the rule and need for time to prepare to implement the requirements. Some of these commenters stated that it is not practicable to set compliance dates for any LCRI requirements earlier than three years. The EPA also received comment that the agency should provide an additional nationwide two-year extension to the LCRI compliance date as provided under SDWA section 1412(b)(10). The comment indicated the extension would be for capital improvements in the form of LSLR. Conversely, some commenters stated that some of the LCRI requirements do not substantially differ from the 2021 LCRR requirements and requested that the EPA set earlier compliance dates for the LCRI for some or all of the requirements (e.g., no later than one year after rule publication). These commenters stated that a faster compliance schedule would maximize public health benefits and better align with Federal funding sources currently available to assist water systems.

Section 1412(b)(10) of SDWA provides that NPDWRs shall take effect three years after promulgation "unless the Administrator determines that an earlier date is practicable." The EPA agrees with commenters that the complexity of the LCRI and time needed to prepare to implement the final rule support a compliance date three years from the date the rule is promulgated. Providing water systems three years from the date the LCRI is finalized

provides the amount of time necessary for States to work with water systems to prepare to comply with the final LCRI requirements, which includes revisions to most of the provisions introduced in the 2021 LCRR. The EPA disagrees with commenters that indicate one year is sufficient. The LCRI is complex and while some aspects may have similarities with 2021 LCRR requirements, it is different and water systems will need time to plan for and implement these changes. For example, new requirements for tap sampling, changes in tap sampling schedules for many water systems, a lower lead action level and the actions prompted by that level, including corrosion control treatment (CCT) requirements and new requirements for multiple ALEs, will require significant water system and State resources to prepare to implement. Furthermore, these requirements are all highly interrelated, and therefore setting different compliance dates for different provisions would increase rule complexity further, create implementation challenges, and may lead to widespread non-compliance (88 FR 84969, USEPA, 2023a).

Specifically, one of the key features of the LCRI is for all water systems to identify and replace all lead and GRR service lines as quickly as feasible, regardless of system lead levels. While some systems are voluntarily initiating service line replacement programs due to historic funding provided under the BIL, many systems have not or are not currently conducting service line replacement. Many systems have not been required to conduct LSLR under the LCR and may not have experience developing replacement programs. Water systems and States have noted the potential challenges of implementing replacement programs effectively, including availability of equipment and supplies, difficulty securing funding, and hiring crews to complete replacements. The EPA is working with States and water systems to demonstrate best practices for overcoming or mitigating these challenges through the technical assistance initiatives, Lead Service Line Replacement Accelerators (USEPA, 2023c) and the Get the Lead Out (GLO) Initiative (USEPA, 2024e). The three-year period after promulgation of the final LCRI is for systems to plan for compliance, including hiring additional staff, soliciting bids for contractors, securing grants or other types of funding, and continuing to improve inventories to ensure that they are better positioned to conduct mandatory service line replacement. It would also provide time

for the market to correct for potential shortages in resources or workers.

Additionally, the EPA is concerned that not providing water systems enough time to prepare to implement these requirements could undermine their efficacy. For example, as discussed in section IV.B of this preamble, water systems must be prepared to conduct a variety of actions that if not adequately prepared for, may result in fewer service line replacements. The EPA anticipates that water systems will use the three-year period prior to the LCRI compliance date to identify unknowns, develop their service line replacement plan, identify barriers to full service line replacement, and develop outreach materials that are intended to support full service line replacement. Additionally, an earlier compliance date for all the other LCRI requirements besides mandatory LSLR would divert resources from planning for mandatory service line replacement and may delay a system's ability to start replacing lead and GRR service lines.

The EPA also disagrees with providing a nationwide two-year extension to the compliance date under SDWA section 1412(b)(10). As described in section II.C of this preamble, in accordance with SDWA section 1412(b)(10), the Administrator, or a State (in the case of an individual system), may allow up to two additional years to comply with a treatment technique if the Administrator or State (in the case of an individual system) determines that additional time is necessary for capital improvements. Where a State, or the EPA where it has primacy, chooses to provide such an extension, the system would have up to five years from the rule's promulgation date to begin compliance with the treatment technique. The EPA has not determined that an additional two years is necessary for water systems nationwide to make capital improvements to begin compliance with the LCRI. Systems have been subject to more stringent requirements for LSLR and CCT since the promulgation for the 2021 LCRR that allowed time to prepare and obtain funding for any necessary capital improvements. Moreover, there is significant funding available through the BIL and other sources for LSL identification and replacement. The EPA has also been working with States to provide extensive technical assistance to water systems to replace LSLs. Additionally, as noted above, the EPA is providing water systems three years before the LCRI compliance date to identify unknowns and prepare for service line replacement, which may include voluntarily replacing lead and

GRR service lines. The EPA has determined that a cumulative average 10 percent per year replacement schedule is feasible in the LCRI and provides deferred deadline options for some systems (section IV.B.8). Furthermore, the commenter does not indicate why an additional two years is necessary for capital improvements in the form of LSLR to comply with the requirements of the LCRI.

c. Early Implementation of LCRI Risk Mitigation Provisions

The EPA requested comment on whether the agency should require water systems to comply with the LCRI requirements for risk mitigation after a full or partial service line replacement, service line disturbances, and associated reporting upon the effective date of the LCRI. Commenters supported such a requirement citing the similarity of the LCRI requirements to those first introduced in the 2021 LCRR and the value of providing health protective measures sooner while water systems are conducting service line replacement. Others disagreed on the grounds that it would be impracticable to implement these requirements upon the effective date of the LCRI. Some commenters supported voluntary implementation of the provisions prior to the LCRI compliance date.

The EPA agrees that a compliance date earlier than three years after promulgation is not practicable and therefore, implementation of the LCRI risk mitigation requirements prior to that date should be voluntary. As noted in the proposal, while the EPA expects that earlier implementation of these actions would reduce lead exposure, setting an earlier implementation date for these select LCRI requirements would result in systems complying with a mix of requirements across three versions of the CFR (*i.e.*, as amended by LCR, LCRR, and LCRI). The EPA is concerned about this complexity and that it could divert resources away from preparing to comply with the other LCRI requirements. In addition, water systems would not likely have time to prepare to implement this requirement by October 16, 2024, the 2021 LCRR compliance date. As described above, setting an implementation date between October 16, 2024 and the LCRI compliance date would introduce confusion and complexity for implementation, reporting, and recordkeeping. The EPA strongly encourages water systems to voluntarily implement these provisions as best practices prior to the LCRI compliance date. The EPA's May 1, 2024 memorandum "Implementing Lead

Service Line Replacement Projects Funded by the Drinking Water State Revolving Fund” details the risk mitigation measures, including follow-up tap sampling, point-of-use devices and pitcher filters, that are eligible under the DWSRF funding (USEPA, 2024i). Additionally, States can require water systems to implement these provisions early.

3. Final Rule Requirements

For the final LCRI, the EPA is setting the compliance dates for the LCRI revisions to 40 CFR 141.2 and 141.31 and subparts I, Q, and O of part 141 to three years after the publication date of this final rule in the **Federal Register** (see section II.C of this preamble).

The EPA is also specifying provisions as codified in the CFR on July 1, 2020, and on July 1, 2023, that water systems

must comply with between October 16, 2024, and the LCRI compliance date, in accordance with § 141.80(a)(4)(i).

Beginning on October 16, 2024, water systems are required to comply with the requirements of §§ 141.2, 141.31(d), and 141.80 through 141.91 as codified on July 1, 2020. In addition, water systems will also be required to comply with the provisions listed in Exhibit 3 as codified on July 1, 2023.

EXHIBIT 3—REQUIREMENTS INTRODUCED IN THE 2021 LCRR THAT WATER SYSTEMS MUST COMPLY WITH BETWEEN OCTOBER 16, 2024, AND THE LCRI COMPLIANCE DATE

Citation (CFR codified July 1, 2023)	Description
§ 141.84(a)(1) through (10) (excluding paragraphs (a)(6) and (7)).	Initial public service line inventory development.
§ 141.90(e)(1)	Submission of initial inventory to the State.
§ 141.85(e)	Initial and annual notification of known or potential service line containing lead.
§ 141.85(a)(1)(ii)	Revised lead health effects language.
§ 141.90(e)(13) and (f)(4)	Annual reporting and certification of the notifications in § 141.85(e) to the State.
§ 141.90(h)(3)	State provides results of the 90th percentile lead calculations, in writing, to the water system within 15 days of the end of the tap sampling period (if applicable).
§§ 141.201(a)(3)(vi) and 141.202(a)(10)	Tier 1 PN for exceedance of the lead action level as specified in § 141.80(c). ¹
§§ 141.201(c)(3) and 141.31(d)(2)	Submit copy of Tier 1 PN for a lead action level exceedance to the head of the primacy agency and the EPA administrator no later than 24 hours after the system learns of the exceedance.
40 CFR part 141, appendix A to subpart Q, section I.C.1 (excluding § 141.90, except paragraphs (e)(1) and (13) and (f)(4)).	Tier 3 PN required for: failure to notify persons served at service connections of a known or potential service line containing lead and failure to submit initial inventory to the State by October 16, 2024.
40 CFR part 141, appendix B to subpart Q, section D.23	Revised lead health effects language for required PN.

¹ As codified on July 1, 2020.

Additionally, starting October 16, 2024, failure to conduct the reporting requirements in Exhibit 3 (*i.e.*, § 141.90(e)(1) and (13) and (f)(4)) require Tier 3 PN in accordance with 40 CFR part 141, appendix A to subpart Q. Tier 3 PN for failure to conduct other requirements in § 141.90 will not begin until the LCRI compliance date associated with those provisions.

The EPA notes that the CCR requirements in 40 CFR part 141, subpart O, that were revised under the 2021 LCRR rulemaking also have a compliance date of October 16, 2024, in accordance with § 141.152(a). The one exception is the requirement for water systems to notify consumers in the CCR that complete lead tap sampling data are available for review and include information on how to access the data (§ 141.153(d)(4)(xii) as codified July 1, 2023, and renumbered to § 141.153(h)(8)(i) in the final CCR Rule (89 FR 45980, USEPA, 2024c)), which has a compliance date of three years after the publication of the LCRI. This is because the current requirements for tap sampling and calculating the 90th percentile are subject to the LCRI compliance date. The compliance date for systems to notify the public that this

data is publicly available should not be earlier than the compliance date for the data collection to avoid administrative complications of these piecemeal implementation of these related provisions.

C. State Primacy and Special Primacy Requirements

1. Rationale and Proposed LCRI Revisions

SDWA authorizes the EPA to promulgate and enforce NPDWRs (SDWA section 1412 and 1414). States that have been approved by the EPA for primary enforcement authority may also enforce drinking water standards under State law. SDWA section 1413 and the EPA’s implementing regulations set forth the requirements that primacy agencies (States) must meet to obtain and maintain primary enforcement responsibility (primacy) for its public water systems (PWSs). These include: (1) adopting drinking water regulations that are no less stringent than Federal NPDWRs under section 1412(a) and 1412(b) of SDWA, as well as the CCR Rule and the PN Rule under section 1414 of SDWA; (2) adopting and implementing adequate procedures for enforcement; (3) keeping records and

making reports available on activities that the EPA requires by regulation; (4) issuing variances and exemptions (if allowed by the State) under conditions no less stringent than allowed by SDWA sections 1415 and 1416; and (5) adopting and being capable of implementing an adequate plan for the provision of safe drinking water under emergency situations. The regulations in 40 CFR part 142 set out the specific program implementation requirements for States, Tribes, and Territories to obtain and maintain primacy for the Public Water System Supervision (PWSS) Program, as authorized under section 1413 of the SDWA.

PWSs in these primacy States must then comply with both sets of State and Federal regulations, although in practice, PWSs would only comply with the more stringent of the two regulations. Generally, primacy States monitor compliance with regulations; however, the EPA can also take enforcement actions against water systems for failure to comply with NPDWRs. The EPA conducts annual reviews of State programs and can also withdraw primacy under certain circumstances (see § 142.17).

Under § 142.12(b), all primacy agencies are required to submit a revised program to the EPA for approval within two years of promulgation of the final LCRI or request an extension of up to two years in certain circumstances. In order to be granted an extension, a primacy agency will be required to meet certain requirements as deemed appropriate by the EPA on a case-by-case basis to ensure adequate implementation and enforcement of the LCRI until the program revision is approved. To be approved for a program revision, primacy agencies are required to adopt revisions at least as stringent as the revised LCR, CCR, and PN lead-related provisions. To obtain primacy for this rule, primacy applications must address the general requirements specified in subpart B of part 142. The EPA proposed special primacy requirements for the lead and copper NPDWR (§ 142.16(d)), to ensure compliance with the revised State requirements described in the LCRI.

To retain primary enforcement authority, States must adopt revisions at least as stringent as the provisions in 40 CFR part 141, subpart I (Control of Lead and Copper); §§ 141.153, 141.154, 141.201, and 141.202; appendix A to subpart O of part 141 ([Consumer Confidence Report] Regulated Contaminants); appendix A to subpart Q of part 141 (NPDWR Violations and Other Situations Requiring Public Notice); and appendix B to subpart Q of part 141 (Standard Health Effects Language for Public Notification).

In the proposed LCRI, the EPA proposed revising the existing special primacy requirements by modifying some, and establishing new, special primacy requirements for States as a condition of primacy. The EPA proposed to eliminate the special primacy requirement related to systems' goal-based service line replacement programs, given the proposed LCRI requirement for mandatory service line replacement. The EPA also proposed a new special primacy requirement that States would be required to identify State laws, including statutes and constitutional provisions, relevant to a water system's ability to obtain access to conduct a full service line replacement and notify water systems in writing whether such laws exist or not. States would be required to provide this notification by the compliance date and within six months of the enactment of new or revised State law that pertains to access. The purpose of this requirement is to ensure States are informing systems about requirements under State law and provide consistent interpretation of State law across the State. The State is

the appropriate entity to compile this information because many systems are unlikely to have expertise to make these interpretation determinations.

Consistent interpretation of laws regarding access is important because mandatory full service line replacement of lead and GRR service lines is an important component of the LCRI to protect public health to the extent feasible and compliance should be enforced uniformly within States.

Under the 2021 LCRR, like the 1991 LCR, States must determine if a greater mandatory LSLR rate is feasible and to notify the system of its determination in writing. The EPA proposed to modify this to require States to set a shortened deadline at any time throughout a system replacement program if the State determines a shorter deadline is feasible. The EPA also proposed requiring States to establish an appropriate deadline to complete inventory validation when they determine a shortened deadline is feasible. The purpose of these requirements is to ensure that States are meeting their responsibilities to make determinations on whether a faster mandatory LSLR rate is feasible. State oversight of the service line replacement rate is essential because lead and GRR service lines are a major source of lead in drinking water so increasing the replacement rate when feasible will have significant public health benefits.

The EPA also proposed modifications to special primacy requirements under the LCRI with respect to the requirement for States to set a deadline for systems to prepare an updated inventory where they find discrepancies in their inventory. The 2021 LCRR only requires States to set this deadline where water systems identify an LSL that was categorized as non-lead in the inventory. In the LCRI, the EPA proposed inclusion of GRRs because these are included in the proposed service line replacement requirements and may also be improperly identified. In addition, the EPA proposed inclusion of lead connectors in the inventory and requiring systems that have inventories with no lead connectors and no unknown connectors to update their inventory if a lead connector is found. Therefore, the EPA proposed a requirement for States to set a deadline for systems to prepare an updated inventory in these cases.

The EPA also proposed, related to monitoring for lead in schools and child care facilities, requiring States to describe how the State will determine if an alternative lead sampling program is as "stringent as the Federal requirements" including how the State

will use the definitions of elementary schools, secondary schools, and child care facilities as defined in § 141.2 to issue waivers. The EPA also proposed that States describe how they will meet the requirement to review the lists of schools and child care facilities submitted by CWSs to ensure entries conform to the definitions of school and child care facility in § 141.2, and that States would be required to ensure that the list of schools and child care facilities is complete. Prior to proposal, the EPA received questions about the LCRR requirement for States to define schools and child care facilities. The EPA is aware that the types of facilities that meet the definition of child care facility under § 141.2 may differ among States (*e.g.*, which facilities are licensed by the State). However, it is not the EPA's intention for States to develop new definitions for schools and child care facilities for purposes of complying with the new rule. In LCRI, the EPA proposed the definition of "child care facility."

The EPA proposed requiring that States verify that systems have complied with follow-up requirements following a single site sampled above the action level. Under the 2021 LCRR, this requirement was part of "find-and-fix". In the proposed LCRI, this requirement was relabeled as Distribution System and Site Assessment (see section IV.H of this preamble). This change was proposed to be consistent with the terminology in the rest of the LCRI and is not a substantive change in requirements from the 2021 LCRR.

2. Summary of Public Comments and the EPA's Response

a. Identifying State Laws Pertaining to Access

The EPA received comments both in favor of and against the special primacy requirement in § 142.16(d)(8) for States to identify State laws, including statutes and constitutional provisions, that pertain to a water system's access to conduct full service line replacement and to notify water systems in writing whether any such laws exist or not. Commenters against this provision stated that individual systems should be responsible for determining which laws, statutes, or constitutional provisions apply to their system and that there would be additional State burden associated with this research.

Commenters in favor of this provision felt that it would be a benefit to systems to have access to this information. The EPA retained this requirement in the final rule because while the EPA acknowledges that this provision will

require additional effort by States, there is value and efficiency in having the State provide consistent information to all systems in the State. In addition, States are better positioned to interpret State laws or statutes than individual water systems. Neither the proposed nor final rule require States to identify specific local laws relevant to a water system's ability to obtain access to conduct a full service line replacement.

b. Setting Shortened Replacement Deadlines

In the proposal, the EPA requested comment on whether States, as a condition of primacy, or the EPA when it is directly implementing the program, should be required to set initial shortened service line replacement deadlines by a certain timeframe, such as no later than 60 days after the compliance date. Many commenters responded to this request for comment by saying that shortened deadlines are not feasible and that States should not have the authority to set shortened deadlines. (See section IV.B.7 of this preamble for more information about the EPA's determination to require States to evaluate shortened replacement deadlines.) Those who commented on defining the timeframe for the decision about shortened deadlines were split on the need to establish a specific timeframe for the State's decision. Some supported a shorter timeframe, citing the need to establish shortened deadlines quickly for faster public health protection and to establish predictability for systems. Some supported longer timeframes or no timeframes at all, citing the State burden of evaluating complex information for multiple systems simultaneously before reaching a conclusion. For systems that are not eligible for deferred deadlines, the EPA decided not to include a specific timeframe for State decisions on shortened service line replacement deadlines in the final LCRI because the conditions for which a system may be able to replace at a faster rate may change throughout the replacement program. Therefore, the LCRI language in § 141.84(d)(5)(v) requires the State to make a shortened deadline determination at any time throughout a system's replacement program when a State determines a shorter deadline is feasible, which would include within 60 days of the compliance date. This would address the burden concerns expressed by some commenters by not requiring States to review all replacement programs at the same time, but also provide the flexibility to make shortened deadline decisions as early as

possible to enhance public health and provide predictability for systems. This also allows States to use information obtained during the replacement period through inventory investigations that may inform the State's decision to require a shorter deadline. The EPA intends to develop guidance to assist States in making shortened deadline determinations. For systems that are eligible for deferred deadlines, the EPA included specific deadlines for State decisions on whether the deferred deadline and associated replacement rate identified by the system is the fastest feasible. Specifically, States are required under § 141.84(d)(5)(vi)(C) to make determinations as soon as practicable, but no later than the end of the second program year and every three years thereafter. This is not expected to significantly impact State burden because of the small number of systems that will be eligible for deferred deadlines. (See section IV.B.8 of this preamble for more information on State requirements for making these determinations and the public health value of these provisions.)

c. Deferred Deadlines

The EPA requested comment on whether to require the State, as a condition of primacy, to approve the use of the deferred deadline provision where the water system qualifies for it and/or whether to require the State to assess whether it would be feasible for a system to meet the 10-year deadline or a shorter deadline even if the system meets the regulatory criteria for the deferred deadline. The EPA received mixed comments in response to this request. Some commenters favored requiring States to approve the use of the deferred deadline provisions and not permitting States to set shorter deadlines for systems that qualify and apply for deferred deadlines, as described in § 141.84(d)(5)(vi). These commenters stated that this placed additional burden on States and that systems could be subject to arbitrary decisions by States about deferred deadlines. Other commenters stated that States should always be required to assess whether systems that meet the requirements of § 141.84(d)(5)(vi) could meet the standard 10-year deadline and therefore a special primacy condition is appropriate because extremely long timeframes for replacement could put people at risk for much longer than necessary.

The EPA agrees that due to the urgency to complete lead and GRR service line replacement as quickly as feasible, States should be required to regularly evaluate whether shorter

deadlines are feasible for systems eligible for a deferred deadline. The LCRI maintains the proposed requirement for States to set a shortened deadline at any time throughout a system replacement program if the State determines a shorter deadline is feasible. The final LCRI also contains new provisions that require States to evaluate, as soon as practicable, but no later than the end of the second program year and every three years thereafter, and either approve the continued use of the deferred deadline and replacement rate as the fastest feasible for the system, or set a shorter deferred deadline and identify an associated replacement rate to ensure the system is replacing service lines at the fastest feasible rate for the system (see section IV.B.8 of this preamble). The LCRI requires States to determine whether the system's recommended deferred deadline and associated cumulative average replacement rate are the fastest feasible to conduct mandatory service line replacement. In addition, the EPA cannot preclude a State from adopting or enforcing more stringent requirements, consistent with other SDWA regulations.

d. Translation Support

In the preamble for the proposal, the EPA requested comment on "Whether the Agency should require States, as a condition of primacy, to provide translation support to water systems that are unable to do so for public education materials to consumers with limited English proficiency." (See section IV.J.3.g of this preamble for the EPA's response to these comments.) The EPA elected to include a special primacy requirement to require States to provide technical assistance to systems in meeting the requirement to provide translation assistance to consumers with limited English proficiency. The EPA selected this approach because it is consistent with the approach in the Final CCR Rule Revisions (89 FR 45980, USEPA, 2024c).

3. Final Rule Requirements

The EPA retained the proposed special primacy requirements, with minor editorial revisions for clarity, to ensure effective oversight and implementation of the LCRI by States. In addition to finalizing the proposed items, the EPA made minor adjustments to include provisions that implement other requirements of the LCRI as described below. State primacy requirements are located in § 142.16(d).

The EPA included § 142.16(d)(9) in the final LCRI, which requires, as a condition of primacy, States to make

determinations about systems eligible for deferred deadlines, including determining if the deferred deadline is the fastest feasible or whether a faster deadline is feasible, and reporting the results of these determinations to the EPA. This requirement is necessary to implement State requirements in §§ 141.84(d)(5)(vi) and 142.15(c)(4)(iii)(H). The EPA intends to issue guidance to assist States in making determinations on the fastest feasible deadlines for service line replacement. For more information on the changes to the deferred deadlines provisions, please see section IV.B.8 of this preamble.

The EPA included a special primacy requirement in § 142.16(d)(5)(ii) for States to provide or require the review of inventory validation efforts, including making determinations on whether previous validation efforts are at least as stringent as the requirements and providing written approval to the system, and requiring additional actions for systems based on the results of the inventory validations. This requirement is necessary to implement State requirements in § 141.84(b)(5).

The EPA also included a special primacy requirement in § 142.16(d)(10) to require States, as a condition of primacy, to make determinations about which water systems serve a large proportion of consumers with limited English proficiency and provide technical assistance to these systems in meeting the requirement to provide translation assistance in these communities. This requirement is necessary to implement State requirements in § 141.85(b)(1).

D. State Reporting and Recordkeeping Requirements

1. State Recordkeeping Requirements

a. Rationale and Proposed LCRI Revisions

State recordkeeping provisions are essential elements of the LCRI because they ensure that States and the EPA have the data and information they need in order to ensure effective implementation and enforcement of the rule. State recordkeeping requirements are located in § 142.14 of the final rule.

The EPA proposed several changes to State recordkeeping requirements to conform with changes proposed elsewhere in the proposed LCRI. Because the EPA proposed eliminating the trigger level and requiring mandatory full service line replacement, the EPA also proposed removing recordkeeping requirements for any State determinations of LSLR goal rates. The EPA proposed changing instances

of LSLR to “service line replacement” and “lead and galvanized requiring replacement service lines” to reflect the proposed mandatory full service line replacement requirements of both lead and GRR service lines. The EPA also proposed clarifying that the requirement in § 142.14(d)(8)(ix) for States to maintain records of system-specific determinations for some NTNCWSs and CWSs to collect non-first draw samples refers to samples that do not meet the minimum six-hour stagnation time.

The EPA also proposed clarifying existing requirements regarding the length of the records retention period. The EPA requires each State with primacy enforcement responsibility to retain records listed under § 142.14(d) for not less than 12 years. States must maintain records of all currently applicable or most recent State determinations, including all supporting information and technical basis for each decision, under § 142.14(d)(8). Revisions to the LCR in 2000 added a requirement that if no change is made to the State determinations under § 142.14(d)(8) during the 12-year retention period, that the State must retain the record until a new decision, determination, or designation has been issued. The EPA proposed revising § 142.14(d)(8) in the LCRI to clarify the existing record retention requirement and improve implementation. The EPA also proposed changing the order of provisions in § 142.14(d)(8) to improve readability.

The EPA also proposed moving requirements for States to maintain records of service line replacement plans, service line inventories, and compliance sampling pools to § 142.14(d)(9) with other reports and information submitted under § 141.90. The EPA proposed this change to improve organization and clarity because these records are not State determinations. Because the EPA proposed requiring systems to complete a baseline service line material inventory by the rule compliance date, the EPA also proposed requiring that States maintain records on these baseline inventories in addition to the initial service line inventory and any required updates to the inventory.

b. Summary of Public Comments and the EPA’s Response

In the proposal, the EPA requested comment on whether States should be required to maintain records related to Distribution System and Site Assessments (DSSA) conducted by water systems. Some commenters stated that this information would be valuable to States and therefore should be

maintained. Other commenters stated that retaining this information would cause additional burdens for States with no additional benefit. Some commenters not in favor of State maintenance of records indicated that systems should be required to maintain the information and make it available to the State upon request. Some commenters also expressed concern that the data systems that are used to store State data may not be set up to store this information. The EPA agrees with commenters concerned about the burden of such a requirement for States to maintain records on DSSAs and therefore is not adding a requirement to do so in the final LCRI. The EPA also received general comments about State burden and agrees that adding such a requirement would increase the overall burden of the LCRI on States. The EPA does not want to create additional unnecessary burden on the States so they can focus on implementing the requirements of the LCRI that have important direct public health benefits such as LSLR, CCT, and public education, among other things. The EPA notes that States will be receiving DSSA information from systems as required in § 141.90(g)(1) and that the final rule (§ 142.14(d)(8)) requires the State to retain all currently applicable or most recent State determinations, including supporting information, for all decisions regarding the LCRI. To the extent that DSSA information was used in State decision making, it must be retained under this provision. Should States need information on DSSA sites they can request this information from the water system.

In the proposal, the EPA requested comment on “whether States should be required to maintain documentation of determinations of more stringent implementation, including but not limited to conditions or approvals related to reduced compliance monitoring and additional information required to conduct a review or designate OCCT.” Some commenters stated support for maintaining this information, while other commenters did not. One commenter stated that the provisions of § 142.14(a) and (d)(8) require States to maintain records on which their decisions are made, so a specific requirement on more stringent implementation would be redundant. The EPA agrees that the requirements in this request for comment would be redundant based on § 142.14(d)(8) and therefore has not made any additions to the final LCRI regulatory text that require maintaining this type of documentation.

c. Final Rule Requirements

State recordkeeping requirements found in § 142.14(d)(8) through (10) in the proposal were all finalized without substantive changes from the proposal. Minor revisions to these sections in the final LCRI include updates for clarification and organizational purposes. Additional revisions were made to match revisions in other sections of the final rule with corresponding revisions or to correct references to other sections of the rule.

The final LCRI adds § 142.14(d)(8)(v), which requires State to keep records of designations of optimal water quality parameters (OWQPs), as a technical correction to ensure consistency with § 142.15(c)(4)(iii)(C), which requires States to report this information to the EPA on a quarterly basis. These requirements mirror the requirements for States to designate and review OWQPs under § 141.82(f). This should not require any additional effort by States because States are required to report this information, so they would need to collect it. The rest of the items in § 142.14(d) were renumbered to accommodate this inserted requirement.

The final LCRI also adds § 142.14(d)(8)(ix) to correspond to the addition of a new requirement for additional system reporting and State approvals for systems that are eligible for deferred deadlines provisions in their LSLR program as defined in § 141.84(d)(5)(vi). There is a corresponding State reporting requirement for this information, therefore the States must retain this information. For more information on the revisions to the deferred deadlines provisions, please see section V.B of this preamble.

2. State Reporting Requirements

a. Rationale and Proposed LCRI Revisions

State reporting provisions are essential elements of the LCRI because they ensure that States and the EPA have the data and information they need to ensure effective implementation and enforcement of the rule. State reporting requirements are located in § 142.15 of the finalized rule.

The EPA proposed making two changes to quarterly State reporting to conform with the changes proposed elsewhere in the LCRI. In the 2021 LCRR, States were required to report summary numbers of LSLs, GRR service lines, and unknown service lines, as reported by systems in their mandatory service line inventories. The EPA proposed requiring in the LCRI to expand the inventories to include lead

connectors and non-lead service lines and to require States to report totals for these additional categories per system. In the 2021 LCRR, goal-based LSLR was introduced in addition to mandatory LSLR upon an action level exceedance and requires States to report the date that systems must begin LSLR for all systems required to do so. As the LCRI proposed mandatory service line replacement irrespective of measured lead levels, the EPA proposed that States instead report the calculated replacement deadline for each system under either the proposed mandatory 10-year deadline, shortened deadlines, or under proposed options for deferred deadlines. In addition, the EPA proposed requiring States to report the number and type of service lines replaced each year, as reported by systems.

The EPA also proposed consolidating reporting requirements in § 142.15(c)(4)(i) and (iii). Under LCRR, the EPA removed dates differentiating reports submitted by States to the EPA prior to January 1, 2000, and those submitted after January 1, 2002, resulting in some duplicative requirements. Specifically, the EPA proposed maintaining requirements for States to report the date of CCT and source water treatment related milestones (e.g., the date CCT study results are submitted to the State, date of OCCT installation is complete) and removing duplicative requirements such as reporting the systems with action level exceedances given that States are required under LCRI to report the 90th percentile values of all water systems in addition to the first and last days of the tap monitoring period. These reporting elements are necessary for the EPA's enforcement and oversight.

The EPA also proposed changing State reporting to implement section 1414(c)(2)(D) of SDWA, as amended by the Water Infrastructure Improvements for the Nation (WIIN) Act. This provision requires the EPA to issue a Tier 1 PN of a system's lead action level exceedance if a system fails to do so; however, the EPA would need to know of the action level exceedance to conduct the notice. Therefore, the EPA proposed requiring that States submit the 90th percentile lead level for any system with an action level exceedance within 15 days following the end of each applicable tap monitoring period or within 24 hours of receiving notification of a lead action level exceedance from a water system, whichever is earlier.

b. Summary of Public Comments and the EPA's Responses

Commenters expressed general concern that the proposed rule placed additional burden on States and that more resources in the form of funding, staffing and time would be needed by States to effectively implement the rule. The EPA has accounted for costs to States to implement and enforce the rule in the proposed and final rules. While the costs to States have increased in the final rule relative to the currently implemented LCRR provisions, the increase in State burden is needed to ensure the improvements to the LCRI, including increased public health protection, are correctly implemented and enforced. See section VI.D.3 of this preamble for more information about State costs.

Commenters also expressed concerns that the additional burdens on States would be compounded by additional burdens associated with the EPA's final NPDWR for six PFAS. Under the requirements in SDWA section 1412(b)(3)(C), Economic Analyses for NPDWRs must be conducted using the costs and benefits associated with the rule under consideration only and are not permitted to factor in costs or benefits associated with other proposed or final EPA regulations. Therefore, costs and benefits associated with the PFAS rule have not been included in the final LCRI Economic Analysis and it is not appropriate to factor any PFAS burden considerations into the EPA's decision-making on the LCRI. The EPA also notes that while there are new requirements the States must perform in the LCRI and other recent regulations, including PFAS, many of the State requirements for the LCRI are the same or similar to existing regulations. Therefore, States will be in a good position to continue the similar requirements while adapting to the new requirements. States will have three years between the final rule date and the compliance date to prepare for the new requirements.

Commenters expressed that the complexity of the reporting and recordkeeping requirements of the LCRI require an appropriate data system to manage the data requirements of the LCRI. Some commenters also specifically mentioned the need for updates to the Safe Drinking Water Information System (SDWIS) and/or the Drinking Water State Federal Tribal Information Exchange System (DW SFTIES) to match the reporting requirements of the LCRI. Commenters also expressed a concern that these updates would not be possible in time

for LCRI implementation. The EPA remains committed to providing high quality tools to assist States with their implementation of NPDWRs. The EPA intends to support the data management needs of primacy agencies for the LCRI through the Drinking Water State Federal Tribal Information Exchange System (DW SFTIES) development project, and to have a product available for State use by the compliance date of the LCRI. The EPA will work closely with State program and information technology staff on LCRI database needs and on overall SDWIS modernization. The EPA is intending to provide LCRI Data Entry Instructions (DEIs). The LCRI DEIs will provide detailed guidance to primacy agencies regarding the LCRI monitoring, recordkeeping, and reporting requirements.

Commenters recommended that the EPA strengthen reporting requirements to ensure improved enforcement of the LCRI provisions. Some comments suggested that the proposed rule, in their view, lacked timely and transparent reporting needed to assure compliance. The EPA does not agree that the reporting requirements in the LCRI are insufficient to support effective enforcement. The EPA added further reporting requirements to align with new requirements for the final LCRI as described in section IV.N of this preamble. The EPA carefully considered all reporting requirements to ensure that all required reporting elements provided some value to the State and/or the EPA for public health or enforcement. Some commenters suggested that the LCRI should require direct electronic reporting of sample results from labs and/or systems to a database shared by the EPA and the States. The EPA did not include such a requirement because the EPA does not wish to place overly prescriptive requirements on States on how reporting should be done. The EPA acknowledges that in some States, direct electronic reporting may be an option for systems to report to States. However, not all systems and States are set up for this type of reporting therefore it is not appropriate to require it in the LCRI. The EPA notes the LCRI does not prohibit States from setting up direct electronic reporting. In addition, the EPA notes that the recently promulgated Consumer Confidence Rule Revisions include a requirement for States to submit compliance monitoring data annually to EPA for all NPDWRs beginning in 2027, which will improve the EPA's ability to fulfill oversight responsibilities under SDWA, including those associated with the LCRI. Prior to adoption of DW SFTIES, the EPA will

facilitate primacy agency reporting to minimize reporting burden. A primacy agency could submit CMD using one of two formats: (1) As a data extract using the EPA's SDWIS State Data Extraction Tool; or (2) As an extracted copy of its database and database documentation (USEPA, 2024c).

Commenters expressed concern with the deadline of 15 days after the sampling period to calculate the 90th percentile and report the results to the EPA. Commenters pointed out that the systems have up to 10 days to submit the results to the State, which means in some circumstances the State would only have five days to perform the analysis necessary to calculate the 90th percentile and report to the EPA. Since the language does not say five business days, it could become even more challenging to meet in cases where a weekend is within the five-day window. The final LCRI retains the 10-day reporting timeframe for systems and the 15-day reporting timeframe for States. The EPA determined that these timeframes are appropriate, and that systems and States will be able to meet these deadlines. The EPA acknowledges that in some cases the States may have a short turnaround time to complete the calculations and the reporting requirement, however, the public health interest in receiving this information in a timely manner is extremely important. When a system has an action level exceedance, there are various actions that systems, States, or the EPA must take in order to alert the public to the potential risks to their health. Section 1414(c)(2)(D) of SDWA, as amended by the WIIN Act, requires the EPA to issue a Tier 1 PN (a 24-hour notification) of a system's lead action level exceedance if a system fails to do so. The EPA would need to know of the action level exceedance to conduct the notice. Given the public health interest in issuing the Tier 1 notice in a timely manner, in cases where the EPA is issuing the notice, the EPA must be made aware in an appropriate timeframe.

c. Final Rule Requirements

The EPA finalized proposed State reporting requirements found in § 142.15(c)(4)(iii)(B) through (G) without substantive changes from the proposal. The agency made minor adjustments from the proposal for clarification and organizational purposes. The EPA made additional revisions to align with revisions in other sections of the final rule with corresponding revisions or to correct references to other sections of the rule.

The EPA made a technical correction to the Reports by States section

(§ 142.15). Specifically, the agency added language to the introductory paragraph (§ 142.15(c)(4)) to clarify that the requirement for States to report the 90th percentile calculation for systems that exceed the action level to the EPA is not a quarterly requirement as originally stated in the introduction. In the proposal, this language was not consistent with the language in § 142.15(c)(4)(iii)(G) in the proposal and final rule, which requires 15 days of the end of the tap sampling period.

The EPA added new State reporting requirements in § 142.15(c)(4)(iii)(H). These new requirements correspond to new State requirements in § 141.84(d)(5)(vi) to review service line replacement plans for those systems that are eligible for deferred deadlines and make determinations as to whether a shortened deferred deadline is feasible. Under this provision, States are required to report the result of the State's determination as to whether the deferred deadline is the fastest feasible, the deadline at the fastest feasible rate, and the reasons for the State's decision. For more information on the changes to the deferred deadlines provisions, please see section IV.B.8 of this preamble.

VI. Economic Analysis

This section summarizes the final Lead and Copper Rule Improvements (LCRI) Economic Analysis supporting document (USEPA, 2024a), which was prepared in compliance with Safe Drinking Water Act (SDWA) section 1412(b)(3)(C). This analysis is commonly called the Health Risk Reduction Cost Analysis (HRRCA). SDWA section 1412(b)(3)(C)(i) lists the analytical elements of the required HRRCA as follows: (1) quantifiable and non-quantifiable health risk reduction benefits; (2) quantifiable and non-quantifiable health risk reduction benefits from reductions in co-occurring contaminants; (3) quantifiable and non-quantifiable costs that are likely to occur solely as a result of compliance; (4) incremental costs and benefits of rule options; (5) effects of the contaminant on the general population and sensitive subpopulations including infants, children, pregnant women, the elderly, and individuals with a history of serious illness; (6) any increased health risks that may occur as a result of compliance, including risks associated with co-occurring contaminants; and (7) other relevant factors such as uncertainties in the analysis and factors with respect to the degree and nature of the risk.

Based on this final LCRI HRRCA analysis, the United States

Environmental Protection Agency (EPA) Administrator reaffirms the finding made at proposal, under SDWA section 1412(b)(4)(C), that the estimated quantified and non-quantifiable benefits of the regulation justify the quantified and non-quantifiable costs.

In this analysis, the EPA assumes that the LCRI National Primary Drinking Water Regulation (NPDWR) will be promulgated in 2024. The agency estimated the year or years in which all costs and benefits accrue over a 35-year period of analysis. The 35-year window was selected to capture costs associated with rule implementation as well as water systems conducting service line replacement and installing and operating optimal corrosion control treatment (OCCT). The EPA accounts for the Illinois, New Jersey, Michigan, and Rhode Island State-required service line replacement programs in the regulatory analysis baseline, so that the estimated final LCRI cost will not double count the service line replacement costs already required by States.

The EPA annualized the estimated future streams of costs and benefits that accrue from compliance activities occurring over this same period of analysis symmetrically. The EPA does not capture the effects of compliance with the final LCRI after the end of the period of analysis, although, the agency does account for benefits that continue to accrue in the future from compliance activities that occur during the 35-year window. Costs and benefits are presented as annualized values in 2022 dollars. The EPA determined the present value of these costs and benefits using a discount rate of two percent as prescribed by the Office of Management and Budget (OMB) Circular A-4 (OMB, 2023).

Estimated benefits, in terms of health risk reduction from the final LCRI, result from the activities performed by water systems, which are expected to reduce risk to the public from exposure to lead and copper in drinking water at the tap. The EPA quantifies and monetizes some of this health risk reduction from lead exposure by estimating the decrease in lead exposures accruing to both children and adults from the installation and re-optimization of OCCT, service line replacement, the implementation of point-of-use filter devices, and the provision of pitcher filters in systems with multiple action level exceedances and by quantifying and monetizing the resulting increases in intelligence quotient (IQ) in children zero to seven years old, and reductions in incidents of low birth weight, attention-deficit/hyperactivity disorder (ADHD) in

children, and adult cardiovascular disease premature mortality.

A. Summary of Public Comments and the EPA's Response

The EPA published an economic analysis for the proposed rule in accordance with SDWA section 1412(b)(3)(C) (USEPA, 2023q). The proposed rule Economic Analysis and the appendices to the proposed rule Economic Analysis can be found in the rule docket, under the document ID number EPA-HQ-OW-2022-0801-0712. The EPA requested comment, information, and data on all aspects of the proposed rulemaking including the Economic Analysis.

The EPA received comments and data submissions. As a result of the new information submitted by commenters and additional data obtained by the EPA in response to comments, the agency has improved the estimates of costs and benefits for the final rule.

Commenters indicated that the EPA should be using a two percent discount rate when calculating the annualized social costs and benefits of the LCRI, not the three and seven percent rates used in the proposed rule analysis. The EPA agrees with the commenters and notes that the U.S. White House and OMB recently finalized and re-issued the A-4 benefit-cost analysis guidance (OMB, 2023), and the update includes new guidance to use a social discount rate of two percent. The updated OMB Circular A-4 states that the discount rate should equal the real (inflation-adjusted) rate of return on long-term U.S. government debt which provides an approximation of the social rate of time preference. For the LCRI, the OMB Circular A-4 does not require the agency to follow the updated guidance for this final rulemaking; however, the guidance does encourage “to the extent feasible and appropriate, as determined in consultation with OMB, agencies should follow this Circular’s guidance earlier than these effective dates.” Given the OMB’s statement encouraging early implementation of the Circular A-4 guidance and public input received on the discount rates considered by the EPA in the proposed LCRI, for this final rule, the EPA estimated national benefits and costs at the two percent discount rate and incorporated those results into the final LCRI Economic Analysis (USEPA, 2024a). Because the EPA provided cost estimates discounted at three and seven percent for the proposed LCRI based on OMB guidance, which was in effect at the time of the proposed rule analysis (OMB, 2003), the agency has also calculated the cost impacts at both the three and seven

percent discount rates. See the final LCRI Economic Analysis (USEPA, 2024a), appendix F for results.

Commenters requested that the EPA should show the costs of the LCRI over each year of the period of analysis. The EPA agrees that having information on the distribution of cost over the course of the period of analysis can be useful in understanding impacts to regulated entities. Providing this information is also consistent with OMB Circular A-4 (OMB, 2023) guidance. See the final LCRI Economic Analysis (USEPA, 2024a), chapter 6, section 6.3 for the undiscounted annual costs and benefits of the final LCRI.

Commenters suggested that the agency should include the social cost of the incremental greenhouse gas emissions that might result from compliance with the final LCRI. The EPA disagrees with commenters that SDWA requires the EPA to quantify and consider the climate disbenefits associated with GHG emission increases from this final rule in the HRRCA. The HRRCA requirements of SDWA 1412(b)(3)(C)(i)(III) require the agency to analyze “quantifiable and nonquantifiable costs . . . that are likely to occur solely as a result of compliance with the maximum contaminant level”. Therefore, the EPA considered as part of its HRRCA analysis the compliance costs to facilities, including the costs to purchase electricity for the operation of OCCT at drinking water treatment facilities and fuel costs for the use of construction and transport vehicles in the replacement of lead and galvanized requiring replacement (GRR) service lines. Also, the agency did not include in the HRRCA analysis the climate disbenefits from GHG emissions associated with producing the electricity needed to operate CCT and the combustion of the fuel used in the replacement of service lines because these impacts do not qualify as compliance costs to public water systems (PWSs).

The EPA is committed to understanding and addressing climate change impacts in carrying out the agency’s mission of protecting human health and the environment. While the EPA is not required by SDWA 1412(b)(3)(C) to consider climate disbenefits under the HRRCA the agency has estimated the potential climate disbenefits from the operation of OCCT at drinking water treatment facilities and the use of construction and transport vehicles in the replacement of lead and galvanized requiring replacement (GRR) service lines. The EPA’s final rule is based on the EPA’s record-based analysis of the

statutory factors in SDWA 1412(b), and this disbenefits analysis is presented solely for the purpose of complying with the directives in E.O. 12866 (Regulatory Planning and Review). OMB Circular A-4 states “[l]ike other benefits and costs, an effort should be made to quantify and monetize additional effects when feasible and appropriate” (OMB, 2023). The scope of the monetized climate disbenefits analysis is limited to the climate impacts associated with the incremental GHG emissions from the operation of OCCT at drinking water treatment facilities and the use of construction and transport vehicles in the replacement of lead and galvanized requiring replacement (GRR) service lines required under the final LCRI. See section VI.E.10 of this preamble for a summary of the EPA’s assessment of the final rule’s incremental greenhouse gas emissions, and see chapter 5, section 5.9 of the final LCRI Economic Analysis (USEPA, 2024a) for additional detail on the analysis.

Commenters raised a number of points associated with the general concept that the EPA should consider, in this LCRI rulemaking, including the potential financial impacts to affected drinking water systems of the LCRI, other ongoing capital management obligations, Clean Water Act (CWA) compliance obligations (for combined sewer and drinking water systems), climate change related expenditures, and a number of other regulations proposed by the EPA. One of the commenters highlighted the proposed per- and polyfluoroalkyl substances (PFAS) NPDWR, which since the closure of the LCRI proposed rule comment period was finalized on April 10, 2024, indicating that overlapping compliance schedules will create affordability issues. A commenter also indicated that the agency should consider the percentages of systems likely to make treatment changes due to PFAS NPDWR maximum contaminant level (MCL) exceedances and how that would impact the costs associated with LCRI requirements. The other proposed rules mentioned by commenters were the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substance designation, the Stage 3 Microbial and Disinfection Byproducts NPDWR rulemaking, and the CWA designated use and water quality criteria rulemaking for the Delaware River. Commentors indicated that the EPA cannot impose a cumulative regulatory burden on communities that is not economically sustainable or leads to inadequate resources for other key

public health protections. In response, the EPA notes that the HRRCA, required by SDWA, excludes costs that result from compliance with other regulations. Specifically, SDWA section 1412(b)(3)(C)(i)(III) requires that the EPA include quantifiable and non-quantifiable costs that are likely to occur solely as a result of compliance with the rule including monitoring, treatment, and other costs and excluding costs resulting from compliance with other proposed or promulgated regulations. The agency also notes that the impact from other non-NPDWR regulations (e.g., CWA water quality standards), aging water infrastructure, and non-revenue water control are not part of the evaluation of routine compliance in drinking water regulations and, thus, are not accounted for in the EPA’s cost analysis. Nonetheless, the EPA has not identified any other drinking water regulations or requirements that will inhibit compliance with the final LCRI, nor should the final LCRI regulation significantly impair compliance with other regulations (e.g., installing a treatment technology to comply with the PFAS NPDWR MCLs does not inhibit a system from taking action to meet OCCT requirements under the final LCRI). The potential implementation overlap between the PFAS NPDWR (now final) and the LCRI could potentially result in a large number of public water systems (PWSs) and States facing rule start-up, administrative, and sampling/service line inventory costs associated with both rules within a few years after the promulgation of the rules. Also, the more significant costs of installing and operating OCCT and/or conducting full service line replacement along with installing and operating PFAS treatment technology in a similar time frame are expected to fall on some systems. The EPA does not have sufficiently detailed lead/GRR service line information and 90th percentile lead tap sample data, and PFAS occurrence data to explore the potential treatment cost interactions of the two rules. However, it is feasible for water systems to comply with both regulations by taking appropriate mitigating actions, potentially similar to the ones outlined in the PFAS NPDWR Best Available Technologies (BAT) and Small Systems Compliance Technologies (SSCT) Support Document (see the PFAS BAT/SSCT Support Document, USEPA 2024j) to address the impacts that PFAS treatment may have on CCT. This is especially true in light of increased funding available under the BIL, including \$11.7 billion in DWSRF funding that can be used for PFAS

treatment and lead service line replacement, \$15 billion in dedicated funding for service line replacement, and \$9 billion in dedicated funding for emerging contaminants in drinking water, especially PFAS (\$4 billion in DWSRF emerging contaminants funds and \$5 billion from the Emerging Contaminants in Small or Disadvantaged Communities (EC-SDC) grant program). Note, the EPA reasonably anticipates BIL funding is likely to be able to support a substantial portion of the initial capital costs of the final PFAS rule. (See section 1.5 in the LCRI Response to Comment document and section 2.4 of the PFAS Response to comment document (USEPA, 2024k; USEPA, 2024l).) The EPA also notes that the extended five-year compliance date for meeting the PFAS MCLs may provide implementation flexibility for those systems facing the potential for simultaneous installation of PFAS and OCCT treatment technologies. The EPA acknowledges the potential that operational adjustments may be necessary to adjust the corrosivity of finished water if treatment is installed to meet the PFAS NPDWR MCLs. Ion exchange resins or reverse osmosis, for instance, may make water more corrosive if post-treatment stabilization (e.g., pH adjustment) is not performed. However, the increase in corrosivity is short-lived after an ion exchange media change-out (see the PFAS BAT/SSCT Support Document, USEPA 2024j) and would likely not create the long-term water chemistry issues that would trigger the LCRI study requirements associated with significant treatment changes nor significant adjustment to LCRI corrosion control treatment (CCT). Systems using reverse osmosis would likely need post-treatment stabilization to address corrosivity although as part of the PFAS regulatory analysis the EPA found that it is highly unlikely that drinking water systems would select this technology largely due to the challenges presented by managing the treatment residuals, in fact the final PFAS analysis assumed that no systems would implement reverse osmosis (see chapter 5 of the Economic Analysis for the Final PFAS NPDWR (USEPA, 2024f)). Given this information, the EPA made no changes to its baseline assumptions on existing pH levels in finished water nationally, so the PFAS NPDWR was found to have no quantifiable impact on the final LCRI Economic Analysis modeling, although the EPA acknowledges that it is possible that LCRI CCT costs may be underestimated based on the impact of PFAS treatment.

The EPA received a number of comments indicating that the agency under costed service line replacement. Commenters did not provide adequate rationales or supporting data for altering the agency's proposed rule national level service line replacement cost methodology and estimated cost range. The EPA maintains the 7th Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) survey as the source of service line replacement unit costs. The EPA agrees with commenters that unit costs for service line replacement can vary greatly: the full range of service line replacement unit costs considered in the DWINSA data set is \$1,248 to \$15,837. A wide range of costs is also cited by CDM Smith (2022) and Betanzo and Speight (2024). The EPA evaluated both its existing and new data, obtained as a result of the public comment process, including the DWINSA dataset, the CDM Smith report (2022), individual service line replacement costs reported by commenters, and the Betanzo and Speight (2024) literature review and engineering cost estimate. Based on the EPA's review, which is provided in appendix A of the final LCRI Economic Analysis (USEPA, 2024a), the EPA maintained the DWINSA as the primary source of data for service line replacement unit cost estimates. The DWINSA collects actual project and asset data from a stratified random statistical sample of water systems, which minimizes bias and uncertainty in the survey and results. No other data source provided detailed project-level data as required by the DWINSA. The DWINSA¹² cost dataset contains responses from small, medium, and large systems and from urban and rural systems, representing 31 water systems in 13 States across EPA Regions 1, 2, 3, 5, 7, and 8 and representing States in the Northeast, the Midwest, and the West. These systems serve populations ranging from 3,000 to over 2,000,000 persons, although the dataset includes more projects for systems serving more than 10,000 persons, which is consistent with the relative prevalence of lead content service lines in these systems. The dataset includes a mix of project types including targeted service line replacement for sensitive subpopulations, replacement of lead pipes and GRR service lines when found, and service line replacement in coordination with water main

replacement. The EPA adjusted the DWINSA reported costs to account for regional differences in prices to produce a national average. Each service line replacement cost estimate, from a given system replacement project, is weighted by the DWINSA sample weights, which reflect the probability that each system is included in the sample. Each project was also weighted by the number of service lines included in the project to capture the relative importance of the project cost estimate in comparison with the total dataset. The weighted values were then used to estimate descriptive statistics for the cost of service line replacement per line. Overall, the DWINSA dataset provides the most complete picture of the range of possible service line replacement costs. As described in chapter 4, section 4.2.2.2 of the final LCRI Economic Analysis (USEPA, 2024a), the EPA uses the 25th and 75th percentile values to provide a range of national costs for the final LCRI that reflect the degree of uncertainty in the average service line replacement unit cost (\$6,507 and \$8,519 for a full service line replacement). The EPA did not use the minimum and maximum values, from the 33 DWINSA reported projects,¹³ for this bounding exercise given that applying these figures to 100 percent of service line replacements seemed unreasonably extreme. Using minimum and maximum values would have produced a national estimate range greater than what is warranted given the uncertainty in the distribution of service line replacement unit costs.

A commenter raised concerns that the EPA may be overestimating both baseline and changes in drinking water lead exposure by its use of modeled fifth-liter water lead concentration values (calculated based on the agency's drinking water lead concentration profile data) as a proxy for exposure in the proposed rule benefits analysis. The EPA reassessed its water lead concentration modeling and given recent findings (Urbanic et al., 2022) from the comparison of composite samples, which approximate lead exposure given water use patterns at a residence, and profile samples, where a volume weighted average lead concentration was calculated, at sites in two cities, the agency chose to use a volume weighted average lead concentration calculated using data from the first 10 liters of profile data in approximating exposure at the tap for the final LCRI benefits analysis.

The Association of State Drinking Water Administrators (ASDWA) provided the EPA with an updated LCRI

2024 version of their Costs of States Transactions Study (CoSTS) model which estimated the first five years of total and incremental burden to States for implementing the proposed LCRI. Burden totals from this model were significantly higher for some State oversight activities than those estimated by the EPA for the proposed LCRI. The EPA carefully evaluated the information and assumptions in the updated 2024 CoSTS model and used a subset of the information from the model to assist in the development of revised State burden estimates for the cost analysis of the final rule. The EPA compared the per-activity State burden estimates in the ASDWA 2024 CoSTS model to those included in the proposed rule and to those included in the 2020 CoSTS model, which ASDWA provided as part of the 2021 Lead and Copper Rule Revisions (LCRR) rulemaking, and selected the higher burden estimates for use in the cost estimates for the final rule. The EPA revised cost estimates for a number of State activities including: the review and approval of the small system flexibility option, reviewing initial lead monitoring data and preparing systems for any new requirements under the LCRI, reviewing changes in tap sampling locations, reviewing monitoring results and 90th percentile calculations, reviewing school and child care facility testing program materials, reviewing CCT study data and determining the type of OCCT to be installed, reviewing CCT study data and determining the needed OCCT adjustment, reviewing CCT guidance and its applicability to individual PWSs, consulting on required actions in response to a treatment change, reviewing the filter plan, reviewing annual service line inventory updates, reviewing the annual service line replacement program report, and reviewing copies of consumer notices and certifications. In addition to this list of updated burden variables, several estimates in the ASDWA 2024 CoSTS model were consistent with the proposed rule requiring no update for the final rule analysis. These included the implementation and administration activities, reviewing sample invalidation requests, reviewing water quality parameter (WQP) sampling data and compliance with OWQPs, reviewing source water monitoring results, consulting with the system prior to any Distribution System and Site Assessment CCT adjustments, reviewing the report on Distribution System and Site Assessment responses, reviewing point-of-use public education materials, reviewing the inventory validation

¹² Note 7th DWINSA service line replacement costs data come from 2021 survey effort. The replacement cost data was not targeted for update as part of the additional one-time update that took place in 2023.

¹³ Note two systems provided two projects each.

report, reviewing the service line replacement plan, participating in joint communication efforts with local and State health departments, and consulting with community water systems (CWSs) on other public education activities in response to a lead action level exceedance. Overall, the updated burden values will result in higher estimated State and total costs for the final rule when compared to the burden estimates used in the analysis of the proposed rule. See chapter 4 of the final LCRI Economic Analysis for more detail on the information the EPA used from the ASDWA CoSTS models in the adjustment of State cost variables (USEPA, 2024a).

B. Affected Entities and Major Data Sources Used To Develop the Baseline

The entities potentially affected by the final LCRI are PWSs classified as either CWSs or NTNCWSs and primacy agencies (States). In the economic modeling performed, the EPA uses the Safe Drinking Water Information System Fed Data Warehouse (SDWIS/Fed) to derive the number of CWSs and non-transient non-community water systems (NTNCWSs), 49,529 and 17,418, respectively. The agency also assumed, for modeling purposes, 56 primacy agencies.¹⁴

The EPA used a number of data sources to develop the drinking water

industry characterization for the regulatory analysis. Exhibit 4 (Exhibit 3–1 in chapter 3 of the final LCRI Economic Analysis (USEPA, 2024a)) lists the major data sources, describes the data used from each source, and explains how it was used in the estimation of the regulatory analysis baseline, which corresponds to the 2021 LCRR.¹⁵ Additional detailed descriptions of these data sources and how they were used in the characterization of baseline industry conditions can be found in chapter 3 of the final LCRI Economic Analysis (USEPA, 2024a).

EXHIBIT 4—DATA SOURCES USED TO DEVELOP THE BASELINE FOR THE FINAL LCRI

Data source	Baseline data derived from the source
SDWIS/Fed fourth quarter 2020 “frozen” dataset ¹	• PWS inventory, including population served, number of service connections, source water type, and water system type. Also used to identify NTNCWSs that are schools and child care facilities. • Status of CCT, including identification of water systems with CCT and the proportion of water systems serving ≤50,000 persons that installed CCT in response to the pre-2021 LCR. • Analysis of lead 90th percentile concentrations to identify water systems below, at, or above the lead and/or copper action levels at the start of rule implementation by LSL status, <i>i.e.</i>, presence or absence of LSLs for the pre-2021 LCR, 2021 LCRR, and LCRI. Used in concert with data from Michigan described below for the LCRI.² • The proportion of water systems that are on various reduced monitoring schedules for lead tap and WQP monitoring. • The frequency of source and treatment changes and those source changes that can result in additional source water monitoring. • Number of distribution system entry points per drinking water system for systems that were not included in the UCMR 3 dataset.
2006 CWSS (USEPA, 2009)	• PWS labor rates.
UCMR 3 (2013–2015)	• Number of distribution system entry points per drinking water system.
7th DWINSA and Supplemental One-time Update	• Service line material characterization. • Service line replacement costs. • Service line material characterization. • Design and average daily flow per system.
State service line information	
Geometries and Characteristics of Public Water Systems (USEPA, 2000c).	
Six-Year Review 3 ICR Occurrence Dataset (2006–2011)	• Baseline distribution of pH for various CCT conditions. • Baseline orthophosphate dose for CCT.
State of Michigan Lead and Copper Compliance Monitoring Data (Michigan EGLE, 2019–2021).	• Analysis of the ratio of fifth- to first-liter lead tap samples to estimate the increase in lead 90th percentile levels for LSL systems based on the use of the higher of the first- or fifth-liter sample result. Ratios are applied to SDWIS/Fed system level lead 90th percentile data to identify systems below, at, or above the action level under the final LCRI by LSL status. • Percent of individual samples exceeding 0.010 mg/L for the final LCRI.

Acronyms: AWWA = American Water Works Association; CCT = corrosion control treatment; CWSS = Community Water System Survey; DWINSA = Drinking Water Infrastructure Needs Assessment; ICR = Information Collection Request; LCR = Lead and Copper Rule; LCRR = Lead and Copper Rule Revisions; LCRI = Lead and Copper Rule Improvements; LSL = lead service line; Michigan EGLE = Michigan Department of Environment, Great Lakes, and Energy; NTNCWS = non-transient non-community water system; public water system; SDWIS/Fed = Safe Drinking Water Information System/Federal version; UCMR 3 = Third Unregulated Contaminant Monitoring Rule; USEPA = United States Environmental Protection Agency; WQP = water quality parameter.

Note:

¹ Contains information reported through December 31, 2020.

² A system's lead 90th percentile level is a key factor in determining a system's requirements under the pre-2021 LCR, 2021 LCRR, and final LCRI.

¹⁴ The 56 primacy agencies include 49 States (excluding Wyoming), Puerto Rico, Guam, United States Virgin Islands, American Samoa, North Mariana Islands, and Navajo Nation. For cost modeling purposes, the EPA also included the District of Columbia (DC) as a primacy agency when assigning burden and costs of the rule although

some of these costs are incurred by the actual primacy agency, EPA Region 3.

¹⁵ Note that the EPA provides an alternative regulatory analysis, which assumes a pre-2021 LCR baseline during the 35-year period of analysis starting in 2024, in appendix C of the final LCRI EA (USEPA, 2024a). Because PWSs and Primacy

Agencies will likely not have implemented the parts of the 2021 LCRR associated with compliance dates after October 16, 2024, the agency is providing this alternative baseline analysis that describes LCRI incremental costs and benefits relative to a non-LCRR state of the industry.

C. Overview of the Cost-Benefit Model

The EPA used its SafeWater Lead and Copper Rule (LCR) model to analyze the costs and benefits of the final LCRI. For a detailed description of the model, see chapter 5 of the Economic Analysis for the Final Lead and Copper Rule Revisions (USEPA, 2020d). The EPA originally developed the SafeWater LCR model because of the need to model costs and benefits where significant variability existed in both regulated entity characteristics in the baseline and regulatory compliance scenarios, a fact that remains true of the analysis for the final LCRI. PWSs will face different compliance scenarios depending on the size and type of the water system; the presence of lead, GRR, and unknown service lines; water quality; and existing corrosion controls. In addition, PWSs will also face different unit costs based on water system baseline characteristics including size, type, and number of entry points (e.g., labor rates, and CCT capital and operation and maintenance unit costs).

One of the strengths of the SafeWater LCR model is that it incorporates a large degree of variability across water system baseline characteristics that influence compliance and costs. For example, under the final LCRI, PWSs will face different compliance scenarios and costs depending on their size, primary source water type, number of entry points to the distribution system, number of lead and GRR service lines in their distribution system, and existing in place corrosion controls. The SafeWater LCR model also includes variability in compliance characteristics like different labor rates and the number of tap and WQP samples required by system size.

One limitation of the cost-benefit analysis is that the EPA does not have all of the PWS-specific data needed to fully reflect baseline and compliance variability across PWSs, therefore, the SafeWater LCR model applies a “model PWS” approach. From a set of system baseline characteristic data, including system type, system size, and primary water source, the EPA defined 72 PWS categories, or strata, in the SafeWater LCR model. The 72 PWS categories consist of each combination of PWS type (2), PWS population size category (9), PWS primary source water (2), and PWS public/private ownership (2). See the final LCRI Economic Analysis (USEPA, 2024a), chapter 4, section 4.2.1 for more information on model strata.

The SafeWater LCR model creates model PWSs that represent systems in each category by combining the PWS-specific data available in SDWIS/Fed with data on baseline and compliance

characteristics available at the PWS category level. When categorical data are point estimates, every model PWS in a category is assigned the same value. When the EPA has probabilistic data representing system variability, the SafeWater LCR model assigns each model PWS a value sampled from the distribution. Examples of the distributional data inputs that characterize variability in the SafeWater LCR model include the burden for PWSs and State staff to conduct tasks like sampling and compliance documentation and review. These distributions are assumed to be independent, which is a limitation of the model.

While the model system approach allows for a good characterization of variability across PWSs, it is less exact than if the EPA had complete information on each PWS. Because of this model PWS approach, the SafeWater LCR model does not output any results at the PWS level, but rather, outputs cost (and benefit) estimates at the PWS category, or strata. For additional information on the data sources used in the estimation of costs see chapter 3 and chapter 4, sections 4.2.2, 4.3, 4.4, and 4.5 of the final LCRI Economic Analysis (USEPA, 2024a).

Chapter 3 of the final LCRI Economic Analysis describes in greater detail the baseline data elements, their derivations, and the inherent sources of uncertainty in the developed data elements (USEPA, 2024a). The EPA estimates the incremental costs and benefits of the final LCRI relative to a baseline, as described in chapter 3, that assumes compliance with the 2021 LCRR and other State regulations requiring lead service line replacement (Illinois, Michigan, New Jersey, and Rhode Island) and tap sampling in schools and child cares (17 States and the District of Columbia) that go beyond the 2021 LCRR requirements. Chapter 4, sections 4.3 and 4.4 of the final LCRI Economic Analysis discuss how each data element is used in the estimation of costs. The chapter also provides examples and references to how these data were developed, and the uncertainty associated with specific data elements. Chapter 5 of the final LCRI Economic Analysis provides detail on the water lead concentrations under the baseline conditions (e.g., presence of a lead service line (LSL) and CCT) and the functions used to quantify benefit categories, their derivations, and the inherent sources of uncertainty associated with the use of those functions (USEPA, 2024a). All significant uncertainties of this economic analysis are described in the

following sections of the final LCRI Economic Analysis (USEPA, 2024a). Chapter 3, section 3.4 and Exhibit 3–78 outline uncertainties associated with the analytical baseline and water system compliance characteristics. The SafeWater LCR model and cost uncertainty is discussed in chapter 4, section 4.2.2 and Exhibit 4–2. Also, for a discussion of the uncertainties in the benefits analysis, see chapter 5, section 5.7 and Exhibit 5–41.

The SafeWater LCR model follows each model PWS, which represents a cohort of systems with the same characteristics, in the sample through each year of the period of analysis (35 years) and determines how the PWS will comply with each requirement of the final rule, estimating the yearly compliance cost and tracking the impact of the compliance actions on drinking water lead concentrations and the resultant effects on health outcomes. It also tracks how other events, such as changing a water source or treatment, effect the water system’s compliance requirements for the next year. The estimated costs and benefits for each model PWS are weighted, so they represent the number of actual PWSs known to have similar characteristics (e.g., population served, entry points to the distribution system, etc.). Then, the summary statistics are calculated, including total quantified costs of the regulatory requirement, total quantified benefits of the regulatory requirement, the variability in PWS-level costs (e.g., 5th and 95th percentile system costs), and the variability in household-level costs.¹⁶

This treatment technique rulemaking, and therefore the SafeWater LCR model, is complex, incorporating multiple triggers (e.g., action level exceedance, single sample exceedance, multiple action level exceedances) that require multiple and varying compliance actions (e.g., CCT installation or re-

¹⁶ The exception to the use of model PWSs and the assignment of system characteristics data in the SafeWater LCR model is the 24 very large water systems serving more than one million persons. Because of the small number of water systems in this size category, the uniqueness of their system characteristics, and the potential large impact of these systems on estimated national costs and benefits, the EPA collected information on very large water systems’ CCT practices and chemical doses, pH measurements and pH adjustment practices, number of LSLs, service populations, and average annual flow rates for each entry point to the distribution system. When facility-specific data were available, the EPA used them to estimate compliance costs and benefits for the very large water systems. If data were not available, the EPA assigned baseline characteristics using the same process as previously described. See chapter 4, section 4.2.3 of the final LCRI Economic Analysis for a summary of the data the EPA collected on these very large systems (USEPA, 2024a).

optimization, Distribution System and Site Assessment, public education, and temporary filter distribution) that also require a large number of inputs for the estimation of total compliance costs and benefits. Many of these inputs, which are specific to the assessment of the costs and benefits of the final LCRI, are uncertain.

The EPA determined that the agency does not have enough information to perform a probabilistic uncertainty analysis as part of the SafeWater LCR model analysis for this rule. Instead, to capture uncertainty, the EPA estimated compliance costs and benefits using the SafeWater LCR model under low and high bracketing scenarios. For costs, the bracketing scenarios are defined by the following three cost drivers: the number of PWSs that will exceed the action level under the revised tap sampling requirements; the cost of service line replacement; and the cost of CCT. The low and high scenarios for benefits are driven by: the number of PWSs that will exceed the action level under the revised tap sampling requirements (the same variable which is used to define the low and high cost scenarios); the concentration-response functions that characterize how reductions in blood lead levels (caused by changes in lead exposure) translate into estimates of avoided IQ reductions, cases of ADHD, and cardiovascular disease premature mortality; and high and low estimates of the ADHD cost of illness. These low and high scenarios are defined by the assignment of low and high values for the set of cost and benefit drivers listed above. Detailed descriptions of these variables and the derivation of their values under the low and high scenarios can be found in chapters 4 and 5 of the final LCRI Economic Analysis (USEPA, 2024a). Due to the data limitations mentioned above, with the exception of the uncertain variables that define the difference between the low and high scenarios, the remaining baseline water system and compliance characteristics are treated as certain and remain constant across the scenarios. While this limits the full description of the uncertainty in the monetized cost and benefit estimates, it does allow the EPA to clearly define the uncertainty characterized in the cost-benefit range provided by the low and high scenarios and maintains consistency between the estimation of costs and benefits for the baseline (2021 LCRR) and final LCRI (e.g., number of systems with lead and/or GRR service lines and percent of connections that are lead and/or GRR service lines).

When evaluating the economic impacts on PWSs and households, the

EPA uses the estimated PWS cost of capital to discount future costs, as this best represents the actual costs of compliance that water systems would incur over time. The EPA used data from the 2006 Community Water System Survey (CWSS) to estimate the PWS cost of capital. The 2006 CWSS is the most recent CWSS available. The EPA calculated the overall weighted average cost of capital (across all funding sources and loan periods) for each size/ownership category, weighted by the percentage of funding from each source. The cost of capital for each CWS size category and ownership category is shown in appendix B of the final LCRI Economic Analysis (USEPA, 2024a). Since similar cost of capital information is not available for NTNCWSs, the EPA used the CWS cost of capital when calculating the annualized cost per NTNCWS. The EPA's estimated total capital cost may be greater than the costs water systems actually bear when complying with the LCRI's regulatory requirements because low or no interest loans and grants are available from State and local governments, EPA programs, and other Federal agencies. See section III.G of this preamble for more information on available funding. The availability of funds from government sources, while potentially reducing the impact of the regulatory costs to individual PWSs, does not reduce the social cost of capital to society, which looks at the total opportunity cost of the capital expenditures.

The EPA projects that rule implementation activities will begin immediately after rule promulgation. These activities will include one-time PWS and State costs for staff to read the LCRI, become familiar with the rule provisions, and develop training materials and train employees on the new rule requirements. States will also incur burden hours associated with adopting the rule into State requirements, updating their LCR program policies and practices, and modifying data management systems. PWSs will incur costs to comply with the service line inventory requirements, service line materials notification requirements, development of the service line replacement plan, updating their lead tap sampling plan and the requirement for public notification following an exceedance of 0.015 mg/L (2021 LCRR lead action level) in years one through three of the 35-year period of analysis. The EPA expects that water systems will begin complying with all other LCRI rule requirements three years after promulgation, or in year four of the analysis.

Some requirements of the final LCRI must be implemented by water systems regardless of their water quality and tap sampling results (e.g., service line inventory updates, service line replacement, and CWS school and child care facility sampling programs). However, other significant cost drivers are a function of a water system's 90th percentile lead tap sample value. Because a water system's lead 90th percentile value is important to determining certain regulatory requirements and costs and benefits under the final LCRI, the SafeWater LCR model tracks each model PWS's 90th percentile value over each annual time step in the model. The 90th percentile value, and if it exceeds the action level, dictates actions including, but not limited to, tap sampling and water quality parameter monitoring schedules, the installation or re-optimization of OCCT, the installation of point-of-use devices or pitcher filters at water systems selecting this treatment option instead of CCT as part of the small system flexibilities under the final LCRI, and certain public education requirements.¹⁷ Under the final LCRI, the SafeWater LCR model assumes a PWS's 90th percentile tap sample values will drop at or below the action level once they: (1) install or re-optimize OCCT;¹⁸ or (2) install point-of-use devices. PWSs that remove all service lines with lead content are also assigned a new 90th percentile tap sample value with a low likelihood of an action level exceedance. When the PWS no longer has a 90th percentile tap sample value above the action level, it incurs lower sampling and public education costs.

The SafeWater LCR model allows for future increases in 90th percentile lead values as a result of changes in source water and treatment. The likelihood of these events occurring has been derived from SDWIS/Fed data (see chapter 3, section 3.3.9 of the final LCRI Economic Analysis (USEPA, 2024a)). When a change in source water or treatment occurs in a modeled year, a new 90th percentile value is assigned to the water system. This value may be higher or lower than the current value, thus potentially triggering new corrective

¹⁷ Distribution System and Site Assessment adjustments to CCT are required for a single lead tap sample exceedance of the action level of 0.010 mg/L. The provision of temporary pitcher filters is triggered by multiple action level exceedances. Both of these compliance requirements are also positively associated with system level 90th percentile tap sample values.

¹⁸ The SafeWater LCR model implements a required systemwide Distribution System and Site Assessment activity as a change in pH which is equivalent to pH adjustments associated with CCT installation or re-optimization in the model.

actions. In the model, if a water system already has “optimized” CCT in place, it is assumed that no additional action is needed and that the current treatment is adequate; therefore, the 90th percentile value will not change.

D. Cost Analysis

This section summarizes the cost elements and estimates the total cost of compliance for the baseline (2021 LCRR), the final LCRI, and the incremental cost of the final LCRI, under both the low- and high-cost scenarios, discounted at two percent.¹⁹ The EPA presents the estimated PWS rule costs; the calculated distributions of incremental annualized costs by primary water source and size category for households served by CWSs; and the estimated costs to States for implementation and administration of the rule.²⁰ This section also quantifies

the potential increase in phosphates that would result from the increased use of corrosion inhibitors under the rule, quantifies the resulting cost for treating to remove the additional phosphates at downstream wastewater treatment plants that may be constrained by nutrient discharge limits, and discusses the ecological impacts that may result from increased phosphorus loads to surface waters.

1. Public Water System Costs

The EPA provides estimates of the LCRI regulatory requirement costs that accrue to PWSs for the following cost components: rule implementation and administration, sampling, service line inventory and replacement, CCT, point-of-use program (if a small system selects this compliance option), and public education and outreach. For the purpose of developing the PWS costs for each of

these rule components, the EPA further subdivided these groupings into sub-components and activities to be completed by systems implementing the LCRI requirements. For most activities, water systems will incur labor unit costs (e.g., PWS staff participate in training). Systems will also incur unit capital and operation and maintenance costs for a number of activities (e.g., installation of CCT). Exhibit 5 (Exhibit 4–6 in the final LCRI Economic Analysis (USEPA, 2024a)) provides an overview of the rule components, subcomponents, and activities for which the EPA estimates water system unit costs for the rule. Detailed information on the derivation of unit costs associated with each activity can be found in the final LCRI Economic Analysis (USEPA, 2024a) sections identified in Exhibit 5.

EXHIBIT 5—PWS COST COMPONENTS, SUBCOMPONENTS, AND ACTIVITIES ORGANIZED BY SECTION 1

Component	Subcomponents	Activities ²
4.3.1: PWS Implementation and Administrative Costs.	4.3.1.1: PWS One-Time Implementation and Administrative Costs.	(a) Read and understand the rule. (b) Assign personnel and resources for rule implementation. (c) Participate in training and technical assistance provided by the State during rule implementation. (d) Provide small system flexibility option recommendation to the State.
4.3.2: PWS Sampling Costs	4.3.2.1: PWS Lead Tap Sampling	(a) Update sampling instructions for lead tap sampling and submit to the State. (b) Contact homes to establish new 100 percent LSL tap sampling pool. (c) Update and submit tap sampling plan to the State. (d) Report any changes in sampling locations to the State. (e) Confer with the State on initial lead sampling data and status under the LCRI. (f) Obtain households for each round of lead tap sampling. (g) Offer incentives to households to encourage participation in lead tap sampling program. (h) Ship tap sampling material and instructions to participating households. (i) Collect lead tap samples. (j) Determine if a sample should be rejected and not analyzed. (k) Analyze lead tap samples in-house or commercially. (l) Prepare and submit sample invalidation request to the State. (m) Inform consumers of tap sample results. (n) Certify to the State that results were reported to consumers. (o) Submit request to renew 9-year monitoring waiver to the State. (p) Submit sampling results and 90th percentile calculation to the State. (q) Oversee the customer-initiated lead sampling program. (r) Ship tap sampling material and instructions to participating households for customer-initiated lead sampling program. (s) Collect lead tap samples for customer-initiated lead sampling program. (t) Analyze lead tap samples in-house or commercially for customer-initiated lead sampling program. (u) Inform customers of lead tap sample results for customer-initiated lead sampling program.
	4.3.2.2: PWS Lead Water Quality Parameter Monitoring.	(v) Collect lead WQP samples from the distribution system. (w) Analyze lead WQP samples from the distribution system.

¹⁹The EPA is reporting final LCRI social costs using the 2 percent discount rate to be consistent with revised guidance from OMB (OMB Circular A–4, 2023). Because the EPA provided cost estimates discounted at 3 and 7 percent for the proposed LCRI based on OMB guidance which was in effect at the

time of the proposed rule analysis (OMB Circular A–4, 2003), the agency has also calculated the cost impacts at both the 3 and 7 percent discount rates. See the final LCRI Economic Analysis (USEPA, 2024a) appendix F for results.

²⁰Note that reporting costs are represented in the cost totals provided in the estimates below, but a separate summary of the reporting costs required by the Paperwork Reduction Act can be found in section VII.B of this preamble.

EXHIBIT 5—PWS COST COMPONENTS, SUBCOMPONENTS, AND ACTIVITIES ORGANIZED BY SECTION ¹—Continued

Component	Subcomponents	Activities ²
	4.3.2.3: PWS Copper Water Quality Parameter Monitoring. 4.3.2.4: PWS Source Water Monitoring. 4.3.2.5.1: CWS School and Child Care Facility Lead Sampling Costs—First Five-Year Cycle. 4.3.2.5.2: CWS School and Child Care Facility Lead Sampling Costs—Second Five-Year Cycle On.	(x) Collect lead WQP samples from entry points. (y) Analyze lead WQP samples from entry points. (z) Report lead WQP sampling data and compliance with OWQPs to the State. (aa) Collect copper WQP samples from the distribution system. (bb) Analyze copper WQP samples from the distribution system. (cc) Collect copper WQP samples from entry points. (dd) Analyze copper WQP samples from entry points. (ee) Report copper WQP sampling data and compliance with OWQPs to the State. (ff) Collect source water samples. (gg) Analyze source water samples. (hh) Report source water monitoring results to the State. (ii) Create a list of schools and child care facilities served by CWS and submit to State. (jj) Develop lead outreach materials for schools and child care facilities. (kk) Prepare and distribute initial letters explaining the sampling program and the EPA's 3Ts Toolkit. (ll) Contact elementary school or child care facility to determine and finalize its sampling schedule (one-time) or contact secondary school to offer sampling (annual). (mm) Contact school or child care facility to coordinate sample collection logistics. (nn) Conduct walkthrough at school or child care facility before the start of sampling. (oo) Travel to collect samples. (pp) Collect samples. (qq) Analyze samples. (rr) Provide sampling results to tested facilities. (ss) Discuss sampling results with the school or child care facility. (tt) Conduct detailed discussion of high sampling results with schools and child care facilities. (uu) Report school and child care facility sampling results to the State. (vv) Prepare and provide annual report on school and child care facility sampling program to the State. (ww) Update the list of schools and child care facilities and submit to the State. (xx) Contact schools and child care facilities to offer sampling. (yy) Contact the school or child care facility to coordinate sample collection logistics. (zz) Conduct walkthrough at school or child care facility before the start of sampling. (aaa) Travel to collect samples. (bbb) Collect samples. (ccc) Analyze samples. (ddd) Provide sampling results to tested facilities. (eee) Discuss sampling results with the school and child care facility. (fff) Conduct detailed discussion of high sampling results with schools and child care facilities. (ggg) Report school and child care facility sampling results to the State. (hhh) Prepare and provide annual report on school and child care facility sampling program to the State.
4.3.3: PWS Corrosion Control Costs	4.3.3.1: CCT Installation 4.3.3.2: Re-optimization of Existing Corrosion Control Treatment. 4.3.3.3: DSSA Costs 4.3.3.4: System Lead CCT Routine Costs.	(a) Conduct a CCT study. (b) Install CCT (PO₄, PO₄ with post treatment, pH adjustment, or modify pH). (c) Revise CCT study. (d) Re-optimize existing CCT. (e) Contact customers and collect follow-up tap sample. (f) Analyze follow-up lead tap sample. (g) Collect distribution system WQP sample. (h) Analyze distribution system WQP sample. (i) Review incidents of systemwide events and other system conditions. (j) Consult with the State prior to making CCT changes. (k) Report follow-up sample results and overall DSSA responses to the State. (l) Review CCT guidance. (m) Provide WQP data to the State and discuss during sanitary survey.

EXHIBIT 5—PWS COST COMPONENTS, SUBCOMPONENTS, AND ACTIVITIES ORGANIZED BY SECTION ¹—Continued

Component	Subcomponents	Activities ²
4.3.4: PWS Service Line Inventory and Replacement Costs.	4.3.4.1: Service Line Inventory	(n) Notify and consult with the State on required actions in response to source water change. (o) Notify and consult with the State on required actions in response to treatment change. (a) Conduct records review for connector materials. (b) Compile and submit connector updated LCRR inventory (baseline inventory) to the State. (c) Identify material for unknown service lines. (d) Report annual inventory updates to the State. (e) Conduct field investigations for inventory validation. (f) Report validation results to the State. (g) Develop initial service line replacement plan and submit to the State for review. (h) Identify funding options for full service line replacements. (i) Include information on deferred deadline and associated replacement rate in the service line replacement plan. (j) Update service line replacement plan annually or certify no changes. (k) Provide an undated recommendation of the deferred deadline and associated replacement rate. (l) Systems replace lead and GRR service lines. (m) Contact customers and conduct site visits prior to service line replacement. (n) Deliver filters and 6 months of replacement cartridges at time of service line replacement. (o) Collect tap sample post-service line replacement. (p) Analyze post-service line replacement tap sample. (q) Inform customers of tap sample result. (r) Submit annual report on service line replacement program to the State.
4.3.5: PWS POU-Related Costs (Small System Compliance Option).	4.3.4.2: Service Line Replacement Plan. 4.3.4.3: Physical Service Line Replacements. 4.3.4.4: Ancillary Service Line Replacement Activities.	(a) Develop initial service line replacement plan and submit to the State for review. (h) Identify funding options for full service line replacements. (i) Include information on deferred deadline and associated replacement rate in the service line replacement plan. (j) Update service line replacement plan annually or certify no changes. (k) Provide an undated recommendation of the deferred deadline and associated replacement rate. (l) Systems replace lead and GRR service lines. (m) Contact customers and conduct site visits prior to service line replacement. (n) Deliver filters and 6 months of replacement cartridges at time of service line replacement. (o) Collect tap sample post-service line replacement. (p) Analyze post-service line replacement tap sample. (q) Inform customers of tap sample result. (r) Submit annual report on service line replacement program to the State. (a) Provide, monitor, and maintain POU devices.
4.3.6: PWS Lead Public Education, Outreach, and Notification Costs.	4.3.5.1: POU Device Installation and Maintenance. 4.3.5.2: POU Ancillary Activities 4.3.6.1: Consumer Notice 4.3.6.2: Activities Regardless of Lead 90th Percentile Level.	(b) Develop POU plan and submit to the State. (c) Develop public education materials and submit to the State. (d) Print POU education materials. (e) Obtain households for POU monitoring. (f) Deliver POU monitoring materials and instructions to participating households. (g) Collect tap samples after POU installation. (h) Determine if sample should be rejected and not analyzed. (i) Analyze POU tap samples. (j) Prepare and submit sample invalidation request to the State. (k) Inform customers of POU tap sample results. (l) Certify to the State that POU tap results were reported to customers. (m) Prepare and submit annual report on POU program to the State. (a) Develop lead consumer notice materials and submit to the State for review. (b) Provide a copy of the consumer notice and certification to the State. (c) Update CCR language. (d) Develop new customer outreach plan. (e) Develop approach for improved public access to lead health-related information and tap sample results. (f) Establish a process for public access to information on known or potential lead content service line locations and tap sample results. (g) Maintain a process for public access to lead health information, known or potential lead content service line locations, and tap sample results. (h) Respond to customer request for known or potential lead content service line information. (i) Respond to requests from realtors, home inspectors, and potential home buyers for known or potential lead content service line information. (j) Develop a list of local and State health agencies. (k) Develop lead outreach materials for local and State health agencies and submit to the State for review. (l) Deliver lead outreach materials for local and State health agencies. (m) Develop public education materials for known or potential lead content service line disturbances and submit to the State.

EXHIBIT 5—PWS COST COMPONENTS, SUBCOMPONENTS, AND ACTIVITIES ORGANIZED BY SECTION ¹—Continued

Component	Subcomponents	Activities ²
	4.3.6.3: Public Education Activities in Response to Lead ALE.	(n) Deliver public education for service line disturbances. (o) Deliver filters and 6 months of replacement cartridges during disturbances of service lines. (p) Develop inventory-related outreach materials and submit to the State for review. (q) Distribute inventory-related outreach materials. (r) Provide translation services for public education materials. (s) Certify to the State that lead outreach was completed. ³ (t) Update mandatory language for lead ALE public education and submit to the State for review. (u) Deliver lead ALE public education materials to all customers. (v) Post notice to website. (w) Prepare press release. (x) Contact public health agencies to obtain additional organizations and update recipient list. (y) Notify public health agencies and other organizations. (z) Consult with State on other public education activities. (aa) Implement other public education activities.
	4.3.6.4: Public Education Activities in Response to Multiple Lead ALEs.	(bb) Develop plan for making filters available and submit to the State for review. (cc) Develop outreach materials for systems with multiple lead ALEs and submit to the State for review. (dd) Conduct enhanced public education for systems with multiple lead ALEs. (ee) Consult with State on filter program for systems with multiple lead ALEs. (ff) Administer filter program for systems with multiple lead ALEs. (gg) Make filters available due to multiple lead ALEs.

Acronyms: 3Ts = “3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities Toolkit: A Training, Testing, and Taking Action Approach (Revised Manual)”; ALE = action level exceedance; CCR = consumer confidence report; CCT = corrosion control treatment; CWS = community water system; DSSA = Distribution System and Site Assessment; GRR = galvanized requiring replacement; OCCT = optimal corrosion control treatment; OWQPs = optimal water quality parameters; PO4 = orthophosphate; POU = point-of-use; PWS = public water system; WQP = water quality parameter.

Notes:

¹ Numbering and lettering in the exhibit represents the section in the final LCRI Economic Analysis document (USEPA, 2024a), where additional information on the definition of and derivation of burden and cost for each activity is located. Systems will also incur burden for record-keeping activities under the LCRI, such as retaining records of decisions, supporting documentation, technical basis for decisions, and documentation submitted by the system. The EPA has included burden for recordkeeping with each activity when applicable as opposed to providing separate burden estimates.

² The EPA assigned a unique letter identification (ID) for each activity under a given rule component. Activities are generally organized with upfront, one-time activities first followed by ongoing activities.

³ This certification is inclusive of outreach activities in sections 4.3.6.1 through 4.3.6.4 in the final LCRI Economic Analysis.

The EPA uses the derived unit costs associated with each regulatory activity from Exhibit 5 as inputs to the SafeWater LCR model, which estimates low and high scenario PWS total costs for the baseline (2021 LCRR) and the final LCRI.²¹ Baseline total costs are then subtracted from the LCRI total costs to determine the incremental costs

of the new regulatory requirements under the final LCRI for both the low- and high-cost scenarios. These total PWS incremental costs are presented as annualized values, discounted at two percent in Exhibit 6. The estimated total PWS incremental annualized costs of the final LCRI range from \$1.45 to \$1.95 billion, in 2022 dollars, when a two

percent discount rate is applied. The exhibits also detail the proportion of the annualized costs attributable to each rule component. For estimated total and incremental costs by subcomponent see chapter 4, section 4.3 of the final LCRI Economic Analysis (USEPA, 2024a).

EXHIBIT 6—ESTIMATED NATIONAL TOTAL MONETIZED ANNUALIZED PWS RULE COSTS—2 PERCENT DISCOUNT RATE
[Millions of 2022 USD]

PWS annual costs	Low estimate			High estimate		
Rule component	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Sampling	\$134.0	\$166.0	\$32.0	\$143.6	\$176.2	\$32.6
PWS Service Line Replacement *	84.6	1,259.0	1,174.4	124.5	1,763.9	1,639.4
Corrosion Control Technology	552.0	591.1	39.1	647.8	692.9	45.1
Point-of Use Device Installation and Maintenance	2.4	5.1	2.7	5.9	9.6	3.7
Public Education and Outreach	69.6	267.3	197.7	72.1	302.2	230.1

²¹ For additional information on how the SafeWater LCR model uses unit cost data to

estimate PWS costs, see chapter 4, section 4.3 of the final LCRI Economic Analysis (USEPA, 2024a).

EXHIBIT 6—ESTIMATED NATIONAL TOTAL MONETIZED ANNUALIZED PWS RULE COSTS—2 PERCENT DISCOUNT RATE—
Continued

[Millions of 2022 USD]

PWS annual costs	Low estimate			High estimate		
Rule component	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Rule Implementation and Administration	0.1	3.4	3.3	0.2	3.4	3.2
<i>Total Annual PWS Costs</i>	<i>842.7</i>	<i>2,291.9</i>	<i>1,449.2</i>	<i>994.1</i>	<i>2,948.2</i>	<i>1,954.1</i>

* Service line replacement includes full and partial lead and GRR service line replacements.

Previous Baseline costs are projected over the 35-year period of analysis and are affected by the EPA's assumptions on three uncertain variables that vary between the low- and high-cost scenarios. For the LCRR Economic Analysis (USEPA, 2020d), the EPA assumed that the cost of customer-side service line replacements made under the goal-based replacement rate would be paid for by households. The agency also assumed that system-side service line replacements under the goal-based replacement rate and all service line replacements (both customer-side and systems-side) would be paid by the PWS under the three percent mandatory replacement rate. The EPA made these modeling assumptions based on the different levels of regulatory responsibility systems faced operating under a goal-based replacement rate versus a mandatory replacement rate. While systems would not be subject to a potential violation for not meeting the target replacement rate under the goal-based replacement requirement, under the three percent mandatory replacement rate, the possibility of a violation could motivate more systems to meet the target replacement rate even if they had to adopt customer incentive programs that would shift the cost of replacing customer-side service lines from customers to the system. To be consistent with these LCRR modeling assumptions, under the LCRI, the EPA assumed that mandatory replacement costs would fall only on systems. Therefore, the negative incremental values reported for the "Household Service Line Replacement Costs" category do not represent a net cost savings to households. They represent an assumed shift of the estimated service line replacement costs from households to systems. The EPA has insufficient information to estimate the actual service line replacement cost-sharing relationship between customers and systems at a national level for this analysis.

2. Annualized Per-Household Costs

The SafeWater LCR cost model calculates the annualized cost per household by first calculating the cost per gallon of water produced by the CWS. This cost per gallon represents the cost incurred by the system to comply with the requirements of the LCRI. This is a total cost for the system that includes the rule implementation and administration, sampling, service line inventory and replacement, CCT, point-of-use program (if a small system selects

this compliance option), and public education and outreach component costs. Because of uncertainty in three important LCRI cost input variables, discussed in section VI.C of this preamble, the agency developed low- and high-cost scenarios. These scenarios produce a range in the estimated cost per gallon and two estimates for annualized per household costs.

The SafeWater LCR model multiplies these low and high scenario costs per gallon by the average annual household consumption (in gallons) to determine

the cost per household per year associated with increased costs borne by the CWS. Exhibits 7 and 8 (Exhibits 4–139 and 4–140 in chapter 4 of the final LCRI Economic Analysis) show the distributions of incremental annualized costs for CWS households by primary water source and size category. Note that the percentiles represent the distribution of average household costs across CWSs in a category, not the distribution of costs across all households in a CWS category.²²

EXHIBIT 7—ESTIMATED ANNUALIZED INCREMENTAL COST PER HOUSEHOLD BY COMMUNITY WATER SYSTEM CATEGORY—
LOW SCENARIO
[2022 USD]

Ownership	Source water	Size	Mean	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
Private	Ground	Less than 100	\$67.10	\$28.10	\$39.80	\$57.80	\$89.00	\$117.00
Private	Ground	101 to 500	22.50	6.40	11.40	19.40	28.10	43.50
Private	Ground	501 to 1,000	4.60	1.20	1.60	3.00	6.10	8.50
Private	Ground	1,001 to 3,300	2.70	0.60	0.90	1.60	3.60	4.80
Private	Ground	3,301 to 10,000	8.50	– 0.20	0.60	5.00	14.50	25.00
Private	Ground	10,001 to 50,000	6.50	0.10	0.60	6.40	11.20	14.30
Private	Ground	50,001 to 100,000	7.50	0.00	0.30	8.70	11.70	13.90
Private	Ground	100,001 to 1,000,000	4.70	0.00	0.20	3.80	8.50	9.70
Private	Surface	Less than 100	59.20	23.40	32.80	50.90	78.60	106.40
Private	Surface	101 to 500	17.70	5.60	8.40	15.00	22.40	33.70
Private	Surface	501 to 1,000	4.30	1.50	1.90	2.80	5.20	8.70
Private	Surface	1,001 to 3,300	2.60	0.60	0.70	1.40	3.20	4.60
Private	Surface	3,301 to 10,000	9.70	0.30	0.80	6.40	15.30	26.20
Private	Surface	10,001 to 50,000	5.50	0.20	0.50	4.70	9.60	13.00
Private	Surface	50,001 to 100,000	7.00	0.00	2.00	7.90	10.90	13.80
Private	Surface	100,001 to 1,000,000	5.70	0.00	0.20	6.10	9.70	12.10
Private	Surface	Greater than 1,000,000	1.90	1.30	1.30	2.40	2.40	2.60
Public	Ground	Less than 100	52.20	23.40	31.60	43.50	69.50	93.90
Public	Ground	101 to 500	14.80	4.90	7.40	11.80	18.60	28.10
Public	Ground	501 to 1,000	3.70	1.20	1.60	2.50	4.40	6.70
Public	Ground	1,001 to 3,300	2.00	0.50	0.70	1.30	2.50	3.50
Public	Ground	3,301 to 10,000	7.10	0.20	0.60	4.30	11.30	19.30

²² Note that, although the EPA assumed in the cost analysis that systems would pay for customer-side service line replacement, it is possible that, in some systems, individual homeowners may bear a much greater annual household burden that includes the customer-side service line

replacement. The EPA estimates the cost of removing the customer-owned portion of a service line to range from \$1,920 to \$5,400, with a central tendency (median) of \$3,273. The percentage of customers in each water system paying the higher customer-side service line replacement costs

depends on the number of lead and GRR service lines in the water system, the rate of replacement, and the details of the water system's service line replacement program.

**EXHIBIT 7—ESTIMATED ANNUALIZED INCREMENTAL COST PER HOUSEHOLD BY COMMUNITY WATER SYSTEM CATEGORY—
LOW SCENARIO—Continued
[2022 USD]**

Ownership	Source water	Size	Mean	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
Public	Ground	10,001 to 50,000	4.50	0.10	0.50	4.00	7.30	10.20
Public	Ground	50,001 to 100,000	5.20	0.00	0.90	6.00	8.20	9.90
Public	Ground	100,001 to 1,000,000	5.20	0.00	1.20	6.30	8.00	9.60
Public	Ground	Greater than 1,000,000	0.60	0.30	0.30	0.80	0.80	0.90
Public	Surface	Less than 100	54.30	21.00	29.70	52.50	72.20	90.30
Public	Surface	101 to 500	12.60	4.40	6.30	10.20	15.50	23.60
Public	Surface	501 to 1,000	3.50	1.30	1.60	2.40	4.20	6.40
Public	Surface	1,001 to 3,300	2.00	0.50	0.70	1.20	2.30	3.40
Public	Surface	3,301 to 10,000	7.90	0.50	0.80	5.30	12.90	20.60
Public	Surface	10,001 to 50,000	5.00	0.20	0.60	4.60	8.40	11.10
Public	Surface	50,001 to 100,000	5.90	0.00	0.40	6.50	9.50	11.80
Public	Surface	100,001 to 1,000,000	6.50	0.10	0.50	7.60	10.00	12.10
Public	Surface	Greater than 1,000,000	2.40	0.30	0.60	2.00	2.40	5.00

Notes: Rows are not included for system categories that contain zero systems. Detailed rows may not add exactly to the total due to independent rounding.

When evaluating the economic impacts on PWSs, the EPA uses the estimated PWS cost of capital to discount future costs (not the 2 percent discount rate used to evaluate social costs and benefit) because this best represents the actual costs of compliance that water systems would incur over time. For more information on cost of capital, see the final LCRI Economic Analysis chapter 4, section 4.2.3.3.

**EXHIBIT 8—ESTIMATED ANNUALIZED INCREMENTAL COST PER HOUSEHOLD BY COMMUNITY WATER SYSTEM CATEGORY—
HIGH SCENARIO
[2022 USD]**

Funding	Source Water	Size	Mean	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
Private	Ground	Less than 100	\$64.60	\$25.50	\$35.50	\$55.40	\$87.40	\$115.80
Private	Ground	101 to 500	22.00	4.60	9.40	18.70	27.70	46.80
Private	Ground	501 to 1,000	4.80	1.00	1.50	2.90	6.50	11.00
Private	Ground	1,001 to 3,300	2.80	0.50	0.80	1.50	3.70	5.20
Private	Ground	3,301 to 10,000	11.20	– 1.70	0.60	6.20	19.50	34.00
Private	Ground	10,001 to 50,000	8.90	0.10	0.50	8.00	15.40	20.40
Private	Ground	50,001 to 100,000	10.60	0.00	0.10	12.00	16.70	20.10
Private	Ground	100,001 to 1,000,000	6.50	0.00	0.20	6.10	11.70	13.80
Private	Surface	Less than 100	57.20	20.90	29.90	49.30	79.90	108.10
Private	Surface	101 to 500	16.70	2.60	6.90	13.30	21.20	35.10
Private	Surface	501 to 1,000	4.40	1.20	1.80	2.70	5.60	9.70
Private	Surface	1,001 to 3,300	2.80	0.50	0.70	1.20	3.40	5.20
Private	Surface	3,301 to 10,000	12.50	– 0.50	0.70	7.10	20.30	36.60
Private	Surface	10,001 to 50,000	7.50	0.10	0.60	4.90	13.10	18.20
Private	Surface	50,001 to 100,000	9.80	0.00	2.20	10.90	15.30	19.40
Private	Surface	100,001 to 1,000,000	8.00	0.00	0.10	8.50	14.00	16.90
Private	Surface	Greater than 1,000,000	2.50	1.60	1.60	3.20	3.20	3.40
Public	Ground	Less than 100	51.70	22.20	29.40	44.40	71.70	92.10
Public	Ground	101 to 500	15.00	4.40	6.40	11.50	18.80	30.60
Public	Ground	501 to 1,000	4.00	1.20	1.50	2.50	4.80	8.20
Public	Ground	1,001 to 3,300	2.30	0.40	0.70	1.20	2.70	4.30
Public	Ground	3,301 to 10,000	8.70	– 0.60	0.50	4.40	15.00	26.30
Public	Ground	10,001 to 50,000	6.20	0.10	0.50	5.70	10.50	14.40
Public	Ground	50,001 to 100,000	7.30	0.00	1.50	8.40	11.70	14.20
Public	Ground	100,001 to 1,000,000	7.20	0.00	2.00	8.60	11.00	13.50
Public	Ground	Greater than 1,000,000	0.80	0.30	0.30	1.10	1.10	1.20
Public	Surface	Less than 100	52.90	19.40	28.50	50.30	71.00	90.50
Public	Surface	101 to 500	12.60	3.80	5.40	9.80	15.80	25.50
Public	Surface	501 to 1,000	3.60	1.10	1.50	2.30	4.60	7.60
Public	Surface	1,001 to 3,300	2.20	0.40	0.60	1.20	2.60	4.00
Public	Surface	3,301 to 10,000	9.90	0.10	0.70	5.80	17.00	27.90
Public	Surface	10,001 to 50,000	7.00	0.20	0.60	6.20	11.70	16.00
Public	Surface	50,001 to 100,000	8.20	0.00	0.40	9.00	13.50	16.70
Public	Surface	100,001 to 1,000,000	9.10	0.00	0.60	10.50	14.10	17.00
Public	Surface	Greater than 1,000,000	3.20	0.30	0.80	2.60	3.30	6.90

Notes: Rows are not included for system categories that contain zero systems. Detailed rows may not add exactly to the total due to independent rounding.

When evaluating the economic impacts on PWSs, the EPA uses the estimated PWS cost of capital to discount future costs (not the two percent discount rate used to evaluate social costs and benefit) because this best represents the actual costs of compliance that water systems would incur over time. For more information on cost of capital, see the final LCRI Economic Analysis chapter 4, section 4.2.3.3.

3. State Costs

For each of the PWS cost components and subcomponents, previously described in section VI.D.1 of this preamble, States (*i.e.*, primacy agencies)

have associated costs. Exhibit 9 (Exhibit 4–141 in the final LCRI Economic Analysis (USEPA, 2024a)) provides a list of the State activities, organized by LCRI cost component and subcomponent groups, for which the

EPA developed unit costs. Detailed information on the derivation of the unit costs associated with each State activity can be found in the sections of the final LCRI Economic Analysis identified in Exhibit 9.

EXHIBIT 9—STATE COST COMPONENTS, SUBCOMPONENTS, AND ACTIVITIES ORGANIZED BY SECTION ¹

Component	Subcomponents	Activities ²
4.4.1: State Implementation and Administrative Costs.	4.4.1.1: State Start-up Implementation and Administrative Activities.	(a) Adopt rule and develop program. (b) Modify data management systems. (c) Provide system training and technical assistance. (d) Provide staff training. (e) Review and approve small system flexibility option.
	4.4.1.2: State Annual Implementation and Administrative Activities.	(f) Coordinate with the EPA. (g) Provide ongoing technical assistance. (h) Report to SDWIS/Fed. (i) Train staff for annual administration.
4.4.2: State Sampling Related Costs.	4.4.2.1: State Lead Tap Sampling Costs.	(a) Provide templates for revised sampling instructions and conduct review. (b) Review updated sampling plan. (c) Review initial lead monitoring data and prepare systems for status under the LCRI. (d) Review change in tap sample locations. (e) Review 9-year monitoring waiver renewal. (f) Review sample invalidation requests. (g) Review consumer notification certifications. (h) Review monitoring results and 90th percentile calculations. (i) Review lead WQP sampling data and compliance with OWQPs.
	4.4.2.2: State Lead WQP Sampling Costs.	(j) Review copper WQP sampling data and compliance with OWQPs.
	4.4.2.3: State Copper WQP Monitoring Costs.	(k) Review source water monitoring results.
	4.4.2.4: State Source Water Monitoring Costs.	(l) Review list of schools and child care facilities.
	4.4.2.5: State School Sampling Costs.	(m) Provide templates on school and child care facility testing program. (n) Review school and child care facility testing program materials. (o) Review school and child care facility sampling results after individual sampling events. (p) Review annual reports on school and child care facility lead in drinking water testing program.
4.4.3: State CCT Related Costs	4.4.3.1: CCT Installation	(a) Review CCT study and determine type of CCT to be installed. (b) Set OWQPs after CCT installation.
	4.4.3.2: Re-optimization	(c) Review CCT study and determine needed OCCT adjustment. (d) Reset OWQPs after CCT re-optimization.
	4.4.3.3: State DSSA Costs	(e) Consult with system prior to any DSSA CCT adjustments. (f) Review report on DSSA responses.
	4.4.3.4: State Lead CCT Routine Costs.	(g) Review CCT guidance and applicability to individual PWSs. (h) Review water quality data with PWSs during sanitary survey. (i) Consult on required actions in response to source water change. (j) Consult on required actions in response to treatment change.
4.4.4: State Service Line Inventory and Replacement Related Costs.	4.4.4.1: Service Line Inventory Costs.	(a) Review connector updated LCRR initial inventory (baseline inventory). (b) Review annual service line inventory updates. (c) Review inventory validation report.
	4.4.4.2: Service Line Replacement Plan Review Costs.	(d) Review initial service line replacement plan. (e) Review information on deferred deadline and associated replacement rate in the service line replacement plan and determine fastest feasible rate. (f) Review annually updated service line replacement plan or certification of no change. (g) Conduct triennial review of water system updated recommended deferred deadline and associated replacement rate and determine fastest feasible rate. (h) Review annual service line replacement program report.
	4.4.4.3: Service Line Replacement Report Review Costs.	
4.4.5: State POU Related Costs	4.4.5.1: One-Time POU Program Costs.	(a) Review POU plan. (b) Provide templates for POU outreach materials. (c) Review POU public education materials.
	4.4.5.2: Ongoing POU Program Costs.	(d) Review sample invalidation request for POU monitoring. (e) Review customer notification certifications. (f) Review annual POU program report.
4.4.6: State Public Education-Related Costs.	4.4.6.1: Consumer Notice	(a) Provide templates for consumer notice materials. (b) Review lead consumer notice materials. (c) Review copy of the consumer notice and certification.

EXHIBIT 9—STATE COST COMPONENTS, SUBCOMPONENTS, AND ACTIVITIES ORGANIZED BY SECTION ¹—Continued

Component	Subcomponents	Activities ²
	4.4.6.2: Activities Regardless of the Lead 90th Percentile Level.	(d) Provide templates for updated CCR language. (e) Provide templates for local and State health department lead outreach. (f) Review lead outreach materials for local and State health departments. (g) Participate in joint communication efforts with local and State health departments. (h) Provide templates for service line disturbance outreach materials. (i) Review public education materials for service line disturbances. (j) Provide templates for inventory-related outreach materials. (k) Review inventory-related outreach materials. (l) Provide technical assistance to PWSs for public education materials.
	4.4.6.3: Public Education Activities in Response to Lead ALE.	(m) Review public education certifications. (n) Provide templates for updated public education materials for systems with a lead ALE. (o) Review revised lead language for systems with a lead ALE. (p) Consult with CWS on other public education activities in response to lead ALE.
	4.4.6.4: Public Education Activities in Response to Multiple Lead ALEs.	(q) Review plan for making filters available. (r) Provide templates for systems with multiple lead ALEs. (s) Review outreach materials provided by systems with multiple lead ALEs. (t) Consult on filter program for systems with multiple lead ALEs.

Acronyms: ALE = action level exceedance; CCR = Consumer Confidence Report; CCT = corrosion control treatment; CWS = community water system; DSSA = Distribution System and Site Assessment; LCRI = Lead and Copper Rule Improvements; LSL = lead service line; LSLR = lead service line replacement; OWQPs = optimal water quality parameters; POU = point-of-use; PWS = public water system; SDWIS/Fed = Safe Drinking Water Act Information System/Federal version; WQP = water quality parameter.

Notes:

¹ Numbering and lettering in the exhibit represents the sections in the final LCRI Economic Analysis (USEPA, 2024a), where additional information on the definition of and derivation of burden and cost for each activity is located. States will also incur burden for recordkeeping activities under the final LCRI, such as retaining records of decisions, supporting documentation, technical basis for decisions, and documentation submitted by the system. The EPA has included burden for recordkeeping with each activity when applicable as opposed to providing separate burden estimates.

² The EPA assigned a unique letter of identification (ID) for each activity under a given rule component. Activities are generally organized with upfront, one-time activities first followed by ongoing activities. Note that these activities are different than the activities identified for PWSs in Exhibit 5.

In the SafeWater LCR model, the majority of the costs associated with States are determined on a per water system basis. State activities and costs are largely driven by the rule requirements for individual water systems. The exception is the implementation and administrative costs that are tallied on a per-State basis. The per-water-system State costs and per-State costs are summed to obtain aggregate costs for this category. For additional information on how the SafeWater LCR model uses unit cost data to estimate State costs, see chapter 4, section 4.4 of the final LCRI Economic Analysis (USEPA, 2024a).

The SafeWater LCR cost model estimates that States will incur monetized incremental estimated annualized costs that range from \$28 million to \$26 million under the low- and high-cost scenarios, respectively, when presented in 2022 dollars and discounted at the two percent rate.

4. Costs Impacts Associated With Additional Phosphate Usage

Adding orthophosphate CCT creates a protective inner coating on pipes that

can inhibit lead leaching. However, once phosphate is added to the public water distribution system, some of this incremental loading remains in the water stream as it flows into wastewater treatment plants (WWTPs) downstream. This generates treatment costs for certain WWTPs. In addition, at those locations where treatment does not occur, water with elevated phosphorus concentrations may discharge to water bodies and induce certain ecological impacts. Due to many water systems operating both the wastewater and drinking water systems, the EPA is evaluating the costs of additional phosphate usage for informational purposes. Because these costs are associated with wastewater treatment to meet Clean Water Act regulatory requirements, they are not “likely to occur solely as a result of compliance” with the final LCRI, and, therefore, are not costs considered as part of the HRRCA under SDWA, section 1412(b)(3)(C)(i)(III).

To estimate the potential fate of the orthophosphate added at PWSs, the EPA developed a conceptual mass balance model. The EPA applied this conceptual

model to estimate the increase in loading at WWTPs, given an initial loading from corrosion control at water treatment plants. The WWTPs could incur costs because of upstream orthophosphate additions if they have permit discharge limits for phosphorus parameters. The percentage of WWTPs with phosphorus limits has increased over time. From 2007 to 2024,²³ in annual percentage rate terms, the growth rate in the percentage of WWTPs with phosphorus limits is 3.4 percent (see chapter 4, section 4.5.1 of the final LCRI Economic Analysis; USEPA, 2024a).

The EPA applied the growth rate observed from 2007 to 2024 to estimate the anticipated percentage of WWTPs with phosphorus limits in future years. This growth rate results in an estimated 61 percent of WWTPs with phosphorus discharge limits after 35 years. Applied

²³ The agency used WWTP phosphorus limit data from the EPA’s Discharge Monitoring Report (DMR) “Water Pollutant Loading Tool” using search criteria limiting results to the phosphorus parameter group and WWTPs only. The DMR Water Pollutant Loading Tool data is only available from 2007 onward.

as the percentage of WWTPs that need to take treatment actions, this estimate is likely conservative.

The specific actions a WWTP might need to take to maintain compliance with a National Pollution Discharge Elimination System (NPDES) phosphorus permit limit will depend on the type of treatment present at the WWTP and the corresponding phosphorus removal provided. Based on a review of NPDES data, it is likely that most of the WWTPs that already have phosphorus limits have some type of treatment to achieve the limit.

Some treatment processes can accommodate incremental increases in influent loading and still maintain their current removal efficiency. Such processes might not need significant adjustment to maintain their existing phosphorus removal efficiency, given an incremental increase. Other treatment processes may need modifications to their design or operation to maintain their removal efficiency in the face of an influent loading increase.

The EPA derived a unit cost of \$5.44 per pound for removing incremental phosphorus (for additional information, see chapter 4, section 4.5.1 of the final LCRI Economic Analysis; USEPA, 2024a). This unit cost includes the cost of additional chemical consumption and the operating cost of additional sludge processing and disposal. The costs a WWTP could incur depend on the magnitude of the loading increase relative to the specific WWTP's effluent permit limit. The WWTPs whose current discharge concentrations are closer to their limit are more likely to have to act. The WWTPs whose current treated water concentrations are well below their limit are less likely to incur costs but might, under certain conditions, incur costs (*e.g.*, when phosphorus removal achieved by technology in place at a WWTP is sensitive to incremental phosphorus loading increases and must be modified to continue to meet the limit). Furthermore, future phosphorus limits could be more stringent than existing limits.

Therefore, the EPA conservatively assumed that any WWTP with a discharge limit for phosphorus parameters could incur costs. Accordingly, in calculating costs, the EPA used the anticipated percentage of WWTPs with phosphorus discharge limits as the likelihood that incremental orthophosphate loading from a drinking water system would reach a WWTP with a limit. The EPA combined this likelihood and the unit cost (previously estimated) with incremental phosphorus loadings to calculate incremental costs

to WWTPs for each year of the period of analysis. The incremental annualized cost that the WWTPs would incur to remove additional phosphorous associated with the LCRI, under the low- and high-cost scenario, ranges from \$120,000 to \$300,000 at a two percent discount rate.

The EPA estimates that WWTP treatment reduces phosphorus loads reaching water bodies by 59 percent, but they are not eliminated. The rule's national-level total incremental phosphorus loads reaching water bodies are projected to change over the period of analysis from the low/high scenario range of 225,000 to 272,000 pounds 15 years after promulgation to the low/high scenario range of 216,000 to 260,000 pounds at year 35. Note that the EPA model assumes that once CCT is installed or re-optimized phosphate use remains constant over the remainder of the period of analysis. Because most CCT implementation is carried out prior to complete LSL removal and the model does not allow for reductions in the use of phosphate after systems remove all their lead content service lines the EPA's CCT cost estimates and phosphorus loading estimates to both WWTPs and receiving waterbodies may be overestimated. See chapter 4, section 4.5.2 of the final LCRI Economic Analysis (USEPA, 2024a) for information on how loading estimates are calculated. The ecological impacts of these increased phosphorous loadings are highly localized: total incremental phosphorus loadings will depend on the amount and timing of the releases, characteristics of the receiving water body, effluent discharge rate, existing total phosphorus levels, and weather and climate conditions. Detailed, spatially explicit information on effluents and on receiving water bodies does not exist in a form suitable for this analysis. Rather, to evaluate the potential ecological impacts of the rule, the EPA evaluated the significance of the national-level phosphorus loadings compared to other phosphorous sources in the terrestrial ecosystem.

To put these phosphorus loadings in context, estimates from the U.S. Geological Survey (USGS) Spatially Referenced Regression On Watershed Attributes (SPARROW) model suggest that anthropogenic sources deposit roughly 750 million pounds of total phosphorus per year (USEPA, 2019c). The total phosphorus loadings from the LCRI high-cost scenario would contribute about 0.5 percent (3.6 million/750 million) of total phosphorus entering receiving waterbodies in a given year, and the incremental amount of total phosphorus associated with the

final LCRI relative to the baseline (2021 LCRR) grows only 0.03 percent (260,000/750 million). At the national level, the EPA expects total phosphorus entering waterbodies as a result of the final LCRI update to be small, relative to the total phosphorus load deposited annually from all other sources. National average load impacts may obscure localized ecological impacts in some circumstances, but the existing data do not allow an assessment as to whether this incremental load will induce ecological impacts in particular areas. It is possible, however, that localized impacts may occur in certain water bodies without restrictions on phosphate influents or in locations with existing elevated phosphate levels.

An increase in phosphorus loadings can lead to economic impacts and undesirable aesthetic impacts. Excess nutrient pollution can cause eutrophication (excessive plant and algae growth) in lakes, reservoirs, streams, and estuaries throughout the United States. Eutrophication, by inducing primary production, leads to seasonal decomposition of additional biomass and consumption of oxygen, creating a state of hypoxia (or low oxygen) within the water body. In extreme cases, the low- to no-oxygen states can create dead zones, or areas in the water where aquatic life cannot survive. Studies indicate that eutrophication can decrease aquatic diversity for this reason (*e.g.*, Dodds et al., 2009). Eutrophication may also stimulate the growth of harmful algal blooms (HABs) or over-abundant algae or cyanobacteria populations. Algal blooms can seriously harm the aquatic ecosystem by blocking sunlight and creating diurnal swings in oxygen levels because of overnight respiration. Such conditions can starve and deplete aquatic species. In addition, rapid photosynthesis may consume dissolved inorganic carbon and elevate pH levels (Chislock et al., 2013). Certain types of phosphorous-fueled cyanobacterial blooms may produce toxins to both humans and aquatic life. These toxins can include microcystins (liver toxins) and neurotoxins. This issue is particularly prevalent in lakes or other slow-flowing water bodies. HABs producing cyanotoxins that occur in sources in drinking water can impact drinking water (USEPA, 2024m). HAB events have also directly or indirectly contributed to fish kill events by causing the absorption or ingestion of toxins, or by creating conditions of limited sunlight and oxygen (Glibert et al., 2005). In addition to lethal impacts on aquatic organisms, toxins produced

by HABs can harm terrestrial wildlife and livestock that are exposed to toxins in sufficient levels (Backer, 2002; Chislock et al., 2013).

5. Total Monetized Costs

The estimated annualized low- and high-cost scenarios, discounted at two

percent, that PWSs, households,²⁴ and States will incur in complying with the baseline (2021 LCRR), the final LCRI, and incrementally are summarized in Exhibit 10. The estimated total monetized incremental annualized cost of the final LCRI range from \$1.47 to

\$1.95 billion at a two percent discount rate, in 2022 dollars. The exhibit also details the proportion of the annualized costs attributable to each rule component.

EXHIBIT 10—ESTIMATED NATIONAL MONETIZED ANNUALIZED RULE COSTS—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

PWS annual costs	Low estimate			High estimate		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Sampling	\$134.0	\$166.0	\$32.0	\$143.6	\$176.2	\$32.6
PWS Service Line Replacement *	84.6	1,259.0	1,174.4	124.5	1,763.9	1,639.4
Corrosion Control Technology	552.0	591.1	39.1	647.8	692.9	45.1
Point-of Use Installation and Maintenance	2.4	5.1	2.7	5.9	9.6	3.7
Public Education and Outreach	69.6	267.3	197.7	72.1	302.2	230.1
Rule Implementation and Administration	0.1	3.4	3.3	0.2	3.4	3.2
Total Annual PWS Costs	842.7	2,291.9	1,449.2	994.1	2,948.2	1,954.1
Household Service Line Replacement Costs **	8.1	0.0	– 8.1	26.4	0.0	– 26.4
State Rule Implementation and Administration	38.4	66.1	27.7	41.8	67.6	25.8
Wastewater Treatment Plant Costs ***	3.0	3.0	0.0	4.8	5.1	0.3
Total Annual Rule Costs	892.2	2,361.0	1,468.8	1,067.1	3,020.9	1,953.8

Note: Previous Baseline costs are projected over the 35-year period of analysis and are affected by the EPA's assumptions on three uncertain variables which vary between the low- and high-cost scenarios.

* Service line replacement includes full and partial lead and GRR service line replacements.

** The EPA in the LCRR Economic Analysis (USEPA, 2020d) assumed that the cost of customer-side service line replacements made under the goal-based replacement rate would be paid for by households. The agency also assumed that system-side service line replacements under the goal-based replacement rate and all service line replacements (both customer-side and systems-side) would be paid by the PWS under the 3 percent mandatory replacement rate. The EPA made these modeling assumptions based on the different levels of regulatory responsibility systems faced operating under a goal-based replacement rate versus a mandatory replacement rate. While systems would not be subject to a potential violation for not meeting the target replacement rate under the goal-based replacement requirement, under the 3 percent mandatory replacement rate, the possibility of a violation could motivate more systems to meet the target replacement rate even if they had to adopt customer incentive programs that would shift the cost of replacing customer-side service lines from customers to the system. To be consistent with these LCRR modeling assumptions, under the LCRI, the EPA assumed that mandatory replacement costs would fall only on systems. Therefore, the negative incremental values reported for the "Household Service Line Replacement Costs" category do not represent a net cost savings to households. They represent an assumed shift of the estimated service line replacement costs from households to systems. The EPA has insufficient information to estimate the actual service line replacement cost-sharing relationship between customers and systems at a national level for this analysis.

*** Due to many water systems operating both the wastewater and drinking water systems, the EPA is evaluating the costs of additional phosphate usage for informational purposes. Because these costs are not incurred by the public water system, these costs are not "likely to occur solely as a result of compliance" with the LCRI, and, therefore, are not costs considered as part of HRRCA under SDWA section 1412(b)(3)(C)(i)(III).

Acronyms: LCRI = Lead and Copper Rule Improvements; PWS = public water system.

E. Benefits Analysis

The final LCRI is expected to result in significant health benefits, since both lead and copper are associated with adverse health effects. Lead is a highly toxic pollutant that can damage neurological, cardiovascular, immunological, developmental, and other major body systems (USEPA, 2024b). The EPA is particularly concerned about ongoing exposure experienced by children because lead

can affect brain development, which impacts lifelong level of function. Additionally, children, through their physiology and water ingestion requirements, may be at higher risk. Research shows that, on average, formula-fed infants and young children consume more drinking water per day on a body weight basis than adolescents. Using the USDA Continuing Survey of Food Intakes by Individuals (CSFII) data, (Kahn and Stralka, 2008) demonstrated this trend is most

pronounced in children under one year of age who drink more than double the amount older children and adults drink per kg of body weight. Additionally, children absorb two to four times more lead than adults through the gastrointestinal tract (Mushak, 1991; WHO, 2011; and Ziegler et al., 1978). No safe blood lead level in children has been identified (CDC, 2024). The EPA assessed the quantification potential of those health endpoints identified in the agency's lead integrated science

²⁴ Note that as part of the baseline (LCRR) analysis of service line replacement costs the EPA assumed that customer-side service line replacements under the goal-based service line replacement program would be paid by the household. For the estimation of LCRI service line replacement costs the EPA assumed that all

replacement cost would be borne by the PWS. These differing costing assumptions result in the positive household costs (not accruing to PWSs) reported under the baseline (LCRR) cost estimates while no household service line replacement costs are reported under the LCRI. These assumptions also result in decreased incremental costs for the

LCRI under household service line replacement costs, but the cost of replacing the customer portion of service lines is now included, by assumption, in the LCRI incremental costs for PWS service line replacement.

assessments (ISAs) (2013 and 2024) and the NTP monograph (NTP, 2012), and summarized in appendix D of the final LCRI Economic Analysis (USEPA, 2024a). The EPA's health risk reduction and benefits assessment of the LCRI requirements concentrates on quantification and monetization of the estimated impact of reductions in lead exposure on four health endpoints: IQ values and cases of ADHD in children, lower birth weights in children of women of childbearing age, and cases of cardiovascular disease premature mortality in adults. The EPA has focused on these four health endpoints as the dose-response functions for these quantified health endpoints have been extensively reviewed by the agency and in the case of reductions in IQ losses, low birth weight and cardiovascular mortality, externally peer reviewed. Also, the approach used for IQ has been used in multiple rulemakings and undergone SAB review. As explained in appendix D of the final LCRI Economic Analysis (USEPA, 2024a), there are additional non-quantified lead health impacts to both children and adults that will be realized as a result of this rulemaking including: cardiovascular morbidity effects, renal effects, reproductive and developmental effects (apart from ADHD), immunological effects, neurological effects (apart from children's IQ), and cancer. Therefore, the quantified benefits of this rule likely underestimate the true social benefits.

Although copper is an essential element for health, excess intake of copper has been associated with several adverse health effects. Most commonly, excess exposure to copper results in gastrointestinal symptoms such as nausea, vomiting, and diarrhea (National Research Council, 2000). In susceptible populations, such as individuals with genetic disorders (*i.e.*, Wilson's Disease) or predispositions to accumulate copper, chronic exposure to excess copper can result in liver toxicity. Because household level data on the changes in copper concentrations that result from changes in CCT are not available, this analysis does not quantify any potential benefits from reduced copper exposure that may result from the rule. See appendix E in the final LCRI Economic Analysis (USEPA, 2024a) for additional copper health impact information.

1. Modeled Drinking Water Lead Concentrations

In updating the EPA's drinking water lead concentrations for the LCRI, the agency built upon the data and models used in the analysis for the 2021 LCRR. Detailed information on the residential

lead concentration data and modeling from the 2021 LCRR can be found in chapter 6 of the final LCRR Economic Analysis (USEPA, 2020d). In the 2021 LCRR analysis, the EPA collected and used data on lead concentrations and information regarding LSL²⁵ and CCT status, location, and date of sample collection, representing 14 water systems across the United States and Canada. The EPA updated this data for the LCRI analysis by initially identifying eight additional sampling datasets.²⁶ After close assessment, it was determined that seven of the datasets had data availability and study design issues and could not be included.²⁷ Only the 532 samples collected from the City of Clarksburg, WV, in fall to winter of 2021 could be added to the lead concentration dataset, resulting in a total of 18,571 samples collected from 1,657 homes in 16 cities representing 15 city water systems. The EPA grouped the samples into LSL status categories ("LSL," "Partial LSL," and "No LSL"). The samples were also grouped by CCT treatment, assigning status as having "None," "Partial," or "Representative." "Partial" includes those water systems with some pH adjustment and lower doses of a phosphate corrosion inhibitor, but this treatment is not optimized. "Representative" are those water systems in the dataset that have higher doses of phosphate inhibitors, which are considered optimized in the model. For additional information, see chapter 5, section 5.2.1 of the final LCRI Economic Analysis (USEPA, 2024a).

The EPA fit several regression models, following the same methodology from the 2021 LCRR benefits analysis (see chapter 6, section 6.2.2 of the final LCRR Economic Analysis (USEPA, 2020d), of tap water lead concentrations as predicted by LSL presence ("LSL" or "No LSL"), LSL extent ("Partial LSL"), CCT status, and "profile liter." "Profile liter" is the cumulative volume a sample represented within a consecutive sampling series at a single location and time. Models that describe the profile liter accounted for the variation among sampling events, sampling sites, and city. The water lead concentrations exhibited a right-skewed distribution; therefore, the variable was

log-transformed to provide a better modeled fit of the data. The EPA selected one of the regression models based on its fit and parsimony and used it to produce simulated lead concentrations for use in the benefits analysis (see Exhibit 5–8 in chapter 5 of the final LCRI Economic Analysis). The selected model suggests that besides water system, residence (sampling location), and sampling event, the largest effects on lead concentration in tap water come from the presence of LSLs and the number of liters drawn since the last stagnation period. Although CCT can reduce lead concentrations from LSLs and other sources of lead, such as residential plumbing fixtures, the presence or absence of CCT produces smaller effects on water lead concentration than the presence or absence of LSLs. Because locations with LSLs are more likely to have high lead concentrations than those without, CCT reduces water lead concentrations more in homes served by LSLs than in those not served by LSLs. See Exhibit 5–9 in chapter 5, section 5.2.2 of the final LCRI Economic Analysis (USEPA, 2024a) for additional details and estimated regression coefficients. The regression results indicate that, although CCT can significantly reduce water lead concentrations, the removal of LSLs in systems with representative CCT will still reduce water lead concentrations.

To statistically control for some sources of variability in the input data, the EPA, following the 2021 LCRR analysis, did not use summary statistics from the original data directly in estimating the effects of LSL and CCT status. Instead, the EPA produced simulated mean lead concentrations for 500,000 samples based on the selected regression model. These concentrations were simulated for the first 10 profile liter values taken after stagnation. The simulations were performed on the log-scale to conform to the fitted model (which used a log-transformed water lead concentration variable) and converted to the original scale to produce geometric means and geometric standard deviations. Geometric means are more representative of the central tendency of a right-skewed distribution than are arithmetic means and prevent overestimation of the impact of water lead levels on estimated blood lead levels and resulting benefits values. The simulated sample concentrations represent new estimates for the updated lead concentration dataset. These simulations rely on estimates of variability and uncertainty from the regression model (described above) and

²⁵ Note, no GRR lines are part of the profile dataset. See below in this section for a discussion of assumed GRR water lead concentrations.

²⁶ The EPA identified 8 datasets from Clarksburg, WV, Cleveland, OH, Chicago, IL, Kalamazoo, MI, Parchment, MI, Flint, MI, Galesburg, IL, and Sebring, OH, with drinking water lead samples collected from 2016 to 2021.

²⁷ For additional information on the assessment of the lead concentration data, see chapter 5, section 5.2.1 of the final LCRI Economic Analysis (USEPA, 2024a).

given information on LSL and CCT status. For more detail regarding this analysis, see chapter 5, section 5.2.2 of the final LCRI Economic Analysis (USEPA, 2024a). Individual estimates are best thought of as the central tendency for a lead tap sample concentration, given regression model parameters and estimated variance. The simulated samples represent the volume weighted average lead concentration using data from the first 10 liters of profile data, approximating lead exposure at the tap for the final LCRI benefits analysis.

The EPA estimates that improving CCT will produce significant reductions in lead tap water concentration overall. However, in the case of “no LSL” presence, the final model produced predictions of drinking water concentrations that overlapped almost completely for all CCT conditions.²⁸ In the available profile data, there were no statistically significant differences in measured water lead concentrations between the different CCT scenarios when LSLs were not present, likely because, apart from and compared to LSLs, the remaining sources of lead in

residential plumbing (old solder and brass) are small and contribute far less lead to a multi-liter sequential sampling profile. Therefore, the EPA used the pooled estimate of predicted drinking water concentrations for all residences with no LSL presence, regardless of CCT condition, for the main analysis in chapter 5 of the final LCRI Economic Analysis (USEPA, 2024a).²⁹ Uncertainties in the water modeling are discussed in section 5.2.5 and in section 5.7, Exhibit 5–36 of the final LCRI Economic Analysis (USEPA, 2024a).

EXHIBIT 11—LSL AND CCT SCENARIOS AND SIMULATED GEOMETRIC MEAN TAP WATER LEAD CONCENTRATIONS AND STANDARD DEVIATIONS FOR THE FIRST TEN LITERS DRAWN AFTER STAGNATION FOR EACH COMBINATION OF LSL AND CCT STATUS (EXHIBIT INCLUDES ASSUMED GRR, POU, AND PITCHER FILTER WATER LEAD CONCENTRATIONS)

LSL status	CCT status	Simulated mean of log lead (µg/L)	Simulated SD ^a of log lead	Simulated geometric mean lead (µg/L)	Simulated geometric SD ^a of lead
LSL	None	2.67	1.32	14.38	3.75
Partial LSL/GRR	None	1.92	1.33	6.85	3.77
No LSL	None	^b – 0.19	^b 1.33	^b 0.83	^b 3.78
LSL	Partial	2.07	1.33	7.93	3.77
Partial LSL/GRR	Partial	1.35	1.33	3.84	3.78
No LSL	Partial	^b – 0.19	^b 1.33	^b 0.83	^b 3.78
LSL	Representative	1.45	1.33	4.27	3.78
Partial LSL/GRR	Representative	0.76	1.33	2.14	3.78
No LSL	Representative	^b – 0.19	^b 1.33	^b 0.83	^b 3.78
POU and pitcher filters	Representative	^b – 0.19	^b 1.33	^b 0.83	^b 3.78

Acronyms: LSL = lead service line; CCT = corrosion control treatment; POU = point-of-use; SD = standard deviation.

^a Standard deviations reflect “among-sampling event” variability.

^b Simulated results were pooled to produce a common estimate for homes with no LSL presence across CCT conditions. Also, the “No LSL” values were used for POU and pitcher filter lead tap concentrations.

Note: GRR service line water lead concentrations are assumed to equal “Partial LSL” concentrations.

In the estimation of the benefits of the final LCRI, each modeled person within a water system is assigned to one of the estimated drinking water lead concentrations in Exhibit 11, depending on CCT, point-of-use, pitcher filter, and LSL/GRR service line status. Note that the EPA assumes GRR service lines produce water lead concentrations equivalent to the “Partial LSL” status, therefore, all households served by GRR service lines will have a starting water lead concentration equal to one of the three possible “Partial LSL” categories: “Partial LSL/None CCT”, “Partial LSL/Partial CCT”, “Partial LSL/representative CCT”. The EPA estimated benefits under both the low and high scenarios used in the final LCRI analysis

to characterize uncertainty in the estimates. With regard to benefits, the low and high scenarios differ by the following: the number of PWSs that will exceed the action level under the revised tap sampling requirements; the concentration-response functions that characterize how reductions in blood lead levels (caused by changes in lead exposure) translate into estimates of avoided IQ reductions, cases of ADHD, and cardiovascular disease premature mortality; and high and low estimates of the ADHD cost of illness. See chapter 4, section 4.2 for an overview of the SafeWater LCR model and chapter 5, section 5.5 for a summary of the variables driving the benefit scenarios in the final LCRI Economic Analysis

(USEPA, 2024a). The EPA predicted the status of each system under the low and high scenarios prior to rule implementation and in each year of rule implementation for both the baseline (2021 LCRR) and final LCRI. Depending on the timing of required actions that can change CCT, point-of-use device, pitcher filter, and LSL/GRR service line status under both the baseline (2021 LCRR) and final LCRI low- and high-scenario model runs, changes in lead concentrations and resultant blood lead levels are predicted every year for the total population served by the systems for the 35-year period of analysis. In the primary benefits analysis for the final rule, improvements to CCT and the use of installed point-of-use devices are

²⁸ The EPA does not think that there are lead water mains in the country. Water mains are typically 6 to 16 inches in diameter whereas service lines have a smaller diameter. The common water main materials include ductile iron, PVC, asbestos cement, HDPE, and concrete steel (Folkman, 2018). LSLs are typically two inches or less in diameter (LSLR Collaborative, 2021).

²⁹ Note that, in the economic analysis, the EPA does not make restrictive assumptions in pairing

specific CCT and LSL statuses. It is not improbable to have systems with CCT in place where no LSLs are present. The pre-2021 LCR requires all systems serving more than 50,000 persons to install CCT. Systems may also install CCT for other reasons apart from the LCR. Also, a number of systems have had 90th percentile tap sample values above the action level that require CCT even where LSLs are not present due to initial corrosivity of the water and secondary sources of lead like old brass and

solder. It is possible for a system to have LSLs, but no CCT, because the existing water chemistry in a system may be non-corrosive and, therefore, lead 90th percentile lead tap sample values may be lower than the action level. The EPA combined data from two sources to estimate the percent of CCT systems with LSLs (SDWIS/Fed and Needs Survey data). See sections 3.3.3 and 3.3.4 of the final LCRI Economic Analysis (USEPA, 2024a) for additional details.

only predicted for individuals in households with LSL/GRRs prior to implementation of the baseline (2021 LCRR) and final LCRI requirements (consistent with the discussion above about the limits of the data for predicting the impact of CCT when LSLs are not present). In the model, LSL/GRR service line removals are predicted by water system and year for both the baseline (2021 LCRR) and final LCRI and multiplied by the average number of persons per household (across demographic categories) to determine the number of people shifting from one LSL/GRR service line status to another. To predict the changes in lead exposure that result from an improvement in CCT, the EPA assumes the entire LSL/GRR service line population of a water system will move to the new CCT status at the same time. The EPA also assumes that when a small system implements point-of-use devices under the LCRI's small system compliance flexibilities the entire water system moves to a drinking water lead concentration equivalent to the "No LSL/Representative CCT" status in Exhibit 11, which implies that everyone in households in a distribution system with LSLs/GRR service lines is properly using the point-of-use devices. See section IV.I of this preamble for additional information on the compliance alternatives available to small CWSs and NTNCWSs. As part of the multiple action level exceedance requirements under the final LCRI, the EPA assumes that 100 percent of a water system's population with lead, GRR, and unknown service lines will request and receive pitcher filters or point-of-use devices and, hence, will move to a water lead concentration equivalent to the "No LSL/Representative CCT" status in Exhibit 11. This assumption implies that everyone who receives a pitcher filter or point-of-use device is using it properly. See section IV.K of this preamble for additional information on the regulatory requirements associated with multiple action level exceedances. See chapter 5, section 5.3 of the final LCRI Economic Analysis (USEPA, 2024a) for more detailed information on the number of people switching lead concentration categories under the low and high scenarios.

2. Blood Lead Modeling

The EPA has determined that health impact functions exist in the literature, so that the agency can quantify the improvements from the decreases in water lead concentrations that result from implementation of the final LCRI. The four health endpoints the EPA quantifies are increased IQ values and reduced cases of ADHD in children, reductions in lower birth weights in children of women of childbearing age, and reduced cases of cardiovascular disease premature mortality in adults. As a prerequisite to estimating the impact to these health endpoints, the EPA must first use the drinking water lead concentration data the agency developed to determine the potential impact to blood lead levels from the regulatory requirements under the baseline (2021 LCRR) and the final LCRI for both children aged zero to seven years, using the coupled Stochastic Human Exposure and Dose Simulation Multimedia (SHEDS-multimedia) model and the Integrated Exposure and Uptake Biokinetic model (SHEDS-Pb, formerly known as SHEDS-IEUBK), and children eight years old through adulthood with the All Ages Lead Model (AALM) version 3.

3. Estimating Blood Lead Levels in Children (0–7 year olds)

Consistent with the 2021 LCRR benefits analysis, the EPA estimated the distribution of blood lead levels in children, aged zero to seven, using the EPA's SHEDS-Multimedia model coupled with its IEUBK model. For further information on SHEDS-Pb model development and evaluation, refer to Zartarian et al. (2017). As a first step in estimating the blood lead levels, the EPA utilized the SHEDS-Multimedia model, which can estimate distributions of lead exposure using a two-stage Monte Carlo sampling process, given input lead concentrations in various media and human behavior data from the EPA's Consolidated Human Activity Database (CHAD) and the Centers for Disease Control and Prevention's (CDC) National Health and Nutrition Examination Survey (NHANES). SHEDS-Multimedia, in this case, uses individual time-activity diaries from the CDC's NHANES and the EPA's CHAD

for children aged zero to seven to simulate longitudinal activity diaries. Information from these diaries is then combined with relevant lead input distributions (e.g., outdoor air lead concentrations) to estimate exposure. Drinking water tap concentrations for each of the modeled LSL and CCT scenarios were used as the drinking water inputs to SHEDS-Multimedia. For more detail on the other lead exposure pathways that are held constant as background in the model, see chapter 5, section 5.4 of the final LCRI Economic Analysis (USEPA, 2024a).

In the SHEDS-Pb coupled methodology, the SHEDS model takes the place of the exposure and variability components of the IEUBK model by generating a probability distribution of lead intakes across media. These intakes are multiplied by route-specific (e.g., inhalation and ingestion) absorption fractions to obtain a distribution of lead uptakes (see Exhibit 5–17 in chapter 5, section 5.4 of the final LCRI Economic Analysis; USEPA, 2024a). This step is consistent with the uptake estimation that would normally occur within the IEUBK model. The media-specific uptakes can be summed across exposure routes to give total lead uptake per day. Next, the EPA used age-based relationships derived from the IEUBK model, through the use of a polynomial regression analysis, to relate these total lead uptakes to blood lead levels. Exhibit 12 presents modeled SHEDS-Pb blood lead levels in children by year of life and LSL presence, CCT status, and pitcher filter or point-of-use device. The blood lead levels in this exhibit represent what children's blood lead levels would be if they lived under the corresponding LSL or GRR service line, point-of-use device, pitcher filter, and CCT status combination for their entire lives. Note that when "No LSL" is the beginning or post-rule state, 0.83 µg/L (the simulated geometric mean) is the assumed concentration across all levels of CCT status (none, partial, or representative). As previously noted, the extent to which changes in CCT status make meaningful differences in lead concentrations for those without lead or GRR service lines cannot be determined from the data available to the EPA in this analysis.

EXHIBIT 12—MODELED SHEDS-Pb GEOMETRIC MEAN BLOOD LEAD LEVELS IN CHILDREN FOR EACH POSSIBLE DRINKING WATER LEAD EXPOSURE SCENARIO FOR EACH YEAR OF LIFE

Lead service line status	Corrosion control treatment status	Water concentration (µg/L)	GM blood lead level (µg/dL) ^b for specified year of life							Avg. ^c
			0–1 ^a	1–2	2–3	3–4	4–5	5–6	6–7	
LSL	None	14.38	4.94	2.74	2.82	2.71	2.78	2.95	2.61	3.08
Partial LSL/GRR	None	6.85	3.12	1.98	2.01	2.01	2.01	2.08	1.84	2.15

EXHIBIT 12—MODELED SHEDS-Pb GEOMETRIC MEAN BLOOD LEAD LEVELS IN CHILDREN FOR EACH POSSIBLE DRINKING WATER LEAD EXPOSURE SCENARIO FOR EACH YEAR OF LIFE—Continued

Lead service line status	Corrosion control treatment status	Water concentration (µg/L)	GM blood lead level (µg/dL) ^b for specified year of life							
			0–1 ^a	1–2	2–3	3–4	4–5	5–6	6–7	Avg. ^c
No LSL	None	0.83	1.19	1.28	1.30	1.28	1.30	1.39	1.10	1.26
LSL	Partial	7.93	3.27	2.11	2.13	2.10	2.08	2.21	1.95	2.27
Partial LSL/GRR	Partial	3.84	2.18	1.64	1.66	1.68	1.64	1.72	1.47	1.71
No LSL	Partial	0.83	1.19	1.28	1.30	1.28	1.30	1.39	1.10	1.26
LSL	Representative	4.27	2.36	1.72	1.73	1.74	1.73	1.80	1.53	1.80
Partial LSL/GRR	Representative	2.14	1.65	1.47	1.45	1.47	1.46	1.51	1.28	1.47
No LSL	Representative	0.83	1.19	1.28	1.30	1.28	1.30	1.39	1.10	1.26
POU or pitcher filter		0.83	1.19	1.28	1.30	1.28	1.30	1.39	1.10	1.26

^a Blood lead levels for the first year of life are based on regression from IEUBK for 0.5- to 1-year-olds only.

^b These values represent the blood lead for a child living with the LSL/CCT status in the columns to the left. Each year blood lead corresponding to actual modeled child is summed and divided by 7 in the model to estimate lifetime average blood lead.

^c This column contains calculated average lifetime blood lead levels assuming a child lived in the corresponding LSL/GRR service line, CCT, POU, or pitcher filter scenario for their entire life.

4. Estimating Older Child and Adult Blood Lead Levels

In order to estimate the changes in blood lead levels in individuals from eight years old through adulthood (referred to here as adults) associated with the final LCRI, the EPA selected the AALM version 3. The AALM tool is primarily intended for “quantitatively relating lead (Pb) exposures from environmental media that occur over the life time to Pb levels and concentrations in blood, other body tissues, and excreta” (USEPA, 2019d). The tool consists of a lead exposure model and a lead biokinetics model. User inputs for selected environmental media (soil, dust, water, air, and food) are used in the exposure model to predict lead intake per day for a simulated individual, accounting for sex and age differences. Lead absorption by inhalation or ingestion is simulated in the biokinetics model to calculate the daily total rate of lead transfer to the central compartment. The AALM tool

produces an estimate of lead concentration in various tissues and excreta, including estimates of blood lead levels over a lifetime.

The water concentrations calculated for each combination of LSL and CCT status from the EPA’s regression modeling (see Exhibit 11 in section VI.E.1 of this preamble) was used to estimate the distribution of blood lead levels in males and females aged 8 to 79 years using the EPA’s AALM tool. Each distinct LSL and CCT scenario was modeled and represented by water lead concentrations. Each scenario was run for females and males as the AALM tool requires that each sex be modeled separately. Model inputs include: water intake rates per age group, which are the same across sexes and were obtained from the EPA’s 2011 Exposure Factors Handbook (Table 3–1); lead intake from food for each age group, which varies by sex and was calculated using values from appendix C of the AALM Technical Support Document (USEPA, 2019d); lead concentrations in soil and

dust, which are consistent for all age groups and calculated as a weighted average based on data from the U.S. Department of Housing and Urban Development’s (HUD) American Healthy Homes Survey (AHHS) I and II Lead Findings report (USHUD, 2021); soil and dust intake rates by age group up to age 21 were estimated by Ozkaynak et al. (2022), which used the EPA’s SHEDS Soil and Dust model; and an air lead concentration of 0.01 µg/m³ was used for all age groups and sexes based on national air monitoring results reporting in Cavender (2013).

The AALM modeling output provides the yearly estimated blood lead level (µg/dL) by age from 8 to 79 years for each status combination of sex, LSL, CCT, and point-of-use device or pitcher filter. For additional detailed information on the AALM inputs and modeling results, see chapter 5, section 5.4.2 of the final LCRI Economic Analysis (USEPA, 2024a). A summary of the AALM results by sex are presented in Exhibit 13.

EXHIBIT 13—ESTIMATES OF GEOMETRIC MEAN BLOOD LEAD LEVELS IN OLDER CHILDREN AND ADULTS (AGES 8–79) FOR EACH POSSIBLE DRINKING WATER LEAD EXPOSURE SCENARIO

Lead service line status	Corrosion control treatment status	Sex	Geometric mean blood lead level (µg/dL) for specified age group ¹ in years from the AALM							
			8–15	16–19	20–29	30–39	40–49	50–59	60–69	70–79
LSL	None	Male	1.33	1.28	1.70	1.82	1.92	1.98	1.36	1.94
		Female	1.25	1.44	1.99	2.14	2.27	2.35	1.56	2.31
Partial LSL/GRR	None	Male	1.03	1.00	1.30	1.35	1.37	1.39	1.36	1.34
		Female	0.97	1.10	1.47	1.53	1.56	1.59	1.56	1.53
No LSL	None	Male	0.80	0.77	0.98	0.97	0.94	0.92	0.88	0.85
		Female	0.74	0.83	1.06	1.03	1.00	0.98	0.94	0.91
LSL	Partial	Male	1.08	1.04	1.36	1.42	1.45	1.47	1.45	1.42
		Female	1.01	1.15	1.55	1.62	1.66	1.70	1.67	1.65
Partial LSL/GRR	Partial	Male	0.92	0.89	1.14	1.16	1.16	1.15	1.12	1.10
		Female	0.85	0.96	1.26	1.28	1.28	1.28	1.25	1.22
No LSL	Partial	Male	0.80	0.77	0.98	0.97	0.94	0.92	0.88	0.85
		Female	0.74	0.83	1.06	1.03	1.00	0.98	0.94	0.91
LSL	Representative	Male	0.93	0.90	1.16	1.19	1.19	1.19	1.16	1.13
		Female	0.87	0.98	1.29	1.32	1.32	1.32	1.29	1.27
Partial LSL/GRR	Representative	Male	0.85	0.82	1.05	1.05	1.03	1.02	0.99	0.96
		Female	0.79	0.89	1.15	1.14	1.12	1.11	1.07	1.04
No LSL	Representative	Male	0.80	0.77	0.98	0.97	0.94	0.92	0.88	0.85
		Female	0.74	0.83	1.06	1.03	1.00	0.98	0.94	0.91

EXHIBIT 13—ESTIMATES OF GEOMETRIC MEAN BLOOD LEAD LEVELS IN OLDER CHILDREN AND ADULTS (AGES 8–79) FOR EACH POSSIBLE DRINKING WATER LEAD EXPOSURE SCENARIO—Continued

Lead service line status	Corrosion control treatment status	Sex	Geometric mean blood lead level (µg/dL) for specified age group ¹ in years from the AALM							
			8–15	16–19	20–29	30–39	40–49	50–59	60–69	70–79
POU or pitcher filter		Male	0.80	0.77	0.98	0.97	0.94	0.92	0.88	0.85
		Female	0.74	0.83	1.06	1.03	1.00	0.98	0.94	0.91

¹ The estimated values reported in this exhibit represent the mean blood lead level for the ages specified in the range. The AALM tool reports age-specific, yearly blood lead levels for each single year age that are used in the SafeWater LCR benefits model.

5. Quantifying and Monetizing Health Endpoints

The EPA quantified and monetized the change in four health endpoints in the final LCRI Economic Analysis. The endpoints are reductions: in IQ values and cases of ADHD in children, lower birth weights in children of women of childbearing age, and cases of cardiovascular disease premature mortality in adults. The concentration response functions for the four quantified health endpoints that have been extensively reviewed by the agency³⁰ and in the case of reductions in IQ losses, low birth weight and cardiovascular disease premature mortality, externally peer reviewed. Also, the approach used for IQ has been used in multiple prior rulemakings and undergone SAB review. The subsections below outline the methods the EPA used in analysis of each of these endpoints.

6. Estimating IQ Benefits

The EPA uses the SHEDS-Pb estimated set of potential geometric mean blood lead levels for children zero to seven years of age (presented in Exhibit 12 in section VI.E.3 of this preamble) as inputs in the modeling of IQ benefits for the final LCRI. The benefits analysis uses lifetime average blood lead values to determine estimates of avoided IQ loss that correspond to reductions in water lead concentrations resulting from changes in LSL/GRR, point-of-use device, pitcher filter, and CCT status at some point in a representative child's life (between ages zero and seven), and those made prior to the child's birth for those born seven years after the baseline (2021 LCRR) or final LCRI resulted in a

water lead concentration status change. Therefore, the SafeWater LCR model, in each year of the analysis, calculates IQ benefits based on the cohort, or percent of the modeled population, that turns seven years of age in the year being analyzed. The SafeWater LCR model, for both the baseline (2021 LCRR) and final LCRI, tracks PWS implementation over the 35-year period of analysis. This data allows the model to determine the number of children that fall within each of the 11 possible LSL/GRR service line, CCT, point-of-use device, and pitcher filter lead exposure scenarios for each of the seven years prior to the year being modeled. The model then calculates a set of average lifetime blood lead levels for the possible LSL/GRR service line, CCT, point-of-use device, and pitcher filter exposure scenarios. The average lifetime blood lead levels are affected by both the change in LSL/GRR service line, CCT, point-of-use device, and pitcher filter status, and the years zero to seven in which the status change occurs. The model then applies these average lifetime blood lead level values to the appropriate percentage of the seven-year-old cohort (the percent of seven year olds that are estimated to experience the scenarios represented by the average lifetime blood lead levels) for that analysis year under both the baseline (2021 LCRR) and final LCRI requirements. The change in average lifetime blood lead levels for the seven-year-old cohort is then used to determine the incremental benefit of avoided IQ losses for both the baseline (2021 LCRR) and final LCRI.

In order to relate the child's estimated average lifetime blood lead level to an estimate of avoided IQ loss, the EPA selected concentration-response functions based on lifetime blood lead levels from two studies. For the high estimate function, the agency used a study by Lanphear et al. (2019). For the low estimate, the EPA selected the independent analysis by Crump et al. (2013), which is based on the same data used in Lanphear et al. (2019). Since the regulatory requirements are expected to reduce chronic exposures to lead, the EPA selected lifetime blood lead levels as the most appropriate measure to

evaluate benefits, with lifetime defined for purposes of this particular analysis as age zero to seven. No threshold has been identified for the neurological effects of lead (Budtz-Jørgensen et al., 2013; Crump et al., 2013; Schwartz et al., 1991; USEPA, 2013). Therefore, the EPA assumes that there is no threshold for this endpoint and quantified avoided IQ loss associated with all blood lead levels.

The estimated value of an IQ point decrement is derived from the EPA's (2019c) reanalysis of Salkever (1995), which estimates that a one-point increase in IQ results in a 1.9 percent increase in lifetime earnings for males and a 3.4 percent increase in lifetime earnings for females. Lifetime earnings are estimated using the average of 10 American Community Survey (ACS) single-year samples (2008 to 2017) and projected cohort life tables from the Social Security Administration. Projected increases in lifetime earnings are then adjusted for the direct costs of additional years of education and forgone earnings while in school. The EPA's (2019c) reanalysis of Salkever (1995) estimates a change of 0.08 years of schooling per change in IQ point for males and a change of 0.09 years of schooling per change in IQ point for females resulting from a reduction in lead exposure.

To estimate the uncertainty underlying the model parameters of the Salkever (1995) reanalysis, the EPA (2019c) used a bootstrap approach to estimate a distribution of model parameters over 10,000 replicates (using random sampling with replacement). For each replicate, the net monetized value of a one-point increase in IQ is subsequently estimated as the gross value of an IQ point based on a lifetime of earnings, less the value of additional education costs and foregone earnings while in school. The EPA uses an IQ point value discounted to age seven. Based on the EPA's reanalysis of Salkever (1995), the mean value of an IQ point in 2022 dollars and discounted to age seven, is \$42,226 using a two

³⁰ The EPA undertook a rigorous process to identify concentration response functions to quantify benefits. This included reviewing all available studies which could be used to develop quantitative relationships between changes in lead exposure and/or changes in blood lead levels and changes in health endpoints. The EPA evaluated the studies for quality and potential biases. The EPA then drafted a separate report for each health endpoint. In addition to the quality review findings, each report provides quantitative estimates, based on the identified functions, of potential changes in the health endpoint and was reviewed by EPA experts and/or externally peer reviewed.

percent discount rate.³¹ See appendix F of the final LCRI Economic Analysis (USEPA, 2024a) for a sensitivity analysis of the value of avoided IQ loss benefits based on Lin et al. (2018).

The EPA used the estimated changes in lifetime (age zero to seven) average blood lead levels that result from changes in LSL/GRR, CCT, point-of-use device, and/or pitcher filter status as inputs to the concentration response functions estimated by Lanphear et al. (2019) and Crump et al. (2013). The resultant high and low estimates of annual avoided IQ decrements per change in LSL/GRR, CCT, point-of-use device, and/or pitcher filter status change are then summed and multiplied by the EPA's reanalyzed Salkever (1995) values per IQ point. These high and low annual benefit values for each year of the period of analysis were then further annualized over the period of analysis using a two percent discount rate. Note that this analysis quantifies the benefits from water quality changes that occur during the 35-year period of analysis, but also accounts for the fact that monetized IQ benefits continue to accrue beyond the 35-year period because they are not experienced by modeled children until they reach adulthood. See Exhibit 14 in section VI.E.10 of this preamble for the estimated benefit from avoided IQ losses from lead and GRR service line replacement, CCT installation and re-optimization, point-of-use device program operation, and the provision of pitcher filters in systems with multiple ALEs as a result of the baseline (2021 LCRR), the final LCRI, and the incremental difference between the two sets of regulatory requirements under both the low and high scenarios. For detailed information on the quantification and monetization of the IQ benefits associated with the final LCRI see chapter 5, sections 5.5.1 and 5.5.2 of the final LCRI Economic Analysis (USEPA, 2024a).

7. Estimated ADHD Benefits

This is the first regulation in which the EPA has estimated benefits of

avoided cases of ADHD associated with reductions in lead exposure; as discussed below the approach for quantifying such benefits will continue to evolve as our understanding of the potential relationship improves. As described in appendix D, the USEPA ISA (2024b) strengthened the conclusions of the 2013 ISA and concluded that there was a causal relationship between lead exposure and inattention, impulsivity, and hyperactivity in children based on recent studies of children with group mean BLLs ≤ 5 $\mu\text{g/dL}$. The 2024 ISA states that "prospective studies of ADHD, including a study of clinical ADHD that controlled for parental education and SES [Socioeconomic status], although not quality of parental caregiving reported positive associations" (USEPA, 2024b, p. IS–30). The causes of ADHD are not fully understood, but research suggests a number of potential causes, including genetics, exposure to environmental toxins, prenatal cigarette smoking or alcohol intake, and brain changes (Tripp et al., 2009; Pliszka et al., 2007). The EPA's 2013 lead ISA stated that in children, "attention was associated with biomarkers of Pb exposure representing several different lifestages and time periods. Prospective studies did not examine a detailed Pb biomarker history, and results do not identify an individual critical lifestage, time period, or duration of Pb exposure associated with attention decrements in children. Associations in prospective studies for attention decrements with tooth Pb level, early childhood average and lifetime average blood Pb levels point to an effect of cumulative Pb exposure." The 2024 ISA addresses the uncertainties presented in the 2013 ISA by stating that "The largest uncertainty addressed by the recent evidence base is the previous lack of prospective studies examining ADHD (Appendix 3.5.2.4–3.5.2.5). The bulk of the recent evidence comprises prospective studies that establish the temporality of the association between Pb [lead] exposure and parent or teacher ratings of ADHD symptoms and clinical ADHD. Across studies, associations were observed with tooth Pb concentrations, childhood BLLs (<6 $\mu\text{g/dL}$), and with maternal or cord BLLs (2–5 $\mu\text{g/dL}$)." The available studies relating blood lead to ADHD use one-time BLLs, while it is possible that cumulative exposure is also important. However, one-time and cumulative measures of BLLs in children are often correlated. Therefore, the EPA has chosen diagnosed cases of ADHD as an endpoint in this benefits analysis,

because literature exists linking ADHD diagnosis to these monetizable outcomes. The larger body of literature on attention, impulsivity, and hyperactivity symptoms in children supports this association. The EPA chose a higher and lower concentration-response function for the estimates of avoided cases to partially address the uncertainty in the most appropriate function to use in estimating avoided cases due to the rule. Additional future research will help to further understand the critical exposure window (thus exposure metric), the mode of action of lead in the development of ADHD and/or related symptoms, and the interplay with genetic factors and exposures to other substances.

The approach used to quantify ADHD here is based on review and analysis that Abt Associates (Abt Associates, 2022a) conducted under contract to the EPA. The benefits analysis uses average blood lead values to determine estimates of avoided diagnosed ADHD cases that correspond to reductions in water lead concentrations resulting from changes in LSL, point-of-use device, pitcher filter, and CCT status. The EPA used the concentration-response functions from two studies to bracket the estimated number of ADHD cases avoided. The EPA's high estimate is based on a study by Froelich et al. (2009), and the low estimate is based on a study by Ji et al. (2018). The EPA utilized the AALM estimated set of potential geometric mean blood lead levels for the 8- to 15-year-old age group (presented in Exhibit 13 in section VI.E.4 of this preamble) as inputs in the modeling of ADHD benefits when using the Froelich et al. (2009) concentration response function to estimate the high scenario. Because Ji et al. (2018) measured early childhood blood lead levels in their study, the EPA used the set of potential geometric mean blood lead levels estimated by the SHEDS-Pb model (shown in Exhibit 12 in section VI.E.3 of this preamble) as the input values for the Ji et al. (2018) concentration response function for the low ADHD benefits scenario.

As described above in section VI.E of this preamble, the SafeWater LCR model, with the strengths and limitations characterized in section VI.C of this preamble and sections 4.2.2 and 5.7 of the final LCRI Economic Analysis (USEPA, 2024a), is able to track the population in water systems that are affected by changes in LSL/GRR service line, point-of-use device, pitcher filter, and CCT status and the resultant changes in water and blood lead concentration for each population group per year of the 35-year period of

³¹ Note that the EPA's use of the term "two percent discount rate" with regard to the calculation of the IQ point high and low values (which represent the present value of the change in lifetime earnings) is shorthand for a declining discount rate that begins with a two percent discount rate for the years 2024–2079, a 1.9 percent discount rate used for the years 2080–2094, and a 1.8 percent discount rate used in years 2095–2102. This declining rate structure was implemented to comply with updates to the OMB Circular A–4 (OMB, 2023) guidance, which indicates that a declining discount rate may be used to capture the uncertainty in the appropriate discount rate over long time horizons like lifetime labor force participation.

analysis. These changes in blood lead levels for each population group are then used to estimate the number of avoided cases of ADHD using the Froelich et al. (2009) function for the high benefits scenario and the Ji et al. (2018) function for the low benefits scenario.

The EPA uses information on ADHD costs estimated from Doshi et al. (2012) in the monetization step. The Doshi et al. (2012) costs include incremental child and adolescent costs for patient and family health care, family productivity losses, educational expenses, and justice system expenses. The cost estimate also includes incremental adult patient and family health care and justice system costs. The adult costs are adjusted downward to account for the fact that not all ADHD cases persist into adulthood. Because there is uncertainty over what percent of ADHD cases persist into adulthood, the EPA uses a high and low estimate of the ADHD cost of illness based on a high and low estimate of ADHD persistence into adulthood. The high estimate assumes that 90 percent of childhood cases of ADHD persist into adulthood, based on Sibley et al. (2022). The low estimate is based on Barbaresi et al. (2013), which reports a 29.3 percent persistence rate. The high and low persistence rates are both used to adjust the Doshi et al. (2012) healthcare and justice system benefits realized at ages 18 and older for an avoided case of ADHD diagnosed in childhood.

In order to apply these avoided cost values in the benefits analysis, the EPA produced two net present value estimates for all avoided ADHD costs incurred through age 64. The first value used the Doshi et al. (2012) costs adjusted by the 29.3 percent adult persistence rate discounted back to age seven for use with Ji et al. (2018) in the estimation of the low benefit scenario (Ji et al. (2018) used blood lead levels measured in young children). The second value used the Doshi et al. (2012) costs adjusted by the 90 percent adult persistence rate discounted back to age 11 for use with the Froelich et al. (2009) function in estimating the high benefits scenario (Froelich et al. (2009) used blood lead levels measured in children 8 to 15 years of age so the EPA selected age 11 as the average value). The net present values of both the low and high avoided costs were computed using a two percent discount rate. The costs were also adjusted to 2022 dollars. The estimated per-case ADHD avoided costs under the high benefits scenario and discounted at a two percent rate to age 11 is \$184,194. The per-case ADHD avoided costs under the low benefits

scenario and discounted at a two percent rate to age seven is \$128,559.

The estimated number of ADHD cases avoided under the low and high benefits scenarios in each year of the 35-year period of analysis was then multiplied by the corresponding net present value to compute the avoided cost per year. This annual stream of benefits was annualized at two percent over the 35-year period of analysis, and further discounted to year one of the period of analysis. See Exhibit 14 in section VI.E.10 of this preamble for the estimated benefit from avoided ADHD cases from lead and GRR service line replacement, CCT installation and re-optimization, point-of-use device program operation, and the provision of pitcher filters in systems with multiple ALEs as a result of the baseline (2021 LCRR), the final LCRI, and the incremental difference between the two sets of regulatory requirements under both the low and high scenarios. For detailed information on the quantification and monetization of the ADHD benefits associated with the final LCRI see chapter 5, sections 5.5.3 and 5.5.4 of the final LCRI Economic Analysis (USEPA, 2024a).

8. Estimated Low Birth Weight Benefits

Blood lead levels from the AALM tool for women of childbearing age (17 to 45 years of age) were used to estimate reduced lower birth weight in infants. The concentration response function characterizing the relationship between changes in female blood lead level and reductions in lower birth weight in infants comes from a study by Zhu et al. (2010). The agency used the Zhu et al. (2010) function for both the low- and high-benefits scenarios because the EPA did not identify a second concentration response function based on a similarly high-quality dataset and analysis; however, several other smaller studies were identified that support the relationship between lead exposures and reduced birth weight (see the final LCRI Economic Analysis (USEPA, 2024a), appendix D, section D.3.6 and Abt Associates (2022b) for additional material on the relationship between maternal blood lead and changes in birth weight). The choice of Zhu et al. (2010) was peer reviewed (Versar, 2015).

The valuation of changes in birth weight is based on a review and analysis that Abt Associates (2022b) conducted, which was finalized after undergoing peer review coordinated by the EPA. Their analysis of U.S. Department of Health and Human Services, Medical Expenditure Panel Survey data found that birth weight in the very low birth weight/low birth weight and normal

ranges influences inpatient hospital stays. In the EPA's LCRI analysis, annual average inpatient expenditures (avoided costs) by initial birth weight (2–10 pounds) are the product of: (1) the predicted probability of having at least one medical event in the period, and (2) the mean conditional expenditures (*i.e.*, conditional on observing at least one medical event in the period). The mean conditional expenditures have been estimated based on projected initial birth weight and projected increases in weight of 0.04, 0.11, and 0.22 pounds.

Generally, as initial birth weight increases, the size of avoided expenditures decreases. Similarly, as expected increase in weight goes up, the avoided costs increase. For example, at a starting birth weight of 3.3 pounds, an increase in birth weight of 0.22 pounds results in a decrease in inpatient hospital expenditures of \$1,652 (2010\$), but the cost saving is less than \$100 at a starting birth weight of 5.5 pounds. In applying the average inpatient avoided cost values to the LCRI case, the EPA adjusted the study's 2010 cost estimates to 2022 dollars. The agency also assumed that baseline birth weights for the affected infants are equal to the distribution of birth weights in the United States. See Exhibit 14 (discounted at two percent), in section VI.E.10 of this preamble, for the estimated benefit from avoided low birth weight impacts from lead and GRR service line replacement, CCT installation and re-optimization, point-of-use device program operation, and the provision of pitcher filters in systems with multiple action level exceedances as a result of the LCRR, the final LCRI, and the incremental difference between the two sets of regulatory requirements under both the low and high scenarios. For detailed information on the quantification and monetization of the low birth weight benefits associated with the final LCRI see chapter 5, sections 5.5.5 and 5.5.6 of the final LCRI Economic Analysis (USEPA, 2024a).

9. Estimated Cardiovascular Disease Premature Mortality Benefits

The EPA's estimation of benefits from avoided cardiovascular disease (CVD) associated premature mortality follows the methodology outlined in Brown et al. (2020) and Abt Associates (2023). The latter document is a revised report incorporating feedback from an independent peer review of an earlier draft of the report (MDB Incorporated, 2019) that articulated the strengths and limitations of our understanding of the relationship between lead exposure and cardiovascular disease premature

mortality, and thus the strengths and limitations of the method presented. These strengths and limitations are discussed in more detail in the final LCRI Economic Analysis, chapter 5 (USEPA, 2024a). In order to bracket the reduction in CVD premature mortality risk avoided, and the calculated monetized benefits, associated with reductions in blood lead levels resulting from lead and GRR service line replacement, CCT installation and re-optimization, point-of-use device program operation, and pitcher filter distribution accruing under the final LCRI, the EPA selected two concentration response functions. The high scenario function is based on the blood lead level <5 µg/dL analysis in Lanphear et al. (2018), and the low scenario function is based on Aoki et al. (2016). While additional concentration response functions for this relationship are available as detailed in Brown et al. (2020) and Abt Associates (2023), these two functions represent, respectively, the highest and lowest changes in cardiovascular disease premature mortality associated with a given change in adult blood lead level available in peer-reviewed studies estimating continuous functions using high quality, nationally representative datasets. The EPA will evaluate new and novel data as they become available, and will consider updating this methodology for estimating cardiovascular premature mortality effects of changes in adult lead exposure as appropriate.

In order to value the reduced CVD premature mortality risk, the EPA uses the same approach it uses in estimating the benefits associated in reductions of particulate matter and ozone in air pollution regulations. Specifically, the EPA draws on the published academic surveys about how much people are willing to pay for small reductions in their risks of dying from adverse health conditions that may be caused by environmental pollution. In the scientific literature, these estimates of willingness to pay for small reductions in mortality risks are often referred to as the “value of a statistical life.” This is because these values are typically reported in units that match the aggregate dollar amount that a large group of people would be willing to pay for a reduction in their individual risks of dying in a year, such that we would expect one fewer death among the group during that year on average. The EPA’s value of a statistical life was adjusted to 2022 dollars, and the resulting value of \$12.98 million was applied to each avoided case, or reduction in population

risk resulting in one fewer CVD death.³² Avoided cases of CVD premature mortality are estimated for each annual time step, over the 35-year period of analysis in the SafeWater LCR model, for all adults ages 40 to 79, using the yearly blood lead levels modeled by the AALM, and shown in Exhibit 13, for both the low and high scenarios (as defined by the concentration response functions and the estimated range of PWSs that will exceed the action level under the baseline (2021 LCRR) and final LCRI).

Under both scenarios, the SafeWater LCR model is able to track the population in water systems that are affected by changes in LSL/GRR service line, point-of-use device, pitcher filter, and CCT status and the resultant changes in water and blood lead concentration for each population group per year of the 35-year period of analysis. These changes in blood lead levels for each population group are then used to estimate the number of avoided cases of CVD premature mortality using the <5 µg/dL Lanphear et al. (2018) function in the high scenario and the Aoki et al. (2016) function for the low scenario, assuming baseline cases of CVD premature mortality due to lead follow the same distribution of all cardiovascular mortality cases in the U.S. population.

See Exhibit 14 (discounted at two percent), in section VLE.10 of this preamble, for the estimated benefit from avoided CVD premature mortality risk from lead and GRR service line replacement, CCT installation and re-optimization, point-of-use device program operation, and the provision of pitcher filters in systems with multiple ALEs as a result of the baseline (2021 LCRR), the final LCRI, and the incremental difference between the two sets of regulatory requirements under both the low and high scenarios. For detailed information on the quantification and monetization of the CVD premature mortality benefits associated with the final LCRI see chapter 5, sections 5.5.7 and 5.5.8 of the final LCRI Economic Analysis (USEPA, 2024a).

³² The EPA uses a value of a statistical life (VSL) of \$12.98 million, which is estimated using the EPA’s (2014) recommended VSL of \$4.8 million in 1990 dollars and EPA’s (2014) recommended method for adjusting the VSL for income growth and inflation. The \$4.8 value in 1990 dollars is updated to the \$12.98 million in 2022 dollars by adjusting for inflation using the U.S. Bureau of Labor Statistics’ (2019) Consumer Price Index and adjusting it for income growth using real gross domestic product (GDP) per capita and an income elasticity of 0.4.

10. Total Monetized Benefits

Exhibit 13 shows the estimated, monetized national annualized total benefits, under the low and high scenarios,³³ associated with the baseline (2021 LCRR), the final LCRI, and the increment of change between the two, discounted at two percent. The benefits from the final LCRI result from the activities performed by water systems which are expected to reduce risk to the public from exposure to lead in drinking water at the tap. The EPA quantifies and monetizes some of this health risk reduction from lead exposure by estimating the decrease in lead exposures accruing to both children and adults from the installation and re-optimization of CCT, service line replacement, the implementation of point-of-use filter devices, and the provision of pitcher filters in systems with multiple ALEs.³⁴ The total and incremental benefits reported are subdivided into estimated health endpoint benefits stemming from avoided reductions in IQ and cases of ADHD in children, lower birth weights in children of women of childbearing age, and cases of CVD premature mortality in adults. The estimated monetized benefits associated with avoided premature mortality are much larger than those associated with neurodevelopmental impacts in children. Still the public health impact of this regulation is important for children given the life-long impact of the early life health effects, the potential of health impacts from cumulative lead exposures, and the fact that there are several other avoided health impacts that were not quantified. See appendix D of the final LCRI Economic Analysis (USEPA, 2024a) for additional information on the non-quantified health impacts of lead exposure.

The total annualized monetized benefits range from \$13.5 to \$25.1 billion at a two percent discount rate in 2022 dollars. The Exhibit 14 also details the proportion of the annualized

³³ The low and high benefits scenarios are defined by: differences in the estimated number of systems experiencing lead ALEs based on calculated lead tap sampling 90th percentile values; the concentration-response functions that characterize how reductions in blood lead levels (caused by changes in lead exposure) translate into estimates of avoided IQ reductions, cases of ADHD, and CVD premature mortality; two alternative high and low valuations for an IQ point; and high and low estimates of the ADHD cost of illness.

³⁴ Note that because of the lack of granularity in the assembled lead concentration profile data, with regard to CCT status when samples were collected (see section VLE.1 of this preamble), the benefits of small improvements in CCT, like those resulting from the Distribution System and Site Assessment rule requirements, cannot be quantified in the model.

benefits attributable to each health endpoint category of monetizable benefit. For additional information on estimated health endpoint benefits subdivided by final LCRI regulatory activity see chapter 5 of the final LCRI Economic Analysis (USEPA, 2024a). See section VI.F.2 of this preamble for information on non-quantifiable

benefits. In addition to the uncertainties in the dose response functions and the quantification of the economic impacts noted above and in chapter 5 of the final LCRI Economic Analysis (USEPA, 2024a), the estimated benefits are contingent on the assumptions in the baseline—principally, whether or not the provisions of the prior 2021 LCRR

to remove LSLs have been successfully met. Therefore, the EPA provides in appendix C of the final LCRI Economic Analysis for the final rule (USEPA, 2024a) estimated national costs and benefits of the LCRI utilizing the regulatory requirements of the pre-2021 LCR as a baseline.

EXHIBIT 14—ESTIMATED NATIONAL MONETIZED ANNUAL BENEFITS—2 PERCENT DISCOUNT RATE
[millions of 2022 USD]

	Low estimate			High estimate		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Annual IQ Benefits	\$1,208.5	\$6,831.3	\$5,622.8	\$3,279.0	\$10,963.0	\$7,684.0
Annual Low-Birth Weight Benefits	1.0	5.4	4.4	1.8	5.7	3.9
Annual ADHD Benefits	33.6	196.3	162.7	179.9	599.5	419.6
Annual Adult CVD Premature Mortality Benefits	1,750.7	9,454.3	7,703.6	8,174.9	25,210.0	17,035.1
Total Annual Benefits	2,993.8	16,487.3	13,493.5	11,635.6	36,778.2	25,142.6

Acronyms: LCRI = Lead and Copper Rule Improvements; IQ = intelligence quotient; ADHD = attention-deficit/hyperactivity disorder; CVD = cardiovascular disease.

The EPA is committed to understanding and addressing climate change impacts in carrying out the agency's mission of protecting human health and the environment. While the EPA is not required by SDWA 1412(b)(3)(C)(i)(III) to consider climate disbenefits under the HRRCA, the agency has estimated the potential climate disbenefits caused by increased greenhouse gas (GHG) emissions associated with the operation of CCT at drinking water treatment facilities and the use of construction and transport vehicles in the replacement of lead and GRR service lines. As explained in section VI.A of this preamble, this disbenefits analysis is presented solely for the purpose of complying with Executive Order 12866. The EPA analysis found that the climate disbenefits of the final LCRI from CO₂, CH₄, and N₂O emissions associated with increased electricity use in the operation of CCT at drinking water treatment facilities and the direct combustion of fossil fuels from the use

of construction and transport vehicles in the replacement of lead and GRR service lines resulted in monetized annualized values that range from \$2.1 million under the low scenario to \$2.0 million under the high scenario discounted at two percent, in 2022 dollars. These disbenefit values constitute less than 0.02- 0.01 percent of the monetized benefits of the rule, at a two percent discount rate, under the low and high scenarios, respectively. Note that the EPA did not quantify the potential emissions changes associated with the production and delivery of CCT chemicals, the construction required for the installation of CCT technology, and the production and transport of copper and plastic replacement piping and plumbing components. The EPA recognizes that many activities directly and indirectly associated with drinking water treatment produce GHG emissions; however, the agency determined that it could not accurately quantify all the potential factors that could increase and decrease greenhouse

gas emissions that are not solely attributable to the onsite CCT operations and service line replacement field operations directly required by the rule. The EPA also notes that this analysis uses the 2021 LCRR as a baseline in order to calculate the incremental GHG emissions.

F. Cost-Benefit Comparison

This section summarizes and describes the numeric relationship between the monetized incremental costs and benefits of the final LCRI regulatory requirements. The section also discusses both the non-monetized costs and benefits of the rulemaking. Exhibit 15 compares the annualized monetized incremental costs and benefits of the final LCRI for the low and high scenarios. The net annualized incremental monetized benefits, under the low and high scenarios, range from \$12.0 to \$23.2 billion at a two percent discount rate in 2022 dollars.

EXHIBIT 15—COMPARISON OF ESTIMATED MONETIZED NATIONAL ANNUALIZED INCREMENTAL COSTS TO BENEFITS OF THE LCRI—2 PERCENT DISCOUNT RATE
[millions 2022 USD]

PWS annual costs	Low scenario	High scenario
Annualized Incremental Costs	\$1,468.8	\$1,953.8
Annualized Incremental Benefits	13,493.5	25,142.6
<i>Annual Net Benefits</i>	12,024.7	23,188.8

1. Non-Monetized and Non-Quantified Costs

The final LCRI is expected to result in additional phosphate being added to drinking water to reduce the amount of lead leaching into the water in the distribution system. Although the downstream ecological impacts are not “likely to occur solely as a result of compliance” with the final LCRI, and therefore are not costs considered as part of the HRRCA under SDWA, section 1412(b)(3)(C)(i)(III), the EPA for informational purposes has quantified incremental phosphorus loadings and outlined potential downstream ecological impacts. The EPA’s cost model estimated that, nationwide, the final LCRI may result in post-WWTP total incremental phosphorus loads to receiving waterbodies increasing over the period of analysis, under the low and high scenarios, by a range of 225,000 to 272,000 pounds fifteen years after promulgation, and by a range of 216,000 to 260,000 pounds at year 35. At the national level, under the high scenario, this additional phosphorous loading to waterbodies is relatively small, less than 0.03 percent of the total phosphorous load deposited annually from all other anthropogenic sources. However, national average receiving waterbody phosphorus load impacts may obscure significant localized ecological impacts. Impacts, such as eutrophication, may occur in water bodies without restrictions on phosphate deposits, or in locations with existing elevated phosphate levels. See chapter 4, section 4.5.2 of the final LCRI Economic Analysis (USEPA, 2024a) for additional information.

The EPA also notes that there exist unquantified costs associated with service line replacement. Costs associated with the disruption of normal traffic patterns in communities implementing service line replacement programs are not accounted for in the monetized cost estimates of the rule. This impact to traffic could be significant in localized areas where lead, GRR, and unknown service lines are co-located with high traffic roads. During service line replacement, worksite activities and characteristics have the potential to increase car and pedestrian accidents. Also given the necessity to shut off water service to buildings and residences during service line replacement, the probability of fire damage and negative health/sanitation impacts may increase. Given that service line replacement takes a relatively small amount of time (four hours on average), the low probability of accidents and fire, the advance notice

provided to building occupants, and alternative local sources of water available in emergencies (e.g., fire hydrants) it is unlikely that these unquantified costs are nationally significant.

2. Non-Quantified and Non-Monetized Benefits

In addition to the benefits monetized in the final LCRI analysis for reductions in lead exposure, there are several other benefits that are not quantified. The risk of adverse health effects due to lead exposure that are expected to decrease as a result of the final LCRI are summarized in appendix D of the final LCRI Economic Analysis (USEPA, 2024a) and are expected to affect both children and adults. The EPA focused its non-quantified impacts assessment on the endpoints identified using two comprehensive U.S. Government documents summarizing the literature on lead exposure health impacts. These documents are the EPA’s Integrated Science Assessment for Lead (ISA) (USEPA, 2024b); and the U.S. Department of Human and Health Services’ National Toxicology Program (NTP) Monograph on Health Effects of Low-Level Lead (NTP, 2012). Both sources present comprehensive reviews of the literature as of the time of publication on the risk of adverse health effects associated with lead exposure. The EPA summarized those endpoints to which either the EPA ISA or the NTP Lead Monograph assigned one of the top two tiers of confidence in the relationship between lead exposure and the risk of adverse health effects. These endpoints include cardiovascular morbidity effects, renal effects, reproductive and developmental effects (apart from ADHD and low birth weight initial hospitalization), immunological effects, neurological effects (apart from children’s IQ), and cancer.

There are a number of final LCRI requirements that reduce lead exposure to both children and adults that the EPA could not quantify. The final rule will require additional lead public education requirements that target consumers directly, schools and child care facilities, health agencies, and people living in homes with lead and GRR service lines. Increased education will lead to additional averting behavior on the part of the exposed public, resulting in reductions in the negative impacts of lead. The rule will also require the development of service line inventories that include additional information on lead connectors and make the location of the lead content service lines publicly accessible. This will give potentially exposed consumers more information

and will provide potential home buyers with this information as well. Homeowners may request LSL/GRR service line removal earlier than a water system might otherwise plan on replacing the line. The benefits of moving these lead and GRR service line removals forward in time are not quantified in the analysis of the final LCRI. Because of the lack of granularity in the lead tap water concentration data available to the EPA for the regulatory analysis, the benefits of small improvements in CCT to individuals residing in homes with lead content service lines, like those modeled under the Distribution System and Site Assessment requirements, are not quantified.

The EPA also did not quantify the CCT benefits of reduced lead exposure from lead-containing plumbing components (not including from lead and/or GRR service lines) to individuals who reside in both: (1) homes that have lead and/or GRR service lines but also have other lead-containing plumbing components, and (2) those that do not have lead and/or GRR service lines but do have lead-containing plumbing components.³⁵ The EPA has determined that the final LCRI requirements may result in reduced lead exposure to the occupants of both these types of buildings as a result of improved monitoring and additional actions to optimize CCT. In the analysis of the LCRI, the number of both homes served by lead and/or GRR service lines and homes not served by lead and/or GRR service lines potentially affected by water systems increasing their corrosion control during the 35-year period of analysis is 5.2 million in the low scenario and 9.1 million in the high scenario. Some of these households may have leaded plumbing materials apart from lead or GRR service lines, including lead connectors, leaded brass fixtures, and lead solder. These households could potentially see reductions in tap water lead concentrations.

Some researchers have pointed to the potential for CCT cobenefits associated with reduced corrosion, or material damage, to plumbing pipes, fittings, and fixture, and appliances that use water

³⁵ Although the EPA estimated an average lead concentration for the first 10 liters of drinking water to inform the water lead concentration estimates used to quantify benefits the EPA could not calculate the CCT benefits associated with lead containing plumbing components (apart from lead and/or GRR service lines), because the EPA used a pooled estimate for all CCT conditions in residences with no lead and/or GRR service lines in place (See the Final LCRI Economic Analysis (USEPA(2024a) chapter 5, section 5.2.3 for additional information).

owned by both water systems and homeowners (Levin, 2023). The corrosion inhibitors used by systems that are required to install or re-optimize OCCT as a result of the final LCRI are expected to result in additional benefits associated with the increased useful life of the plumbing components and appliances (e.g., water heaters), reduced maintenance costs, reduced treated water loss from the distribution system due to leaks, and reduced potential liability and damages from broken pipes in buildings that receive treated water from the system. The replacement of GRR service lines may also lead to reduced treated water loss from the distribution system due to leaks (AwwaRF and DVGW-Technologiezentrum Wasser, 1996). The EPA did not have sufficient information to estimate these impacts nationally for the final rule analysis.

Additionally, the risk of adverse health effects associated with copper that are expected to be reduced by the final LCRI are summarized in appendix E of the final LCRI Economic Analysis (USEPA, 2024a). These risks include acute gastrointestinal symptoms, which are the most common adverse effect observed among adults and children. In sensitive groups, there may be reductions in chronic hepatic effects, particularly for those with rare conditions such as Wilson's disease and children pre-disposed to genetic cirrhosis syndromes. These diseases disrupt copper homeostasis, leading to excessive accumulation that can be worsened by excessive copper ingestion (National Research Council, 2000).

3. Reaffirm Cost-Benefit Determination

When proposing an NPDWR, SDWA section 1412(b)(4)(C) requires that the Administrator shall publish a determination as to whether the benefits of the proposed rule justify, or do not justify, the costs based on the analysis conducted under SDWA section 1412(b)(3)(C). Note the SDWA section 1412(b)(3)(C) analysis the HRRCA, the components of which are described in introduction to section VI. For the proposed LCRI, the Administrator determined that the quantified and non-quantifiable benefits of the proposed LCRI NPDWR justified the quantifiable and non-quantifiable costs.

The EPA fully weighed the costs and benefits of the final rule HRRCA analysis, as discussed in the final LCRI Economic Analysis of the action, the agency considered the monetized values (discounted at two percent in addition to those discounted at three and seven

percent,³⁶) the potential impacts of the non-quantifiable uncertainties, the non-quantifiable costs and benefits, and public comments received by the agency related to the quantitative and qualitative assessment of the costs and benefits. For the final rule, the EPA is reaffirming the Administrator's determination made at proposal that the quantified and non-quantifiable benefits of the rule justify its quantified and non-quantifiable costs.

As indicated in section VI.F of this preamble, the monetized costs and benefits result in net annualized incremental benefits that range from \$12.0 to \$23.2 billion under the low and high scenarios at a two percent discount rate in 2022 dollars. The EPA estimated the monetized net benefits of the final LCRI under low and high bracketing scenarios in order to capture the variability in system characteristics and the significant uncertainty associated with a set of lead specific data inputs which drive both the estimated costs and benefits in the SafeWater LCR model. With regard to costs, the uncertain variables which define the measurable difference between the low and high scenarios, are the number of PWSs that will exceed the lead action level under the revised tap sampling requirements, the cost of lead and GRR service line replacement, and the cost of CCT. The difference between low and high benefits scenarios are driven by the number of PWSs that will exceed the action level under the revised tap sampling requirements; the concentration response functions that estimate the impact lead concentrations have on avoided reductions in IQ, cases of ADHD in children, and cases of cardiovascular disease premature mortality in adults; and high and low estimates of the ADHD cost of illness.

There are also a number of potentially significant non-quantifiable and non-monetized costs and benefits that weight into the reaffirmation of the determination of benefits justifying costs. On the cost side of the equation the EPA considered the potential temporary costs associated with service line replacement including traffic congestion, increased probability of vehicular and pedestrian accidents, fire

damage, and negative sanitation impacts. With regard to benefits, the final LCRI will reduce the non-quantifiable harmful impacts of lead exposure which include cardiovascular morbidity effects, renal effects, reproductive and developmental effects (apart from ADHD and low birth weight initial hospitalization), immunological effects, neurological effects (apart from children's IQ), and cancer. The EPA analysis did not quantify the impacts from changes in consumer averting behavior, such as flushing lines before drinking water is drawn, filter use, or customer-initiated service line replacement due to the final LCRI's additional lead public education requirements that target all potential affected consumers directly, schools and child care facilities, health agencies, and people living in homes with lead and GRR service lines; and the development of service line inventories that include lead connector information with the requirement for public access to the information. The analysis was also unable to quantify the potentially significant benefits of reducing lead concentrations in drinking water from: all households with leaded plumbing inside the home in water systems where the final LCRI requires installation or re-optimization of OCCT; and all households in systems implementing small improvements in OCCT because of the Distribution System and Site Assessment final rule requirements. Corrosion inhibitors used by systems that are required to install or re-optimize OCCT as a result of the final LCRI would experience an additional benefit in terms of the increased useful life of the plumbing components and appliances (e.g., water heaters), reduced maintenance costs, reduced treated water loss from the distribution system due to leaks, and reduced potential liability and damages from broken pipes in buildings that receive treated water from the system. The final LCRI is also expected to reduce the potential for negative copper exposure health impacts. Taken as a group the quantified and non-quantifiable benefits outweigh the quantified and non-quantifiable costs leading to the determination that the final LCRI's benefits justify the costs.

Note that although not included in the SDWA HRRCA analysis the EPA, as part of its Executive Order 12866 assessment of the final LCRI, has also considered: (1) the monetized cost and non-quantifiable negative environmental impacts the incremental phosphorus loadings to WWTPs and receiving waterbodies cause by the increased use

³⁶ The EPA used the two percent discount rate as prescribed by the Office of Management and Budget's updated Circular A-4 (OMB Circular A-4, 2023). Because the EPA provided cost estimates discounted at three and seven percent for the proposed LCRI based on OMB guidance which was in effect at the time of the proposed rule analysis (OMB Circular A-4, 2003), the agency has also calculated the cost impacts at both the three and seven percent discount rates. See the final LCRI Economic Analysis (USEPA, 2024a), appendix F for results.

of orthophosphate as a corrosion inhibitor; and (2) the climate disbenefits resulting from the greenhouse gas emissions associated with increased energy consumption as a result of the regulatory requirements of the final LCRI.³⁷ In the case of additional phosphorus loadings, the EPA estimates that incremental national annualized WWTP costs associated with the final LCRI will range from \$120,000 to \$300,000 at a two percent discount rate in 2022 dollars.³⁸ In addition to the monetized impacts increased phosphorus reaching receiving waterbodies raises the potential for non-quantified costs associated with eutrophication, HABs, and other significant localized ecological impacts. With regard to the disbenefits resulting from greenhouse gas emissions, the EPA analysis found that the climate disbenefits of the final LCRI from CO₂, CH₄, and N₂O emissions associated with increased electricity use in the operation of CCT at drinking water treatment facilities and the direct combustion of fossil fuels from the use of construction and transport vehicles in the replacement of LSLs and GRR

service lines resulted in monetized annualized values that range from \$2.1 million under the low scenario to \$2.0 million under the high scenario discounted at two percent, in 2022 dollars. These disbenefit values constitute less than 0.02–0.01 percent of the monetized benefits of the rule, at a two percent discount rate, under the low and high scenarios, respectively. For additional information on the impacts of the additional phosphorus loadings at WWTPs and receiving waterbodies, and the climate disbenefits of incremental greenhouse gas emissions see the final LCRI Economic Analysis (USEPA, 2024a), chapter 4, section 4.5, and chapter 5, section 5.9, respectively.

G. Alternative Regulatory Options Considered

The Office of Management and Budget recommends that “it is generally informative to explore modifications of some or all of a regulation’s key individual attributes or provisions” (OMB, 2023). Pursuant to this guidance, the EPA considered alternative regulatory options when developing the

final LCRI related to: the required lead action level; the service line replacement rate; the definition of lead content to be replaced as part of the service line replacement program; the potential for deferred deadlines under the service line replacement program; changes to the lead tap sampling schedule; the filter requirements under a multiple lead ALE program; and the size threshold of the small system compliance flexibility. Due to the large number of alternative options considered, this analysis uses the high scenario assumptions to illustrate how their monetized benefits and costs compare to those of the final LCRI. Also note that EPA has feasibility concerns with the implementation of some of the alternative options analyzed which raises the level of uncertainty associated with the estimated cost and benefit values for those alternatives. The agency has noted in the following subsections the alternative options impacted by feasibility concerns. Exhibit 16 provides a detailed summary of the final LCRI requirements and the alternative options considered.

EXHIBIT 16—SUMMARY OF ALTERNATIVE OPTIONS CONSIDERED FOR THE FINAL LCRI

Area	Alternative option considered	Final LCRI
Lead Action Level	1. Lead Action Level of ≤0.015 mg/L 2. Lead Action Level of ≤0.005 mg/L	Lead AL of ≤0.010 mg/L (proposed rule).
Service Line Replacement Rate.	Service lines are replaced at an annual rate of 7%	Service lines are replaced at an annual rate of 10% (proposed rule).
Definition of Lead Content to be Replaced.	Systems must replace lead service lines and galvanized lines previously downstream of lead lines or unknown lead content lines, and lead connectors and galvanized lines previously downstream of lead connectors.	Systems must replace lead service lines and galvanized lines previously downstream of lead lines or unknown lead content lines. Lead connectors are replaced when encountered (proposed rule).
SLR Deferred Deadline	1. Systems may be given a deferred deadline for finishing all LSL and GRR replacements resulting in a maximum rate which is the lower of 10,000 lines per year or 39 replacements per 1,000 connections per year (proposed rule—with change to connections per year from households per year). 2. Systems may be given a deferred deadline for finishing all LSL and GRR replacements resulting in a maximum rate which is the lower of 8,000 lines per year or 39 replacements per 1,000 connections per year.	Systems may be given a deferred deadline for finishing all lead and GRR service line replacements resulting in a maximum rate of 39 replacements per 1,000 connections.

³⁷ Because these costs are not incurred by the public water system, these costs are not “likely to occur solely as a result of compliance” with the final LCRI, and, therefore, are not costs considered

as part of the HRRCA under SDWA, section 1412(b)(3)(C)(i)(III).

³⁸ The EPA included the monetized estimated cost of WWTP phosphorus removal in its estimated total cost values in the final LCRI economic analysis

in order to conservatively demonstrate the potential impact to PWSs given the fact that many systems operate both the drinking water and wastewater systems, however these costs are not part of the HRRCA under SDWA.

EXHIBIT 16—SUMMARY OF ALTERNATIVE OPTIONS CONSIDERED FOR THE FINAL LCRI—Continued

Area	Alternative option considered	Final LCRI
Lead Tap Sampling	All systems return to standard 6-month monitoring with an ALE. Systems with lead, GRR, and/or unknown service lines at the compliance date conduct standard 6-month monitoring at the compliance date and non-lead service line systems remain on LCR monitoring schedule until new LCRI protocol sampling may change P90. When (and if) a non-lead system finds a lead or GRR service line they return to 6-month monitoring. (proposed rule). Systems that sampled using the new protocol and are below the LCRI action level prior to the compliance date may qualify to retain their current schedule.	All systems return to standard 6-month monitoring with an ALE. Systems with lead and GRR service lines return to standard 6-month monitoring at compliance date. Unknown and non-lead service line systems remain on LCR monitoring schedule until new LCRI protocol sampling may change P90. When (and if) a non-lead/all unknown system finds a lead or GRR service line they return to 6-month monitoring. Systems with lead and GRR service lines that sampled using the new protocol and are below the LCRI action level prior to the compliance date may qualify to retain their current schedule.
Multiple ALE Filter Programs	Systems with at least 2 lead ALEs in a rolling 5-year period must prepare and submit a filter plan to State. Systems with at least 3 lead ALEs in a rolling 5-year period must: 1. Make filters available to all customers with lead, GRR, and unknown lead content service lines. 2. Deliver filters directly to all customers.	Systems with at least 2 lead ALEs in a rolling 5-year period must prepare and submit a filter plan to State. Systems with at least 3 lead ALEs in a rolling 5-year period must make filters available to all customers (proposed rule—with filter plan being required after 2 ALEs instead of 3 ALEs for the final rule).
Small System Flexibility	CWSs that serve 10,000 or fewer persons, and all NTNCWSs, are provided compliance flexibility when they exceed the action level.	CWSs that serve 3,300 or fewer persons, and all NTNCWSs, are provided compliance flexibility when they exceed the action level (proposed rule).

Acronyms: LCRI = Lead and Copper Rule Improvements; GRR = galvanized requiring replacement; ALE = action level exceedance; CWS = community water system; NTNCWS = non-transient, non-community water system; LSL = lead service line; GRR = galvanized requiring replacement service line; P90 = calculated 90th percentile lead tap sample.

Note: (Proposed Rule) indicates if a final rule component or alternative option were originally considered as part of the proposed LCRI.

1. Alternative Lead Action Levels

Exhibit 17 and Exhibit 18 compare the quantified costs and benefits of the final

LCRI to the quantified costs and benefits at an action level of 0.015 mg/L holding all other final LCRI rule requirements

constant. Results in these tables are provided for the high scenario at a two percent discount rate.³⁹

EXHIBIT 17—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE LEAD ACTION LEVEL OPTION (AL >0.015 mg/L)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE
[Millions of 2022 USD]

PWS annual costs	Final rule			Alternative option (AL ≤0.015 mg/L)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Sampling	\$143.6	\$176.2	\$32.6	\$143.6	\$168.1	\$24.5
PWS SLR	124.5	1,763.9	1,639.4	124.5	1,765.2	1,640.7
Corrosion Control Technology	647.8	692.9	45.1	647.8	621.1	– 26.7
Point-of Use Installation and Maintenance	5.9	9.6	3.7	5.9	5.6	– 0.3
Public Education and Outreach	72.1	302.2	230.1	72.1	274.7	202.6
Rule Implementation and Administration	0.2	3.4	3.2	0.2	3.4	3.2
<i>Total Annual PWS Costs</i>	<i>994.1</i>	<i>2,948.2</i>	<i>1,954.1</i>	<i>994.1</i>	<i>2,838.1</i>	<i>1,844.0</i>
Household SLR Costs	26.4	0.0	– 26.4	26.4	0.0	– 26.4
State Rule Implementation and Administration	41.8	67.6	25.8	41.8	66.2	24.4
Wastewater Treatment Plant Costs ..	4.8	5.1	0.3	4.8	3.3	– 1.5

³⁹ Note the following for all cost results in this section VI.G Alternative Regulatory Options Considered: The EPA in the 2021 LCRR economic analysis (USEPA, 2020b) assumed that the cost of customer-side service line replacements made under the goal-based replacement requirement would be paid for by households. The agency also assumed that system-side service line replacements under the goal-based replacement requirement and full service line replacements (both customer-side and systems-side) would be paid by the PWS under the three percent mandatory replacement requirement. The EPA made these modeling assumptions based on the different levels of

regulatory responsibility systems faced operating under a goal-based replacement requirement versus a mandatory replacement requirement. While systems would not be subject to a potential violation for not meeting the replacement target under the goal-based replacement requirement, the possibility of a violation under the three percent mandatory replacement requirement could motivate more systems to meet the replacement target even if they decided that it was necessary to adopt customer incentive programs that would shift the cost of replacing customer-side service lines from customers to the system. To be consistent with these 2021 LCRR modeling assumptions, under the

final LCRI, the EPA assumed that mandatory replacement costs would fall only on systems. Therefore, the negative incremental values reported for the “Household SLR Costs” category do not represent a net cost savings to households. They represent an assumed shift of the estimated service line replacement costs from households to systems. The EPA has insufficient information to estimate the actual service line replacement cost sharing relationship between customers and systems at the national level of analysis.

EXHIBIT 17—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE LEAD ACTION LEVEL OPTION (AL >0.015 mg/L)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE—Continued

[Millions of 2022 USD]

PWS annual costs	Final rule			Alternative option (AL ≤0.015 mg/L)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Total Annual Rule Costs	1,067.1	3,020.9	1,953.8	1,067.1	2,907.6	1,840.5

Acronyms: AL = action level; LCRI = Lead and Copper Rule Improvements; PWS = public water system; SLR = lead service line replacement; USD = United States dollar.

Notes:

(1) Previous Baseline costs are projected over the 35-year period of analysis and are affected by the EPA's assumptions on three uncertain variables which vary between the low and high cost scenarios.

(2) Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

EXHIBIT 18—ESTIMATED NATIONAL ANNUAL BENEFIT COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE LEAD ACTION LEVEL OPTION (AL >0.015 mg/L)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

	Final rule			Alternative option (AL ≤0.015 mg/L)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Annual IQ Benefits	\$3,279.0	\$10,963.0	\$7,684.0	\$3,279.0	\$10,586.0	\$7,307.0
Annual Low-Birth Weight Benefits	1.8	5.7	3.9	1.8	5.5	3.7
Annual ADHD Benefits	179.9	599.5	419.6	179.9	580.4	400.5
Annual Adult CVD Premature Mortality Benefits	8,174.9	25,210.0	17,035.1	8,174.9	24,203.4	16,028.5
Total Annual Benefits	11,635.6	36,778.2	25,142.6	11,635.6	35,375.3	23,739.7

Acronyms: ADHD = attention-deficit/hyperactivity disorder; AL = action level; CVD = cardiovascular disease; IQ = intelligence quotient; LCRI = Lead and Copper Rule Improvements; USD = United States dollar.

Note: Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

Exhibit 19 and Exhibit 20 compare the quantified costs and benefits of the final LCRI to the quantified costs and benefits at an action level of 0.005 mg/L holding all other final LCRI rule requirements constant. Results in these tables are provided for the high scenario at a two percent discount rate. Note that the estimated results for the alternative option, which assumes water systems can achieve lead levels at or below a

lead action level of ≤0.005 mg/L, must be viewed as having a higher degree of uncertainty. Although the EPA has adjusted action level exceedance data that allows for the calculation of the cost and benefits of this alternative, the agency has concerns about the feasibility of implementing this option. See section IV.F.4 of this preamble for a detailed discussion of the lead action level and its function to support the

feasibility of the CCT treatment technique. Given the concerns over feasibility and therefore the uncertainty associated with the estimated costs and benefits of this alternative option, the EPA is discounting the fact that estimated net benefits for this alternative option are greater than the estimated net benefits for the final LCRI. The final LCRI maintains the lead action level at ≤0.010 mg/L.

EXHIBIT 19—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE LEAD ACTION LEVEL OPTION (AL >0.005 mg/L)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

PWS annual costs	Final rule			Alternative option (AL ≤0.005 mg/L)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Sampling	\$143.6	\$176.2	\$32.6	\$143.6	\$198.7	\$55.1
PWS SLR	124.5	1,763.9	1,639.4	124.5	1,762.4	1,637.9
Corrosion Control Technology	647.8	692.9	45.1	647.8	819.4	171.6
Point-of Use Installation and Maintenance	5.9	9.6	3.7	5.9	15.7	9.8
Public Education and Outreach	72.1	302.2	230.1	72.1	374.2	302.1
Rule Implementation and Administration	0.2	3.4	3.2	0.2	3.6	3.4
Total Annual PWS Costs	994.1	2,948.2	1,954.1	994.1	3,174.0	2,179.9

EXHIBIT 19—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE LEAD ACTION LEVEL OPTION (AL >0.005 mg/L)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE—Continued
[Millions of 2022 USD]

PWS annual costs	Final rule			Alternative option (AL ≤0.005 mg/L)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Household SLR Costs	26.4	0.0	– 26.4	26.4	0.0	– 26.4
State Rule Implementation and Administration	41.8	67.6	25.8	41.8	71.7	29.9
Wastewater Treatment Plant Costs	4.8	5.1	0.3	4.8	8.2	3.4
Total Annual Rule Costs	1,067.1	3,020.9	1,953.8	1,067.1	3,253.9	2,186.8

Acronyms: AL = action level; LCRI = Lead and Copper Rule Improvements; PWS = public water system; SLR = lead service line replacement; USD = United States dollar.

Notes:

(1) Previous Baseline costs are projected over the 35-year period of analysis and are affected by EPA's assumptions on three uncertain variables which vary between the low and high cost scenarios.

(2) Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

EXHIBIT 20—ESTIMATED NATIONAL ANNUAL BENEFIT COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE LEAD ACTION LEVEL OPTION (AL >0.005 mg/L)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE
[Millions of 2022 USD]

	Final rule			Alternative option (AL ≤0.005 mg/L)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Annual IQ Benefits	\$3,279.0	\$10,963.0	\$7,684.0	\$3,279.0	\$11,651.2	\$8,372.2
Annual Low-Birth Weight Benefits	1.8	5.7	3.9	1.8	6.0	4.2
Annual ADHD Benefits	179.9	599.5	419.6	179.9	634.9	455.0
Annual Adult CVD Premature Mortality Benefits	8,174.9	25,210.0	17,035.1	8,174.9	27,044.4	18,869.5
Total Annual Benefits	11,635.6	36,778.2	25,142.6	11,635.6	39,336.5	27,700.9

Acronyms: ADHD = attention-deficit/hyperactivity disorder; AL = action level; CVD = cardiovascular disease; IQ = intelligence quotient; LCRI = Lead and Copper Rule Improvements; SLR = lead service line replacement; USD = United States dollar.

Note: Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

2. Alternative Service Line Replacement Rate LCRI to the quantified costs and benefits of the rule with an alternative service line replacement rate of seven percent, holding all other rule requirements constant. Results are provided for the high scenario at a two percent discount rate.

Exhibit 21 and Exhibit 22 compare the quantified costs and benefits of the final

EXHIBIT 21—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE SERVICE LINE REPLACEMENT OPTION (SLR RATE = 7%)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE
[Millions of 2022 USD]

PWS Annual Costs	Final rule			Alternative option (SLR Rate = 7%)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Sampling	\$143.6	\$176.2	\$32.6	\$143.6	\$176.1	\$32.5
PWS SLR	124.5	1,763.9	1,639.4	124.5	1,672.2	1,547.7
Corrosion Control Technology	647.8	692.9	45.1	647.8	696.0	48.2
Point-of Use Installation and Maintenance	5.9	9.6	3.7	5.9	10.2	4.3
Public Education and Outreach	72.1	302.2	230.1	72.1	341.0	268.9
Rule Implementation and Administration	0.2	3.4	3.2	0.2	3.4	3.2
Total Annual PWS Costs	994.1	2,948.2	1,954.1	994.1	2,898.9	1,904.8
Household SLR Costs	26.4	0.0	– 26.4	26.4	0.0	– 26.4
State Rule Implementation and Administration	41.8	67.6	25.8	41.8	67.7	25.9

EXHIBIT 21—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE SERVICE LINE REPLACEMENT OPTION (SLR RATE = 7%)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE—Continued
[Millions of 2022 USD]

PWS Annual Costs	Final rule			Alternative option (SLR Rate = 7%)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Wastewater Treatment Plant Costs	4.8	5.1	0.3	4.8	5.2	0.4
Total Annual Rule Costs	1,067.1	3,020.9	1,953.8	1,067.1	2,971.8	1,904.7

Acronyms: LCRI = Lead and Copper Rule Improvements; PWS = public water system; SLR = lead service line replacement; USD = United States dollar.

Notes: (1) Previous Baseline costs are projected over the 35-year period of analysis and are affected by the EPA's assumptions on three uncertain variables which vary between the low- and high-cost scenarios.

(2) Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

EXHIBIT 22—ESTIMATED NATIONAL ANNUAL BENEFIT COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE SERVICE LINE REPLACEMENT OPTION (SLR RATE = 7%)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE
[Millions of 2022 USD]

	Final rule			Alternative option (SLR Rate = 7%)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Annual IQ Benefits	\$3,279.0	\$10,963.0	\$7,684.0	\$3,279.0	\$9,994.8	\$6,715.8
Annual Low-Birth Weight Benefits	1.8	5.7	3.9	1.8	5.2	3.4
Annual ADHD Benefits	179.9	599.5	419.6	179.9	540.5	360.6
Annual Adult CVD Premature Mortality Benefits	8,174.9	25,210.0	17,035.1	8,174.9	22,997.8	14,822.9
Total Annual Benefits	11,635.6	36,778.2	25,142.6	11,635.6	33,538.3	21,902.7

Acronyms: ADHD = attention-deficit/hyperactivity disorder; CVD = cardiovascular disease; IQ = intelligence quotient; LCRI = Lead and Copper Rule Improvements; SLR = lead service line replacement USD = United States dollar.

Note: Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

3. Alternative Definition of Lead Content Service Lines To Be Replaced

Exhibit 23 and Exhibit 24 compare the quantified costs and benefits of the final LCRI to the quantified costs and benefits of requiring all lead connectors and all galvanized lines downstream and previously downstream from lead connectors be replaced along with LSLs and galvanized service lines downstream of LSLs or unknown lead content service lines at the 10 percent annual replacement rate. Results are provided for the high scenario at the two percent discount rate. As discussed in sections IV.B.2 and IV.O.3 of this preamble, both the complete inventorying and mandatory removal of

lead connectors and galvanized service lines downstream and previously downstream of lead connectors is not feasible without significantly delaying the replacement of lead and GRR service lines. Therefore, note that although the EPA was able to estimate costs and benefits for this alternative option, using 7th DWINSA survey data on lead content service lines, the estimated results are uncertain and likely overestimate both costs and benefits since full lead and GRR service line replacement is assumed to still occur within the required 10 year window (except for those systems on deferred deadlines) when in fact these replacement may be delayed as a result

of implementing the requirements of this option. Given the concerns over feasibility and therefore the uncertainty associated with the estimated costs and benefits of this alternative option (note benefits estimates would be overestimated to a larger extent than costs), the EPA is discounting the fact that estimated net benefits for this alternative option are greater than the estimated net benefits for the final LCRI. The final LCRI maintains the final rules requirement to replace all LSLs and galvanized service lines downstream of LSLs or unknown lead content service lines at the 10 percents annual replacement rate (except for those systems on deferred deadlines).

EXHIBIT 23—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE OPTION INCLUDING LEAD CONNECTORS IN DEFINITION OF SERVICE LINES TO BE REPLACED—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

	Final rule			Alternative option (lead connectors and galvanized lines previously downstream of lead connectors must be replaced)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
PWS Annual Costs						
Sampling	\$143.6	\$176.2	\$32.6	\$143.6	\$176.4	\$32.8
PWS SLR	124.5	1,763.9	1,639.4	124.5	1,921.7	1,797.2
Corrosion Control Technology	647.8	692.9	45.1	647.8	701.3	53.5
Point-of Use Installation and Maintenance	5.9	9.6	3.7	5.9	9.7	3.8
Public Education and Outreach	72.1	302.2	230.1	72.1	306.6	234.5
Rule Implementation and Administration	0.2	3.4	3.2	0.2	3.4	3.2
<i>Total Annual PWS Costs</i>	<i>994.1</i>	<i>2,948.2</i>	<i>1,954.1</i>	<i>994.1</i>	<i>3,119.1</i>	<i>2,125.0</i>
Household SLR Costs	26.4	0.0	– 26.4	26.4	0.0	– 26.4
State Rule Implementation and Administration	41.8	67.6	25.8	41.8	67.9	26.1
Wastewater Treatment Plant Costs	4.8	5.1	0.3	4.8	5.3	0.5
Total Annual Rule Costs	1,067.1	3,020.9	1,953.8	1,067.1	3,192.3	2,125.2

Acronyms: LCRI = Lead and Copper Rule Improvements; SLR = lead service line replacement; PWS = public water system; USD = United States dollar.

Notes: (1) Previous Baseline costs are projected over the 35-year period of analysis and are affected by the EPA's assumptions on three uncertain variables which vary between the low and high cost scenarios.

(2) Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

EXHIBIT 24—ESTIMATED NATIONAL ANNUAL BENEFIT COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE OPTION INCLUDING LEAD CONNECTORS IN DEFINITION OF SERVICE LINES TO BE REPLACED—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

	Final rule			Alternative option (lead connectors and galvanized lines previously downstream of lead connectors must be replaced)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Annual IQ Benefits	\$3,279.0	\$10,963.0	\$7,684.0	\$3,279.0	\$12,646.8	\$9,367.8
Annual Low-Birth Weight Benefits	1.8	5.7	3.9	1.8	6.4	4.6
Annual ADHD Benefits	179.9	599.5	419.6	179.9	684.8	504.9
Annual Adult CVD Premature Mortality Benefits	8,174.9	25,210.0	17,035.1	8,174.9	28,943.5	20,768.6
Total Annual Benefits	11,635.6	36,778.2	25,142.6	11,635.6	42,281.5	30,645.9

Acronyms: ADHD = attention-deficit/hyperactivity disorder; CVD = cardiovascular disease; IQ = intelligence quotient; LCRI = Lead and Copper Rule Improvements; USD = United States dollar.

Note: Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

4. Alternative Service Line Replacement Deferred Deadline

Exhibit 25 and Exhibit 26 compare the quantified costs and benefits of the final LCRI to the quantified costs and benefits

under an alternative service line replacement deferred deadline which would allow systems to replace lead and GRR service lines at a maximum rate equal to the lower of two alternatives: (1) 10,000 lines per year; or (2) 39

replacements per 1000 connections per year, holding all other rule requirements constant. Results are provided for the high scenario at a two percent discount rate.

EXHIBIT 25—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE DEFERRED DEADLINE OPTION (ADDING MAX RATE OF 10,000 SL PER YEAR)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[millions of 2022 USD]

PWS Annual Costs	Final rule			Alternative option (SL replacement deferred deadline with additional potential maximum rate of 10,000 SL per year)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Sampling	\$143.6	\$176.2	\$32.6	\$143.6	\$176.0	\$32.4
PWS SLR	124.5	1,763.9	1,639.4	124.5	1,763.1	1,638.6
Corrosion Control Technology	647.8	692.9	45.1	647.8	692.8	45.0
Point-of Use Installation and Maintenance	5.9	9.6	3.7	5.9	9.7	3.8
Public Education and Outreach	72.1	302.2	230.1	72.1	302.4	230.3
Rule Implementation and Administration	0.2	3.4	3.2	0.2	3.4	3.2
<i>Total Annual PWS Costs</i>	<i>994.1</i>	<i>2,948.2</i>	<i>1,954.1</i>	<i>994.1</i>	<i>2,947.4</i>	<i>1,953.3</i>
Household SLR Costs	26.4	0.0	– 26.4	26.4	0.0	– 26.4
State Rule Implementation and Administration	41.8	67.6	25.8	41.8	67.6	25.8
Wastewater Treatment Plant Costs	4.8	5.1	0.3	4.8	5.0	0.2
<i>Total Annual Rule Costs</i>	<i>1,067.1</i>	<i>3,020.9</i>	<i>1,953.8</i>	<i>1,067.1</i>	<i>3,020.0</i>	<i>1,952.9</i>

Acronyms: LCRI = Lead and Copper Rule Improvements; PWS = public water system; SL = service line; SLR = lead service line replacement; USD = United States dollar.

Notes: (1) Previous Baseline costs are projected over the 35-year period of analysis and are affected by the EPA's assumptions on three uncertain variables which vary between the low and high cost scenarios.

(2) Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

EXHIBIT 26—ESTIMATED NATIONAL ANNUAL BENEFIT COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE DEFERRED DEADLINE OPTION (ADDING MAX RATE OF 10,000 SL PER YEAR)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

	Final rule			Alternative option (SL replacement deferred deadline with additional potential maximum rate of 10,000 SL per year)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Annual IQ Benefits	\$3,279.0	\$10,963.0	\$7,684.0	\$3,279.0	\$10,960.3	\$7,681.3
Annual Low-Birth Weight Benefits	1.8	5.7	3.9	1.8	5.7	3.9
Annual ADHD Benefits	179.9	599.5	419.6	179.9	599.3	419.4
Annual Adult CVD Premature Mortality Benefits	8,174.9	25,210.0	17,035.1	8,174.9	25,203.7	17,028.8
<i>Total Annual Benefits</i>	<i>11,635.6</i>	<i>36,778.2</i>	<i>25,142.6</i>	<i>11,635.6</i>	<i>36,769.0</i>	<i>25,133.4</i>

Acronyms: ADHD = attention-deficit/hyperactivity disorder; CVD = cardiovascular disease; IQ = intelligence quotient; LCRI = Lead and Copper Rule Improvements; SL = service line; USD = United States dollar.

Note: Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

Exhibit 27 and Exhibit 28 compare the quantified costs and benefits of the final LCRI to the quantified costs and benefits under an alternative service line replacement deferred deadline which

would allow systems to replace lead and GRR service lines at a maximum rate equal to the lower of two alternatives: (1) 8,000 lines per year; or (2) 39 replacements per 1000 connections per

year, holding all other rule requirements constant. Results are provided for the high scenario at a two percent discount rate.

EXHIBIT 27—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE DEFERRED DEADLINE OPTION (ADDING MAX RATE OF 8,000 SL PER YEAR)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

PWS Annual Costs	Final rule			Alternative option (SL replacement deferred deadline with additional potential maximum rate of 8,000 SL per year)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Sampling	\$143.6	\$176.2	\$32.6	\$143.6	\$176.0	\$32.4
PWS SLR	124.5	1,763.9	1,639.4	124.5	1,761.8	1,637.3
Corrosion Control Technology	647.8	692.9	45.1	647.8	692.8	45.0
Point-of Use Installation and Maintenance	5.9	9.6	3.7	5.9	9.7	3.8
Public Education and Outreach	72.1	302.2	230.1	72.1	302.7	230.6
Rule Implementation and Administration	0.2	3.4	3.2	0.2	3.4	3.2
<i>Total Annual PWS Costs</i>	<i>994.1</i>	<i>2,948.2</i>	<i>1,954.1</i>	<i>994.1</i>	<i>2,946.4</i>	<i>1,952.3</i>
Household SLR Costs	26.4	0.0	– 26.4	26.4	0.0	– 26.4
State Rule Implementation and Administration	41.8	67.6	25.8	41.8	67.6	25.8
Wastewater Treatment Plant Costs	4.8	5.1	0.3	4.8	5.0	0.2
Total Annual Rule Costs	1,067.1	3,020.9	1,953.8	1,067.1	3,019.0	1,951.9

Acronyms: LCRI = Lead and Copper Rule Improvements; PWS = public water system; SL = service line; SLR = lead service line replacement; USD = United States dollar.

Notes: (1) Previous Baseline costs are projected over the 35-year period of analysis and are affected by the EPA's assumptions on three uncertain variables which vary between the low and high cost scenarios.

(2) Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

EXHIBIT 28—ESTIMATED NATIONAL ANNUAL BENEFIT COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE DEFERRED DEADLINE OPTION (ADDING MAX RATE OF 8,000 SL PER YEAR)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

	Final rule			Alternative option (SL replacement deferred deadline with additional potential maximum rate of 8,000 SL per year)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Annual IQ Benefits	\$3,279.0	\$10,963.0	\$7,684.0	\$3,279.0	\$10,943.3	\$7,664.3
Annual Low-Birth Weight Benefits	1.8	5.7	3.9	1.8	5.7	3.9
Annual ADHD Benefits	179.9	599.5	419.6	179.9	598.3	418.4
Annual Adult CVD Premature Mortality Benefits	8,174.9	25,210.0	17,035.1	8,174.9	25,164.0	16,989.1
Total Annual Benefits	11,635.6	36,778.2	25,142.6	11,635.6	36,711.3	25,075.7

Acronyms: ADHD = attention-deficit/hyperactivity disorder; CVD = cardiovascular disease; IQ = intelligence quotient; LCRI = Lead and Copper Rule Improvements; SL = service line; USD = United States dollar.

Note: Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

5. Alternative Lead Tap Sampling Standard Monitoring Requirements

Under the final LCRI, there are a number of criteria that can result in a system's starting standard six-month lead tap sample monitoring. Systems are required to conduct six-month lead tap sample monitoring if the system: exceeds an action level at the compliance date; has known lead and/or GRR service lines at the LCRI compliance date; or discovers any lead and/or GRR service lines after the

compliance date (unless the system replaces all the discovered service lines prior to the next tap monitoring period), in addition to other criteria unchanged from the LCRR. Note that under the final LCRI requirements, non-lead and non-lead/unknown service line systems remain on their existing LCR monitoring schedule at the rule compliance date. They remain on their previous tap sampling schedule until new sampling, which is compliant with the LCRI sampling protocols, may change the

system's calculated 90th percentile to exceed the action level. Also, systems with lead and GRR service lines that sampled using the new LCRI protocol (*i.e.*, correct priority tiering sites, correct sample volume, and either first-liter sample (at non-LSL service line sites) or first- and fifth-liter samples (at sites with LSLs)) and are below the LCRI action level prior to the compliance date may qualify to retain their current tap sampling schedule. As part of the development of the final rule, the EPA

considered an alternative option that would also require systems with unknown lead content service lines (even when no lead and/or GRR service lines are known to be present in the system) to conduct standard six-month monitoring.

The EPA's analysis of this alternative option found that the expected increase in sampling cost and potential increase in benefits associated with systems (non-lead/unknown and 100 percent unknown) taking earlier corrective action as a result of action level exceedances were small and did not affect estimated nation annualized costs and benefits at the EPA \$100,000 significant digit level. Therefore, the EPA is not presenting exhibits characterizing the differences between the estimated costs and benefit of the final rule and the lead tap sampling alternative option. However, it is important to note that the EPA has feasibility concerns associated with the alternative option. The additional cost

and burden to PWSs and States would draw resources away from the implementation of other LCRI rule components such as CCT and public education, and the implementation of tap sampling in higher risk locations. See section IV.E of this preamble for further discussion. Because of these concerns it is likely that the estimated cost and benefit of the alternative option are less certain than those of the final rule.

6. Alternative Temporary Filter Programs for Systems With Multiple Lead Action Level Exceedances

The final LCRI includes a requirement that systems with at least two lead ALEs in a rolling year-year period must prepare and submit a filter plan to the State. In addition, if a system has three or more ALEs in a rolling five-year period, it must make filters available to all consumers in the distribution system. The EPA assessed two additional alternative filter programs while developing the final rule. Under

both alternatives, systems with at least two ALEs in a rolling five-year period will follow the final rule requirements to develop and submit to the State a filter plan. For systems with at least three ALEs in a rolling five-year window, alternative one would require systems to make temporary filters available to all customers having lead, GRR, and unknown lead content service lines. Alternative two would require systems to directly deliver temporary filters to all customers in the distribution system.

Exhibit 29 compares the quantified costs of the final LCRI to the quantified costs of requiring systems with at least three ALEs in a rolling five-year window to make filters available to customers with lead, GRR, or unknown lead content service lines. Under this alternative temporary filter option, all other final LCRI rule requirements have been held constant. Cost results are provided for the high scenario at the two percent discount rate.

EXHIBIT 29—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE TEMPORARY FILTERS PROGRAM FOR MULTIPLE ALE SYSTEMS OPTION (FILTERS MADE AVAILABLE TO LEAD, GRR, AND UNKNOWN SERVICE LINE CUSTOMERS ONLY)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

PWS Annual Costs	Final rule			Alternative option (temporary filters made available to lead, GRR, and unknown lead content service line customers only in systems meeting multiple ALE criteria)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Sampling	\$143.6	\$176.2	\$32.6	\$143.6	\$176.1	\$32.5
PWS SLR	124.5	1,763.9	1,639.4	124.5	1,763.9	1,639.4
Corrosion Control Technology	647.8	692.9	45.1	647.8	692.9	45.1
Point-of Use Installation and Maintenance	5.9	9.6	3.7	5.9	9.6	3.7
Public Education and Outreach	72.1	302.2	230.1	72.1	274.8	202.7
Rule Implementation and Administration	0.2	3.4	3.2	0.2	3.4	3.2
<i>Total Annual PWS Costs</i>	<i>994.1</i>	<i>2,948.2</i>	<i>1,954.1</i>	<i>994.1</i>	<i>2,920.7</i>	<i>1,926.6</i>
Household SLR Costs	26.4	0.0	– 26.4	26.4	0.0	– 26.4
State Rule Implementation and Administration	41.8	67.6	25.8	41.8	67.6	25.8
Wastewater Treatment Plant Costs	4.8	5.1	0.3	4.8	5.1	0.3
<i>Total Annual Rule Costs</i>	<i>1,067.1</i>	<i>3,020.9</i>	<i>1,953.8</i>	<i>1,067.1</i>	<i>2,993.4</i>	<i>1,926.3</i>

Acronyms: ALE = action level exceedance; LCRI = Lead and Copper Rule Improvements; PWS = public water system; LSL = lead service line; GRR = galvanized requiring replacement service line; SLR = lead service line replacement; United States dollar.

Notes: (1) Previous Baseline costs are projected over the 35-year period of analysis and are affected by the EPA's assumptions on three uncertain variables which vary between the low and high cost scenarios.

(2) Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

Because the EPA's benefit analysis cannot quantify benefits from reducing lead exposures at residences that do not initially have lead or GRR service lines, the estimated benefits for this option are equal to those estimated for the final rule and therefore are not repeated. See

Exhibit 14 for the estimated benefits of both the final LCRI and this alternative option. A discussion of the EPA's lead concentration data can be found in section VI.E.1 of this preamble. The quantified benefits of the final rule are in fact a more accurate representation of

the alternative option where filters would not be made available to non-lead, GRR, and unknown service line customers. The analysis for the final LCRI was not able to quantify the potential benefits of filter use at non-lead and GRR households, resulting in

an underestimate of benefits. Therefore, although not shown in the estimated values, the benefits of the final LCRI are likely larger than those of the alternative option.

Exhibit 30 compares the quantified costs of the final LCRI to the quantified costs of requiring systems with at least three ALEs in a rolling five-year window to directly deliver filters to all customers in the distribution system. Results are provided for the high scenario at a two percent discount rate. Again, the EPA does not present benefit values for this option. The monetized benefits are equivalent to those of the final LCRI, see Exhibit 14. Given concerns over the potential to underestimate the cost impact of the final LCRI multiple ALE filter program, which is dependent on the number of customers in a system that chose to obtain a filter from the PWS, the EPA assumed a 100 percent customer filter pick-up rate. This assumption, made to ensure a conservative assessment of the cost impacts of the program could lead to a potential overestimate of the benefits of such a program. However, this potential to overestimate benefits is tempered by the fact that, as discussed above, the EPA can only calculate

benefits accruing to households that initially have lead or GRR service lines. Therefore, although benefits accruing to this household group may be overestimated, the increased assumed pick-up rate among the non-lead and GRR service line households do not affect estimated benefits. So, given that both the final LCRI and the direct delivery of filters option assume 100 percent filter use rates in the estimation of benefits, the estimated benefits are equal and likely overestimated. It seems reasonable to postulate that the filter use rate may be higher for the direct delivery option, given the increased level of effort required of consumers to pick-up a filter from a PWS designated location under the LCRI (although the EPA has no documented information to indicate this is true) and therefore this option would result in greater benefits. Note, however, that the EPA has feasibility concerns, discussed in section IV.K.2 of this preamble, with the required direct delivery of temporary filters to all customers. Therefore, the alternative option costs and benefits are more uncertain and may be overestimated because the values assume timely implementation of the requirement.

Because the EPA is unable to quantify benefits from reducing lead exposures at residences that do not initially have lead or GRR service lines and given the concerns over the feasibility of requiring direct delivery of temporary filters to all customers, the EPA cannot wholly rely on estimates of net benefits to determine the optimal temporary filter program regulatory requirements when systems have multiple ALEs. Although the estimated net benefits for the “only make filters available to customers with lead, GRR, or unknown lead content service lines” are greater than those estimated for the final rule the EPA has determined that the additional non-quantifiable potential benefits associated with lead reductions at households that did not initially have lead or GRR service lines outweighs the additional cost of the final rule program. Also as stated above the EPA has feasibility concerns with the option requiring direct delivery to all customers. The final rule requires that, if a system has three or more ALEs in a rolling five-year period, it must make filters available to all consumers in the distribution system.

EXHIBIT 30—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE TEMPORARY FILTERS PROGRAM FOR MULTIPLE ALE SYSTEMS OPTION (DELIVER FILTERS TO ALL CUSTOMERS)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

PWS Annual Costs	Final rule			Alternative option (deliver temporary filters directly to all customers in systems meeting multiple ALE criteria)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Sampling	\$143.6	\$176.2	\$32.6	\$143.6	\$176.1	\$32.5
PWS SLR	124.5	1,763.9	1,639.4	124.5	1,763.9	1,639.4
Corrosion Control Technology	647.8	692.9	45.1	647.8	692.9	45.1
Point-of Use Installation and Maintenance	5.9	9.6	3.7	5.9	9.6	3.7
Public Education and Outreach	72.1	302.2	230.1	72.1	308.1	236.0
Rule Implementation and Administration	0.2	3.4	3.2	0.2	3.4	3.2
<i>Total Annual PWS Costs</i>	<i>994.1</i>	<i>2,948.2</i>	<i>1,954.1</i>	<i>994.1</i>	<i>2,954.0</i>	<i>1,959.9</i>
Household SLR Costs	26.4	0.0	– 26.4	26.4	0.0	– 26.4
State Rule Implementation and Administration	41.8	67.6	25.8	41.8	67.6	25.8
Wastewater Treatment Plant Costs	4.8	5.1	0.3	4.8	5.1	0.3
<i>Total Annual Rule Costs</i>	<i>1,067.1</i>	<i>3,020.9</i>	<i>1,953.8</i>	<i>1,067.1</i>	<i>3,026.7</i>	<i>1,959.6</i>

Acronyms: ALE = action level exceedance; LCRI = Lead and Copper Rule Improvements; PWS = public water system; SL = service line; SLR = lead service line replacement; United States dollar.

Notes: (1) Previous Baseline costs are projected over the 35-year period of analysis and are affected by the EPA's assumptions on three uncertain variables which vary between the low and high cost scenarios.

(2) Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

7. Alternative Size Threshold for Small System Compliance Flexibility

Exhibit 31 and Exhibit 32 compare the quantified costs and benefits of the final LCRI to the quantified costs and benefits for an alternative option where the small system compliance flexibility size threshold for CWSs is equal to systems serving 10,000 or fewer persons. The final LCRI sets the small system compliance flexibility threshold at systems serving 3,300 or fewer persons. Note under both the final rule and the assessed alternative NTNCWSs are allowed compliance flexibility. Results

are provided for the high scenario at a two percent discount rate. The estimated costs and benefits under the alternative small system compliance flexibility threshold, of systems serving up to 10,000 persons, assumes the effective implementation of POU in place of system wide CCT. As discussed in section IV.I of this preamble the agency finds that in CWSs serving greater than 3,300 persons it is highly unlikely that POU programs, given their complexity, will be implemented effectively and could not make a determination that a POU program is as effective as CCT at minimizing exposure

to lead in water for systems serving more than 3,300 persons. Therefore, under the alternative threshold option the estimated costs and, to a larger degree, the estimated benefits are uncertain. Given the concerns over feasibility and therefore the uncertainty associated with the estimated costs and benefits of this alternative option, the EPA is discounting the fact that estimated net benefits for this alternative option are greater than the estimated net benefits for the final LCRI. The final rule sets the small system compliance flexibility threshold at systems serving 3,300 or fewer persons.

EXHIBIT 31—ESTIMATED NATIONAL ANNUALIZED RULE COST COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE SMALL SYSTEM FLEXIBILITY OPTION (FLEXIBILITY FOR CWSS SERVING UP TO 10,000 PERSONS)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

PWS Annual Costs	Final rule			Alternative option (small system flexibility for CWSs serving up to 10,000 persons)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Sampling	\$143.6	\$176.2	\$32.6	\$143.6	\$176.0	\$32.4
PWS SLR	124.5	1,763.9	1,639.4	124.5	1,763.9	1,639.4
Corrosion Control Technology	647.8	692.9	45.1	647.8	692.7	44.9
Point-of Use Installation and Maintenance	5.9	9.6	3.7	5.9	9.6	3.7
Public Education and Outreach	72.1	302.2	230.1	72.1	302.0	229.9
Rule Implementation and Administration	0.2	3.4	3.2	0.2	3.4	3.2
<i>Total Annual PWS Costs</i>	<i>994.1</i>	<i>2,948.2</i>	<i>1,954.1</i>	<i>994.1</i>	<i>2,947.6</i>	<i>1,953.5</i>
Household SLR Costs	26.4	0.0	– 26.4	26.4	0.0	– 26.4
State Rule Implementation and Administration	41.8	67.6	25.8	41.8	67.6	25.8
Wastewater Treatment Plant Costs	4.8	5.1	0.3	4.8	5.2	0.4
<i>Total Annual Rule Costs</i>	<i>1,067.1</i>	<i>3,020.9</i>	<i>1,953.8</i>	<i>1,067.1</i>	<i>3,020.4</i>	<i>1,953.3</i>

Acronyms: CWS = community water system; LCRI = Lead and Copper Rule Improvements; SLR = lead service line replacement; PWS = public water system; United States dollar.

Notes: (1) Previous Baseline costs are projected over the 35-year period of analysis and are affected by the EPA's assumptions on three uncertain variables which vary between the low and high cost scenarios.

(2) Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted at true differences between the costs and benefits of the final rule and the alternative option.

EXHIBIT 32—ESTIMATED NATIONAL ANNUAL BENEFIT COMPARISON BETWEEN THE FINAL LCRI AND ALTERNATIVE SMALL SYSTEM FLEXIBILITY OPTION (FLEXIBILITY FOR CWSS SERVING UP TO 10,000 PERSONS)—HIGH SCENARIO—2 PERCENT DISCOUNT RATE

[Millions of 2022 USD]

	Final rule			Alternative option (small system flexibility for CWSs serving up to 10,000 persons)		
	Baseline	LCRI	Incremental	Baseline	LCRI	Incremental
Annual IQ Benefits	\$3,279.0	\$10,963.0	\$7,684.0	\$3,279.0	\$10,963.1	\$7,684.1
Annual Low-Birth Weight Benefits	1.8	5.7	3.9	1.8	5.7	3.9
Annual ADHD Benefits	179.9	599.5	419.6	179.9	599.5	419.6
Annual Adult CVD Premature Mortality Benefits	8,174.9	25,210.0	17,035.1	8,174.9	25,210.5	17,035.6
<i>Total Annual Benefits</i>	<i>11,635.6</i>	<i>36,778.2</i>	<i>25,142.6</i>	<i>11,635.6</i>	<i>36,778.8</i>	<i>25,143.2</i>

Acronyms: ADHD = attention-deficit/hyperactivity disorder; CVD = cardiovascular disease; CWS = community water system; IQ = intelligence quotient; LCRI = Lead and Copper Rule Improvements; USD = United States dollar.

Note: Very small differences in results between the final rule and the regulatory option are due to inter-run variability in the SafeWater LCR model, and/or rounding, and should not be interpreted as true differences between the costs and benefits of the final rule and the alternative option.

The EPA's analysis of the alternative regulatory options found that the following options had estimated annual net benefits greater than the final LCRI: (1) setting the action level to 0.005 mg/L; (2) including lead connectors and galvanized service lines previously downstream of lead connectors in the definition of lead content requiring replacement; (3) requiring systems with multiple action level exceedances to make temporary filters available to households with lead, GRR, or unknown lead content service lines; and (4) allowing systems serving up to 10,000 persons the ability to utilize the small system compliance flexibility options. From a purely economic standpoint that would mean these four options are preferable to the final LCRI. However, three of these options were not selected, in place of the final rule, because of questionable technical feasibility. SDWA section 1412(b)(4)(D) says the term "feasible" means feasible with the use of the best technology, treatment techniques and other means which the Administrator finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are available. The EPA has discussed the agency's feasibility concerns with regard to: setting the action level to 0.005 mg/L; including lead connectors and galvanized service lines previously downstream of lead connectors in the definition of lead content requiring replacement; and allowing systems serving up to 10,000 persons the ability to utilize the small system compliance flexibility options, in preceding sections of this preamble. Regarding setting the action level at a level below 0.010 mg/L, the EPA has expressed concern associated with feasibility. See section IV.F.4 of this preamble for information on feasibility. When considering the inclusion of lead connectors and galvanized service lines previously downstream of lead connectors in the set of service lines that must be actively replaced, the EPA was concerned about how these activities might pull resources away from the removal of lead and GRR service lines that pose a greater exposure risk. See sections IV.B.2 and IV.O.3 of this preamble for a detailed discussion. In the case of setting the threshold for the small system flexibility option to include systems serving up to 10,000 persons or fewer, despite the modeling results showing an increase net benefits under this option, the EPA finds that the complexity of

implementing point-of-use filtration at all residences in a system serving 3,300 to 10,000 individuals, or potentially 1,300 to 4,000 separate locations, cannot be correctly captured in the estimated cost structure within the economic model and makes this option infeasible. See section IV.I of this preamble for additional information on point-of-use feasibility. In addition, the monetized benefits associated with the implementation of CCT are known to be underestimated given the potential reductions in lead exposure at homes without lead and GRR service lines in a system implementing CCT which is not captured in the EPA benefit estimates. The CCT benefits also do not capture reduced water loss, plumbing repair cost, and water damage costs associated with the increased use of corrosion control. See section VI.F.2. of this preamble for more information on the unquantified impacts. See section IV.F of this preamble for additional information on corrosion control treatment. With regard to estimated annual net benefits being greater for the alternative option where systems with multiple action level exceedances would be required to only make temporary filters available to households with lead, GRR, or unknown lead content service lines, the EPA has highlighted the inability of the benefits analysis to monetize positive health impact from reduced lead exposure at non-lead and GRR service line locations which leads to an underestimate of final LCRI benefits relative to the benefits estimated for this alternative option. Note also that the EPA made a conservative costing assumption that 100 percent of households that are eligible to receive a filter would pick-up a filter when made available. The EPA has very little information on what the actual pick-up rate may be but it is possible that the rate could be significantly less than 100 percent and therefore the costs for both the final LCRI and this alternative multiple ALE temporary filters program are overestimated, and given the fact that the final LCRI is making filters available to all households in a system its estimated costs are likely overestimated to a greater extent than the alternative option. Because of the similar annual estimated net benefits between the two alternatives, only \$27.5 million in 2022 dollars, and the benefit and cost estimation uncertainties outlined above the EPA cannot rely on the relative size

of the estimated net benefits in selecting between these options. Therefore, the EPA selected the final LCRI multiple ALE option because it protects individuals in systems with multiple ALEs that do not have lead, GRR, or unknown service lines, were as the alternative option while addressing most of the exposure issues in lead, GRR service line systems today does not cover systems with multiple ALEs and no lead, GRR, or unknown service lines. The alternative option will also effectively sunset as all unknowns are identified and lead and GRR service lines are replaced (13 years except for systems on approved differed deadlines) leaving consumers in systems with chronic ALEs and no lead or GRR service lines to be exposed to potentially high levels of lead coming from premise plumbing. The final rule addresses this issue into the future by requiring filters be made available to all customers in systems with multiple ALEs.

In the case of the alternative lead tap sample monitoring requirements that would have systems with unknown lead content service lines start standard six-month lead tap sampling at the LCRI compliance date, the EPA's monetized cost and benefit estimates were too close to conclusively determine if this alternative option or the final LCRI has greater net benefits. Due to the potentially high volume of systems required to start standard monitoring, the EPA did not select to move forward with this alternative lead tap sampling option. One concern is the ability of the States to handle the increased demands of overseeing the potentially large number of systems requiring sampling assistance during the compressed time period immediately following the rule compliance date. Another concern is that requiring systems with unknowns to start standard six-month lead tap sampling would affect a large number of small systems, as the EPA estimates that 45 percent of small systems, or 20,200 systems, have an inventory with unknown material service lines and no lead or GRR service lines. Lastly, the EPA considered a phased approach to include systems with unknowns in the standard monitoring requirements but decided that the complexity of a phased approach was not commensurate with the benefits, as nearly all systems will conduct monitoring within three years of the rule promulgation based on their LCR sampling schedule. See section

IV.E of this preamble for additional information on lead tap sampling.

VII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866 (Regulatory Planning and Review) and Executive Order 14094 (Modernizing Regulatory Review)

This action is a “significant regulatory action”, as defined under section 3(f)(1) of Executive Order 12866, as amended by Executive Order 14094. Accordingly, the United States Environmental Protection Agency (EPA) submitted this action to the Office of Management and Budget (OMB) for Executive Order 12866 review. Documentation of any changes made in response to the Executive Order 12866 review is available in the docket. The EPA prepared an analysis of the potential costs and benefits associated with this action. This analysis, the *Economic Analysis for the Final Lead and Copper Rule Improvements* or final LCRI Economic Analysis (USEPA, 2024a), is also available in the docket and is summarized in section VI of this preamble.

B. Paperwork Reduction Act (PRA)

The information collection activities in this final rule have been submitted for approval to the OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned the EPA ICR number 2788.02 and OMB control number 2040-NEW. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

The paperwork burden associated with this final rule consists of the burden imposed on systems to read and understand the LCRI as well as the burden associated with certain new or revised collections of information. Specifically, public water systems (PWSs) will have to assign personnel and devote resources to implement the rule. In addition, public water systems will need to attend training sessions and receive technical assistance from their State during implementation of the LCRI. Furthermore, PWSs will have to update the 2021 LCRR initial inventory and include information on lead connectors and submit the updated inventory to the State. For the PWSs that have lead, GRR, or unknown

service lines, a service line replacement plan will need to be developed. PWSs will need to develop, submit to the State, and annually distribute public education materials on service line material type to those consumers served by lead, GRR, or unknown service lines. Systems must also update and submit to the State a tap site sample plan.

Likewise, the paperwork burden for States include reading and understanding the LCRI. The State will have to adopt the rule and develop programs to implement the LCRI. This may result in the State modifying their data system while implementing the LCRI. Also, the State will have to provide staff with training and technical assistance as well as provide water systems with training and technical assistance for implementation of the LCRI. The State is also responsible for reviewing the updated LCRR initial inventories (referred to as the baseline inventory in the LCRI) which will contain lead connector information and PWS demonstrations and written statements of only non-lead service lines, non-lead connectors, or no connectors present from systems in lieu of a publicly accessible inventory as well as reviewing service line replacement plans. States will have to review service line replacement plans. States will have to review language for public education materials on service line material type. States must also review updated tap site sample plans.

The information collected under the ICR is critical to States and other authorized entities that have been granted primacy (*i.e.*, primary enforcement authority) for the LCRI. These authorized entities are responsible for overseeing the LCRI implementation by certain public water systems within their jurisdiction. States would utilize these data to determine compliance, designate additional treatment controls to be installed, and establish enforceable operating parameters. The collected information is also necessary for PWSs. PWSs would use these data to demonstrate compliance, assess treatment options, operate and maintain installed treatment equipment, and communicate water quality information to consumers served by the water system. States would also be required to report a subset of these data to the EPA. The EPA would utilize the information to protect public health by ensuring compliance with the LCRI, measuring progress toward meeting the LCRI's goals, and evaluating the appropriateness of State implementation activities. No confidential information

would be collected as a result of this ICR.

Respondents/affected entities:

Respondents would include owners and operators of public water systems who must report to their State, and States, who must report to the Federal Government.

Respondent's obligation to respond:

The collection requirements are mandatory under sections 1401(1)(D), 1445(a)(1)(A), and 1413(a)(3) of SDWA.

Estimated number of respondents:

67,003; includes 56 primacy agencies and 66,947 public water systems.

Frequency of response: For the first three years after the final rule is published, the majority of the responses are required once, with some outliers being required annually.

Total estimated burden: 3,987,886 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: \$348,472,952 (per year), includes \$166,786,198 in annualized capital or operation & maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. When OMB approves this ICR, the agency will announce that approval in the **Federal Register** and publish a technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

C. Regulatory Flexibility Act (RFA)

Pursuant to section 603 and 609(b) of the RFA, the EPA prepared an initial regulatory flexibility analysis (IRFA) for the proposed rule and convened a Small Business Advocacy Review (SBAR) Panel to obtain advice and recommendations from small entity representatives that potentially would be subject to the rule's requirements. Summaries of the IRFA and Panel recommendations are presented in the proposed rule at 88 FR 85040 (USEPA, 2023a).

As required by section 604 of the RFA, the EPA prepared a final regulatory flexibility analysis (FRFA) for this action. The FRFA addresses the issues raised by public comments on the IRFA for the proposed rule. The complete FRFA is available for review in section 7.4 of the final LCRI Economic Analysis in the docket and is summarized here.

For purposes of assessing the impacts of this final rule on small entities, the EPA considered small entities to be

water systems serving 10,000 persons or fewer. This is the threshold specified by Congress in the 1996 Amendments to the Safe Drinking Water Act (SDWA) for small water system flexibility provisions. As required by the RFA, the EPA proposed using this alternative definition in the **Federal Register** (63 FR 7620, USEPA, 1998c), requested public comment, consulted with the Small Business Administration (SBA), and finalized the alternative definition in the agency's Consumer Confidence Reports (CCR) regulation (63 FR 44524, USEPA, 1998d). As stated in the final CCR rule (USEPA, 1998d), the alternative definition would apply to all future drinking water regulations.

The EPA used the Federal Safe Drinking Water Information System (SDWIS/Federal) data from the fourth quarter 2020 to identify about 63,000 small public water systems (PWSs) that may be impacted by the final LCRI. A small PWS serves between 25 and 10,000 persons. These water systems include over 45,000 community water systems (CWSs) that serve year-round residents and more than 17,000 non-transient non-community (NTNCWSs) that serve the same persons at least six months per year (e.g., a water system that is an office park or church). The EPA used data from the 7th Drinking Water Infrastructure Needs Survey and Assessment (DWINSA or Needs Survey) and its supplemental one-time update to estimate that, of the total number of small systems serving 10,000 persons or fewer, 22,235 CWSs and 434 NTNCWSs have service lines with lead content, potential lead content, or unknown content. For additional information on the development of estimated counts of systems with potential lead content service lines, see the final Economic Analysis document section 3.4.4 (USEPA, 2024a). The percent of small systems that are estimated to exceed the lead action level (0.010 mg/L) ranges from 4.4 to 38.9 percent depending on the variation between projected low- and high-cost scenarios of 90th percentile lead tap sample values and the presence of LSLs in systems (see Exhibits 7-3, 7-4, and 7-5 in the final Economic Analysis for more information; USEPA, 2024a).

SDWA is the core statute addressing drinking water quality at the Federal level. Under SDWA, the EPA sets public health goals and enforceable standards for drinking water quality. The EPA promulgated the LCR NPDWR to require PWSs to minimize lead and copper in drinking water by reducing water corrosivity and preventing lead and copper from leaching from premise

plumbing and drinking water distribution system components.

The regulatory revisions in the LCRI will strengthen public health protection and improve rule implementation. The final rule includes requirements that can be categorized as follows: conducting a service line inventory that includes lead connectors and is updated annually; requiring mandatory full service line replacement under the control of water systems; improving tap sampling; installing or re-optimizing corrosion control treatment (CCT); enhancing lead tap and water quality parameter monitoring; evaluating sites with lead tap sample results above 0.010 mg/L to assess issues with CCT performance in the distribution system; utilizing pitcher filters and point-of-use devices; improving customer outreach; and revising reporting and recordkeeping requirements. The regulatory requirement categories can also be thought of as the main cost categories affecting small systems. States are required to implement operator certification (and recertification) programs per SDWA section 1419 to ensure operators of CWSs and NTNCWSs, including small water system operators, have the appropriate level of certification.

The EPA solicited small entity stakeholder input during the development of the LCRI. Sections VII.E and VII.F of this preamble contain detailed information on stakeholder outreach during the rulemaking process, including material on the federalism and Tribal consultation processes, respectively. The EPA also specifically sought input from small entity stakeholders through the SBAR Panel process. On November 15, 2022, the EPA's Small Business Advocacy Chairperson convened the Panel, which consisted of the Chairperson, the Director of the Standards and Risk Management Division within the EPA's Office of Ground Water and Drinking Water, the Administrator of the Office of Information and Regulatory Affairs within the OMB, and the Chief Counsel for Advocacy of the SBA. The SBAR Panel process was completed on May 31, 2023. Detailed information on the overall panel process can be found in the panel report available in the LCRI docket (EPA-HQ-OW-2022-0801).

The EPA received comments on the rule proposal, including from the Deputy Chief Counsel for the Office of Advocacy of the SBA, on the impact and cost burden for small water systems and their consumers. The SBA commented on Federal funding availability and access for small systems, upcoming and competing compliance needs (e.g., per-

and polyfluoroalkyl substances in drinking water and as a hazardous substance), the effect of potential increases to ratepayer costs for disadvantaged communities and the complexity of the updated tap sampling protocol for small systems with LSLs. The SBA recommended that the EPA revise its cost estimates for the LCRI to account for the stated concerns, revise the environmental justice analysis to include the impact of rate increases caused by the rule on disadvantaged communities, and work with small entities to ensure they have the personnel and resources necessary to achieve compliance with the LCRI requirements. The EPA discussed Federal funding and technical assistance avenues for systems, including small systems, in the preamble of the proposed LCRI (88 FR 84878, USEPA, 2023a) and in section III.G of this preamble. For additional discussion on the SBA's and others' comments on funding and technical assistance, see sections III.G and III.D of this preamble. For the EPA's response to the SBA's recommendations, see section VI of this preamble for the cost estimates and section VII.J of this preamble for more information on the environmental justice analysis.

The SBA commented on the feasibility of the proposed 10-year replacement deadline, noting that, "under the RFA, the EPA is required to examine whether alternative timetables or requirements would be appropriate to help small systems comply with the LCRI" and recommending that the agency revise and extend service line replacement deadlines for small systems. The SBA also commented on the ability of small systems to access private property for service line replacement. For the EPA's discussion on the feasibility of the mandatory service line replacement requirement, which is based on a sample of systems currently conducting replacement programs, see section IV.B of this preamble. The LCRI also includes the deferred deadlines provision, where any system with a high proportion of known lead and GRR service lines to service connections may defer their mandatory replacement deadline to a calculated later date (see section IV.B.8 of this preamble for more information). The EPA discussed customer access barriers and provided examples of successful systems in the preamble for the proposed LCRI. The final LCRI includes a requirement for systems to make a reasonable effort to obtain property owner consent.

Under the final rule requirements, small CWSs serving 3,300 or fewer

persons and all NTNCWSs with a 90th percentile lead value above the lead action level of 0.010 mg/L may choose an alternative compliance option to CCT, including installing and maintaining point-of-use devices or removing all lead-bearing plumbing material from the system. As discussed in section IV.F.1 of this preamble, the EPA previously determined that optimal corrosion control treatment (OCCT) is an affordable technology for all size systems (63 FR 42039, USEPA, 1998a; USEPA, 1998b). However, allowing the smallest systems (serving 3,300 or fewer persons) and all NTNCWSs to utilize these alternative compliance options provides these systems with flexibility in complying with the LCRI that may still have technical difficulties implementing CCT. These alternative compliance options are as effective at reducing risk from lead in drinking water for this category of systems as CCT. See section IV.I of this preamble for more information on these requirements.

In addition to the small system flexibility provisions for action level exceedances, there are other flexibilities included in the rule, such as in tap sampling, CCT, and public education, that will ensure sufficient public health protection for the communities served. For instance, systems serving 3,300 persons or fewer may apply to the State to reduce the frequency of tap sampling and monitoring to once every nine years if the system demonstrates that the distribution system and drinking water supply plumbing are free of lead- and copper-containing materials. The EPA clarified in the final LCRI that waivers approved by the State in writing prior to the LCRI effect date, rather than April 11, 2000, are still in effect unless the system no longer meets the 90th percentile of 0.005 mg/L for lead and 0.65 mg/L and the system does not meet the ineligibility criteria. In addition § 141.86(g)(7)(ii) was removed as it is no longer applicable. Systems serving 10,000 persons or fewer are only required to install or re-optimize corrosion control treatment if they exceed the action level, whereas most systems with CCT serving between 10,001 and 50,000 persons must now optimize their CCT similar to systems serving more than 50,000 persons as well as meet optimized water quality parameters. Systems serving 3,300 persons or fewer that exceed the lead action level do not have to submit a press release to media outlets as long as they meet the requirement to distribute public education materials to all households served. Also, systems

serving 3,300 persons or fewer that exceed the lead action level must only complete one additional public outreach activity, whereas larger systems must complete three activities.

Another form of flexibility provided to all water systems, but that is most likely to benefit small systems, is the provision that systems with at least one lead or GRR service line and a lead action level exceedance (or lead practical quantitation limit (PQL) exceedance for large systems) may defer installing or re-optimizing OCCT as they replace all lead and GRR service lines in five years or less at a mandatory minimum annual rate. This provision allows systems to avoid the expense of having to conduct studies, such as a pipe loop study, prior to installing or re-optimizing OCCT while the system configurations are changing. In addition, this allows systems to prioritize the health protection afforded by mandatory full service line replacement. At the end of the five-year-or-less period, the system must remove all lead and GRR service lines (the system must have access to all lead and GRR service lines) and identify the material of all unknown service lines, replacing any lines found to be lead or GRR service lines. For systems with approximately 50 LSLs or fewer, most or all the lines can be replaced for the cost of the pipe rig/loop study, given the cost of a pipe loop study for small systems (\$307,744) and assuming that the costs for a full service line replacement will range between \$6,507 and \$8,519, the estimated 25th and 75th percentile cost estimates derived by the EPA using 7th DWINSA data (USEPA, 2024a). If the system had an action level exceedance after completing mandatory service line replacement within five years or less, the system could evaluate corrosion control treatments with much less expensive coupon or desktop studies (chapter 4, section 4.3.3, USEPA 2024a). See section IV.F of this preamble for more information on this flexibility.

The EPA assessed the degree to which the final LCRI small system flexibilities would mitigate compliance costs. The EPA is estimating low- and high-cost scenarios to characterize uncertainty in the cost model results. These scenarios are functions of assigning different input values (low and high) to a number of variables that affect the relative cost of the small system compliance options. The number of systems serving 3,300 or fewer persons that choose to install and maintain point-of-use devices under the final LCRI range from 2,406 to 4,066, serving between 250,048 and 474,266 persons. The total monetized annualized cost for small systems under

the low-and high-cost scenarios range from \$277 to \$313 million discounted at two percent. The low and high scenarios also produce between \$1.4 and \$2.5 billion in small system total monetized annualized benefits discounted at two percent. See chapter 7, section 7.4.5 of the final LCRI Economic Analysis for a breakdown of cost and benefit estimates by small system size sub-categories. Under the final LCRI, the number of small CWSs that will experience incremental annual costs of more than one percent of revenues ranges from 35,895 to 37,069 (80 percent to 82 percent of all small CWSs) and the number of small CWSs that will have annual incremental costs exceeding 3 percent of revenues ranges from 26,993 to 27,568 (60 percent to 61 percent of small CWSs). Lead-bearing plumbing was not analyzed in the EPA's cost-benefit model. See chapter 7, section 7.4 of the final LCRI Economic Analysis for more information on the characterization of the impacts under the final rule.

The EPA has considered an alternative approach to provide regulatory flexibility to small water systems. The alternative would make small system flexibility available to all NTNCWSs and CWSs serving up to 10,000 persons when a system has an action level exceedance. Systems that meet the criteria may choose from among the following compliance options: (1) optimizing existing CCT or installing new CCT; (2) installing and maintaining point-of-use devices at all locations being served; or (3) removal of all lead-bearing plumbing material from the system. Note that the EPA's cost-benefit model does not include an analysis of the removal of lead-bearing plumbing. The total monetized annualized cost for the high scenario under the alternative small system compliance option is \$500,000 less than the final LCRI at a two percent discount rate. The alternative small system compliance option also results in increased monetized annualized benefits under the high scenario equal to \$600,000 at a two percent discount rate. Note that the SafeWater Lead and Copper Rule (LCR) model cost minimization calculations producing these results do not capture the impact of the feasibility concerns associated with implementing point-of-use at systems serving over 3,300 persons. See Exhibits 31 and 32 in section VI.G.7 of this preamble for a more detailed comparison of the costs and benefits of the final LCRI and this alternative small system flexibility compliance requirement. Also see chapter 7, section

7.4 and chapter 8, section 8.8 of the final LCRI Economic Analysis for additional information on the analysis of the alternative approach (USEPA, 2024a).

In addition, the EPA will develop a Small Entity Compliance Guide to help small entities comply with this rule. The EPA plans to develop the Small System Compliance Guide within the first three years after promulgating the rule and make it available on the EPA's LCRI website.

D. The Unfunded Mandates Reform Act (UMRA)

This action contains a Federal mandate that may result in expenditures of \$174 million in 2022\$ (\$100 million in 1995\$ adjusted for inflation using the GDP implicit price deflator) or more as described in UMRA, 2 U.S.C. 1531–1538, for State, local, and Tribal governments, in the aggregate, or the private sector in any one year. Accordingly, the EPA prepared a written statement required under section 202 of UMRA. The statement is included in the docket for this action (see chapter 7, section 7.5 of the final LCRI Economic Analysis (USEPA, 2024a)) and is briefly summarized here.

The EPA conducted a cost analysis of the final rule as required under SDWA, UMRA, and Executive Order 12866. For additional detail on the analysis see section VI of this preamble and chapters 4 and 6 of the final LCRI Economic Analysis (USEPA, 2024a). The EPA finds that under the low-cost scenario, the highest annual incremental cost over the 35-year period of analysis is estimated to happen in the fourth year after rule promulgation. In this year, publicly owned PWSs are expected to have undiscounted incremental costs of \$3.8 billion, privately owned PWSs are expected to have undiscounted incremental costs of \$700 million, and States will have undiscounted incremental costs of \$119 million. Under the high-cost scenario, the highest annual incremental cost over the 35-year period of analysis is estimated to happen in the eighth year after rule promulgation. In this year, publicly owned PWSs are expected to have undiscounted incremental costs of \$5.9 billion, privately owned PWSs are expected to have undiscounted incremental costs of \$875 million, and States will have undiscounted incremental costs of \$40 million. Therefore, the final LCRI has projected estimated total undiscounted costs for the high cost year of the period of analysis that range from \$4.6 billion to \$6.8 billion in 2022 dollars and is therefore subject to the requirements of

Sections 202 of UMRA. The EPA notes that the Federal Government is providing potential sources of funds to offset some of those direct compliance costs of the LCRI, including \$15 billion as part of the Bipartisan Infrastructure Law. However, the rule's costs still exceed \$174 million for a given year even when considering currently available Federal funds.

Consistent with the intergovernmental consultation provisions of UMRA section 204, the EPA consulted with governmental entities affected by this rule. The EPA describes the government-to-government dialogue and comments from State, local, and Tribal governments in sections VII.E and VII.F of this preamble.

Consistent with UMRA section 205, the EPA identified and analyzed a reasonable number of regulatory alternatives to determine the treatment technique requirements in the final LCRI. See section VI.G of this preamble and chapter 8 of the final LCRI Economic Analysis (USEPA, 2024a) for descriptions and analysis of alternative options that were considered.

This action may significantly or uniquely affect small governments. The EPA consulted with small governments concerning regulatory requirements that might significantly or uniquely affect them. The EPA describes this consultation in the Regulatory Flexibility Act (RFA), section VII.C of this document.

E. Executive Order 13132 (Federalism)

The EPA concluded that this action has federalism implications because it imposes substantial direct compliance costs on State or local governments, and the Federal Government will not provide the funds necessary to pay those costs. However, the EPA notes that the Federal Government is providing a potential source of funds to offset some of those direct compliance costs through the Bipartisan Infrastructure Law. The EPA estimates that the net change in primacy agency related costs for State, local, and Tribal governments in the aggregate is between \$25.8 and \$27.7 million in 2022 dollars at a two percent discount rate (USEPA, 2024a).

The EPA provides the following federalism summary impact statement. The EPA consulted with State and local officials early in the process of developing the proposed action to permit them to have meaningful and timely input into its development. On October 13, 2022, the EPA held a federalism consultation through a virtual meeting. The EPA invited the following national organizations

representing State and local officials to that meeting: the National Governor's Association, the National Conference of State Legislatures, the Council of State Governments, the National League of Cities, the U.S. Conference of Mayors, the National Association of Counties, the International City/County Management Association, the National Association of Towns and Townships, the Council of State Governments, County Executives of America, and the Environmental Council of the States. The EPA also invited the Association of State Drinking Water Administrators, the Association of Metropolitan Water Agencies, the National Rural Water Association, the American Water Works Association, the Association of State and Territorial Health Officials, the National Association of County and City Health Officials, the American Public Works Association, the Association of Clean Water Administrators, the Western States Water Council, the African American Mayors Association, the National Association of State Attorneys General, the Western Governors' Association, the National School Board Association, the American Association of School Administrators, and the Council of the Great City Schools to participate in the meeting. Representatives from 15 organizations participated in the meeting.

The EPA also provided the members of the various associations an opportunity to provide input during follow-up meetings. The EPA received requests for additional meetings and held meetings with the Association of State Drinking Water Administrators and member States on October 5, 2022, and November 2, 2022.

In addition to input received during the meeting on October 13, 2022, the EPA provided an opportunity to receive written input within 60 days after the date of that meeting. A summary report of the views expressed during the federalism consultation meeting and written submissions is available in the docket (EPA-HQ-OW-2022-0813).

F. Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments)

This action has Tribal implications because it imposes substantial direct compliance costs on Tribal governments, and the Federal Government will not provide funds necessary to pay all of those direct compliance costs. There are 996 PWSs serving Tribal communities, where 87 of them are federally-owned (USEPA, 2024a). The final LCRI Economic Analysis estimated that the total annualized incremental costs placed on

all systems serving Tribal communities ranges from \$5.9 to \$7.2 million (USEPA, 2024a). The EPA notes that these estimated impacts will not fall evenly across all Tribal systems. The LCRI small system flexibility provisions offer regulatory relief by providing flexibilities for CWSs serving 3,300 or fewer persons and all NTNCWSs that choose alternatives to CCT, such as installation and maintenance of point-of-use devices and replacement of lead-bearing materials to address lead in drinking water. This flexibility may result in LCRI implementation cost savings for many Tribal systems since 89 percent of Tribal CWSs serve 3,300 or fewer persons and 16 percent of all Tribal systems are NTNCWSs (USEPA, 2024a). Lastly, the EPA notes that the Federal Government is providing a potential source of funds to offset some of those direct compliance costs through the Bipartisan Infrastructure Law (BIL). Tribal communities may apply for funding and technical assistance to support reduction of lead in drinking water through the Drinking Water Infrastructure Grants Tribal Set-Aside Program, specifically, the Lead Service Line Replacement Supplemental funding, which includes \$60 million per year for five years (fiscal year (FY) 2022–FY 2026) from the Bipartisan Infrastructure Law to support lead service line identification and replacement in water systems serving Tribes. The EPA also provides support to Tribal communities through Tribal Grant Programs established under the WIIN Act, specifically the Reducing Lead in Drinking Water Tribal Grant Program that supports lead reduction projects for public water systems that serve Tribal communities and the Voluntary School and Childcare Lead Testing and Reduction Tribal Grant Program to support lead testing in drinking water at any school or child care facility, public or private, that serves federally recognized Tribal populations.

The EPA consulted with federally recognized Tribal officials early in the process of developing this action to permit them to have meaningful and timely input into its development. Between October 6, 2022, and December 9, 2022, the EPA consulted with federally recognized Indian Tribes. The consultation included two national webinars with interested Tribes on October 27, 2022, and November 9, 2022, during which the EPA provided an overview of proposed rulemaking information and requested input. A total of 11 Tribal representatives participated in the two webinars. The EPA received

oral comments from one commenter who supported the EPA's proposal to collect both first- and fifth-liter samples at lead service line sites and use the higher of the two in the lead 90th percentile calculation. The same commenter also asked if EPA has any programs that provide tap sampling assistance in Tribal homes. The EPA did not receive any written consultation comments from Tribal organizations during the comment period that followed the webinars. Over the course of the rulemaking, the agency did not receive any consultation requests from Tribal nations. Lastly, the EPA did not receive any written or oral comments from Tribal representatives on the proposed rule. A summary report of the views expressed during Tribal consultations is available in the docket (EPA–HQ–OW–2022–0801).

The EPA has met the needs of Tribes that were made known during the development of the LCRI. Specifically, for in-home sampling of lead and copper, the EPA intends to develop guidance documents to assist water systems in implementing the LCRI requirements, including tap sampling. Further, water systems serving Tribes can apply for WIIN grants to support both compliance tap sampling and the requirement for systems to offer supplemental sampling by consumer request.

G. Executive Order 13045 (Protection of Children From Environmental Health and Safety Risks)

Executive Order 13045 directs Federal agencies to include an evaluation of the health and safety effects of the planned regulation on children in Federal health and safety standards and explain why the regulation is preferable to potentially effective and reasonably feasible alternatives. This action is subject to Executive Order 13045 because it is a significant regulatory action under section 3(f)(1) of Executive Order 12866. The EPA believes that the environmental health or safety risk addressed by this action has a disproportionate effect on children as developing fetuses, infants, and young children are most susceptible to the harmful health effects of lead (ATSDR, 2020). Accordingly, the EPA evaluated the environmental health or safety effects of lead found in drinking water on children and estimated the risk reduction and health endpoint impacts to children associated with treatment to reduce lead in drinking water including the adoption and optimization of CCT technologies and the replacement of LSLs and GRR service lines. The results of these evaluations are included in

chapter 5, sections 5.6 and 5.8, and appendix D of the final LCRI Economic Analysis (USEPA, 2024a) and described in section VI of this preamble. Copies of the final LCRI Economic Analysis and supporting information are available in the docket (EPA–HQ–OW–2022–0801).

Furthermore, the EPA's *Policy on Children's Health* also applies to this action. Information on how the Policy was applied is available in section III.B of this preamble.

H. Executive Order 13211 (Actions That Significantly Affect Energy Supply, Distribution, or Use)

This action is not a "significant energy action," because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The water systems affected by this action do not generally generate power. In addition, this action does not propose to regulate any aspect of energy distribution because the water systems that would be regulated by the LCRI already use electrical service providers. Finally, the EPA determined that the incremental energy used to implement CCT at drinking water systems and replace LSLs and GRR service lines in response to the regulatory requirements is minimal. As such, the EPA does not anticipate that this final rule would have a significant adverse effect on the supply, distribution, or use of energy.

I. National Technology Transfer and Advancement Act of 1995

This action involves technical standards. The requirements under the LCRI may involve existing voluntary consensus standards because the LCRI requires additional monitoring for lead and copper. The EPA's monitoring and sampling methodologies generally include voluntary consensus standards developed by agencies, such as the American National Standards Institute (ANSI) and other similar types of entities wherever the EPA deems these methodologies appropriate for compliance monitoring. The rule includes requirements to use filters that are certified by an ANSI-accredited certifier. Additional information is available in sections IV.B and IV.I of this preamble. The LCRI does not, however, change any methodological requirements for monitoring or sample analysis. Additional information is available in section IV.E of this preamble. The EPA notes that in some cases, the LCRI revises the required frequency and number of lead tap samples.

J. Executive Order 12898 (Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations) and Executive Order 14096 (Revitalizing Our Nation's Commitment to Environmental Justice for All)

The EPA believes that the human health or environmental conditions that exist prior to this action result in or have the potential to result in disproportionate and adverse human health or environmental effects on communities with environmental justice concerns. The EPA found in the literature review conducted as part of the environmental justice analysis for the LCRI that there are environmental justice concerns associated with lead exposure in the baseline. With respect to the EPA's case study analysis, the data indicate a range of environmental justice concerns associated with baseline LSL presence. The EPA anticipates the LCRI will not create disproportionate and adverse human health or environmental effects on communities with environmental justice concerns under Executive Order 14096 (88 FR 25251, April 21, 2023); see also Executive Order 12898 (59 FR 7629, February 16, 1994). The EPA believes that this action is likely to reduce existing disproportionate and adverse effects on communities with environmental justice concerns. The EPA expects that the LCRI will reduce differential impacts associated with lead exposure from drinking water compared to the baseline identified in the environmental justice analysis. The documentation for this finding, including additional details on the methodology, results, and conclusions, are included in the EPA's Environmental Justice Analysis for the Proposed Lead and Copper Rule Improvements Report and is available in the public docket for this action (EPA-HQ-OW-2022-0801).

Executive Order 12898 first established Federal executive policy on environmental justice. Executive Order 14096 supplemented Executive Order 12898, and among other things, directs Federal agencies, as appropriate and consistent with applicable law, to build upon and strengthen their commitment to deliver environmental justice to all communities across America through an approach that is informed by scientific research, high-quality data, and meaningful Federal engagement with communities with environmental justice concerns.

Consistent with the agency's "Technical Guidance for Assessing Environmental Justice in Regulatory

Analysis" (USEPA, 2016c), the EPA conducted an environmental justice analysis for the LCRI to assess impacts anticipated to result from the proposed LCRI (USEPA, 2023a). The analysis builds on and advances the analysis conducted under the LCRR, which evaluated baseline exposure to lead in drinking water. The LCRI's environmental justice analysis evaluated potential environmental justice concerns associated with lead in drinking water in the baseline and the proposed LCRI, including consideration of whether potential environmental justice concerns would be created or mitigated by the proposed LCRI relative to the baseline. The EPA compiled recent peer-reviewed research on the relationship between lead exposure and socioeconomic status and found that Black, Indigenous, and People of Color (BIPOC) and/or low-income populations are at higher risk of lead exposure and associated health risks. The EPA's literature review identified some trends indicating disproportionate and adverse human health risk for exposure to lead in populations of color and low-income populations, and also that populations of children in households occupied by people of color and/or low-income households are disproportionately at risk of exposure to lead in drinking water because they are more likely to live in housing built when LSLs were more commonly used. The EPA also conducted an analysis of seven case study cities and found a range of outcomes with respect to the sociodemographic and housing unit variables in areas served by LSLs in the cities investigated. In addition to LSL presence, the EPA considered housing age and traffic proximity as indicators of other potential lead exposure pathways.

Updated inventories are similarly not widely available yet; however, some systems have published updated inventories online. In the environmental justice analysis for the LCRI, the EPA evaluated service line inventories from seven water systems to estimate baseline exposure to lead in drinking water using LSL presence as a proxy for lead exposure (USEPA, 2023e). The EPA found a range of outcomes with respect to the sociodemographic and housing unit variables in areas served by LSLs in the cities investigated. While the EPA found that block groups with LSLs often had higher percentages of low-income residents, renters, and People of Color (specifically, Black, Hispanic, or linguistically isolated individuals) compared to block groups without LSLs, there was little evidence that the number of LSLs per capita was

positively correlated with block group demographic characteristics for these seven case studies. However, block groups with the highest number of LSLs per capita (top quartile) had a notably larger percentage of Black residents than the service area as a whole for six case studies. Two other measures (traffic density and pre-1960 housing) were included to capture the possibility of other sources of lead. The analysis results showed that pre-1960 housing is notably higher in block groups with LSLs compared to those without. The percent of housing built prior to 1960 was also positively correlated with the number of LSLs per capita for every case study and was also elevated in the top quartile compared to the service area as a whole. A separate EPA analysis also revealed that LSL prevalence in Cincinnati, OH, and Grand Rapids, MI, was a stronger predictor of the prevalence of elevated blood lead levels compared with the EPA's EJScreen 2017 Lead Paint EJ Index or the U.S. Department of Housing and Urban Development's Deteriorated Paint Index (Tornerio-Velez et al., 2023).

Taken together, these findings support the concern that adverse health effects associated with lead exposure from LSLs may be inequitably distributed with respect to LSL presence. While the limited number of water systems included in the analysis do not permit conclusions to be made about environmental justice and LSL presence outside of the context of these individual systems, the analysis does point to several findings. The analysis demonstrated significant differences in socioeconomic and housing characteristics and the prevalence of LSLs across these systems. It also demonstrated the importance of considering the specific characteristics within the individual system context. Taken together, these findings support the concern that adverse health effects associated with lead exposure from LSLs may be inequitably distributed with respect to LSL presence in some systems.

Statistical analysis did not identify strong associations between LSLR and the characteristics of the Census block group in which they occurred (e.g., socioeconomic and housing characteristics) in any of the case studies. This is because, in general, at the time of the analysis either no LSLs or relatively few LSLs have been removed in the locations of the case studies, which affects the EPA's ability to quantify a relationship. Conversely, in the case study of the water system in Newark, New Jersey, almost all LSLs were removed in a short period of time,

similarly obscuring the relationship between removals and the socioeconomic and housing unit variables. Nevertheless, the EPA recognizes the potential that even in a water system where there are no environmental justice concerns with respect to LSL presence, the sequence and timing in which lead and GRR service lines are replaced by a system's service line replacement program can potentially create a concern. For example, research on a voluntary LSLR program in Trenton, New Jersey, found that owner-occupied and higher valued properties were more likely to participate in the program (Klemick et al., 2024). Many LCRI provisions will have the effect of preventing or minimizing environmental justice concerns from being created within the replacement program, as well as other requirements that can make full replacements and information more accessible to all customers (section III.H). The EPA expects that LCRI provisions, such as service line replacement prioritization, would reduce baseline differential impacts associated with lead exposure from drinking water. In sections III.G and III.H of this preamble, the EPA also highlights external funding available to support full service line replacement, as well as water systems' obligations under Federal civil rights laws.

Additionally, on October 25, 2022, and November 1, 2022, the EPA held public meetings related to environmental justice and the development of the proposed LCRI. The meetings provided an opportunity for the EPA to share information and for individuals to offer input on environmental justice considerations related to the development of the proposed LCRI and how to more equitably address lead in drinking water issues in their communities.

During the meetings and in subsequent written comments, the EPA received public comment on topics including disproportionate exposure to lead and its health effects among BIPOC and low-income communities; lead service line replacement (LSLR) funding; methods to prioritize LSLR; access to LSLR for renters; filter distribution and use during LSLR; lowering the lead action level; establishing an maximum contaminant level (MCL) for lead; updating the lead health effects language required for public education, public notification, and the CCR; ensuring that public education and public notification reaches communities that are most at risk; first- and fifth-liter lead tap sampling; remediating lead identified

through sampling in schools and child care facilities; environmental justice concerns with corrosion control studies; community engagement; and regulatory enforcement and oversight. For more information on the public meetings, please refer to the *Public Meeting on Environmental Justice Considerations for the Development of the Proposed Lead and Copper Rule Improvements (LCRI) Meeting Summary* for each of the meeting dates in the public docket at <https://www.regulations.gov/docket/EPA-HQ-OW-2022-0801>. Written public comments can also be found in the docket.

1. Summary of Public Comments and the EPA's Response

The EPA received several comments regarding the agency's LCRI environmental justice analysis, in addition to general comments about environmental justice and equity in response to lead contamination of drinking water broadly. Commenters stated that low-income and BIPOC communities are disproportionately impacted by lead exposure from LSLs. Furthermore, commenters expressed that LCRI is a meaningful step forward to help many communities experiencing inequities due to several different and cumulative factors, including a lack of resources and investment. Commenters further suggested that analyzing disparities and inequities of environmental exposures is necessary to address environmental justice concerns. The EPA agrees that identifying and addressing disproportionate and adverse human health or environmental effects, as appropriate and consistent with applicable law, is essential for environmental justice considerations.

Some commenters alleged perceived deficiencies in the environmental justice analysis for LCRI based on proposed rule requirements with potential impacts on communities with environmental justice concerns. Since those comments were more specifically about individual rule requirements compared to how the EPA implemented the directives in Executive Orders 12898 and 14096, as allowed under SDWA, the EPA has responded to those comments in the relevant sections of the preamble and Response to Comments document (see section III.H of this preamble and section 22.10.1 of the Response to Comments document (USEPA, 2024k).

The EPA received comments concerning environmental justice and equity with respect to service line replacement and service line replacement plans. The agency's responses to comments are addressed in those sections and the LCRI Response to

Comments (see sections IV.B and IV.C of this preamble and section 9 of the Response to Comments document (USEPA, 2024k)). Commenters recommended that the agency require systems to prioritize criteria for service line replacement in the final rule for communities with the greatest burden from lead exposure and that Federal funding should be allocated to communities with the highest concentration of LSLs. Commenters stated that the costs of service line replacement should not fall on the customers, especially given that, in their view, many communities with environmental justice concerns have not been prioritized in past public works investments. Commenters concluded that further disparities could be created if customers are required to pay to replace their portion of the LSL. While the EPA acknowledges the concern of the potential environmental justice impacts of paying for service line replacement, the agency has not used its section 1412 authority under SDWA to direct how a water system covers the costs of compliance with a NPDWR, which is, at its core, a matter of State and local law. There is no explicit statutory authority for EPA to do so; State and local governments regulate how water systems provide and charge for services to their customers. However, there is an unprecedented amount of Federal funds available to cover LSLR, such as from the BIL. BIL requires that States provide 49 percent of their LSLR and General Supplemental capitalization grant amounts as additional subsidization in the form of principal forgiveness and/or grants to disadvantaged communities, as defined under SDWA section 1452(d)(3). Additional Federal funding sources, such as the Housing and Urban Development Community Development Block Grants, U.S. Department of Agriculture Rural Development, and the U.S. Economic Development Administration Public Works program, also provide opportunities for equitable funding opportunities for communities to utilize for LSLR. Additional examples of funding customer-side service line replacement are given in section III.G of this preamble.

The final LCRI also includes requirements for systems regarding their service line replacement plans to advance transparency for communities, including communities with environmental justice concerns. Specifically, under LCRI at § 141.84(c)(2), systems must make their service line replacement plan publicly available. Systems are also required to

include a prioritization strategy and a funding strategy for conducting full service line replacement as part of their plans.

The EPA received one comment that stated the agency failed to consider the implications of the proposed rule on the affordability of water services and the associated water rate impacts on BIPOC households. The commenter stated that on top of the differential effects of specific rule provisions within the LCRI, the EPA must consider impacts of household water rate increases in disadvantaged households, opportunity costs of BIPOC households, and negative secondary effects the LCRI requirements will have on households. The EPA points out that ratemaking is generally governed by State and local authorities and the EPA does not have the authority to control those rates. The environmental justice analysis was conducted consistent with SDWA.

K. Consultations With the Science Advisory Board (SAB) and the National Drinking Water Advisory Council

In accordance with SDWA sections 1412(d) and 1412(e), the EPA consulted with the National Drinking Water Advisory Council (NDWAC) (or the Council) and the EPA Science Advisory Board (SAB). The following summarizes these requirements and consultations.

1. SAB

SDWA section 1412(e) requires that the EPA request comments from the SAB prior to the proposal of any NPDPWR. As required by SDWA section 1412(e), in 2022, the EPA initiated consultation with the SAB to seek comments in advance of the publication of the proposed LCRI. During this consultation, the EPA asked the SAB to consider service line inventory data at select case study locations to advise the EPA about the most appropriate tools, indicators, and measures for evaluating environmental justice with respect to the presence and replacement of LSLs. The EPA also asked the SAB to evaluate the potential environmental justice impacts of the proposed LCRI in accordance with Executive Order 12898, which directs agencies to “identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations” (E.O. 12898, 1994).

On November 3, 2022, the EPA held a consultation with the SAB regarding the agency’s draft case studies for the proposed LCRI environmental justice analysis. SAB members were asked to address the following questions:

(1.a.) Please comment on the tools/indicators/metrics, such as the recently released Environmental Justice Index (EJI) and Climate and Economic Justice Screening Tool (CEJST), that EPA should consider using when developing LSLR case studies to support the development of the Lead and Copper Rule Improvements EJ analysis.

(1.b.) Given the identified tools and indices (i.e., EJScreen, Social Vulnerability Index, Area Deprivation Index) please comment on whether there is a sub-set of variables within the indices which should be given higher weights in the Lead and Copper Rule Improvements EJ assessment.

(2) Please comment on the indicator/measure that is most suitable for studying the EJ impacts associated with lead service lines and their replacement.

(3) Please comment on whether any of the tools or indicators under consideration for use in the Lead and Copper Rule Improvements assessment of the drinking water EJ impacts can help to better assess lead impacts from other co-located exposure pathways (e.g., lead paint, soil, and dust) to inform the EPA’s understanding of lead exposures from non-drinking water sources.

Materials shared with the SAB are available in the docket (EPA–HQ–OW–2022–0801).

In response, the EPA received a range of recommendations from SAB members. The recommendations primarily focused on the tools and indicators the EPA should use in its environmental justice analysis to support the LCRI. SAB members recommended using indicators from multiple tools (e.g., EJScreen, Centers for Disease Control and Prevention (CDC)’s EJI, CDC/Agency for Toxic Substances and Disease Registry (ATSDR) Social Vulnerability Index (SVI), Area Deprivation Index (ADI)) to more effectively identify communities that are disproportionately burdened by lead exposure and evaluate environmental justice impacts of LSLs and LSLR. One member suggested not using tools that use an index that is based on different indicators or composite tools (evaluating multiple indicators together) (e.g., EJScreen, CDC’s EJI, CDC/ATSDR SVI, ADI). Instead, some members advised extracting and evaluating demographic and socioeconomic factors from these tools individually. SAB members recommended using individual socioeconomic variables from the 2020 U.S. Census in conjunction with the American Community Survey (ACS), CDC’s Minority Health Social Vulnerability Index (MH SVI), and the University of South Carolina’s Social Vulnerability Index (SoVI). One member recommended relying more heavily on tools that have finer resolution and use geographic units at the Census block group level, such as EJScreen and ADI.

In addition, SAB members recommended indicators for studying LSL and LSLR environmental justice impacts including minority populations, low-income population, population under age five, pre-1960 housing, pre-1980 housing, people with disabilities, single-parent households, occupied housing units without complete plumbing, proximity to lead mines, hazardous waste proximity, superfund proximity, and particulate matter (PM) 2.5. A few members recommended including indicators that address drinking water or infrastructure vulnerabilities.

Some members suggested that the EPA focus on indicators most relevant to children, such as children under age five, maternal education, birth weight, and quality of home environment, because children are most sensitive to the effects of lead. One member suggested including a subset of indicators that are children-specific and comprise relevant subgroups of persons under five years and/or 18 years, such as children belonging to non-white racial/ethnic groups, children not born in the U.S., children with disabilities, and children at or below the poverty level. Some members pointed out that race/ethnicity indicators should be disaggregated to focus on only one race/ethnicity instead of an aggregate “people of color” indicator.

Some members suggested giving higher weights to indicators that address populations disproportionately vulnerable to lead exposure and its adverse health effects, such as population under 5 years old and low-income communities, because they are more likely to consume tap water. Additional indicators suggested for weighting were location based, including residential areas near legacy pollution sites.

Some SAB members suggested individual indicators from the following tools be used to consider lead from other pathways: EJScreen, SVI, ADI, and EJI. Some SAB members recommended using proximity to traffic and pre-1960s housing, as these could indicate compound lead exposure from pathways other than drinking water. For example, proximity to traffic could correspond to elevated lead in soil due to past emissions of leaded gasoline, while pre-1960s housing is more likely to have lead paint, contributing to lead in dust and soil.

As a result of the consultation, the EPA incorporated the suggestions from the SAB in a study of the environmental justice implications of the LCRI (USEPA, 2023e). The EPA evaluated correlations between per capita LSLs (in

a Census block group) and different ethnic groups including American Indian or Alaska Native, Asian or Pacific Islander, other or two races, Hispanic, Non-Hispanic Black, and Non-Hispanic white. The EPA also evaluated the relationship between the presence of LSL and indicators representing the populations most at risk of lead exposure such as low income and children under age five. Indicators addressing characteristics that are associated with exposure to other lead sources were also incorporated in the study including structures built prior to 1960 and proximity to traffic. Additional information on SAB recommendations is included in the SAB report available in the docket (EPA-HQ-OW-2022-0801).

2. NDWAC

SDWA section 1412(d) requires the EPA to consult with the NDWAC in proposing and promulgating any NPDWR. The EPA met this requirement for the proposed LCRI on November 30, 2022, when the EPA consulted with the NDWAC prior to the rule proposal. During the November 30 consultation meeting, the EPA provided background on lead in drinking water and the LCR, an overview of the LCRR published in January 2021, and a summary of the outcome of the EPA's review of the LCRR published in the December 2021 **Federal Register** notification (86 FR 71574). The EPA also discussed topics for the potential revisions in the proposed LCRI, including service line replacement, tap sampling and compliance, ways to reduce rule complexity, and small system flexibilities, to collect input and generate discussion among NDWAC members. A summary of the NDWAC consultation is available in the National Drinking Water Advisory Council, Fall 2022 Meeting Summary Report (NDWAC, 2022) and the docket for this rule (EPA-HQ-OW-2022-0801). The EPA carefully considered NDWAC recommendations during the development of the proposed LCRI.

On January 31, 2024, the EPA consulted with the NDWAC again. During the consultation the EPA provided general background on lead in drinking water and the LCR. The EPA provided an overview of the proposed LCRI including discussing the key revisions in the proposed rule. The EPA carefully considered the information provided by the NDWAC during the development of the final LCRI. A summary of the NDWAC input from that meeting is available in the NDWAC Summary Report (NDWAC, 2024) and is

also available in the docket (EPA-HQ-OW-2022-0801).

L. Consultation With the Department of Health and Human Services Under SDWA Section 1412(d)

In accordance with section 1412(d) of SDWA, the agency consulted with the Department of Health and Human Services (HHS). On August 18, 2023, the EPA consulted with the HHS on the proposed LCRI and on July 15, 2024, the EPA consulted with the HHS on the final rule. The EPA received and considered comments from the HHS for both the proposal and final rule through the interagency review process under Executive Order 12866, described in section VII.A of this preamble. Summaries of the consultation meetings with the HHS can be found in the docket (EPA-HQ-OW-2022-0801).

M. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action meets the criteria set forth in 5 U.S.C. 804(2).

VIII. Severability

The purpose of this section is to clarify the EPA's intent with respect to the severability of the components of the rule. The major components of the rule are: (1) a service line inventory, (2) service line replacement, (3) corrosion control treatment, (4) public education, including additional requirements for multiple lead action level exceedances, (5) sampling at schools and child care facilities, and (6) the small system compliance flexibility option.

If a court finds the EPA erred in its promulgation of some aspect of this rule, the EPA expects to request briefing on whether vacatur, partial vacatur, or remand would be the appropriate remedy. While parts of the rule are interdependent, other parts of the rule may be easily severed and implemented or vacated without disrupting the other parts of the rule. In addition, if one component of the rule is vacated, the remaining portions may or may not be adequate to meet the anti-backsliding standard for a revised NPDWR. For example, the LCRI's adjustments to the re-optimization requirements were made in part because systems will be conducting lead and GRR service line replacement. The EPA does not intend those adjustments to take effect in the absence of a mandatory service line replacement requirement. Conversely, if a court were to vacate or partially vacate some aspect of the corrosion control treatment requirements, such as the

action level, the service line replacement requirements can be implemented, and the remaining components of the rule would meet the anti-backsliding standard in SDWA. Therefore, with the exceptions noted below, the EPA expects that additional briefing would be needed to address whether the provision at issue is integral to either the operation of the rule or the anti-backsliding requirement.

- The service line inventory requirement is severable from all other components of the rule, including the service line replacement requirements. While it supports the service line replacement requirements, and the public education requirement to notify customers that are served by lead, GRR, or unknown service lines work in tandem with the inventory, it is also critical to the EPA's administration of financial assistance programs authorized under SDWA for the replacement of service lines. Therefore, even if the service line replacement requirements or the public education requirements are vacated or partially vacated, the service line inventory requirements can operate independently and support the EPA's non-regulatory efforts to support the removal of lead service lines.

- If a court were to vacate any portion of the school and child care facility sampling requirements, the remainder of the rule could be implemented effectively. School and child care facility sampling is not integral to the other components of the rule or the EPA's evaluation of whether the rule as a whole meets the anti-backsliding provision of SDWA. Similarly, the school and child care facility sampling requirements can operate independently if other components of the rule are vacated.

- The small system compliance flexibility option, if vacated, is not integral to the rule or the underlying analyses of feasibility of the rule for small systems. As explained in section IV.I of this preamble, the EPA structured this provision so that it could be easily severed from the remainder of the rule because States are not required to adopt this provision to obtain primacy for the rule, and the EPA expects that some primacy States will exercise their discretion to not adopt this flexibility provision.

- The service line replacement requirements, together with the service line inventory, can be implemented if the court vacates any provisions for (1) corrosion control treatment, including the action level, (2) public education requirements, including additional requirements for multiple action level

exceedances, (3) school and child care facility sampling, and (4) the small system compliance flexibility option. By remaining in effect, the service line replacement provision will significantly reduce adverse health effects known to occur as a result of lead contamination from lead and galvanized service lines.

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List of Subjects

40 CFR Part 141

Environmental protection, Copper, Indians—lands, Intergovernmental relations, Lead, Lead service line, Reporting and recordkeeping requirements, Water supply.

40 CFR Part 142

Environmental protection, Administrative practice and procedure, Copper, Indians—lands, Intergovernmental relations, Lead, Lead service line, Reporting and recordkeeping requirements, Water supply.

Michael S. Regan,
Administrator.

For the reasons stated in the preamble, the Environmental Protection Agency amends 40 CFR parts 141 and 142 as follows:

PART 141—NATIONAL PRIMARY DRINKING WATER REGULATIONS

■ 1. The authority citation for part 141 continues to read as follows:

Authority: 42 U.S.C. 300f, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–4, 300j–9, and 300j–11.

■ 2. Amend § 141.2 by:

■ a. Revising the definitions of “Action level” and “Child care facility”;

■ b. Adding in alphabetical order definitions for “Connector” and “Distribution System and Site Assessment”;

■ c. Revising the definition of “Elementary school”;

■ d. Removing the definitions of “Find-and-fix” and “First draw sample”;

■ e. Adding in alphabetical order a definition for “First-liter sample”;

■ f. Removing the definition of “Full lead service line replacement”;

■ g. Adding in alphabetical order a definition for “Galvanized requiring replacement service line”;

■ h. Revising the definition of “Galvanized service line”;

■ i. Removing the definition of “Gooseneck, pigtail, or connector”;

■ j. Revising the definitions of “Lead service line” and “Lead status unknown service line”;

■ k. Removing the definitions of “Lead trigger level” and “Medium-size water system”;

■ l. Adding in alphabetical order definitions for “Medium water system” and “Newly regulated public water system”;

■ m. Removing the definitions of “Optimal corrosion control treatment” and “Partial lead service line replacement”;

■ n. Adding in alphabetical order definitions for “Optimal corrosion control treatment (OCCT)” and “Partial service line replacement”;

■ o. Revising the definitions of “Pitcher filter” and “Secondary school”;

■ p. Adding in alphabetical order a definition for “Service line”;

■ q. Revising the definitions of “Small water system” and “System without corrosion control treatment”;

■ r. Adding in alphabetical order a definition for “Tap monitoring period”;

■ s. Removing the definition of “Tap sampling monitoring period”; and

■ t. Revising the definitions of “Tap sampling period”, “Tap sampling protocol”, and “Wide-mouth bottles”.

The revisions and additions read as follows:

§ 141.2 Definitions.

* * * * *

Action level, for the purpose of subpart I of this part only, means the

concentrations of lead or copper in water as specified in § 141.80(c) which determines requirements under subpart I of this part. The lead action level is 0.010 mg/L and the copper action level is 1.3 mg/L.

* * * * *

Child care facility, for the purpose of subpart I of this part only, means a location that houses a provider of child care, day care, or early learning services to children, as licensed by the State, local, or Tribal licensing agency.

* * * * *

Connector, also referred to as a gooseneck or pigtail, means a short segment of piping not exceeding three feet that can be bent and is used for connections between service piping, typically connecting the *service line* to the main. For purposes of subpart I of this part, lead connectors are not considered to be part of the service line.

* * * * *

Distribution System and Site Assessment means the requirements under subpart I of this part, pursuant to § 141.82(j), that water systems must perform at every tap sampling site that yields a lead result above the lead action level of 0.010 mg/L.

* * * * *

Elementary school, for the purpose of subpart I of this part only, means a school classified as elementary by State and local practice and composed of any span of grades (including pre-school) not above grade 8.

* * * * *

First-liter sample, for the purpose of subpart I of this part only, means a sample collected of the first one-liter volume of tap water drawn in accordance with § 141.86(b).

* * * * *

Galvanized requiring replacement service line, for the purpose of subpart I of this part only, means a *galvanized service line* that currently is or ever was downstream of a *lead service line*; or is currently downstream of a *lead status unknown service line*. For this definition, downstream means in the direction of flow through the service line. If the water system is unable to demonstrate that the *galvanized service line* was never downstream of a *lead service line*, it is a *galvanized requiring replacement service line* for purposes of the service line inventory and replacement requirements pursuant to § 141.84.

Galvanized service line, for the purpose of subpart I of this part only, means a *service line* that is made of iron or steel that has been dipped in zinc to prevent corrosion and rusting.

* * * * *

Lead service line, for the purpose of subpart I of this part only, means a *service line* that is made of lead or where a portion of the *service line* is made of lead. A lead-lined galvanized service line is defined as a *lead service line*.

Lead status unknown service line, for the purpose of subpart I of this part only, means a *service line* whose pipe material has not been demonstrated to be a *lead service line*, *galvanized requiring replacement service line*, or a non-lead service line pursuant to § 141.84(a)(3).

* * * * *

Medium water system, for the purpose of subpart I of this part only, means a water system that serves greater than 10,000 persons and less than or equal to 50,000 persons.

* * * * *

Newly regulated public water system, for the purpose of subpart I only, refers to either:

(1) An existing *public water system* that was not subject to National Primary Drinking Water Regulations in this part on October 16, 2024, because the system met the requirements of section 1411 of the Safe Drinking Water Act and § 141.3; or

(2) An existing water system that did not meet the definition of a *public water system* in § 141.2 on October 16, 2024. This term does not include existing water systems under new or restructured ownership or management.

* * * * *

Optimal corrosion control treatment (OCCT), for the purpose of subpart I of this part only, means the corrosion control treatment that minimizes the lead and copper concentrations at users' taps while ensuring that the treatment does not cause the water system to violate any National Primary Drinking Water Regulations in this part.

Partial service line replacement, for the purpose of subpart I of this part only, means replacement of any portion of a *lead service line* or *galvanized requiring replacement service line*, as defined in this section, that leaves in service any length of lead or galvanized requiring replacement service line upon completion of the work.

* * * * *

Pitcher filter means a non-plumbed water filtration device, which consists of a gravity fed water filtration cartridge and a filtered drinking water reservoir, that is certified by an American National Standards Institute accredited certifier to reduce lead in drinking water.

* * * * *

Secondary school, for the purpose of subpart I of this part only, means a school comprising any span of grades beginning with the next grade following an elementary school (usually 7, 8, or 9) and ending with grade 12. Secondary schools include both junior high schools and senior high schools and typically span grades 7 through 12.

* * * *

Service line, for the purpose of subpart I of this part only, means a portion of pipe that connects the water main (or other conduit for distributing water to individual consumers or groups of consumers) to the building inlet. Where a building is not present, the service line connects the water main (or other conduit for distributing water to individual consumers or groups of consumers) to the outlet.

* * * *

Small water system, for the purpose of subpart I of this part only, means a water system that serves 10,000 persons or fewer.

* * * *

System without corrosion control treatment, for the purpose of subpart I of this part, means a water system that does not have or purchases all of its water from a system that does not have:

(1) An optimal corrosion control treatment approved by the State; or

(2) Any pH adjustment, alkalinity adjustment, and/or corrosion inhibitor addition resulting from other water quality adjustments as part of its treatment train infrastructure.

Tap monitoring period, for the purpose of subpart I of this part only, means the period of time during which each water system must conduct tap sampling for lead and copper analysis. The applicable tap monitoring period is determined by lead and copper concentrations in tap samples. The length of the tap monitoring period can range from six months to nine years.

Tap sampling period, for the purpose of subpart I of this part only, means the time period, within a tap monitoring period, during which the water system is required to collect samples for lead and copper analysis.

Tap sampling protocol means the method for collecting tap samples pursuant to § 141.86(b).

* * * *

Wide-mouth bottles, for the purpose of subpart I of this part only, means bottles one liter in volume that have a mouth with an inner diameter that measures at least 40 millimeters wide.

■ 3. Amend § 141.31 by revising paragraph (d) to read as follows:

§ 141.31 Reporting requirements.

* * * *

(d)(1) The public water system, within 10 days of completing the public notification requirements under subpart Q of this part for the initial public notice and any repeat notices, must submit to the primary agency a certification that it has fully complied with the public notification regulations under subpart Q. The public water system must include with this certification a representative copy of each type of notice distributed, published, posted, and made available to the persons served by the system and to the media.

(2) For Tier 1 notices for a lead action level exceedance, public water systems must provide a copy of the Tier 1 notice to the Administrator and the head of the primary agency as soon as practicable, but not later than 24 hours after the public water system learns of the exceedance.

* * * *

■ 4. Revise and republish § 141.80 to read as follows:

§ 141.80 General requirements and action level.

(a) *Applicability, effective date, and compliance deadlines.* The requirements of this subpart constitute the national primary drinking water regulations for lead and copper.

(1) The provisions of this subpart apply to community water systems and non-transient, non-community water systems (in this subpart referred to as “water systems” or “systems”) as defined at § 141.2.

(2) The requirements of this subpart are effective as of December 30, 2024.

(3) Community water systems and non-transient non-community water systems must comply with the requirements of this subpart no later than November 1, 2027, except where otherwise specified in §§ 141.81, 141.84, 141.85, 141.86, and 141.90, or where an exemption in accordance with 40 CFR part 142, subpart C or F, has been issued by the Administrator.

(4)(i) Between October 30, 2024, and November 1, 2027, community water systems and non-transient non-community water systems must comply with 40 CFR 141.2, 141.31(d), and 141.80 through 141.91, as codified on July 1, 2020, except systems must also comply with 40 CFR 141.84(a)(1) through (10) (excluding paragraphs (a)(6) and (7)), 141.85(a)(1)(ii) and (e), 141.90(e)(1) and (13), (f)(4), and (h)(3), 141.201(a)(3)(vi) and (c)(3), and 141.202(a)(10); 40 CFR part 141, appendix A to subpart Q, entry I.C.1

(excluding § 141.90, except paragraphs (e)(1) and (13) and (f)(4)) and entry I.C.2; 40 CFR part 141, appendix B to subpart Q, entry D.23; and 40 CFR 141.31(d)(2), as codified on July 1, 2024.

(ii) If an exemption from subpart I of this part has been issued in accordance with 40 CFR part 142, subpart C or F, prior to December 16, 2021, then the water systems must comply with 40 CFR 141.80 through 141.91, as codified on July 1, 2020, until the expiration of that exemption.

(b) *Scope.* The regulations in this subpart constitute a treatment technique rule that includes treatment techniques to control corrosion, treat source water, replace service lines, and provide public education. The regulations in this subpart include requirements to support the treatment technique including a service line inventory, tap sampling, and monitoring for lead in schools and child care facilities. Some of the requirements in this subpart only apply if there is an exceedance of the lead or copper action levels, specified in paragraph (c) of this section, as measured in samples collected at consumers’ taps.

(c) *Lead and copper action levels and method for determining whether there is an exceedance of the action level.*

Action levels must be determined based on tap water samples that must be considered for inclusion under § 141.86(e) for the purpose of calculating the 90th percentile and tested using the analytical methods specified in § 141.89. The action levels described in this paragraph (c) are applicable to all sections of subpart I of this part. Action levels for lead and copper are as follows:

(1) The lead action level is exceeded if the 90th percentile concentration of lead as specified in paragraph (c)(3) of this section is greater than 0.010 mg/L.

(2) The copper action level is exceeded if the 90th percentile concentration of copper as specified in paragraph (c)(3) of this section is greater than 1.3 mg/L.

(3) For purposes of this subpart, the 90th percentile concentration must be derived as follows:

(i) For water systems that do not have Tier 1 and/or Tier 2 sites and only have sites identified as Tier 3, 4, or 5 under § 141.86(a):

(A) The results of all lead or copper samples taken during a tap sampling period and eligible for inclusion in the 90th percentile calculation under § 141.86(e) must be placed in ascending order from the sample with the lowest concentration of lead or copper to the sample with the highest concentration of lead or copper. Each sampling result

must be assigned a number, in ascending order beginning with the number 1 for the sample with the lowest concentration of lead or copper. The number assigned to the sample with the highest concentration must be equal to the total number of samples taken and considered for inclusion in the 90th percentile calculation, in accordance with § 141.86(e).

(B) The number of samples taken during the tap sampling period must be multiplied by 0.9.

(C) The 90th percentile concentration is the concentration of lead or copper in the numbered sample yielded after multiplying the number of samples by 0.9 in paragraph (c)(3)(i)(B) of this section.

(D) For water systems that collect five samples per tap sampling period, the 90th percentile concentration is the average of the highest and second highest concentration from the results in paragraph (c)(3)(i)(A) of this section.

(E) For a water system that is allowed by the State to collect fewer than five samples in accordance with § 141.86(a)(2) or has failed to meet their required minimum number of samples and collected fewer than five samples, the sample result with the highest concentration from the results in paragraph (c)(3)(i)(A) of this section is considered the 90th percentile value.

(ii) For water systems with sites identified as Tier 1 or 2 under § 141.86(a) with sufficient Tier 1 and 2 sites to meet the minimum number of sites required in § 141.86(c) or (d) as applicable:

(A) For lead, water systems must include the higher of the first-liter and fifth-liter lead sample results at each Tier 1 and 2 site (or first-liter lead sample if tiering is based on premise plumbing) taken during the tap sampling period in paragraphs (c)(3)(ii)(B) through (D) of this section. For copper, water systems must include all first-liter copper samples collected at each Tier 1 and 2 site taken during the tap sampling period. Lead or copper sample results from Tier 3, 4, or 5 sites cannot be included in this calculation.

(B) The results of the lead or copper samples taken during a tap sampling period and eligible for inclusion in the 90th percentile calculation under § 141.86(e) identified in paragraph (c)(3)(ii)(A) of this section must be placed in ascending order from the sample with the lowest concentration to the sample with the highest concentration. Each sampling result must be assigned a number, in ascending order beginning with the number 1 for the sample with the lowest concentration. The number assigned to

the sample with the highest concentration must be equal to the total number of samples.

(C) The number of samples identified in paragraph (c)(3)(ii)(B) must be multiplied by 0.9.

(D) The 90th percentile concentration is the concentration of lead or copper in the numbered sample yielded after multiplying the number of samples by 0.9 in paragraph (c)(3)(ii)(C) of this section.

(E) For water systems that collect samples from five sites per tap sampling period, the 90th percentile concentration is the average of the highest and second highest concentration from the results in paragraph (c)(3)(ii)(B) of this section.

(F) For a water system that is allowed by the State to collect fewer than five copper samples or five first-liter-and-fifth-liter-paired lead samples in accordance with § 141.86(a)(2), or has failed to collect at least five copper samples or five first-liter-and-fifth-liter-paired lead samples, the sample result with the highest concentration from the results in paragraph (c)(3)(ii)(B) is considered the 90th percentile value.

(iii) For water systems with sites identified as Tier 1 or 2 under § 141.86(a) with an insufficient number of Tier 1 or 2 sites to meet the minimum number of sites required in § 141.86(c) or (d) as applicable:

(A) For lead, the system must use the higher value of the first-liter and fifth-liter lead sample for each Tier 1 or 2 site (or first-liter lead sample if tiering is based on premise plumbing) and the first-liter lead samples from sites in the next highest available tier (*i.e.*, Tier 3, 4, and 5) to meet the minimum number of sites required in § 141.86(c) or (d) sampled during a tap sampling period for the steps in paragraphs (c)(3)(iii)(B) through (D) of this section. For copper, the system must use all first-liter copper samples collected.

(B) The results of all of the lead or copper samples identified in paragraph (c)(3)(iii)(A) of this section must be placed in ascending order from the sample with the lowest concentration to the sample with the highest concentration. The water system must reduce this list to only include samples with the highest concentrations such that the number of sample results equals the minimum number of sites required to be sampled by § 141.86(c) or (d), as applicable. From this reduced list, each sampling result must be assigned a number, in ascending order beginning with the number 1 for the sample with the lowest concentration. The number assigned to the sample with the highest concentration must be equal to the

minimum number of sites required by § 141.86(c) or (d), as applicable.

(C) The number of samples identified in paragraph (c)(3)(iii)(B) must be multiplied by 0.9.

(D) The 90th percentile concentration is the concentration of lead or copper in the numbered sample yielded after multiplying the number of samples by 0.9 in paragraph (c)(3)(iii)(C) of this section.

(E) For water systems that collect samples from five sites per tap sampling period, the 90th percentile concentration is the average of the highest and second highest concentration from the results in paragraph (c)(3)(iii)(B) of this section.

(F) For a water system that is allowed by the State to collect fewer than five copper samples or five first-liter-and-fifth-liter-paired lead samples in accordance with § 141.86(a)(2), or has failed to collect at least five copper samples or five first-and-fifth-liter-paired lead samples, the sample result with the highest concentration from the results in paragraph (c)(3)(iii)(B) is considered the 90th percentile value.

(G) If a water system does not collect enough samples sufficient to meet the minimum number of sites required in § 141.86(c) or (d), the system must calculate the 90th percentile lead and copper levels following the steps in § 141.80(c)(3)(i)(A) through (C).

■ 5. Revise § 141.81 to read as follows:

§ 141.81 Applicability of corrosion control treatment steps to small, medium, and large water systems.

(a) *Corrosion control treatment.* All water systems are required to install, optimize, or re-optimize optimal corrosion control treatment (OCCT) in accordance with this section. This section sets forth when a system must complete the corrosion control treatment steps under paragraph (d) or (e) of this section based on size, whether the system has corrosion control treatment, and whether it has exceeded the lead practical quantitation limit, lead action level, and/or the copper action level.

(1) *Large water systems (serving >50,000 people).* (i) Large water systems with corrosion control treatment that exceed either the lead action level or copper action level must complete the re-optimized OCCT steps specified in paragraph (d) of this section unless the system:

(A) Has re-optimized OCCT once under paragraph (d) of this section after the compliance date in § 141.80(a)(3);

(B) Is meeting optimal water quality parameters designated by the State; and

(C) Is continuing to operate and maintain corrosion control treatment as required in § 141.82(g).

(ii) The State may require a large water system that does not have to re-optimize under paragraphs (a)(1)(i)(A) through (C) of this section to re-optimize under § 141.82(h).

(iii) A large water system must meet the requirements under paragraph (d) of this section if it exceeds the lead action level at the end of a tap sampling period after completing service line replacement in accordance with the requirements in § 141.84(d) and there are no lead, galvanized requiring replacement, or lead status unknown service lines remaining in the system's inventory.

(iv) Large water systems with corrosion control treatment with 90th percentile results as calculated in accordance with § 141.80(c)(3) that exceed the lead practical quantitation limit of 0.005 mg/L but do not exceed the lead action level or the copper action level may be required by the State to complete the re-optimized OCCT steps in paragraph (d) of this section.

(v) Large water systems without corrosion control treatment with 90th percentile results as calculated in accordance with § 141.80(c)(3) that exceed either the lead practical quantitation limit of 0.005 mg/L or the copper action level must complete steps to study and install OCCT, as specified in paragraph (e) of this section.

(2) *Medium water systems (serving >10,000 and ≤50,000 people).* (i) Medium water systems with corrosion control treatment that exceed either the lead action level or copper action level must complete the re-optimized OCCT steps specified in paragraph (d) of this section unless the system:

(A) Has re-optimized OCCT once under paragraph (d) of this section after the compliance date in § 141.80(a)(3);

(B) Is meeting optimal water quality parameters designated by the State; and

(C) Is continuing to operate and maintain corrosion control treatment as required in § 141.82(g).

(ii) The State may require a medium water system that does not have to re-optimize under paragraphs (a)(2)(i)(A) through (C) of this section to re-optimize under § 141.82(h).

(iii) After completing service line replacement in accordance with the requirements in § 141.84(d) and there are no lead, galvanized requiring replacement, or lead status unknown service lines remaining in the inventory, if at the end of a subsequent tap sampling period, the system exceeds the lead action level, a medium water

system with corrosion control treatment must meet the requirements under paragraph (d) of this section.

(iv) Medium water systems with corrosion control treatment that do not exceed either the lead action level or the copper action level and do not have optimal water quality parameters designated by the State must complete the steps specified in paragraph (d) of this section starting with step 6 under paragraph (d)(6) of this section unless the system is deemed optimized under paragraph (b)(3) of this section.

(v) Medium water systems without corrosion control treatment that exceed either the lead or copper action level must complete the OCCT steps specified in paragraph (e) of this section.

(3) *Small water systems (serving ≤10,000 people) and non-transient non-community water systems.* (i) Small and non-transient non-community water systems with corrosion control treatment that exceed either the lead action level or the copper action level, must complete the re-optimized OCCT steps specified in paragraph (d) of this section unless the system:

(A) Has re-optimized OCCT once under paragraph (d) of this section after the compliance date in § 141.80(a)(3);

(B) Is meeting optimal water quality parameters designated by the State; and

(C) Is continuing to operate and maintain corrosion control treatment as required in § 141.82(g).

(ii) The State may require a small water system that does not have to re-optimize under paragraphs (a)(3)(i)(A) through (C) of this section to re-optimize under § 141.82(h).

(iii) After completing service line replacement in accordance with the requirements in § 141.84(d) and there are no lead, galvanized requiring replacement, or lead status unknown service lines remaining in the inventory, if at the end of a subsequent tap sampling period, the system exceeds the lead action level, a small water system with corrosion control treatment must meet the requirements under paragraph (d) of this section.

(iv) Small and non-transient non-community water systems without corrosion control treatment that exceed either the lead action level or copper action level must complete the corrosion control treatment steps specified in paragraph (e) of this section.

(b) *Systems deemed to have optimized corrosion control.* A system without corrosion control treatment is deemed to have OCCT as defined in § 141.2 if the system meets the requirement of either paragraph (b)(1) or (3) of this section. A system with corrosion control treatment

is deemed to have OCCT as defined in § 141.2 or re-optimized OCCT if the system meets the requirements of either paragraphs (b)(1) and (4) or (b)(3) and (4) of this section. Systems must submit documentation of meeting the applicable requirements to the State in accordance with § 141.90(c)(1) by the applicable deadline for submitting tap sampling results under § 141.90(a)(2).

(1) A medium water system without corrosion control treatment or a small water system is deemed to have OCCT if the water system does not exceed the lead action level and copper action level during two consecutive six-month tap monitoring periods and then remains at or below the lead action level and copper action level in all tap sampling periods conducted in accordance with § 141.86.

(i) A small water system with corrosion control treatment is not eligible to be deemed to have OCCT pursuant to this paragraph (b)(1) where the State has set optimal water quality parameters (OWQPs) under paragraph (d) or (e) of this section.

(ii) If a medium water system without corrosion control treatment or a small water system deemed to have OCCT under this paragraph (b)(1) exceeds the lead action level or copper action level, the system must follow the requirements in paragraph (a) of this section.

(2) [Reserved]

(3) A water system is deemed to have optimized or re-optimized corrosion control treatment if it submits tap sampling results in accordance with § 141.86 demonstrating that the 90th percentile lead level is less than or equal to the lead practical quantitation limit of 0.005 mg/L for two consecutive six-month tap monitoring periods, it does not exceed the copper action level for two consecutive six-month tap monitoring periods, and it does not have OWQPs designated by the State under paragraph (d) or (e) of this section.

(i) A system with 90th percentile tap sampling results that later exceeds the lead practical quantitation limit of 0.005 mg/L or copper action level during any tap sampling period is not eligible to be deemed to have optimized OCCT in accordance with this paragraph (b)(3) until the system has completed the treatment steps specified in paragraph (d) or (e) of this section.

(ii) A system deemed to have OCCT in accordance with this paragraph (b)(3) must continue monitoring for lead and copper at the tap no less frequently than once every three calendar years using the reduced number of sites specified in § 141.86(d)(1) and collecting samples at

times and locations specified in § 141.86(d)(2)(iii).

(4) A system with corrosion control treatment deemed to have OCCT under this paragraph (b) must continue to operate and maintain the corrosion control treatment and also meet any additional requirements that the State determines are appropriate to ensure OCCT is maintained.

(c) [Reserved]

(d) *Treatment steps and deadlines for water systems re-optimizing optimal corrosion control treatment.* Water systems with corrosion control treatment that are required to re-optimize optimal corrosion control treatment under paragraph (a) of this section must complete the following steps (described in the referenced portions of §§ 141.82, 141.86, and 141.87) by the indicated time periods. Water systems must conduct tap sampling for lead and copper in accordance with the requirements of § 141.86 while they complete the corrosion control steps in this section.

(1) *Step 1: Initiate mandatory pipe rig/loop or CCT study or treatment recommendation.* (i) Large or medium water systems with lead service lines that exceed the lead action level must harvest lead service lines from the distribution system and construct flowthrough pipe rigs/loops and operate the rigs/loops with finished water within one year after the end of the tap sampling period in which they exceed the lead action level. These water systems must proceed to step 3 in paragraph (d)(3) of this section and conduct the corrosion control studies for re-optimization under paragraph (d)(3)(i) of this section using the pipe rigs/loops.

(ii) Large water systems without lead service lines that exceed the lead action level or copper action level must conduct the corrosion control studies for re-optimization under paragraph (d)(3)(ii) of this section (step 3).

(iii) A water system other than those covered in paragraph (d)(1)(i) or (ii) of this section must recommend re-optimized optimal corrosion control treatment (§ 141.82(a)) within six months after the end of the tap sampling period in which the system exceeded either the lead action level or copper action level.

(iv) Systems may make an existing corrosion control treatment modification recommendation to the State within six months after the end of the tap sampling period in which the system exceeded the lead action level. The State must evaluate a system's past corrosion control treatment study results prior to approving an existing

treatment modification. When a State approves existing treatment modifications, the State must specify re-optimized OCCT within 12 months after the end of the tap sampling period in which the system exceeded the lead action level. The system must complete modifications to corrosion control treatment to have re-optimized OCCT installed within six months of the State specifying re-optimized OCCT. These systems must proceed to step 6 in paragraph (d)(6) of this section and conduct follow-up monitoring.

(2) *Step 2: State requires CCT study or State designates re-optimized OCCT.* Within one year after the end of the tap sampling period in which a medium water system without lead service lines or a small system exceeded the lead action level or copper action level, the State may require the water system to perform corrosion control studies for re-optimization (§ 141.82(c)(2)). If the State does not require the system to perform such studies, the State must specify re-optimized optimal corrosion control treatment (§ 141.82(d)) within the timeframes specified in paragraphs (d)(2)(i) and (ii) of this section. The State must provide its determination to the system in writing:

(i) For a medium water system, within one year after the end of the tap sampling period during which such water system exceeded the lead action level or copper action level.

(ii) For a small water system, within 18 months after the end of the tap sampling period in which such water system exceeded the lead action level or copper action level.

(3) *Step 3: Study duration.* (i) Any water system with lead service lines that exceeds the lead action level, in accordance with paragraph (d)(1)(i) of this section, must complete the pipe rig/loop corrosion control treatment studies and recommend re-optimized OCCT within 30 months after the end of the tap sampling period in which the system exceeded the lead action level.

(ii) If the water system is required to perform corrosion control studies under paragraph (d)(1)(ii) or (d)(2) of this section, the water system must complete the studies (§ 141.82(c)) and recommend re-optimized OCCT within 18 months after the end of the tap sampling period in which the system exceeded the lead or copper action level or after the State requires that such studies be conducted.

(4) *Step 4: State designation of re-optimized OCCT based on CCT study results.* The State must designate re-optimized OCCT (§ 141.82(d)) within six months after the water system completes paragraph (d)(3)(i) or (ii) of this section (step 3).

(5) *Step 5: Re-optimized OCCT installation deadlines.* Water systems must install re-optimized OCCT (§ 141.82(e)) within one year after the State completes paragraph (d)(4) of this section (step 4) or the State completes paragraph (d)(2)(i) or (ii) of this section (step 2).

(6) *Step 6: Follow-up monitoring.* Water systems must complete standard monitoring for at least two consecutive tap monitoring periods under § 141.86(c)(2)(iii)(D) and water quality parameter monitoring under § 141.87(b)(3) after completing paragraph (d)(5) of this section (step 5). The first tap monitoring period for standard monitoring must begin on January 1 or July 1, whichever is sooner, after completing paragraph (d)(5) (step 5).

(7) *Step 7: State sets optimal water quality parameters (OWQPs).* The State must review the water system's re-optimized OCCT and designate OWQPs (§ 141.82(f)) within six months after completing paragraph (d)(6) of this section (step 6).

(8) *Step 8: Systems meet OWQPs to demonstrate compliance.* Water systems must comply with the State-designated OWQPs (§ 141.82(g)) and conduct tap sampling under § 141.86(c)(2)(iii)(E) and water quality parameter monitoring under § 141.87(b)(4).

(e) *Treatment steps and deadlines for systems without corrosion control treatment.* Except as provided in paragraph (b) of this section, water systems without corrosion control treatment must complete the following corrosion control treatment steps (described in the referenced portions of §§ 141.82, 141.86, and 141.87) by the indicated time periods. Water systems must conduct tap sampling for lead and copper in accordance with the requirements of § 141.86 while they complete the corrosion control steps in this section.

(1) *Step 1: Initiate mandatory pipe rig/loop or CCT study or treatment recommendation.* (i) A medium or large water system with lead service lines that exceeds the lead action level must harvest lead pipes from the distribution system and construct flowthrough pipe rigs/loops and operate the rigs/loops with finished water within one year after the end of the tap sampling period during which the system exceeded the lead action level. These water systems must proceed to step 3 in paragraph (e)(3) of this section and conduct the corrosion control studies for optimization under paragraph (e)(3)(i) of this section using the pipe rigs/loops.

(ii) Large water systems under paragraph (a)(1)(v) of this section must

conduct the corrosion control studies for optimization under paragraph (e)(3) of this section (step 3).

(iii) A water system other than those covered in paragraph (e)(1)(i) or (ii) of this section must recommend optimal corrosion control treatment (OCCT) (§ 141.82(a)) within six months after the end of the tap sampling period during which the system exceeded either the lead action level or copper action level.

(2) *Step 2: State requires CCT study or State designates OCCT.* Within one year after the end of the tap sampling period in which the water system exceeded the lead action level or copper action level, the State may require the water system to perform corrosion control studies (§ 141.82(b)(1)) if those studies are not otherwise required by this subpart. The State must notify the system in writing of the requirement in the preceding sentence. If the State does not require the system to perform such studies, the State must specify OCCT (§ 141.82(d)) within the timeframes established in paragraphs (e)(2)(i) and (ii) of this section. The State must provide its determination to the system in writing:

(i) For a medium water system, within 18 months after the end of the tap sampling period in which such water system exceeds the lead action level or copper action level.

(ii) For a small water system, within 24 months after the end of the tap sampling period in which such water system exceeds the lead action level or copper action level.

(3) *Step 3: Study duration.* (i) Large and medium water systems with lead service lines that exceed the lead action level must complete the corrosion control treatment studies and recommend OCCT within 30 months after the end of the tap sampling period in which they exceeded the lead action level.

(ii) If a water system is required to perform corrosion control studies under paragraph (e)(1)(ii) or (e)(2) of this section, the water system must complete the studies (§ 141.82(c)) and recommend OCCT within 18 months after the end of the tap sampling period in which the system exceeded the lead or copper action level or the State notifies the system in writing that such studies must be conducted.

(4) *Step 4: State designation of OCCT based on CCT study results.* The State must designate OCCT (§ 141.82(d)) within six months after water systems complete paragraph (e)(3)(i) or (ii) of this section (step 3).

(5) *Step 5: OCCT installation deadlines.* Water systems must install OCCT (§ 141.82(e)) within 24 months after the State designates OCCT under

paragraph (e)(2) or (4) of this section (step 2 or step 4).

(6) *Step 6: Follow-up monitoring.* Water systems must complete standard monitoring for at least two consecutive tap monitoring periods under § 141.86(c)(2)(iii)(D) and water quality parameter monitoring under § 141.87(b)(3) after completing paragraph (e)(5) of this section (step 5). The first tap monitoring period for standard monitoring must begin on January 1 or July 1, whichever is sooner, after completing paragraph (e)(5) (step 5).

(7) *Step 7: State sets optimal water quality parameters (OWQPs).* The State must review the water system's installation of treatment and designate OWQPs (§ 141.82(f)) within six months after completing paragraph (e)(6) of this section (step 6).

(8) *Step 8: Systems meet OWQPs to demonstrate compliance.* Water systems must comply with the State-designated OWQPs (§ 141.82(g)) and conduct tap sampling under § 141.86(c)(2)(iii)(E) and water quality parameter monitoring under § 141.87(b)(4).

(f) *Systems with lead or galvanized requiring replacement service lines that can complete full service line replacement in five years or less.* (1) A water system with one or more lead or galvanized requiring replacement service lines is not required to complete the steps under paragraph (d) or (e) of this section if the system meets all the following requirements:

(i) Deadline to complete mandatory service line replacement.

(A) A water system must complete the service line replacement requirements under § 141.84(d) in five years or less from the date of the end of the tap sampling period in which the system first exceeds the lead action level; or

(B) A large water system without corrosion control treatment must complete the service line replacement requirements under § 141.84(d) in five years or less from the date of the end of the tap sampling period in which the system's 90th percentile results first exceed the lead practical quantitation limit; and

(C) For a water system with less than five years remaining to complete mandatory service line replacement in accordance with § 141.84(d), the system must complete the service line replacement requirements under this paragraph (f)(1)(i) by that deadline.

(ii) At a minimum, a system must replace the total number of lead and/or galvanized requiring replacement service lines each year, as identified in that system's inventory on the date of the end of the tap sampling period in

which the system first exceeds the lead action level or in which the system's 90th percentile first exceeds the lead practical quantitation limit, whichever applies, at an annual rate equally divided by the total number of years for service line replacement provided in paragraph (f)(1)(i) of this section. For purposes of calculating the annual rate, the system must replace all lead and galvanized requiring replacement service lines within the least number of years feasible not to exceed five years from the date of the end of the tap sampling period in which the system first exceeds the lead action level or in which the system's 90th percentile first exceeds the lead practical quantitation limit, whichever applies. If the State determines a replacement deadline less than five years is feasible for a water system, the system must replace service lines by that deadline and establish an annual replacement rate based on that number of years until that deadline.

(iii) By the end of the five-year-or-less period in paragraph (f)(1)(i) of this section, the system must have replaced all lead and galvanized requiring replacement service lines calculated in accordance with § 141.84(d)(6) (*i.e.*, no lead, galvanized requiring replacement or lead status unknown service lines remain in the inventory), and identified the material of all lead status unknown service lines, completed the inventory validation requirements in accordance with § 141.84(b)(5), and replaced all unknowns found to be lead or galvanized requiring replacement service lines.

(iv) Except as provided in this section, all other requirements in § 141.84(d) apply.

(2) Throughout the five-year-or-less period in paragraph (f)(1)(i) of this section, systems with corrosion control treatment must continue to operate and maintain corrosion control treatment in addition to completing the mandatory service line replacement requirements under this section.

(3) A water system that does not replace lead and/or galvanized requiring replacement service lines calculated in accordance with § 141.84(d)(6) at the minimum annual rate provided in paragraph (f)(1)(ii) of this section in any one year of the five-year-or-less period in paragraph (f)(1)(i) of this section or complete the service line replacement requirements under § 141.84(d) in accordance with paragraph (f)(1)(iii) of this section, must meet the requirements under paragraph (d) or (e) of this section, as applicable, starting immediately after the system fails to meet the annual removal requirements under paragraph (f)(1)(ii).

(4) At the end of each year of the five-year-or-less period, the system must submit written documentation to the State about the number of lead and galvanized requiring replacement service lines removed that year and whether the minimum annual replacement rate in paragraph (f)(1)(ii) of this section was met. If a system reports or a State determines that the system did not meet its minimum annual replacement rate that year, the system is no longer eligible to defer the requirements under paragraph (d) or (e) of this section, and must meet those requirements, as applicable.

(5) After completing service line replacement in accordance with the requirements in this paragraph (f), a water system must meet the requirements under paragraph (d) or (e) of this section, as applicable, if at the end of a subsequent tap sampling period, the system either exceeds the lead action level or the lead practical quantitation limit, whichever is applicable.

(g) *Completing corrosion control steps for small and medium water systems without corrosion control treatment.* (1) Any small or medium water system without corrosion control treatment required to complete the steps in paragraph (e) of this section that does not exceed the lead action level and copper action level during two consecutive six-month tap monitoring periods pursuant to § 141.86 prior to the start of step 3 in paragraph (e)(3) of this section or prior to or concurrent with the end of step 4 in paragraph (e)(4) of this section may stop completing the steps and is not required to complete paragraph (e)(3) or (5) (step 3 or step 5), respectively, except that medium water systems without corrosion control treatment and with lead service lines must complete a corrosion control treatment study under paragraph (e)(3)(i) of this section. A 90th percentile level at or below the lead action level or copper action level based on less than the required minimum number of samples under § 141.86 cannot be used to meet the requirements of this paragraph (g)(1). Eligible systems can only use the exception in this paragraph (g)(1) once.

(2) Any system that starts step 5 in accordance with paragraph (e)(5) of this section must complete all remaining steps (*i.e.*, steps 6 through 8) in paragraphs (e)(6) through (8) of this section and is not permitted to stop the steps.

(3) Any small or medium water system without corrosion control treatment under paragraph (g)(1) of this section that stopped the steps in

paragraph (e) of this section and subsequently exceeds either the lead action level or copper action level must complete the corrosion control treatment steps in paragraph (e) beginning with the first treatment step that was not completed.

(4) The State may require a water system to repeat treatment steps previously completed by the water system when the State determines that this is necessary to implement the treatment requirements of this section. The State must notify the system in writing of such a determination and explain the basis for its decision.

(h) *Notification requirements for upcoming long-term change in treatment or source.* At a time specified by the State, or if no specific time is designated, as early as possible but no later than six months prior to the addition of a new source or any long-term change in water treatment, a water system must submit written documentation describing the addition of a new source or long-term change in treatment to the State. Systems may not implement the addition of a new source or long-term treatment change without State approval. The State must review and approve the addition of a new source or long-term change in water treatment before it can be implemented by the water system. The State may require any such water system to take actions before or after the addition of a new source or long-term treatment change to ensure that the water system will operate and maintain optimal corrosion control treatment, such as additional water quality parameter monitoring, additional lead or copper tap sampling, and re-evaluating corrosion control treatment. Examples of long-term treatment changes include but are not limited to the addition of a new treatment process or modification of an existing treatment process. Examples of modifications include switching secondary disinfectants, switching coagulants (*e.g.*, alum to ferric chloride), and switching corrosion inhibitor products (*e.g.*, orthophosphate to blended phosphate). Long-term treatment changes can also include dose changes to existing chemicals if the system is planning long-term changes to its finished water pH or residual inhibitor concentration. Long-term treatment changes would not include chemical dose fluctuations associated with daily raw water quality changes where a new source has not been added.

■ 6. Revise § 141.82 to read as follows:

§ 141.82 Description of corrosion control treatment requirements.

This section provides the requirements for systems and States designating optimal corrosion control treatment (OCCT) for a system that is optimizing or re-optimizing OCCT. All systems must complete the corrosion control treatment requirements in this section as applicable under § 141.81.

(a) *System recommendation regarding corrosion control treatment.* (1) Any system without corrosion control treatment that is required to recommend a treatment option in accordance with § 141.81(e)(1)(iii) must, based on the results of lead and copper tap sampling and water quality parameter monitoring, recommend designating one or more of the corrosion control treatments listed in paragraph (c)(1) of this section to the State as the optimal corrosion control treatment for that system. The State may require the system to conduct additional water quality parameter monitoring to assist the State in reviewing the system's recommendation.

(2) Any system with corrosion control treatment that exceeds the lead action level that is required to recommend a treatment option to the State in accordance with § 141.81(d)(1)(iii) must recommend designating one or more of the corrosion control treatments listed in paragraph (c)(2) of this section as the optimal corrosion control treatment for that system.

(3) States may waive the requirement for a system to recommend OCCT if the State requires the system, in writing, to complete a corrosion control study within three months after the end of the tap sampling period in which the lead or copper action level exceedance occurred. These systems must proceed directly to paragraph (c) of this section and complete a corrosion control study.

(b) *State decision to require studies to identify initial OCCT under § 141.81(e)(2) and re-optimized OCCT under § 141.81(d)(2).* (1) The State may require any small or medium water system without corrosion control treatment that exceeds either the lead action level or copper action level to perform corrosion control treatment studies under paragraph (c)(1) of this section to identify OCCT for the system.

(2) The State may require any small or medium water system with corrosion control treatment exceeding either the lead action level or copper action level to perform corrosion control treatment studies under paragraph (c)(2) of this section to identify re-optimized OCCT for the system (*i.e.*, OCCT after a re-optimization evaluation).

(c) *Performance of corrosion control studies.* (1) Systems without corrosion

control treatment required to conduct corrosion control studies under § 141.81(e) must evaluate the effectiveness of each of the following treatments, and if appropriate, combinations of the following treatments, to identify OCCT for the system:

- (i) Alkalinity and pH adjustment;
- (ii) The addition of an orthophosphate- or a silicate-based corrosion inhibitor at a concentration sufficient to maintain an effective corrosion inhibitor residual concentration in all test samples;
- (iii) The addition of an orthophosphate-based corrosion inhibitor at a concentration sufficient to maintain an orthophosphate residual concentration of 1 mg/L (as PO_4) in all test samples; and
- (iv) The addition of an orthophosphate-based corrosion inhibitor at a concentration sufficient to maintain an orthophosphate residual concentration of 3 mg/L (as PO_4) in all test samples.

(2) Systems with corrosion control treatment required to conduct corrosion control studies under § 141.81(d) must evaluate the effectiveness of the following treatments, and if appropriate, combinations of the following treatments, to identify re-optimized OCCT for the system:

- (i) Alkalinity and/or pH adjustment or re-adjustment;
- (ii) The addition of an orthophosphate- or a silicate-based corrosion inhibitor at a concentration sufficient to maintain an effective corrosion inhibitor residual concentration in all test samples if no such inhibitor is currently utilized;
- (iii) The addition of an orthophosphate-based corrosion inhibitor at a concentration sufficient to maintain an orthophosphate residual concentration of 1 mg/L (as PO_4) in all test samples unless the current inhibitor process already meets this residual; and
- (iv) The addition of an orthophosphate-based corrosion inhibitor at a concentration sufficient to maintain an orthophosphate residual concentration of 3 mg/L (as PO_4) in all test samples unless the current inhibitor process already meets this residual.

(3) Systems must evaluate each of the corrosion control treatments specified in paragraph (c)(1) or (2) of this section individually or, if appropriate, in combinations, using pipe rig/loop tests, metal coupon tests, partial-system tests, and/or analyses based on documented analogous treatments with similar size systems that have a similar water chemistry and similar distribution system configurations. Large and

medium water systems with lead service lines, and other systems as required by the State, that exceed the lead action level must conduct pipe rig/loop studies using harvested lead service lines from their distribution systems to assess the effectiveness of corrosion control treatment options on the existing pipe scale. Metal coupon tests can be used as a screen to reduce the number of options evaluated in the pipe rig/loop studies to the current water quality and at least two additional treatment options.

(4) Systems must measure the following water quality parameters in any tests conducted under paragraph (c)(3) of this section both before and after evaluating the corrosion control treatments listed in paragraph (c)(1) or (2) of this section:

- (i) Lead;
- (ii) Copper;
- (iii) pH;
- (iv) Alkalinity;
- (v) Orthophosphate as PO_4 (when an orthophosphate-based inhibitor is used);
- (vi) Silicate (when a silicate-based inhibitor is used); and
- (vii) Any additional parameters necessary to evaluate the effectiveness of a corrosion control treatment as determined by the State.

(5) Systems must identify all chemical or physical constraints that limit or prohibit the use of a particular corrosion control treatment and document those constraints by providing either of the following:

- (i) Data and documentation showing a particular corrosion control treatment has adversely affected other drinking water treatment processes when used by another water system with comparable water quality characteristics. Systems using metal coupon tests to screen and/or pipe rig/loop studies to evaluate treatment options cannot exclude treatment strategies from the studies based on the constraints identified in this paragraph (c)(5)(i).

(ii) Data and documentation demonstrating the water system previously attempted to evaluate a particular corrosion control treatment and found the treatment was ineffective or adversely affects other drinking water quality treatment processes. Systems using metal coupon tests to screen and/or pipe rig/loop studies to evaluate treatment options cannot exclude treatment strategies from the studies based on the constraints identified in this paragraph (c)(5)(ii), unless the treatment was found to be ineffective in a previous pipe rig/loop study.

(6) Systems must evaluate the effect of the chemicals used for corrosion control treatment on other drinking water

quality treatment processes. Systems using metal coupon tests to screen and/or pipe rig/loop studies to evaluate treatment options cannot exclude any of the required treatment strategies specified in paragraph (c)(1) or (2) of this section from the studies based on the effects identified in this section.

(7) Based on the data and analysis for each treatment option evaluated under this paragraph (c), systems must recommend to the State, in writing, the treatment option that the corrosion control studies indicate constitutes OCCT for that system as defined in § 141.2. Systems must provide the State with a rationale for the OCCT recommendation and all supporting documentation specified in paragraph (c)(1) or (2) and paragraphs (c)(3) through (7) of this section.

(d) *State designation of OCCT and re-optimized OCCT*—(1) *Designation of OCCT or re-optimized OCCT*. Based on available information including, where applicable, studies conducted under paragraph (c)(1) or (2) of this section and/or a system's recommended corrosion control treatment option, the State must either approve the corrosion control treatment option recommended by the system or designate alternative corrosion control treatment(s) from among those listed in paragraph (c)(1) or (2) of this section, as applicable. The State must notify the water system, in writing, of its designation of OCCT or re-optimized OCCT and explain the basis for this determination.

(i) When designating OCCT, the State must consider the effects that additional corrosion control treatment will have on water quality parameters and other drinking water quality treatment processes.

(ii) If the State requests additional information to aid its review, the water system must provide that information.

(2) [Reserved]

(e) *Installation of OCCT and re-optimized OCCT*. Each system must install and operate the OCCT or re-optimized OCCT designated by the State under paragraph (d) of this section throughout its distribution system.

(f) *State review of treatment and designation of optimal water quality parameters for OCCT and re-optimized OCCT*. The State must evaluate the results of all lead and copper tap and water quality parameter sampling submitted by the water system and determine whether the water system has installed and operated the OCCT designated by the State in paragraph (d) of this section. Upon reviewing the system's tap and water quality parameter sampling results, both before and after the water system installs

OCCT, or re-optimizes OCCT, the State must designate each of the following:

(1) A minimum value or a range of values for pH measured at each entry point to the distribution system.

(2) A minimum pH value measured in all distribution system samples. This value must be equal to or greater than 7.0, unless the State determines that meeting a pH level of 7.0 is not technologically feasible or is not necessary for OCCT.

(3) If a corrosion inhibitor is used, a minimum concentration or a range of concentrations for orthophosphate (as PO_4) or silicate measured at each entry point to the distribution system.

(4) If a corrosion inhibitor is used, a minimum orthophosphate (as PO_4) or silicate concentration measured in all tap samples that the State determines is necessary to form a passivating film on the interior walls of the pipes of the distribution system. When orthophosphate is used, for OCCT designations for systems previously without corrosion control treatment, the orthophosphate concentration must be equal to or greater than 0.5 mg/L (as PO_4) and for OCCT designations for systems previously with corrosion control treatment, the orthophosphate concentration must be equal to or greater than 1.0 mg/L, unless the State determines that meeting the applicable minimum orthophosphate residual is not technologically feasible or is not necessary for OCCT.

(5) If alkalinity is adjusted as part of OCCT, a minimum concentration or a range of concentrations for alkalinity, measured at each entry point to the distribution system and in all tap samples.

(6) The values for the applicable water quality parameters in paragraphs (f)(1) through (5) of this section must be the values the State determines reflect OCCT or re-optimized OCCT for the water system. The State may designate values for additional water quality parameters the State determines reflect OCCT or re-optimized OCCT for the water system. The State must notify the system, in writing, of these determinations and explain the basis for its decisions.

(g) *Continued operation and monitoring for OCCT and re-optimized OCCT.* All systems, including those optimizing or re-optimizing OCCT, must continue to operate and maintain OCCT, including maintaining water quality parameters at or above the minimum values or within the ranges designated by the State under paragraph (f) of this section, in accordance with this paragraph (g) for all water quality parameter samples collected under

§ 141.87(b)(4) through (d). The requirements of this paragraph (g) apply to all systems, including consecutive systems that distribute water that has been treated to control corrosion by another system, and any water system with corrosion control treatment, OCCT, or re-optimized OCCT that is not required to monitor water quality parameters under § 141.87.

(1) Compliance with the requirements of this paragraph (g) must be determined every six months, as specified under § 141.87(b)(4). A water system is out of compliance with the requirements of this paragraph (g) for a six-month period if it has excursions for any State-specified parameter on more than nine days, cumulatively, during the period. An excursion occurs whenever the daily value for one or more of the water quality parameters measured at a sampling location is below the minimum value or outside the range designated by the State. Daily values are calculated as set out in paragraph (g)(2) of this section. States have discretion to not include results of obvious sampling errors from this calculation. Sampling errors must still be recorded even when not included in calculations.

(2)(i) On days when more than one measurement for the water quality parameter is collected at the sampling location, the daily value must be the average of all results collected at that sampling location during the same day regardless of whether they are collected through continuous monitoring, grab sampling, or a combination of both. If EPA has approved an alternative formula under § 142.16(d)(1)(ii) of this chapter in the State's application for a program revision submitted pursuant to § 142.12 of this chapter, the State's formula must be used to aggregate multiple measurements taken at a sampling point for the water quality parameters in lieu of the formula in this paragraph (g)(2).

(ii) On days when only one measurement for the water quality parameter is collected at the sampling location, the daily value must be the result of that measurement.

(iii) On days when no measurement is collected for the water quality parameter at the sampling location, the daily value must be the daily value calculated on the most recent day on which the water quality parameter was measured at the sampling location.

(h) *Modification of State treatment determination for OCCT and re-optimized OCCT.* Upon its own initiative or in response to a request by a water system or other interested party, a State may modify its determination of OCCT under paragraph (d) of this

section, or optimal water quality parameters under paragraph (f) of this section. A request for modification by a system or other interested party must be in writing, explaining why the modification is appropriate, and providing supporting documentation. The State may require a system to conduct a CCT study to support modification of the determination of OCCT or re-optimized OCCT. The State may modify its determination where it concludes that such change is necessary to ensure that the water system continues to optimize corrosion control treatment. A revised designation must be made in writing, set forth the new treatment requirements and/or optimal water quality parameters, explain the basis for the State's determination, and provide an implementation schedule for completing the treatment modifications for re-optimized corrosion control treatment.

(i) *Treatment decisions by EPA in lieu of the State on OCCT and re-optimized OCCT.* Pursuant to the procedures in § 142.19 of this chapter, the EPA Regional Administrator may review OCCT determinations made by a State under paragraph (d), (f), or (h) of this section and issue Federal corrosion control treatment determinations consistent with the requirements of paragraph (d), (f), or (h) where the EPA Regional Administrator finds that:

(1) A State failed to issue a treatment determination by the applicable deadlines contained in § 141.81;

(2) A State abused its discretion; or

(3) The technical aspects of a State's determination would be indefensible in a Federal enforcement action taken against a water system.

(j) *Distribution System and Site Assessment for tap sample sites with lead results that exceed 0.010 mg/L.* The water system must conduct the following steps when the lead results from an individual tap sample site sampled under § 141.86 exceed 0.010 mg/L and the site is included in the site sample plan under § 141.86(a)(1):

(1) *Step 1: Corrosion control treatment assessment.* Within five days of receiving the tap sampling results, the water system must sample at a water quality parameter site in accordance with paragraph (j)(1)(ii) of this section that is on the same size water main in the same pressure zone and located within a half mile radius of the site with the lead result exceeding 0.010 mg/L. Water systems without corrosion control treatment are not required to collect these samples.

(i) The water system must measure the following water quality parameters:

(A) pH;

(B) Alkalinity;

(C) Orthophosphate (as PO₄), when an inhibitor containing an orthophosphate compound is used; and

(D) Silica, when an inhibitor containing a silicate compound is used.

(ii) The water system must measure at the following locations:

(A) Water systems with an existing water quality parameter site that meets the requirements in this paragraph (j)(1) can conduct this sampling at that site.

(B) All water systems required to meet optimal water quality parameters but do not have an existing water quality parameter site that meets the requirements in this paragraph (j)(1) must add new sites to the minimum number of sites as described in § 141.87(b)(1)(i). Sites must be added until a system has twice the minimum number of sites listed in table 1 to § 141.87(b)(1)(i). When a system exceeds twice the number of sites, the State has discretion to determine if these additional newer sites can better assess the effectiveness of the corrosion control treatment and whether to remove existing sites during sanitary survey evaluation of OCCT.

(2) *Step 2: Site assessment.* Within 30 days of receiving the tap sampling results, water systems must collect and analyze a follow-up sample for lead at any tap sample site that exceeds 0.010 mg/L. These follow-up samples may use different sample volumes or different sample collection procedures to assess the source of elevated lead levels. Samples collected under this section must be submitted to the State but cannot be included in the 90th percentile calculation for compliance monitoring under § 141.86. If the water system is unable to collect a follow-up sample at a site, the water system must provide documentation to the State, as specified in § 141.90(g)(2), explaining why it was unable to collect a follow-up sample.

(3) *Step 3: Evaluate results and system treatment recommendation.* Water systems must evaluate the results of the sampling conducted under paragraphs (j)(1) and (2) of this section to determine if either localized or centralized adjustment of the OCCT or other distribution system actions are necessary and submit the recommendation to the State within six months after the end of the tap sampling period in which the site(s) exceeded 0.010 mg/L. Corrosion control treatment modification may not be necessary to address every exceedance of 0.010 mg/L. Other distribution system actions may include flushing to reduce water age. Water systems must note the cause of the elevated lead level, if known from

the site assessment, in their recommendation to the State as site-specific issues can be an important factor in why the system is not recommending any adjustment of corrosion control treatment or other distribution system actions. Systems in the process of optimizing or re-optimizing OCCT under paragraphs (a) through (f) of this section do not need to submit a treatment recommendation for distribution system and site assessment.

(4) *Step 4: State approval of treatment recommendation.* The State must approve the treatment recommendation or specify a different approach within six months of completing step 3 as described in paragraph (j)(3) of this section and notify the water system in writing.

(5) *Step 5: Modifications to OCCT.* If the State-approved treatment recommendation requires the water system to adjust the OCCT process, the water system must complete modifications to its corrosion control treatment within 12 months of receiving notification from the State as described in paragraph (j)(4) of this section. Systems without corrosion control treatment required to install OCCT must follow the schedule in § 141.81(e).

(6) *Step 6: Follow-up sampling.* Water systems adjusting OCCT must complete follow-up sampling in accordance with §§ 141.86(c)(2)(iii)(D) and 141.87(b)(3) within 12 months after completing step 5 as described in paragraph (j)(5) of this section and submit sampling results to the State in accordance with §§ 141.86 and 141.87.

(7) *Step 7: State OWQP designation.* For water systems adjusting OCCT, the State must review the water system's modification of corrosion control treatment and designate optimal water quality parameters in accordance with paragraph (f) of this section within six months of receiving sampling result in paragraph (j)(6) of this section.

(8) *Step 8: Operate in compliance.* For a water system adjusting OCCT, the water system must operate in compliance with the State-designated optimal water quality parameters in accordance with paragraph (g) of this section and continue to conduct tap sampling in accordance with §§ 141.86(c)(2)(iii)(E) and 141.87(b)(4).

■ 7. Amend § 141.83 by revising paragraph (a)(4) to read as follows:

§ 141.83 Source water treatment requirements.

* * * * *

(a) * * *

(4) *Step 4.* The system shall complete follow-up tap water monitoring

(§ 141.86(c)(2)(iii)(F)) and source water monitoring (§ 141.88(c)) within 36 months after completion of step 2 as described in paragraph (a)(2) of this section.

* * * * *

■ 8. Revise § 141.84 to read as follows:

§ 141.84 Service line inventory and replacement requirements.

(a) *Service line and connector inventory development.* All water systems must develop a service line inventory that identifies the material and location of each service line connected to the public water distribution system. The inventory must include all service lines connected to the public water distribution system regardless of ownership status (e.g., where service line ownership is shared, the inventory includes both the portion of the service line owned by the water system and the portion of the service line owned by the customer). The inventory must meet the following requirements:

(1) All water systems are required to develop an initial inventory and submit it to the State by October 16, 2024, as specified in § 141.80(a)(4)(i).

(2) All water systems must develop an updated initial inventory, known as the "baseline inventory". Systems must submit the baseline inventory to the State by the compliance date in § 141.80(a)(3). Newly regulated public water systems, as defined in § 141.2, must develop a baseline inventory on a schedule established by the State that does not exceed three years from the date the system becomes subject to National Primary Drinking Water Regulations in this part. The baseline inventory must include each service line and identified connector that is connected to the public water distribution system regardless of ownership status (e.g., where service line ownership is shared, the inventory includes both the portion of the service line owned by the water system and the portion of the service line owned by the customer).

(i) For the baseline inventory, water systems must conduct a review of any information listed in paragraphs (b)(2)(i) through (iii) of this section that describes connector materials and locations. Water systems must also conduct a review of any information on lead and galvanized iron or steel materials that they have identified pursuant to § 141.42(d) to identify connector materials and locations. The water system may use other sources of information not listed in paragraphs (b)(2)(i) through (iii) if approved or required by the State.

(ii) Water systems must include each connector identified in paragraph (a)(2)(i) of this section in their baseline inventory. Connector materials must be categorized in the following manner:

(A) “Lead” where the connector is made of lead.

(B) “Non-Lead” where the connector is determined through an evidence-based record, method, or technique not to be made of lead. Water systems are not required to identify the specific material of a non-lead connector; however, they may use the material (e.g., copper or galvanized) as an alternative to categorizing it as “Non-Lead”.

(C) “Unknown” where the material of the connector is not known.

(D) “No connector present” where there is no connector at the location (e.g., where a service line directly connects a water main to a building inlet).

(iii) All water systems must include any new information on service line materials from all applicable sources described in paragraph (b)(2) of this section in the baseline inventory.

(3) Each service line, or portion of the service line where ownership is shared, must be categorized in the following manner:

(i) “Lead” where the service line is a lead service line as defined in § 141.2.

(ii) “Galvanized Requiring Replacement” where the service line is a galvanized requiring replacement service line as defined in § 141.2.

(iii) “Non-Lead” where the service line is determined through an evidence-based record, method, or technique not to be a lead or galvanized requiring replacement service line. Water systems are not required to identify the specific material of a non-lead service line; however, they may use the material (e.g., plastic or copper) as an alternative to categorizing it as “Non-Lead”.

(iv) “Lead Status Unknown” or “Unknown” where the service line material is not known to be lead, galvanized requiring replacement, or non-lead, such as where there is no documented evidence or evidence reliably supporting material categorization. Water systems may elect to provide more information regarding their unknown service lines as long as the inventory clearly distinguishes unknown service lines from those where the categorization of the material is based on the categorization methods approved under paragraph (b)(2) of this section.

(4) The inventory must include a street address associated with each service line and connector. Where a street address is not available for an

individual service line or connector, a unique locational identifier (e.g., block, Global Positioning System or GPS coordinates, intersection, or landmark) may be used.

(5) The inventory must be publicly accessible.

(i) The publicly accessible inventory must include the information described in paragraphs (a)(2) through (4) of this section and be updated in accordance with paragraph (b) of this section.

(ii) Water systems serving greater than 50,000 persons must make the publicly accessible inventory available online.

(6) When a water system has no lead, galvanized requiring replacement, or lead status unknown service lines, no known lead connectors, and no connectors of unknown material, it may comply with the requirements in paragraph (a)(5) of this section using a written statement in lieu of the publicly accessible inventory, declaring that the distribution system has no lead, galvanized requiring replacement, or lead status unknown service lines, no known lead connectors, and no connectors of unknown material. The statement must include a general description of all applicable sources used in the inventory as described in paragraphs (a)(1) and (2) and (b)(2) of this section to make this determination.

(7) Instructions to access the publicly accessible inventory (including inventories consisting only of a statement in accordance with paragraph (a)(6) of this section) must be included in the Consumer Confidence Report in accordance with § 141.153(h)(8)(ii).

(b) *Additional requirements for service line and connector inventory maintenance.* (1) All water systems must update the baseline inventory of service lines and connectors developed in paragraph (a)(2) of this section and submit the updates to the State on an annual basis in accordance with § 141.90(e)(4). These updates begin one year after the compliance date in § 141.80(a)(3). The publicly accessible inventory must reflect any updates no later than the deadline to submit the updated inventory to the State.

(i) All water systems must identify the material of all lead status unknown service lines by the applicable mandatory service line replacement deadline in paragraph (d)(4) of this section.

(ii) Water systems whose inventories contain only non-lead service lines and non-lead connectors or no connectors present are not required to provide updated inventories to the State or updates to the publicly accessible inventory. If, in the future, such a water system discovers a lead service line,

galvanized requiring replacement service line, or lead connector within its system, the system must notify the State no later than 60 days after the discovery, prepare an updated inventory in accordance with this section on a schedule established by the State, replace the lead or galvanized requiring replacement service line in accordance with paragraph (d)(4)(ii) of this section, and replace any lead connector along the service line in accordance with paragraph (e) of this section.

(2) Water systems must update the inventory annually with any new information acquired from all applicable sources described in paragraphs (b)(2) through (4) of this section and follow all applicable requirements for the inventory in paragraphs (a) and (b) of this section. The water system may update the inventory using other sources of information not listed in paragraphs (b)(2)(i) through (iii) of this section if the use of those sources is approved or required by the State.

(i) All construction and plumbing codes, permits, and records or other documentation that indicate the service line and connector materials used to connect structures to the distribution system.

(ii) All water system records on service lines and connectors, including distribution system maps and drawings, recent or historical records on each service connection and connector, meter installation records, historical capital improvement or master plans, and standard operating procedures.

(iii) All records of inspections in the distribution system that indicate the material composition of the service connections and connectors that connect a structure to the distribution system.

(iv) Water systems must update their inventory annually based on any lead or galvanized requiring replacement service line replacements, service line material inspections, or lead connector replacements that have been conducted. Each updated inventory and subsequent update to the publicly accessible inventory must include the following information regarding service line material identification and replacement:

(A) The total number of lead service lines in the inventory;

(B) The total number of galvanized requiring replacement service lines in the inventory;

(C) The total number of lead status unknown service lines in the inventory;

(D) The total number of non-lead service lines in the inventory;

(E) The total number of lead connectors in the inventory;

(F) The total number of connectors of unknown material in the inventory;

(G) The total number of full lead service line replacements and full galvanized requiring replacement service line replacements that have been conducted in each preceding program year as defined in paragraph (d)(5)(iii) of this section; and

(H) The total number of partial lead service line replacements and partial galvanized requiring replacement service line replacements that have been conducted in each preceding program year as defined in paragraph (d)(5)(iii) of this section.

(v) Water systems must identify service line material in accordance with paragraph (a)(3) of this section, connector material in accordance with paragraph (a)(2) of this section, and addresses in accordance with paragraph (a)(4) of this section as they are encountered in the course of normal operations (e.g., checking service line materials when reading water meters or performing maintenance activities). Water systems must update the inventory annually based on the identified service line materials, connector materials and addresses.

(3) Water systems that discover a lead or galvanized requiring replacement service line that was previously inventoried as non-lead must update their inventory in accordance with paragraph (b)(2) of this section and, if applicable, paragraph (b)(1)(ii) of this section. Water systems must notify the State in accordance with § 141.90(e) and comply with any additional actions required by the State to address the inventory inaccuracy.

(4) If a consumer or customer (if different from the person served at that service connection) notifies the water system of a suspected incorrect categorization of their service line material in the inventory, the system must respond to the consumer or customer within 30 days of receiving the notification to make an offer to inspect the service line.

(5) All water systems must validate the accuracy of the non-lead service line category in the inventory as follows:

(i) The water system must identify a validation pool consisting of all service lines categorized as “non-lead,” but excluding non-lead service lines identified by the following: records showing the service line was installed after June 19, 1988, or after the compliance date of a State or local law prohibiting the use of service lines that do not meet the 1986 definition of lead free in accordance with section 1417 of the Safe Drinking Water Act, as amended in 1986 (Pub. L. 99–339, title

I, sec. 109(a), 100 Stat. 651) and 40 CFR 141.43(d)(1) and (2), as codified on July 1, 1991, whichever is earlier; visual inspection of the pipe exterior at a minimum of two points (e.g., excavation, visual inspection in the meter pit or stop box, or visual inspection inside the home); or previously replaced lead or galvanized requiring replacement service lines.

(ii) The water system must confirm the service line material of a random sample (e.g., a sample selected by use of a random number generator or lottery method) of non-lead service lines from the validation pool. Confirmation of service line material must be done by visual inspection of the pipe exterior at a minimum of two points. Where ownership is shared, the water system must conduct at least one visual inspection on each portion of the service line. Where ownership is shared and only one portion of the service line is included in the validation pool, systems must conduct at least one point of visual inspection on the unconfirmed portion of the service line. Water systems must validate at least as many service lines as are required in table 1 to this paragraph (b)(5)(ii).

TABLE 1 TO PARAGRAPH (b)(5)(ii)

Size of validation pool	Number of validations required
<1,500	20 percent of validation pool.
1,500 to 2,000	322.
2,001 to 3,000	341.
3,001 to 4,000	351.
4,001 to 6,000	361.
6,001 to 10,000	371.
10,001 to 50,000	381.
>50,000	384.

(iii) If physical access to private property is necessary to complete the validation and the water system is unable to gain access, the system is not required to conduct a validation at that site. The system must replace the site by randomly selecting a new service line that meets the requirements of paragraph (b)(5)(i) of this section to conduct the validation.

(iv) The deadlines for inventory validation are:

(A) No later than December 31 following seven years after the compliance date in § 141.80(a)(3) for water systems subject to the mandatory service line replacement deadline in paragraph (d)(4) of this section or water systems who have reported only non-lead service lines in their baseline inventory, submitted to the State in accordance with § 141.90(e)(9);

(B) A deadline established by the State for water systems conducting mandatory service line replacement on a shortened deadline for service line replacement as established by the State in accordance with paragraph (d)(5)(v) of this section; or

(C) A deadline established by the State to be no later than three years prior to the deadline for completing mandatory service line replacement if the water system is eligible for and plans to use a deferred deadline under paragraph (d)(5)(vi) of this section or an extended schedule for mandatory service line replacement pursuant to an exemption or a variance.

(v) Water systems that conduct inventory validation pursuant to this paragraph (b)(5) must complete the validation by the applicable deadline described in paragraph (b)(5)(iv) of this section, submit the results of the validation in accordance with § 141.90(e)(9), and comply with any additional actions required by the State to address inventory inaccuracies. The system must submit to the State the specific version (including the date) of the service line inventory that was used to determine the number of non-lead service lines included in the validation pool in accordance with § 141.90(e)(9).

(vi) Water systems may make a written request to the State to approve a waiver of the inventory validation requirements in this paragraph (b). To obtain a waiver, the water system must submit documentation to the State to demonstrate the system has conducted an inventory validation that is at least as stringent as the inventory validation requirements specified in paragraphs (b)(5)(i) through (iii) of this section by the compliance date in § 141.80(a)(3) and obtain written approval of the waiver from the State.

(c) *Service line replacement plan.* All water systems with one or more lead, galvanized requiring replacement, or lead status unknown service lines in their distribution system must create a service line replacement plan by the compliance date in § 141.80(a)(3) and submit a service line replacement plan to the State in accordance with § 141.90(e). The service line replacement plan must be sufficiently detailed to ensure a system is able to comply with the service line inventory and replacement requirements in this section.

(1) The service line replacement plan must include a description of:

(i) A strategy for determining the material composition of lead status unknown service lines in the service line inventory under paragraph (a) of this section;

(ii) A standard operating procedure for conducting full service line replacement (*e.g.*, techniques to replace service lines);

(iii) A communication strategy to inform consumers (*i.e.*, persons served at the service connection) and customers before a full or partial lead or galvanized requiring replacement service line replacement consistent with the requirements for notification and mitigation in paragraph (h) of this section;

(iv) A procedure for consumers and customers to flush service lines and premise plumbing of particulate lead following disturbance of a lead, galvanized requiring replacement, or lead status unknown service line in accordance with § 141.85(f) and following full or partial replacement of a lead or galvanized requiring replacement service line consistent with the requirements for notification and mitigation in paragraph (h) of this section;

(v) A strategy to prioritize service line replacement based on factors including, but not limited to, known lead and galvanized requiring replacement service lines and community-specific factors, such as populations disproportionately impacted by lead and populations most sensitive to the effects of lead;

(vi) A funding strategy for conducting service line replacement. Where the water system intends to charge customers for the cost to replace all or a portion of the service line because it is authorized or required to do so under State or local law or water tariff agreement, the funding strategy must include a description of whether and how the water system intends to assist customers who are unable to pay to replace the portion of the service line they own;

(vii) A communication strategy to inform residential and non-residential customers and consumers (*e.g.*, property owners, renters, and tenants) served by the water system about the service line replacement plan and program; and

(viii) Identification of any laws, regulations, and/or water tariff agreements that affect the water system's ability to gain access to conduct full lead and galvanized requiring replacement service line replacement, including the citation to the specific laws, regulations, or water tariff agreement provisions. This includes identification of any laws, regulations, and/or water tariff agreements that require customer consent and/or require or authorize customer cost-sharing.

(ix) For any water system that identifies any lead-lined galvanized service lines in the service line inventory as described in paragraphs (a) and (b) of this section, a strategy to determine the extent of the use of lead-lined galvanized service lines in the distribution system and categorize any lead-lined galvanized service lines as lead pursuant to table 2 to paragraph (d)(6)(iii)(A) of this section.

(x) For any water system that is eligible for and plans to use a deferred deadline pursuant to paragraph (d)(5)(vi) of this section:

(A) Documentation to support the system's determination that it is eligible for a deferred deadline, showing that 10 percent of the total number of known lead and galvanized requiring replacement service lines in the replacement pool exceeds 39 annual replacements per 1,000 service connections as calculated in paragraph (d)(5)(vi)(A) of this section;

(B) Identification of the deferred deadline and the associated cumulative average replacement rate that the system considers to be the fastest feasible but no slower than a deadline and replacement rate corresponding to 39 annual replacements per 1,000 service connections as calculated in paragraph (d)(5)(vi)(A) of this section, as well as the annual number of replacements required, the length of time (in years and months), and the date of completion for this deadline and rate; and

(C) Information supporting the system's determination that replacing lead and galvanized requiring replacement service lines by an earlier date and faster rate than provided under the deferred deadline provision in paragraph (d)(5)(vi) of this section is not feasible.

(2) The service line replacement plan must be made accessible to the public. Water systems serving greater than 50,000 persons must make the plan available to the public online.

(3) Water systems must annually update the service line replacement plan to include any new or updated information and submit the updates to the State on an annual basis in accordance with § 141.90(e). The water system must make the updated plan publicly accessible no later than the deadline to submit the updated plan to the State.

(i) If there is no new or updated information to include in the service line replacement plan since the previous iteration, the water system may certify to the State that the plan has no updates in lieu of resubmitting the plan unless the system is replacing service lines in accordance with a deferred

deadline and paragraph (c)(3)(ii) of this section applies.

(ii) If there is no new or updated information to include in the service line replacement plan and the water system is replacing service lines in accordance with a deferred deadline pursuant to paragraph (d)(5)(vi) of this section, every three years after the initial submission of the plan, the system must update the information specified in paragraph (c)(1)(x) of this section to support why the system continues to need the deferred deadline and resubmit the plan to the State.

(iii) If there are no longer lead, galvanized requiring replacement, and unknown service lines in the inventory as described in paragraphs (a) and (b) of this section, water systems are not required to resubmit the service line replacement plan or certify to the State that the plan has no updates.

(d) *Mandatory full service line replacement.* (1) All water systems must replace all lead and galvanized requiring replacement service lines under the control of the water system unless the replacement would leave in place a partial lead service line.

(2) Where a water system has access (*e.g.*, legal access, physical access) to conduct full service line replacement, the service line is under its control, and the water system must replace the service line. Where a water system does not have access to conduct full service line replacement, the water system is not required by this subpart to replace the line, but the water system must document the reasons that the water system does not have access and include any specific laws, regulations, and/or water tariff agreements that affect the water system's ability to gain access to conduct full replacement of lead and galvanized requiring replacement service lines. The water system must provide this documentation to the State pursuant to § 141.90(e)(10).

(i) This subpart does not establish the criteria for determining whether a system has access to conduct full service line replacement. Any applicable State or local laws or water tariff agreement requirements to gain access to conduct full service line replacement must be identified in the service line replacement plan as described in paragraph (c) of this section.

(ii) [Reserved]

(3) Where a water system has legal access to conduct full service line replacement only if property owner consent is obtained, the water system must make a "reasonable effort" to obtain property owner consent. If such a water system does not obtain consent

after making a “reasonable effort” to obtain it from any property owner, then the water system is not required by this subpart to replace any portion of the service line at that address unless there is a change in ownership of the property as described in paragraph (d)(3)(ii) of this section. The water system must provide documentation of the reasonable effort to the State pursuant to § 141.90(e)(10).

(i) A “reasonable effort” must include at least four attempts to engage the property owner using at least two different methods of communication (e.g., in-person conversation, phone call, text message, email, written letter, postcard, or information left at the door such as a door hanger) before the applicable deadline of mandatory service line replacement as described in paragraph (d)(4) of this section. The State may require systems to conduct additional attempts and may require specific outreach methods to be used.

(ii) Within six months of any change in ownership of the property, the water system must offer full service line replacement to any new property owner. Systems may use new service initiation or service transfer to a new customer to identify when there is a change in ownership. Within one year of any change in ownership of the property, the system must make a “reasonable effort” to obtain the property owner’s consent as described in paragraph (d)(3)(i) of this section. If the water system is unable to obtain consent from the current property owner after making a “reasonable effort” to obtain it, the water system is not required under this subpart to replace the line. This paragraph (d)(3)(ii) continues to apply until all lead and galvanized requiring replacement service lines are replaced.

(4) The deadline for water systems to replace all lead and galvanized requiring replacement service lines under the control of the water system is no later than 10 program years after the compliance date specified in § 141.80(a)(3) unless the system is subject to a different deadline under paragraphs (d)(5)(v) and (vi) of this section.

(i) Water systems must start mandatory service line replacement programs no later than the compliance date specified in § 141.80(a)(3).

(ii) If a lead or galvanized requiring replacement service line is discovered when the system’s inventory is comprised of only non-lead service lines, the system must complete the following requirements:

(A) Update the replacement pool calculated under paragraph (d)(6)(i) of this section.

(B) Conduct a full service line replacement of the affected service line as soon as practicable but no later than 180 days after the date the service line is discovered. Where a system determines that it is not practicable to conduct full service line replacement within 180 days after the date of discovery (e.g., due to freezing ground conditions), the system may request State approval for an extension of no later than one year after the date the service line was discovered to replace the affected service line. The request for an extension must be made no later than 90 days after the date of discovery of the affected service line.

(5) Water systems must meet a minimum cumulative average annual replacement rate for completing mandatory service line replacement in accordance with this paragraph (d)(5):

(i) *Annual replacement rate.* A water system must replace lead and galvanized requiring replacement service lines as described in paragraph (d)(6) of this section at an average annual replacement rate of at least 10 percent calculated across a cumulative period unless the system is subject to a shortened replacement rate or eligible for a deferred replacement rate in accordance with paragraphs (d)(5)(v) and (vi) of this section.

(ii) *Cumulative percent of service lines replaced.* To calculate the cumulative percent of service lines replaced, at the end of each mandatory service line replacement “program year” as specified in paragraph (d)(5)(iii) of this section, water systems must divide the total number of lead and galvanized requiring replacement service lines replaced thus far in the program in accordance with paragraph (d)(6)(iii) of this section by the number of service lines within the replacement pool in accordance with paragraph (d)(6)(i) of this section.

(iii) *Program year.* The first mandatory service line replacement “program year” is from the compliance date specified in § 141.80(a)(3) to the end of the next calendar year. Every program year thereafter is on a calendar year basis. This paragraph (d)(5)(iii) applies for the purposes of this section.

(iv) *Cumulative average replacement rate.* The annual replacement rate in paragraph (d)(5)(i) of this section is assessed annually as a cumulative average. The first cumulative average replacement rate must be assessed at the end of the third program year and is calculated by dividing the cumulative percent of service lines replaced in accordance with paragraph (d)(5)(ii) of this section by the number of completed program years (or three in this case).

Annually thereafter, at the end of each program year, systems must assess the cumulative average replacement rate by dividing the most recent cumulative percent of service lines replaced in accordance with paragraph (d)(5)(ii) by the number of completed program years. Except as provided in paragraph (d)(5)(iv)(A) of this section, the cumulative average replacement rate must be 10 percent or greater each program year, and the water system must replace all lead and galvanized requiring replacement service lines under its control by the applicable deadline for completing mandatory service line replacement in accordance with paragraph (d)(4) of this section.

(A) A water system is not required by this section to meet the cumulative average replacement rate described in this paragraph (d)(5) where, after the compliance date specified in § 141.80(a)(3), the system has replaced all lead and galvanized requiring replacement service lines in the replacement pool as described in paragraph (d)(6)(i) of this section that are under the control of the system, identified all unknown service lines in the inventory, and documented and submitted to the State the reasons the system currently does not have access to conduct full replacement of the remaining lead and galvanized requiring replacement service lines in the replacement pool in accordance with paragraphs (d)(2) and (3) of this section. When lead and galvanized requiring replacement service lines come under the control of the system, the water system is required to replace the service lines as described in this paragraph (d). This paragraph (d)(5)(iv)(A) continues to apply until all lead and galvanized requiring replacement service lines are replaced.

(B) [Reserved]

(v) *Shortened deadline and associated replacement rate.* Where the State determines that a shortened replacement deadline is feasible for a water system (e.g., by considering the number of lead and galvanized requiring replacement service lines in a system’s inventory), the system must replace service lines by the State-determined deadline and by a faster minimum replacement rate in accordance with paragraph (d)(5)(v)(A) of this section. The State must make this determination in writing and notify the system of its finding. The State must set a shortened deadline at any time throughout a system’s replacement program if a State determines a shorter deadline is feasible. This paragraph (d)(5)(v) also applies to systems eligible for a deferred

deadline as specified in paragraph (d)(5)(vi) of this section.

(A) Systems must replace lead and galvanized requiring replacement service lines at an average annual replacement rate calculated by dividing 100 by the number of years needed to meet the shortened deadline determined by the State, expressed as a percentage. Systems must comply with the cumulative average replacement rate in accordance with paragraph (d)(5)(iv) of this section, where the first cumulative average replacement rate is assessed at the end of the program year that is at least one year after the shortened deadline determination, as determined by the State, unless the shortened replacement deadline is less than three years. If the system's shortened replacement deadline is less than three years, the cumulative average replacement rate must be assessed on a schedule determined by the State.

(B) [Reserved]

(vi) *Deferred deadlines and associated replacement rates.* A water system may defer service line replacement past the deadline in paragraph (d)(4) of this section if the system meets the following criteria:

(A) If a water system replacing 10 percent of the total number of known lead and galvanized requiring replacement service lines in a system's replacement pool results in an annual number of service line replacements by the water system that exceeds 39 per 1,000 service connections, the system may complete replacement of all lead and galvanized requiring replacement service lines by a deadline that corresponds to the system conducting 39 annual replacements per 1,000 service connections at a cumulative average replacement rate assessed in accordance with paragraph (d)(5)(iv) of this section. This paragraph (d)(5)(vi)(A) is also applicable if a water system with service lines newly under their control, after previously not having control as described in paragraph (d)(5)(iv)(A) of this section, is required to conduct more than 39 annual replacements per 1,000 service connections. The number of annual replacements corresponding to 39 annual replacements per 1,000 service connections can be calculated by multiplying the number of service connections in a system by 0.039. The number of years needed to complete replacement is the total number of known lead and galvanized requiring replacement service lines in a system's replacement pool divided by the calculated number of annual replacements. To calculate the minimum cumulative average replacement rate, the system must

divide 100 by the number of years needed to achieve replacing 39 annual replacements per 1,000 service connections, expressed as a percentage.

(B) Any water system that is eligible for and plans to use a deferred deadline must include information, in accordance with paragraph (c)(1)(x) of this section, to support the use of a deferred deadline including identifying the deadline and associated cumulative average rate of replacement to meet this deferred deadline in the system's initial service line replacement plan and subsequent updates to the plan in accordance with paragraph (c) of this section. The system must identify an annual replacement rate that is no less than 39 annual replacements per 1,000 service connections.

(C) As soon as practicable, but no later than the end of the second program year as defined in paragraph (d)(5)(iii) of this section, and every three years thereafter, the State must determine in writing whether the deferred deadline and associated cumulative average replacement rate the system documented in paragraph (c)(1)(x)(B) of this section are the fastest feasible to conduct mandatory service line replacement and either approve the continued use of this deferred deadline and replacement rate as the fastest feasible for the system, or set a shorter deferred deadline and identify an associated replacement rate to ensure the system is replacing service lines at the fastest feasible rate for the system. The State must consider information that includes, but is not limited to, the system's submissions of the service line inventory and replacement plan in accordance with paragraph (a) through (c) of this section and information collected from other water systems conducting mandatory service line replacement. The State may require the system to provide additional information for the State to consider in its assessment of the continued use of a deferred deadline and the fastest feasible replacement rate.

(D) In the first two program years, the system must comply with the annual replacement rate identified in its initial replacement plan (unless the State determines a faster rate is feasible sooner). In subsequent program years, the system must comply with the applicable deferred deadline and associated replacement rate identified in the State's written determination of the deadline and replacement rate in paragraph (d)(5)(vi)(C) of this section.

(6) Calculation of the replacement pool, the annual number of replacements required, and the number of service lines replaced each year to

calculate a system's cumulative average replacement rate described in paragraph (d)(5) of this section are as follows:

(i) *Replacement pool.* To calculate the replacement pool, systems must add the total number of lead, galvanized requiring replacement, and lead status unknown service lines in the baseline inventory submitted by the compliance date specified in § 141.80(a)(3). The water system must not subtract lead or galvanized requiring replacement service lines from the replacement pool when they are replaced. The water system must not subtract service lines that are not under the control of the system from the replacement pool. At the beginning of each program year, water systems must update the replacement pool according to the counts of specific types of recategorized service lines in the inventory annually thereafter as described in this paragraph (d)(6)(i):

(A) Unknown service lines that are identified as non-lead service lines must be subtracted from the replacement pool. Unknown service lines that are identified as lead or galvanized requiring replacement service lines must be recategorized appropriately in the inventory and replacement pool, but they do not change the number of service lines in the replacement pool because recategorization does not remove these service lines from the replacement pool.

(B) Non-lead service lines discovered to be lead or galvanized requiring replacement service lines must be added to the replacement pool.

(C) Lead or galvanized requiring replacement service lines discovered to be non-lead service lines must be subtracted from the replacement pool.

(D) Each entire service line must count only once for purposes of calculating the replacement pool.

(ii) *Annual number of replacements required.* To calculate the number of lead and galvanized requiring replacement service lines a system is required to replace in a given program year, divide the number of service lines in the most up-to-date replacement pool, calculated at the beginning of each program year, by the total number of years remaining under paragraph (d)(4) of this section to complete mandatory service line replacement (e.g., 10 years).

(iii) *Number of service lines replaced.* When calculating the cumulative average replacement rate, the water system may only include full service line replacements of lead or galvanized requiring replacement service lines when counting the number of service lines replaced. Wherever the system conducts a replacement of a lead or

galvanized requiring replacement service line (either a portion of a service line or the entire service line), the replacement counts as a full service line replacement only if, after the

replacement, the entire service line can be categorized in the inventory as non-lead under paragraph (a)(3)(iii) of this section.

(A) For purposes of mandatory service line replacement, systems must count

each entire service line once, including where ownership of the service line is shared, with a single material categorization in accordance with table 2 to this paragraph (d)(6)(iii)(A).

TABLE 2 TO PARAGRAPH (d)(6)(iii)(A)

System-owned portion	Customer-owned portion	Categorization for entire service line
Lead	Lead	Lead.
Lead	Galvanized Requiring Replacement	Lead.
Lead	Non-lead	Lead.
Lead	Lead Status Unknown	Lead.
Non-lead	Lead	Lead.
Non-lead and never previously lead	Non-lead, specifically galvanized pipe material	Non-lead.
Non-lead	Non-lead, material other than galvanized pipe material.	Non-lead.
Non-lead	Lead Status Unknown	Lead Status Unknown.
Non-lead, but system is unable to demonstrate it was not previously Lead.	Galvanized Requiring Replacement	Galvanized Requiring Replacement.
Lead Status Unknown	Lead	Lead.
Lead Status Unknown	Galvanized Requiring Replacement	Galvanized Requiring Replacement.
Lead Status Unknown	Non-lead	Lead Status Unknown.
Lead Status Unknown	Lead Status Unknown	Lead Status Unknown.

(B) A full service line replacement is counted where a non-lead service line is installed for use and the lead or galvanized requiring replacement service line is disconnected from the water main or other service line. If the lead or galvanized requiring replacement service line is disconnected from the water main or system-owned portion of the service line but not removed, the water system must be subject to a State or local law or have a written policy to preclude the water system from reconnecting the lead or galvanized requiring replacement service line to the water main or other service line.

(C) A full service line replacement may be counted where a system physically disconnects a service line that is not in use and the water system does not install a new non-lead service line because there is no service line in use (e.g., at an abandoned property). If the disconnected lead or galvanized requiring replacement service line is not removed, the water system must be subject to a State or local law or have a written policy to preclude the water system from reconnecting the disconnected service line (i.e., a new non-lead service line must be installed if active use is to resume).

(D) Water systems must not count the following as a full service line replacement for purposes of this subpart:

(1) Where the service line is partially replaced as defined in § 141.2.

(2) Where a lead, galvanized requiring replacement, or unknown service line is

determined to be a non-lead service line.

(3) Where only a lead connector is replaced.

(4) Where pipe lining or coating technologies are used while the lead or galvanized requiring replacement service line remains in use.

(5) Where a water system does not replace a lead or galvanized requiring replacement service line because it is not be under the control of the system as described in paragraph (d)(2) of this section.

(e) *Replacement of lead connectors when encountered by a water system.* (1) The water system must replace any lead connector when encountered during planned or unplanned water system infrastructure work unless the connector is not under the control of the system (e.g., where the system does not have and cannot obtain access to conduct the connector replacement).

(i) Upon replacement of any connector that is attached to a lead or galvanized requiring replacement service line, the water system must follow risk mitigation measures for disturbances as specified in § 141.85(f)(2).

(ii) Following replacement of a lead connector, the water system must update the information on the connector material and location in its inventory in accordance with paragraphs (a)(2)(ii) and (b)(2) of this section.

(2) The water system must comply with any State or local laws that require additional connectors to be replaced.

(f) *Replacement of a service line prompted by the customer.* If State or

local laws or water tariff agreements do not prevent customers from conducting partial lead or galvanized requiring replacement service line replacements (“customer-initiated replacements”), the water system must meet the following requirements:

(1) If the water system is notified by the customer that the customer intends to conduct a partial lead or galvanized requiring replacement service line replacement, the water system must:

(i) Replace the remaining portion of the lead or galvanized requiring replacement service line at the same time as, or as soon as practicable after, the customer-initiated replacement, but no later than 45 days from the date the customer conducted the partial replacement;

(ii) Provide notification and risk mitigation measures in accordance with paragraph (h) of this section, as applicable, before the affected service line is returned to service; and

(iii) Notify the State within 30 days if it cannot meet the deadline in paragraph (f)(1)(i) of this section and complete the replacement no later than 180 days from the date the customer conducted the partial replacement.

(2) If the water system is notified or otherwise learns that a customer-initiated replacement occurred within the previous six months and left in place the system-owned portion of a lead or galvanized requiring replacement service line, the water system must:

(i) Replace any remaining portion of the affected service line within 45 days

from the day of becoming aware of the customer-initiated replacement; and

(ii) Provide notification and risk mitigation measures in accordance with paragraph (h) of this section within 24 hours of becoming aware of the customer replacement.

(iii) Notify the State within 30 days if it cannot meet the deadline in paragraph (f)(2)(i) of this section and complete the replacement no later than 180 days of the date the system learns of the customer-initiated replacement.

(3) When a water system is notified or otherwise learns of a customer-initiated replacement of a lead or galvanized requiring replacement service line that occurred more than six months in the past, this section does not require the water system to complete the lead or galvanized requiring replacement service line replacement of the system-owned portion under this paragraph (f). However, the remaining portion of the lead or galvanized requiring replacement service line must be identified in the inventory in accordance with paragraph (b) of this section and replaced in accordance with paragraph (d) of this section.

(g) *Requirements for conducting partial service line replacements.* This paragraph (g) prohibits water systems from conducting a partial lead service line replacement or a partial galvanized requiring replacement service line replacement as defined under § 141.2 unless it is conducted as part of an emergency repair or in coordination with planned infrastructure work that impacts service lines, excluding planned infrastructure work solely for the purposes of lead or galvanized requiring replacement service line replacement. Where a water system has access to conduct full service line replacement as specified in paragraph (d)(2) of this section, the water system must fully replace the service line. Where a water system conducts partial service line replacement, the system must comply with the notification and mitigation requirements specified in paragraphs (h)(1) and (2) of this section.

(1) Whenever a water system conducts a partial replacement of a lead or galvanized requiring replacement service line, the system must include a dielectric coupling separating the remaining service line and the replaced service line (*i.e.*, newly installed service line) to prevent galvanic corrosion unless the replaced service line is made of plastic.

(2) [Reserved]

(h) *Protocols for notification and mitigation for partial and full service line replacements—(1) Notification and mitigation requirements for planned*

partial service line replacement.

Whenever a water system plans to partially replace a lead or galvanized requiring replacement service line in coordination with planned infrastructure work that impacts service lines, the water system must provide written notice to the property owner, or the owner's authorized agent, as well as non-owner occupant(s) served by the affected service line at least 45 days prior to the replacement. Where a water system has access to conduct full service line replacement only if property owner consent is obtained, the water system must make a reasonable effort to obtain property owner consent to replace the remaining portion of the service line in accordance with paragraph (d)(3)(i) of this section. The reasonable effort must be completed before the partial lead service line replacement.

(i) Before the affected service line is returned to service, the water system must provide written notification that explains that consumers may experience a temporary increase of lead levels in their drinking water due to the replacement and that meets the content requirements of § 141.85(a)(1)(ii) through (iv) and contact information for the water system. In instances where multi-family dwellings or multiple non-residential occupants are served by the affected service line to be partially replaced, the water system may elect to post the information at a conspicuous location instead of providing individual written notification to all residents or non-residential occupants.

(ii) Before the affected service line is returned to service, the water system must provide written information about a procedure for consumers to flush service lines and premise plumbing of particulate lead following partial replacement of a lead or galvanized requiring replacement service line.

(iii) Before the affected service line is returned to service, the water system must provide the consumer with a pitcher filter or point-of-use device certified by an American National Standards Institute accredited certifier to reduce lead, six months of replacement cartridges, and instructions for use. If the affected service line serves more than one residence or non-residential unit (*e.g.*, a multi-unit building), the water system must provide a pitcher filter or point-of-use device, six months of replacement cartridges and use instructions to every residential and non-residential unit in the building.

(iv) The water system must offer to the consumer to collect a follow up tap sample between three months and six

months after the completion of any partial replacement of a lead service line. The tap sample must be a first- and fifth-liter paired sample after at least six hours of stagnation, following the tap sampling protocol under § 141.86(b). The water system must provide the results of the sample to the persons served by the service line in accordance with § 141.85(d).

(2) *Notification and mitigation requirements for emergency partial service line replacement.* Any water system that creates a partial replacement of a lead or galvanized requiring replacement service line due to an emergency repair must provide notice and risk mitigation measures to the persons served by the affected service line in accordance with paragraphs (h)(1)(i) through (iv) of this section before the affected service line is returned to service. The water system must offer to the property owner, or the owner's authorized agent, to replace the partial service line created by the emergency repair within 45 days.

(3) *Notification and mitigation requirements for full service line replacement.* Any water system that conducts a full lead or galvanized requiring replacement service line replacement must provide written notice to the persons served by the affected service line before the affected service line is returned to service; written notice must be provided to the owner or the owner's authorized agent, no later than 30 days following completion of the replacement.

(i) The written notification must explain that consumers may experience a temporary increase of lead levels in their drinking water due to the replacement and must meet the content requirements of § 141.85(a)(1)(ii) through (iv) as well as contact information for the water system. In instances where multi-family dwellings or multiple non-residential occupants are served by the lead or galvanized requiring replacement service line to be replaced, the water system may elect to post the information at a conspicuous location instead of providing individual written notification to all persons served in residential and non-residential units.

(ii) Before the replaced service line is returned to service, the water system must provide written information about a procedure for consumers to flush service lines and premise plumbing of particulate lead following full replacement of a lead or galvanized requiring replacement service line.

(iii) Before the replaced service line is returned to service, the water system must provide the consumer with a pitcher filter or point-of-use device

certified by an American National Standards Institute accredited certifier to reduce lead, six months of replacement cartridges, and instructions for use. If the lead service line serves more than one residence or non-residential unit (e.g., a multi-unit building), the water system must provide a pitcher filter or point-of-use device, six months of replacement cartridges and instructions for use to every residential and non-residential unit in the building.

(iv) The water system must offer to the consumer to collect a follow up tap sample between three months and six months after completion of any full replacement of a lead or galvanized requiring replacement service line. The tap sample must be a first-liter sample after at least six hours of stagnation, following the tap sampling protocol under § 141.86(b). The water system must provide the results of the sample to the consumer in accordance with § 141.85(d).

(i) *Reporting to demonstrate compliance to the State.* To demonstrate compliance with paragraphs (a) through (h) of this section, a water system must report to the State the information specified in § 141.90(e).

■ 9. Revise and republish § 141.85 to read as follows:

§ 141.85 Public education and supplemental monitoring and mitigation requirements.

A water system that exceeds the lead action level based on tap water samples collected in accordance with § 141.86 must distribute the public education materials contained in paragraph (a) of this section in accordance with the delivery requirements in paragraph (b) of this section. Water systems that exceed the lead action level must offer to sample the tap water of any person served by the water system who requests it in accordance with paragraph (c) of this section. Water systems must offer to sample for lead in the tap water of any person served by a lead, galvanized requiring replacement, or lead status unknown service line who requests it in accordance with paragraph (c) of this section. All water systems must deliver a consumer notice of lead tap water monitoring results and copper tap water monitoring results to persons served by the water system at sites that are sampled, as specified in paragraph (d) of this section. A water system with lead, galvanized requiring replacement, or lead status unknown service lines must deliver public education materials to persons with a lead, galvanized requiring replacement, or lead status unknown service line as specified in

paragraphs (e) and (f) of this section. All community water systems that do not meet the minimum replacement rate for mandatory service line replacement as required under § 141.84(d) must conduct outreach activities as specified in paragraph (h) of this section. All community water systems must conduct annual outreach to local and State health agencies as outlined in paragraph (i) of this section. Water systems with multiple lead action level exceedances, as specified in paragraph (j)(1) of this section, must conduct public outreach and make filters certified to reduce lead available as specified in paragraphs (j)(2) through (6) of this section. For water systems serving a large proportion of consumers with limited English proficiency, as determined by the State, all public education materials required under this section must comply with the language requirements in paragraph (b)(1) of this section.

(a) *Content of written public education materials—(1) Community water systems and non-transient non-community water systems.* Water systems must include the following elements in written materials (e.g., printed or digital brochures and pamphlets) in the same order as listed in paragraphs (a)(1)(i) through (vii) of this section. In addition, language in paragraphs (a)(1)(i), (ii), and (vii) of this section must be included in the materials, exactly as written, except for the text in brackets for which the water system must include system-specific information. States may approve changes to the content requirements if the State determines the changes are more protective of human health. Any additional information presented by a water system must be consistent with the information in paragraphs (a)(1)(i) through (vii) of this section and be in plain language that can be understood by the general public. Water systems must submit a copy of all written public education materials to the State prior to delivery. The State may require the system to obtain approval of the content of written public education materials prior to delivery.

(i) *Important information about lead in your drinking water.*

Figure 1 to Paragraph (a)(1)(i)

Important Information About Lead in Your Drinking Water

[INSERT NAME OF WATER SYSTEM] found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant people and young children. Please read this information closely to see what you

can do to reduce lead in your drinking water.

(ii) *Health effects of lead.*

Figure 2 to Paragraph (a)(1)(ii)

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.

(iii) *Sources of lead.* (A) Explain what lead is.

(B) Explain possible sources of lead in drinking water and how lead enters drinking water. Include information on home/building plumbing materials, service lines, and connectors that may contain lead and include information about the definition of lead free as provided in Safe Drinking Water Act section 1417 of 1986 and as subsequently revised in 2011. Explain that lead levels may vary and therefore lead exposure is possible even when tap sampling results do not detect lead at one point in time.

(C) Discuss other important sources of lead exposure in addition to drinking water (e.g., paint).

(iv) *Consumer steps to reduce lead exposure.* Discuss the steps the consumer can take to reduce their exposure to lead in drinking water.

(A) Explain that using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. If the system makes filters available in accordance with paragraph (j)(2) of this section, also include information on how the consumer can obtain a filter.

(B) Encourage running the water to flush out the lead. Explain that lead levels increase over time as water sits in lead-containing plumbing materials and regular water usage in the building can reduce lead levels in drinking water. Advise consumers served by lead and galvanized requiring replacement service lines that they may need to flush the water for longer periods.

(C) Explain concerns with using hot water from the tap and specifically

caution against the use of hot water for preparing baby formula.

(D) Explain that boiling water does not reduce lead levels.

(E) Encourage regular cleaning of faucet aerators.

(F) Discuss other steps consumers can take to reduce exposure to lead in drinking water, especially for pregnant persons, infants, and young children, such as using alternative sources of water.

(G) Suggest that parents have their child's blood tested for lead. Provide contact information for the State and/or local health department.

(H) Tell consumers how to get their water tested, including information in accordance with paragraph (c) of this section.

(v) *Levels of lead in drinking water.* Explain why there are elevated levels of lead in the system's drinking water (if known) and what the water system is doing to reduce the lead levels in homes/buildings in this area.

(vi) *Information on lead, galvanized requiring replacement, and unknown service lines.* For systems with lead, galvanized requiring replacement, or lead status unknown service lines in the system's inventory pursuant to § 141.84(a) and (b), public education materials must meet the requirements of paragraphs (a)(1)(vi)(A) through (G) of this section. For systems with lead connectors or connectors of unknown material in the system's inventory pursuant to § 141.84(a) and (b), public education materials must meet the requirements of paragraph (a)(1)(vi)(C) of this section:

(A) Discuss opportunities to replace lead and galvanized requiring replacement service lines;

(B) Discuss opportunities to have the material of a lead status unknown service line identified;

(C) Include information on how to obtain a copy of the service line inventory or view the inventory on the internet if the system is required to make the inventory available online so the consumer can find out if they are served by a lead, galvanized requiring replacement, or lead status unknown service line, or known lead connector or connector of unknown material;

(D) Include information on how to obtain a copy of the service line replacement plan or view the plan on the internet if the system is required to make the service line replacement plan available online;

(E) Include information about opportunities to replace lead and galvanized requiring replacement service lines. Where the water system intends for customer payment for a

portion of the replacement where it is required or authorized by State or local law or a water tariff agreement, the notice must include information about programs that provide financing solutions to assist property owners with replacement of their portion of a lead or galvanized requiring replacement service line;

(F) Include a statement that the water system is required to replace its portion of a lead or galvanized requiring replacement service line when the property owner notifies the water system that they are replacing their portion of the lead or galvanized requiring replacement service line; and

(G) Include a statement that provides instructions for the customer or consumer to notify the water system if they disagree with the service line material categorization in the inventory.

(vii) *More information about lead.*

Figure 3 to Paragraph (a)(1)(vii)

For more information, contact [INSERT NAME OF WATER SYSTEM] at [INSERT WATER SYSTEM PHONE NUMBER OR EMAIL ADDRESS] (IF APPLICABLE), or visit our website at [INSERT WATER SYSTEM WEBSITE]. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at <https://www.epa.gov/lead> or contact your health care provider.

(2) [Reserved]

(b) *Timing, format, and delivery method of public education materials.*

(1) For water systems serving a large proportion of consumers with limited English proficiency, as determined by the State, all public education materials required under this section must contain information in the appropriate language(s) regarding the importance of the materials and either contain information on where such consumers may obtain a translated copy of the public education materials, or assistance in the appropriate language(s), or the materials must be in the appropriate language(s).

(2) Each time a community water system exceeds the lead action level based on tap water samples collected in accordance with § 141.86, the system must conduct the public education tasks under this paragraph (b)(2) within 60 days after the end of the tap sampling period in which the exceedance occurred. For community water systems that are on standard monitoring, the end of the tap sampling period is June 30 or December 31. For community water systems that are required to conduct monitoring annually or less frequently, the end of the tap sampling period is

September 30 of the calendar year in which the sampling occurs, or, if the State has established an alternate four-month tap sampling period, the last day of that period.

(i) Deliver written materials meeting the content requirements of paragraph (a) of this section to each customer receiving a bill and to other service connections to which water is delivered by the water system. In the case of multi-family dwellings, the water system must deliver the written materials to each unit or post the information at a conspicuous location.

(ii)(A) Contact consumers who are most at risk by delivering education materials that meet the content requirements of paragraph (a) of this section to local public health agencies even if they are not located within the water system's service area, along with an informational notice that encourages distribution to all of the agencies' potentially affected customers or community water system's users. The water system must contact the local public health agencies directly by phone, email, or in person. If local public health agencies provide a specific list of additional community-based organizations serving populations at greatest risk from lead exposure (*e.g.*, pregnant people, children), including organizations outside the service area of the water system, then the system must deliver education materials that meet the content requirements of paragraph (a) to all organizations on the provided lists.

(B) Contact consumers who are most at risk by delivering materials that meet the content requirements of paragraph (a) of this section to the following organizations listed in paragraphs (b)(2)(ii)(B)(1) through (7) of this section that are located within the water system's service area, along with an informational notice that encourages distribution to all the organization's potentially affected customers or community water system's users:

(1) Schools, child care facilities, and school boards.

(2) Women, Infants and Children (WIC) and Head Start programs.

(3) Public and private hospitals and medical clinics.

(4) Pediatricians.

(5) Family planning clinics.

(6) Local welfare agencies.

(7) Obstetricians-gynecologists and midwives.

(iii) No less often than quarterly, provide information with each water bill as long as the system exceeds the action level for lead. The message on the water bill must include the statement in figure 4 to this paragraph (b)(2)(iii)

exactly as written except for the text in brackets for which the water system must include system-specific information. The message or delivery mechanism can be modified in consultation with the State; specifically, the State may allow a separate mailing of public education materials to customers if the water system cannot place the information on water bills.

Figure 4 to Paragraph (b)(2)(iii)

[INSERT NAME OF WATER SYSTEM] found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems. For more information please contact [INSERT NAME OF WATER SYSTEM] [or visit (INSERT WATER SYSTEM WEBSITE)].

(iv) Post material meeting the content requirements of paragraph (a) of this section on the water system's website if the system serves a population greater than 50,000. The system must retain material on the website for as long as the system exceeds the action level.

(v) Submit a press release to media outlets including newspaper, television, and radio stations. The submitted press release must state the water system found elevated levels of lead in drinking water in some homes/buildings and meet the content requirements of paragraph (a) of this section.

(vi) Implement at least three additional activities from one or more categories listed in paragraphs (b)(2)(vi)(A) through (J) of this section. The educational content and selection of these activities must be determined in consultation with the State.

(A) Public service announcements.

(B) Paid advertisements.

(C) Public area information displays.

(D) Emails to customers.

(E) Public meetings.

(F) Household deliveries.

(G) Targeted individual customer contact.

(H) Direct material distribution to all multi-family homes and institutions.

(I) Contact organizations representing plumbers and contractors to provide information about lead in drinking water, sources of lead, and the importance of using lead free plumbing materials.

(J) Other methods approved by the State.

(vii) [Reserved]

(3) A community water system must repeat the activities in paragraph (b)(2) of this section until the system is at or below the lead action level based on tap water samples collected in accordance with § 141.86. These repeated activities must be completed within 60 days of the end of each tap sampling period. A

calculated 90th percentile level at or below the lead action level based on fewer than the minimum number of required samples under § 141.86 cannot be used to meet the requirements of this paragraph (b)(3).

(4) Within 60 days after the end of each tap sampling period in which a lead action level exceedance occurs, a non-transient non-community water system must deliver the public education materials specified by paragraph (a) of this section as follows:

(i) Post informational posters on lead in drinking water in a public place or common area in each of the buildings served by the system until the system is at or below the lead action level based on tap water samples collected in accordance with § 141.86; and

(ii) Distribute informational pamphlets and/or brochures on lead in drinking water to each person served by the non-transient non-community water system. The State may allow the system to utilize electronic transmission in lieu of or combined with printed materials as long as it achieves at least the same coverage.

(iii) For systems that are on standard monitoring, the end of the tap sampling period is June 30 or December 31. For systems that are required to conduct monitoring annually or less frequently, the end of the tap sampling period is September 30 of the calendar year in which the sampling occurs, or, if the State has established an alternate tap sampling period, the last day of that period.

(5) A non-transient non-community water system must repeat the tasks contained in paragraph (b)(4) of this section until the system is at or below the lead action level based on tap water samples collected in accordance with § 141.86. These repeated activities must be completed within 60 days of the end of each tap sampling period. A calculated 90th percentile level at or below the lead action level based on fewer than the minimum number of required samples under § 141.86 cannot be used to meet the requirements of this provision.

(6) A water system may discontinue delivery of public education materials if the system is at or below the lead action level during the most recent six-month tap sampling period conducted pursuant to § 141.86. Such a system must recommence public education in accordance with this section if it subsequently exceeds the lead action level during any tap sampling period.

(7) A water system may request an extension from the State, in writing, to complete the activities in paragraphs (b)(2)(ii) through (vi) of this section for

community water systems, or paragraphs (b)(4)(i) and (ii) of this section for non-transient non-community water systems, as follows:

(i) The extension must be approved in writing by the State before the 60-day deadline;

(ii) The State may only grant the extension on a case-by-case basis if the system has demonstrated that it is not feasible to complete the activities in paragraphs (b)(2)(ii) through (vi) of this section for community water systems, or paragraphs (b)(4)(i) and (ii) of this section for non-transient non-community water systems; and

(iii) The activities in paragraph (b)(2) or (4) of this section must be completed no later than six months after the end of the tap sampling period in which the exceedance occurred.

(8) A community water system meeting the criteria of paragraphs (b)(8)(i) and (ii) of this section may apply to the State, in writing (unless the State has waived the requirement for prior State approval), to perform the tasks listed in paragraphs (b)(4) and (5) of this section in lieu of the tasks in paragraphs (b)(2) and (3) of this section if:

(i) The system is a facility, such as a prison or a hospital, where the population served is not capable of or is prevented from making improvements to plumbing or installing point-of-use treatment devices; and

(ii) The system provides water as part of the cost of services provided and does not separately charge for water consumption.

(9) A community water system serving 3,300 or fewer persons may limit certain aspects of their public education programs as follows:

(i) With respect to the requirements of paragraph (b)(2)(ii) of this section, a system serving 3,300 or fewer persons may limit the distribution of the public education materials required under paragraph (b)(2)(ii) to facilities and organizations served by the system that are most likely to be visited regularly by pregnant people and children.

(ii) With respect to the requirements of paragraph (b)(2)(v) of this section, the State may waive this requirement for systems serving 3,300 or fewer persons as long as the system distributes notices to every household served by the system.

(iii) With respect to the requirements of paragraph (b)(2)(vi) of this section, a system serving 3,300 or fewer persons must implement at least one of the activities listed in paragraph (b)(2)(vi).

(c) *Supplemental monitoring and notification of results.* (1) A water system that exceeds the lead action level

based on tap samples collected in accordance with § 141.86 must offer to sample for lead in the tap water of any person served by the water system who requests it. At sites served by a lead, galvanized requiring replacement, or lead status unknown service line, the samples must capture both water in contact with premise plumbing and water in contact with the service line (e.g., first- and fifth-liter samples).

(2) Water systems must offer to sample for lead in the tap water of any person served by a lead, galvanized requiring replacement, or lead status unknown service line who requests it, regardless of whether the water system exceeds the lead action level. The samples must capture both water in contact with premise plumbing and water in contact with the service line (e.g., first- and fifth-liter samples).

(3) All water systems must provide a consumer notice of the individual tap results from supplemental tap water monitoring carried out under the requirements of this paragraph (c) to the persons served by the water system at the specific sampling site from which the sample was taken (e.g., the occupants of the building where the tap was sampled). Water systems must provide the consumer notice in accordance with the requirements of paragraphs (d)(2) through (4) of this section.

(d) *Notification of results*—(1) *Notice requirement.* All water systems must provide a consumer notice of the individual tap results from any lead and copper tap water monitoring carried out under the requirements of § 141.86 to the persons served by the water system at the specific sampling site from which the sample was taken (e.g., the occupants of the building where the tap was sampled).

(2) *Timing of notification.* A water system must provide the consumer notice as soon as practicable but no later than three business days after the water system learns of the tap monitoring results. Notification by mail must be postmarked within three business days of the system learning of the tap monitoring results.

(3) *Content.* (i) The consumer notice for lead must include the results of lead tap water monitoring for the tap that was tested, an explanation of the health effects of lead that meets the requirements of paragraph (a)(1)(ii) of this section, information on possible sources of lead in drinking water that meets the requirements of paragraph (a)(1)(iii)(B) of this section, a list of steps consumers can take to reduce exposure to lead in drinking water that meets the requirements of paragraph (a)(1)(iv) of

this section, and contact information for the water system. The notice must also provide the maximum contaminant level goal and the action level for lead and the definitions for these two terms from § 141.153(c).

(ii) The consumer notice for copper must include the results of copper tap water monitoring for the tap that was tested, an explanation of the health effects of copper as provided in appendix B to subpart Q of this part, a list of steps consumers can take to reduce exposure to copper in drinking water, and contact information for the water system. The notice must also provide the maximum contaminant level goal and the action level for copper and the definitions for these two terms from § 141.153(c).

(4) *Delivery.* Water systems must provide consumer notice to persons served at the tap that was sampled. The notice must be provided electronically (e.g., email or text message), by phone call or voice message, hand delivery, by mail, or another method approved by the State. For example, upon approval by the State, a non-transient non-community water system could post the results in a conspicuous area, such as on a bulletin board, in the facility to allow users to review the information. Water systems that choose to deliver the notice to consumers by phone call or voice message must follow up with a written notice to consumers hand delivered or postmarked within 30 days of the water system learning of the tap monitoring results. The notices of lead and copper tap sampling results may be combined in one notice.

(e) *Notification of service line that is known to or may potentially contain lead*—(1) *Notification requirements.* All water systems with lead, galvanized requiring replacement, or lead status unknown service lines in their inventory pursuant to § 141.84(a) and (b) must provide notification of a service line that is known to or may potentially contain lead to customers and all persons served by the water system at the service connection with a lead, galvanized requiring replacement, or lead status unknown service line.

(2) *Timing of notification.* A water system must provide notification no later than 30 days after completion of the baseline inventory required under § 141.84(a)(2) and repeat the notification no later than 30 days after the deadline for each annual update to the service line inventory under § 141.90(e)(4) until the entire service connection is no longer a lead, galvanized requiring replacement, or lead status unknown service line. For notifications to new customers, water systems must provide

the notice at the time of service initiation.

(3) *Content*—(i) *Persons served by a confirmed lead service line or galvanized requiring replacement service line.* The notice must include:

(A) A statement that the person's service line is lead or galvanized requiring replacement as applicable.

(B) An explanation of the health effects of lead that meets the requirements of paragraph (a)(1)(ii) of this section.

(C) Steps persons at the service connection can take to reduce exposure to lead in drinking water that meet the requirements of paragraph (a)(1)(iv) of this section.

(D) A statement that the consumer can request to have their tap water sampled in accordance with paragraph (c) of this section.

(E) Include information on how to obtain a copy of the service line replacement plan or view the plan on the internet if the system is required to make the service line replacement plan available online.

(F) Information about opportunities to replace lead and galvanized requiring replacement service lines. Where the water system intends for customer payment for a portion of the replacement where it is required or authorized by State or local law or a water tariff agreement, the notice must include information about programs that provide financing solutions to assist property owners with replacement of their portion of a lead or galvanized requiring replacement service line.

(G) A statement that the water system is required to replace its portion of a lead or galvanized requiring replacement service line when the property owner notifies the water system that they are replacing their portion of the lead or galvanized requiring replacement service line.

(H) A statement that provides instructions for the customer to notify the water system if they disagree with the service line material categorization in the inventory.

(ii) *Persons served by a lead status unknown service line.* The notice must include a statement that the person's service line material is unknown but may be lead, the information in paragraphs (e)(3)(i)(B) through (E) of this section, and information about opportunities to verify the material of the service line.

(4) *Delivery.* The notice must be provided to customers and persons served by the water system at the service connection with a lead, galvanized requiring replacement, or lead status unknown service line, by

mail or by another method approved by the State.

(f) *Notification due to a disturbance to a service line that is known to or may potentially contain lead.* (1) Water systems that cause disturbance to a lead, galvanized requiring replacement, or lead status unknown service line must provide customers and the persons served by the water system at the service connection with information about the potential for elevated lead levels in drinking water as a result of the disturbance. Actions taken by a water system that cause a disturbance include actions that result in a shut off or bypass of water to an individual service line or a group of service lines (e.g., operating a valve on a service line or meter setter, or reconnecting a service line to the main) or other actions that cause a disturbance to a service line or group of service lines, such as undergoing physical action or vibration, that could result in pipe scale dislodging and associated release of particulate lead. The provided information must include:

(i) Public education materials that meet the content requirements in paragraphs (a)(1)(ii) through (iv) and (vi) of this section and contact information for the water system; and

(ii) Instructions for a flushing procedure to remove particulate lead.

(2) If the disturbance of a lead, galvanized requiring replacement, or lead status unknown service line results from the replacement of an inline water meter, a water meter setter, or connector, or from the replacement of a water main whereby the service line pipe is physically cut, the water system must provide the persons served by the water system at the service connection with the information in paragraphs (f)(1)(i) and (ii) of this section and a pitcher filter or point-of-use device certified by an American National Standards Institute accredited certifier to reduce lead, instructions to use the filter, and six months of filter replacement cartridges.

(3)(i) *Persons at the service connection.* The water system must comply with the requirements in this paragraph (f) for persons served by the water system at the service connection before any service line that has been shut off or bypassed is returned to service. Where there was a disturbance, but service was not shut off or bypassed, the water system must comply with the requirements in this paragraph (f) as soon as possible, but not to exceed 24 hours following the disturbance.

(ii) *Customers.* The water system must comply with the requirements in paragraph (f)(1) of this section for

customers associated with the service connection who are not persons served by the water system at the service connection (e.g., a customer who is a property owner and renting their property) no later than 30 days following the disturbance.

(4) A water system that conducts a partial or full replacement of a lead or galvanized requiring replacement service line must follow procedures in accordance with the requirements in § 141.84(h). Partial or full replacement of a lead or galvanized requiring replacement service line is not considered a “disturbance” for purposes of this paragraph (f).

(g) [Reserved]

(h) *Outreach activities to encourage participation in full service line replacement.* (1) Community water systems that do not meet the service line replacement rate calculated across a cumulative period as required under § 141.84(d)(5) must conduct at least one outreach activity listed in paragraph (h)(2) of this section to discuss their mandatory service line replacement program and opportunities for replacement and to distribute public education materials that meet the content requirements in paragraph (a) of this section except paragraphs (a)(1)(i) and (v) of this section. The water system must conduct the activity in the year following the program year for which the system does not meet their cumulative average replacement rate and annually thereafter until the water system meets the cumulative average replacement rate or until there are no lead, galvanized requiring replacement, or lead status unknown service lines remaining in the inventory, whichever occurs first.

(2) For community water systems serving more than 3,300 persons, the outreach activity must be one of the activities identified in paragraphs (h)(2)(i) through (iv) of this section or the water system must conduct two activities listed in paragraphs (h)(2)(v) through (viii) of this section. For community water systems serving 3,300 persons or fewer, the outreach activity must be one of the activities identified in paragraphs (h)(2)(i) through (viii) of this section.

(i) Conduct a public meeting.

(ii) Participate in a community event to provide information about its service line replacement program.

(iii) Contact customers by phone call or voice message, text message, email, or door hanger.

(iv) Use another method approved by the State to discuss the service line replacement program and opportunities

for lead and galvanized requiring replacement service line replacement.

(v) Send certified mail to customers and all persons served by the water system at the service connection with a lead or galvanized requiring replacement service line to inform them about the water system’s service line replacement program and opportunities for replacement of the service line.

(vi) Conduct a social media campaign.

(vii) Conduct outreach via the media including newspaper, television, or radio.

(viii) Visit targeted customers (e.g., customers in areas with lower service line replacement participation rates) to discuss the service line replacement program and opportunities for replacement.

(i) *Public education to local and State health agencies—(1) Distribution System and Site Assessment results.* All community water systems must provide information to local and State health agencies about Distribution System and Site Assessment activities conducted in accordance with § 141.82(j) including the location of the tap sample site that exceeded 0.010 mg/L, the result of the initial tap sample, the result of the follow up tap sample, the result of water quality parameter monitoring, and any distribution system management actions or corrosion control treatment adjustments made.

(2) *Timing and content.* Community water systems must annually send Distribution System and Site Assessment information and copies of the public education materials provided under paragraphs (a) and (h) of this section for actions conducted in the previous calendar year no later than July 1 of the following year.

(3) *Delivery.* Community water systems must send public education materials and Distribution System and Site Assessment information to local and State health agencies by mail, email, or by another method approved by the State.

(j) *Additional requirements for water systems with multiple lead action level exceedances.* (1) A water system that exceeds the lead action level at least three times in a rolling five-year period, based on tap water samples collected in accordance with § 141.86, must conduct the activities in this section. The first rolling five-year period begins on the compliance date in § 141.80(a)(3). If a water system exceeds the lead action level at least three times within a five-year period, the system must conduct these actions upon the third action level exceedance even if the rolling five-year period has not elapsed.

(2) No later than 60 days after the tap sampling period in which a water system meets the criteria of paragraph (j)(1) of this section, a water system must make available to all consumers pitcher filters or point-of-use devices certified by an American National Standards Institute accredited certifier to reduce lead, six months of replacement cartridges, and instructions for use. A water system must continue to make replacement cartridges available until the system may discontinue actions in accordance with paragraph (j)(6) of this section.

(3) No later than 60 days after a water system exceeds the lead action level for the second time in a rolling five-year period, the water system must submit a filter plan to the State. The State must review and approve the filter plan within 60 days. If the water system subsequently meets the criteria of paragraph (j)(1) of this section again, the water system is not required to re-submit the filter plan, unless the system has made updates to the plan or otherwise requested by the State. The plan must include:

(i) A description of which methods the system will use to make filters and replacement cartridges available in accordance with paragraph (j)(2) of this section (e.g., operating distribution facilities, delivering filters when requested by the consumer); and

(ii) A description of how the system will address any barriers to consumers obtaining filters.

(4) A water system that meets the criteria of paragraph (j)(1) of this section must conduct a community outreach activity to discuss the multiple lead action level exceedances, steps the system is taking to reduce lead in drinking water, measures consumers can take to reduce their risk consistent with the content requirements of paragraph (a)(1)(iv) of this section, and how to obtain a filter certified to reduce lead as required in paragraph (j)(2) of this section. This activity is in addition to the public education activities required under paragraph (b)(2) of this section for community water systems, and under paragraph (b)(4) of this section for non-transient non-community water systems, that exceed the lead action level. The water system must conduct at least one activity from paragraphs (j)(4)(i) through (v) of this section within six months of the start of the tap sampling period after the most recent lead action level exceedance. The water system must conduct at least one of the activities in paragraphs (j)(4)(i) through (v) every six months until the system no longer meets the criteria of paragraph (j)(1) of this section.

(i) Conduct a public meeting.

(ii) Participate in a community event where the system can make information about ongoing lead exceedances available to the public.

(iii) Contact customers by phone call or voice message, text message, email, or door hanger.

(iv) Conduct a social media campaign.

(v) Use another method approved by the State.

(5) A water system that is already conducting an outreach activity listed in paragraph (j)(4) of this section in order to meet the requirements of paragraph (h) of this section may conduct one activity that meets the requirements of paragraphs (j)(4) and (h), unless otherwise directed by the State.

(6) A water system may discontinue the requirements of this paragraph (j) when the system no longer has at least three lead action level exceedances in a rolling five-year period, based on tap water samples collected in accordance with § 141.86. A calculated 90th percentile level at or below the lead action level based on fewer than the minimum number of required samples under § 141.86 cannot be used to meet the requirements of this paragraph (j)(6). States have the discretion to allow a water system to discontinue the requirements of this paragraph (j) earlier if the system has taken actions to reduce lead levels (e.g., re-optimized optimal corrosion control treatment or completed the service line replacement program) and the system is at or below the lead action level for two consecutive tap monitoring periods.

■ 10. Revise § 141.86 to read as follows:

§ 141.86 Monitoring requirements for lead and copper in tap water.

All water systems must sample for lead and copper at taps used to provide water for human consumption in accordance with the requirements of this section.

(a) *Sample site location.* (1) By the start of the first tap monitoring period in which sampling for lead and copper is required under paragraphs (c) and (d) of this section, each water system must identify potential tap sampling sites and submit a site sample plan to the State as required in § 141.90(a)(1)(i). States may require modifications to submitted site sample plans. Each water system must identify a pool of tap sampling sites that will allow the water system to collect the number of lead and copper tap samples required in paragraphs (c)(1) and (d)(1) of this section.

(i) To select sampling sites, a water system must use information regarding the material of service lines and connectors, including lead, copper, and

galvanized iron or steel, required to be collected under § 141.84.

(ii) Water systems must identify locations in the site sample plan by selecting from sites in the highest tier, unless the site has been found to be unavailable, in accordance with paragraph (a)(4) of this section.

(iii) Sampling sites cannot include sites with installed point-of-entry (POE) treatment devices or taps with point-of-use devices designed to remove inorganic contaminants, except in water systems using these devices at all service connections for primary drinking water taps to meet other primary and secondary drinking water standards as under § 141.93(c)(1).

(2) A water system that has fewer than five sites with drinking water taps that can be used for human consumption meeting the sample site criteria of this paragraph (a) to reach the required number of sample sites listed in paragraphs (c)(1) and (d)(1) of this section, must collect at least one sample from each tap and collect additional samples from those taps on different days during the tap sampling period to meet the required number of sites. Alternatively, the State may allow these water systems to collect a number of samples fewer than the number of sites specified in paragraphs (c)(1) and (d)(1), provided that 100 percent of all taps that can be used for human consumption are sampled. The State must approve this reduction of the minimum number of samples in writing based on a request from the system or onsite verification by the State.

(3) A water system serving sites with premise plumbing made of lead and/or that are served by a lead service line must collect all samples for monitoring under this section from sites with premise plumbing made of lead and/or served by a lead service line. A water system that cannot identify enough sampling sites with premise plumbing made of lead and/or served by lead service lines to meet the minimum number of sites required in paragraphs (c)(1) and (d)(1) of this section must still collect samples from every available site, in accordance with paragraph (a)(4) of this section, containing premise plumbing made of lead and/or served by a lead service line and collect the remaining samples in accordance with the tiering requirements under paragraph (a)(4).

(4) Sampling sites must be selected from the highest tier available (Tier 1 is the highest tier and Tier 5 is the lowest tier). Sites are available unless a customer refuses to participate in sampling or a system has made at least two outreach attempts at a site and has

not received a response. The number of customer refusals and non-responses for compliance sampling during each tap sampling period must be submitted to the State in accordance with the requirements at § 141.90(a)(2)(viii). Systems may continue conducting outreach at sites considered unavailable and may subsequently add such sites to the site sample plan for any reason, such as receiving a service initiation request from a new property owner or occupant or receiving a new consumer request for sampling. A system without a large enough number of sites from a higher tier to meet the number of sites required in paragraphs (c)(1) and (d)(1) of this section may sample sites from the next highest tier. For water systems where Tier 2 sites comprise at least 20 percent of the residential structures served by the community water system, Tier 2 sites may be sampled even when Tier 1 sites are available.

(i) Tier 1 sampling sites are single-family structures with premise plumbing made of lead and/or served by a lead service line.

(ii) Tier 2 sampling sites are buildings, including multiple-family residences, with premise plumbing made of lead and/or served by a lead service line.

(iii) Tier 3 sampling sites are sites that are served by a lead connector. Tier 3 sites are also sites served by a galvanized service line or containing galvanized premise plumbing identified as ever having been downstream of a lead service line. Tier 3 for community water systems only includes single-family structures.

(iv) Tier 4 sampling sites are sites that contain copper premise plumbing with lead solder installed before the effective date of the State's applicable lead ban. Tier 4 for community water systems only includes single-family structures.

(v) Tier 5 sampling sites are sites that are representative of sites throughout the distribution system. For purpose of this paragraph (a), a representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the water system.

(b) *Sample collection protocol.* (1) Except for samples described in paragraphs (b)(1)(iii) and (iv) of this section, all tap samples collected for analysis of lead and copper must be one liter in volume and have stood motionless in the plumbing system and/or service line of each sampling site for at least six hours. Bottles used to collect samples for analysis must be wide-mouth, one-liter sample bottles, as defined at § 141.2. Samples from residential housing must be collected

from an interior kitchen or bathroom sink cold-water tap. Samples from a nonresidential building must be collected at an interior cold-water tap from which water is typically drawn for human consumption. Samples may be collected by the system, or the system may allow members of the public to collect samples after providing instructions for collecting samples in accordance with this paragraph (b)(1). Sample collection instructions cannot direct the sample collector to remove or clean the aerator or flush taps prior to the start of the minimum six-hour stagnation period. To protect members of the public from injury due to handling nitric acid, samples may be acidified up to 14 days after the sample is collected. After acidification to resolubilize the metals, the sample must stand in the original container for a period of time, as specified by the approved EPA method in § 141.23 selected for sample analysis. If a system allows members of the public to sample, the system cannot challenge the accuracy of the sampling results based on alleged sample collection errors.

(i) The first-liter sample must be analyzed for lead and copper at sample sites where both contaminants are required to be monitored. At sample sites where only lead is required to be monitored, the first-liter sample may be analyzed for only lead.

(ii) For sites served by a lead service line, which fall under Tier 1 and Tier 2, an additional fifth-liter sample must be collected at the same time as the first-liter sample and must be analyzed for lead. To collect a first-liter-and-fifth-liter-paired sample, systems must collect tap water in five consecutively numbered, wide-mouth, one-liter sample bottles after the water has stood motionless in the plumbing of each sampling site, including the lead service line, for at least six hours without flushing the tap prior to sample collection. Systems must collect samples starting with the first sample bottle and then fill each subsequently numbered bottle in consecutive order until the final bottle is filled, with the water running constantly while the samples are being collected. In this sequence, the first-liter sample is the first sample collected and the fifth-liter sample is the final sample collected.

(iii) State-approved samples collected pursuant to paragraph (b)(3) of this section may include samples with stagnation periods less than six hours, but must meet all the other sample collection criteria in this paragraph (b)(1), including being one-liter in volume using a wide-mouth bottle and collected at an interior tap from which

water is typically drawn for human consumption.

(iv) Systems may use different sample volumes and/or different sample collection procedures when they collect follow-up samples for Distribution System and Site Assessment under § 141.82(j)(2) and consumer-requested samples under § 141.85(c) to assess the source of lead. Consumer-requested samples must be collected in accordance with § 141.85(c). Systems must submit these sample results to the State in accordance with § 141.90(a)(2)(i) and (g).

(2) Systems must sample at sites listed in the site sample plan. Additionally, systems must prioritize sampling at the same sites that were sampled in the previous tap sampling period. If such a site no longer qualifies under the tiering criteria or if, for reasons beyond the control of the water system, the water system cannot gain access to a sampling site in order to collect a tap sample, the system must collect the tap sample from another site in its site sample plan that meets the original tiering criteria, where such a site exists. Systems must report any change in sites from the previous tap sampling period, and include an explanation of why sampling sites have changed, as required in § 141.90(a)(2)(v). If changes are needed to the site sample plan, systems must submit their updated site sample plan, as required under § 141.90(a)(1)(i), before the start of the next tap sampling period conducted by the system.

(3) A non-transient non-community water system, or a community water system that meets the criteria of § 141.85(b)(8), that does not have enough sites with taps from which first-liter samples or first-liter-and-fifth-liter-paired samples meeting the six-hour minimum stagnation time can be collected, as provided in paragraph (b)(1) of this section, may apply to the State in writing to request approval to substitute first-liter or first-liter-and-fifth-liter-paired samples that do not meet the six-hour minimum stagnation time. Such systems must collect as many first-liter or first-liter-and-fifth-liter-paired samples from interior taps used for human consumption as possible towards meeting the minimum number of sites required in paragraphs (c)(1) and (d)(1) of this section. For the remaining samples to meet the minimum number required, systems must identify sampling times and locations that would likely result in the longest standing times. The State has the discretion to waive the requirement for prior State approval of sites not meeting the six-hour stagnation time

either through State regulation or written notification to the system.

(c) *Standard monitoring.* Standard monitoring consists of six-month tap monitoring periods that begin on January 1 and July 1.

(1) *Standard monitoring sites.* During a standard tap monitoring period, a water system must collect at least one sample from the number of sites in the following table 1 to this paragraph (c)(1). Standard monitoring sites must be selected in accordance with the sampling tiers identified in paragraph (a) of this section.

TABLE 1 TO PARAGRAPH (c)(1)

System size (number of people served)	Standard number of sites for lead and copper sampling
>100,000	100
10,001 to 100,000	60
3,301 to 10,000	40
501 to 3,300	20
101 to 500	10
≤100	5

(2) *Criteria for standard monitoring.* The following systems must conduct standard monitoring for at least two consecutive tap monitoring periods beginning January 1 or July 1, whichever is sooner, following the tap sampling period in which the criterion is met. Systems may then reduce monitoring in accordance with paragraph (d) of this section.

(i) All water systems with lead or galvanized requiring replacement service lines in their inventories as of November 1, 2027, including those deemed optimized under § 141.81(b)(3), must conduct standard monitoring in the first six-month tap monitoring period following November 1, 2027, unless the system has, before or by that date, met all the following criteria:

(A) The system conducts compliance monitoring of sites that meet the correct priority tiering targeting sites served by lead and galvanized requiring replacement service lines in accordance with paragraph (a)(4) of this section;

(B) The system collects samples in accordance with all sample collection requirements in paragraphs (b)(1) and (3) of this section; and

(C) The system collects either first-liter samples or first-liter-and-fifth-liter-paired samples in accordance with paragraph (b)(1) of this section.

(ii) Any water system whose most recent 90th percentile lead and/or copper results as of November 1, 2027, exceeds the lead and/or copper action level must conduct standard monitoring

in the first six-month tap monitoring period following November 1, 2027.

(iii) Systems meeting any of the following criteria:

(A) Any water system that exceeds a lead or copper action level.

(B) Any system that fails to operate at or above the minimum value or within the range of values for the optimal water quality parameters designated by the State under § 141.82(f) for more than nine days in any tap monitoring period as specified in § 141.87.

(C) Any water system that becomes a large water system without corrosion control treatment or any large water system without corrosion control treatment whose lead 90th percentile exceeds the lead practical quantitation limit of 0.005 mg/L.

(D) Any water system that installs OCCT or re-optimizes OCCT as a result of exceeding the lead or copper action level, or any water system that adjusts OCCT following a Distribution System and Site Assessment. Systems conducting standard monitoring under this criterion must continue standard monitoring until the State designates new optimal water quality parameters, at which point systems must comply with paragraph (c)(2)(iii)(E) of this section.

(E) Any water system for which the State has designated new values for optimal water quality parameters under § 141.82.

(F) Any water system that installs source water treatment pursuant to § 141.83(a)(3).

(G) Any water system that has notified the State in writing in accordance with § 141.90(a)(4) of an upcoming addition of a new source or long-term change in treatment, unless the State determines that the addition of the new source or long-term change in treatment is not significant and, therefore, does not warrant more frequent monitoring.

(H) Any water system without lead or galvanized requiring replacement service lines in its inventory that notifies the State under § 141.90(e)(4)(ii) of any subsequently discovered lead or galvanized requiring replacement service lines in its distribution system, unless the system replaces all the discovered service lines before the start of the next tap monitoring period.

(d) *Reduced monitoring based on 90th percentile levels.* Reduced monitoring refers to an annual or triennial tap monitoring period. Each annual or triennial tap monitoring period includes one tap sampling period. The reduced monitoring frequency is based on the 90th percentile value for the water system.

(1) *Reduced monitoring sites.* During a reduced tap monitoring period, a water system must collect at least one sample from the number of sites specified in table 2 to this paragraph (d)(1), unless otherwise specified. Reduced monitoring sites must be selected in accordance with the sampling tiers identified in paragraph (a) of this section. Lead and copper sampling results collected from point-of-use sites under § 141.93(c)(1) cannot be used to meet the criteria for reduced monitoring under this section. States may specify the locations of sample sites when a system is conducting reduced monitoring.

TABLE 2 TO PARAGRAPH (d)(1)

System size (number of people served)	Reduced minimum number of sites for lead and copper sampling
>100,000	50
10,001 to 100,000	30
3,301 to 10,000	20
501 to 3,300	10
101 to 500	5
≤100	5

(2) *Criteria for reduced monitoring.* Systems are eligible for reduced monitoring if they meet all the requirements of this section, including collecting at least the minimum number of samples required, for at least two consecutive tap monitoring periods. The State may require an eligible system to conduct more frequent monitoring.

(i) *Annual monitoring for any system size.* Any system that does not exceed the lead and copper action levels and, for systems with State-designated OWQPs, also maintains the range of optimal water quality parameters designated by the State in accordance with § 141.82(f), for two consecutive six-month tap monitoring periods may reduce the monitoring frequency to annual monitoring. Systems with an annual tap monitoring period must sample at least the standard number of sampling sites for lead in paragraph (c)(1) of this section and at least the reduced number of sites for copper as specified in paragraph (d)(1) of this section. Prior to conducting annual monitoring, systems must receive a written determination from the State approving annual monitoring based on the State's review of monitoring, treatment, and other relevant information submitted by the system as required by § 141.90. For systems that reduce to annual monitoring, the first annual tap monitoring period must

begin no later than six months following the last tap monitoring period.

(ii) *Triennial monitoring for small and medium water systems.* Any small or medium water system that does not exceed the lead and copper action levels and, for systems with State-designated OWQPs, also maintains the range of optimal water quality parameters designated by the State in accordance with § 141.82(f), during three consecutive years of monitoring, including monitoring conducted at both standard and annual frequencies (standard monitoring completed during both six-month periods of a calendar year is considered one year of monitoring), may reduce the monitoring frequency to triennial monitoring. Systems on triennial monitoring must sample at least the reduced number of sites for lead and copper in accordance with paragraph (d)(1) of this section. Prior to conducting triennial monitoring, systems must receive a written determination from the State approving triennial monitoring based on the State's review of monitoring, treatment, and other relevant information submitted by the system as required by § 141.90. For systems that reduce to triennial monitoring, the first triennial tap monitoring period must immediately follow the last annual monitoring period, and the first triennial sampling period must begin no later than three calendar years after the last calendar year in which the system sampled.

(iii) *Triennial monitoring for any system size.* Any water system that demonstrates for two consecutive tap monitoring periods that its 90th percentile lead level, calculated under § 141.80(c)(3), is less than or equal to 0.005 mg/L, the 90th percentile copper level, calculated under § 141.80(c)(3), is less than or equal to 0.65 mg/L and, for systems with State-designated OWQPs, also maintains the range of optimal water quality parameters designated by the State in accordance with § 141.82(f), may reduce the monitoring frequency to triennial monitoring. Systems on triennial monitoring must sample at least the reduced number of sites for lead and copper in accordance with paragraph (d)(1) of this section. Prior to conducting triennial monitoring, systems must receive a written determination from the State approving triennial monitoring based on the State's review of monitoring, treatment, and other relevant information submitted by the system as required by § 141.90. For systems that reduce to triennial monitoring, the first triennial tap monitoring period must immediately follow the last monitoring period, and

the first triennial tap sampling period must begin no later than three calendar years after the last calendar year in which the system sampled.

(3) *Tap sampling period under reduced monitoring.* The tap sampling period for systems on reduced monitoring must occur within the months of June, July, August, or September, unless the State has approved a different tap sampling period in accordance with paragraph (d)(3)(i) of this section. Only systems on reduced monitoring can monitor during a tap sampling period that is shorter than the tap monitoring period.

(i) The State may approve a different tap sampling period for systems collecting samples on reduced monitoring. An alternative tap sampling period approved by the State must be a continuous period of time no longer than four consecutive months, must occur entirely within one calendar year, and must represent a time of normal operation where the highest levels of lead are most likely to occur. For a non-transient non-community water system that does not operate during the months of June through September and for which the period of normal operation where the highest levels of lead are most likely to occur is not known, the State must designate a period that represents normal operation for the system.

(ii) Systems that receive State-approval for an alternate tap sampling period under paragraph (d)(3)(i) of this section and have been sampling in the months of June through September must complete their next tap sampling period no later than 21 months, if on annual monitoring, or no later than 45 months, if on triennial monitoring, following the end of the previous tap sampling period.

(iii) Systems with waivers granted pursuant to paragraph (g) of this section that have been collecting samples during the months of June through September and receive State approval to alter their sampling period as per paragraph (d)(3)(i) of this section must collect their next round of samples before the end of the next nine-year period.

(e) *Inclusion of lead and copper tap samples for calculation of the 90th percentile.* Water systems and the State must consider the results of any sampling conducted in addition to the minimum number of samples required in paragraph (c) or (d) of this section, as applicable, in making any determinations (*i.e.*, calculating the 90th percentile lead or copper level in accordance with § 141.80(c)(3)) under this subpart if the samples meet the requirements of paragraphs (a) and (b) of this section. Consumer-requested

sampling conducted in accordance with § 141.85(c) must be considered if the sample meets the requirements of paragraphs (a) and (b). If multiple samples from the same site, taken during the same tap sampling period, meet the requirements of this section for consideration of the 90th percentile calculation, only the highest value from each site can be considered, except for systems under paragraph (a)(2) of this section.

(1) Water systems sampling at one or more Tier 1 and/or Tier 2 sites in a tap sampling period that are unable to collect the minimum number of samples required in paragraph (c) or (d) of this section from Tier 1 or 2 sites must consider the lead and copper values from the next highest tier available in accordance with paragraph (a) of this section. If a water system has sufficient samples after including the samples from the next highest available tier to meet the minimum number of samples required in paragraph (c) or (d), the system may not consider additional samples from other available lower tiers. Systems (or the State) must calculate the 90th percentile lead and copper values in accordance with § 141.80(c)(3)(iii) using a total number of samples equal to the minimum number of samples required in paragraph (c) or (d). Systems must submit all additional sampling results to the State that were not used in the 90th percentile calculation.

(2) Systems (or the State when the State is calculating the 90th percentile) cannot include samples collected as part of Distribution System and Site Assessment under § 141.82(j)(2) in the 90th percentile calculation.

(3) Systems (or the State when the State is calculating the 90th percentile) cannot include follow-up samples collected as a result of monitoring after service line replacement under § 141.84(h) in the 90th percentile calculation.

(f) *Invalidation of lead and copper tap samples used in the calculation of the 90th percentile.* A sample invalidated under this paragraph (f) does not count towards determining lead or copper 90th percentile levels under § 141.80(c)(3) or towards meeting the minimum monitoring requirements of paragraph (c) or (d) of this section. The system must report the results of all samples to the State and all supporting documentation for samples the system believes should be invalidated.

(1) The State may invalidate a lead or copper tap water sample if at least one of the following conditions is met:

(i) The laboratory establishes that improper sample analysis caused erroneous results.

(ii) The State determines that a sample collected for compliance purposes under this section, that is not an additional sample collected under paragraph (e) of this section, was taken from a site that did not meet the site selection criteria under paragraph (a) of this section, such as when sites of a higher tier were still available.

(iii) The State determines the sample was collected in a manner that did not meet the sample collection protocol under paragraph (b)(1) of this section.

(iv) The sample container was damaged in transit.

(v) There is a substantial reason to believe that the sample was subject to tampering.

(2) To invalidate a sample under paragraph (f)(1) of this section, the State must document in writing both the decision and the rationale for the decision. States may not invalidate a sample solely on the grounds that a follow-up sample result is higher or lower than that of the original sample.

(3) The water system must collect replacement samples for any samples invalidated under this section if, after the invalidation of one or more samples, the system has too few samples to meet the minimum requirements of paragraph (c)(1) or (d)(1) of this section. Any such replacement samples must be taken as soon as possible, but no later than 20 days after the date the State notifies the system of an invalidated sample or by the end of the tap sampling period, whichever occurs later. Replacement samples taken after the end of the applicable tap sampling period can only be used to meet the monitoring requirements of the applicable tap monitoring period in paragraph (c) or (d) of this section and not a subsequent tap monitoring period. The replacement samples must be taken at the same locations as the invalidated samples, except when the sample is invalidated due to an error in meeting the site selection criteria under paragraph (a) of this section, or a system cannot gain access for sampling. The replacement samples must then be taken at locations that meet the site selection criteria other than those locations already used for sampling during the tap monitoring period.

(g) *Monitoring waivers for systems serving 3,300 or fewer persons.* Any water system serving 3,300 or fewer persons that meets the criteria of this paragraph (g) may apply, in writing, to the State to reduce the frequency of monitoring for lead and/or copper to once every nine years. The system must meet the materials criteria specified in paragraph (g)(1) of this section and the monitoring criteria specified in

paragraph (g)(2) of this section. Systems meeting only the criteria for lead may apply for a lead waiver, systems meeting only the criteria for copper may apply for a copper waiver, and systems meeting the criteria for both lead and copper may apply for a full waiver.

(1) *Materials criteria.* The system must demonstrate that its distribution system and service lines and all drinking water supply plumbing, including plumbing conveying drinking water within all residences and buildings connected to the system, are free of lead-containing materials and/or copper-containing materials, as those terms are defined in this paragraph (g)(1), as follows:

(i) *Lead.* To qualify for a lead waiver, the water system must certify and provide supporting documentation to the State that the system, including the distribution system and all premise plumbing, is free of all lead-containing materials, as follows:

(A) It contains no plastic pipes which contain lead plasticizers, or plastic service lines which contain lead plasticizers; and

(B) It is free of lead service lines, galvanized requiring replacement service lines, lead connectors, lead pipes, lead soldered pipe joints, and leaded brass or bronze alloy fittings and fixtures, unless such fittings and fixtures meet the specifications of any standard established pursuant to 42 U.S.C. 300g–6(e) (SDWA section 1417(e)).

(ii) *Copper.* To qualify for a copper waiver, the water system must certify and provide supporting documentation to the State that the system contains no copper service lines or premise plumbing.

(2) *Monitoring criteria.* The system must have completed at least one six-month round of standard tap water monitoring for lead and copper at sites approved by the State and from the number of sites required by paragraph (c)(1) of this section and demonstrate that the 90th percentile levels for any and all rounds of monitoring conducted since the system became free of all lead-containing and/or copper-containing materials, as appropriate, meet the following criteria.

(i) *Lead levels.* To qualify for a lead waiver, the system must demonstrate that the 90th percentile lead level does not exceed 0.005 mg/L.

(ii) *Copper levels.* To qualify for a copper waiver, the system must demonstrate that the 90th percentile copper level does not exceed 0.65 mg/L.

(3) *State approval of waiver application.* The State must notify the

system of its waiver determination, in writing, setting forth the basis of its decision and any condition(s) of an approved waiver. As a condition of a waiver, the State may require the system to perform specific activities (e.g., limited monitoring, periodic outreach to customers to remind them to avoid installing materials that might void the waiver) to avoid lead or copper concentrations of concern in tap water. The water system must continue monitoring for lead and copper at the tap as required by paragraphs (c) and (d) of this section, as appropriate, until it receives written notification from the State that a waiver has been approved.

(4) *Monitoring frequency for systems with waivers.* (i) A system with a full waiver must conduct tap monitoring for lead and copper in accordance with paragraph (d) of this section at least once every nine years. A system with a full waiver must provide the State with the materials certification specified in paragraph (g)(1) of this section for both lead and copper when submitting their tap sampling results to the State. Samples collected every nine years must be collected no later than every ninth calendar year.

(ii) A system with a lead waiver or copper waiver must conduct tap monitoring for only the waived contaminant in accordance with paragraph (d) of this section at least once every nine years. A system with a lead waiver or copper waiver must provide the State with the materials certification specified in paragraph (g)(1) of this section for only the waived contaminant when submitting their tap sampling results to the State. Also, a system must continue to monitor for the non-waived contaminant in accordance with the requirements of paragraphs (c) and (d) of this section, as appropriate.

(iii) Any water system with a waiver must notify the State in writing in accordance with § 141.90(a)(4) about any addition of a new source water or long-term change in treatment, as described in that section. The State may add or modify waiver conditions (e.g., require recertification that the system is free of lead-containing and/or copper-containing materials, require additional round(s) of monitoring), if the State deems any modifications are necessary to address treatment or source water changes at the system.

(iv) If a system with a waiver becomes aware that the system is no longer free of lead-containing or copper-containing materials, as appropriate (e.g., as a result of new construction or repairs), the system must notify the State in writing no later than 60 days after becoming aware of such a change.

(5) *Discontinuation of eligibility.* A system with a waiver where any of the following conditions occurs is not allowed to continue monitoring under its waiver:

(i) A system with a full waiver or a lead waiver no longer satisfies the materials criteria of paragraph (g)(1)(i) of this section or has a 90th percentile lead level greater than 0.005 mg/L.

(ii) A system with a full waiver or a copper waiver no longer satisfies the materials criteria of paragraph (g)(1)(ii) of this section or has a 90th percentile copper level greater than 0.65 mg/L.

(iii) The State notifies the system, in writing, that the waiver has been revoked, setting forth the basis of its decision.

(6) *Requirements following waiver revocation.* A system whose waiver is revoked may re-apply for a waiver when it meets the appropriate materials criteria and monitoring criteria of paragraphs (g)(1) and (2) of this section. A system whose waiver is revoked by the State is subject to the following corrosion control treatment and lead and copper tap water monitoring requirements:

(i) If the system exceeds the lead and/or copper action level, the system must implement or re-optimize OCCT in accordance with the deadlines specified in § 141.81, and any other applicable requirements of this subpart.

(ii) If the system is at or below both the lead and copper action levels, the system must monitor for lead and copper at the tap no less frequently than once every three years using the reduced number of sampling sites specified in paragraph (d)(1) of this section.

(7) *Pre-existing waivers.* Waivers approved by the State in writing prior to the compliance date specified in § 141.80(a)(3) are still in effect if the system has demonstrated that it is both free of lead-containing and copper-containing materials, as required by paragraph (g)(1) of this section and that its 90th percentile lead levels and 90th percentile copper levels meet the criteria of paragraph (g)(2) of this section, and the system does not meet the waiver ineligibility criteria of paragraph (g)(5) of this section.

(h) *Publicly accessible tap monitoring results used in the 90th percentile calculation.* Unless done by the State, all water systems must make the tap monitoring results, including data used in the 90th percentile calculation under § 141.80(c)(3), publicly accessible within 60 days of the end of the tap sampling period. Under this paragraph (h), water systems are not required to

make the addresses of tap sampling sites publicly accessible.

(1) Large water systems must make the tap monitoring results and associated data publicly accessible in a digital format.

(2) Small and medium water systems must make the tap monitoring results and associated data publicly accessible in either a print or digital format.

(3) Water systems must certify to the State, in writing, compliance with this paragraph (h) in accordance with § 141.90(a)(2)(iii) and must retain monitoring data in accordance with the recordkeeping requirements under § 141.91.

■ 11. Revise § 141.87 to read as follows:

§ 141.87 Monitoring requirements for water quality parameters.

All large water systems and all medium water systems with corrosion control treatment (unless deemed optimized under § 141.81(b)(3)), and all small and medium water systems that exceed the lead action level or copper action level must sample and monitor water quality parameters in addition to lead and copper in accordance with the requirements of this section. Any system may be required to monitor water quality parameters as determined by the State, including as provided in this section.

(a) *General requirements*—(1) *Distribution system samples for water quality parameters.* (i) Distribution system samples collected at water taps must be representative of water quality throughout the distribution system, considering the number of persons served, the different sources of water, the different treatment methods employed by the system, and seasonal variability. Sites selected for sampling in the distribution system under this section can be the same as or different from tap sampling sites targeted for lead and copper sampling under § 141.86(a). Systems may consider selecting sites also used for total coliform sampling under § 141.21(a)(1). Sites selected for sampling in the distribution system under this section must be included in the site sample plan specified under § 141.90(a)(1). The site sample plan must be updated prior to changes to the sampling locations.

(ii) Samples collected in the distribution system must be analyzed for the following parameters, when applicable, as specified:

(A) pH;

(B) Alkalinity;

(C) Orthophosphate (as PO₄), when an inhibitor containing an orthophosphate compound is used;

(D) Silica, when an inhibitor containing a silicate compound is used; and

(E) Any parameters specified by the State under § 141.82(a)(1) or (f)(6).

(2) *Entry point samples for water quality parameters.* (i) Samples collected at the entry point(s) to the distribution system must be from locations representative of each source water after treatment. If a system draws water from more than one source water and the source waters are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions when water is representative of all sources typically being used.

(ii) Except as provided in paragraph (b)(3)(ii) of this section for ground water systems, the following parameters must be measured at each entry point to the distribution system, when applicable, as specified:

(A) pH;

(B) When alkalinity is adjusted as part of corrosion control, a reading of the dosage rate of the chemical used to adjust alkalinity, and the alkalinity concentration;

(C) When a corrosion inhibitor is used as part of corrosion control, a reading of the dosage rate of the inhibitor used, and the concentration of orthophosphate (as PO₄) or silica (whichever is applicable); and

(D) Any parameters specified by the State under § 141.82(a)(1) or (f)(6).

(b) *Standard monitoring for water quality parameters*—(1) *Number of samples*—(i) *Distribution system samples.* Systems must collect two distribution system samples for applicable water quality parameters during each monitoring period specified under paragraphs (b)(2) through (4) of this section from each of the minimum number of sites listed in table 1 to this paragraph (b)(1)(i). Systems that collect distribution system samples for water quality parameters from additional sites as a result of the Distribution System and Site Assessment requirements in § 141.82(j) must add those sites to the minimum number of sites listed in table 1 to this paragraph (b)(1)(i) up to a maximum of not more than twice the minimum number of sites.

TABLE 1 TO PARAGRAPH (b)(1)(i)

System size (number of people served)	Minimum number of sites for water quality parameters
>100,000	25

TABLE 1 TO PARAGRAPH (b)(1)(i)—
Continued

System size (number of people served)	Minimum number of sites for water quality parameters
10,001 to 100,000	10
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
≤100	1

(ii) *Samples at entry points.* (A) Systems without installed or re-optimized OCCT and without State-designated optimal water quality parameters required to collect entry point samples must collect a minimum of two entry point samples for each applicable water quality parameter at each entry point to the distribution system at least once during each monitoring period specified in paragraph (b)(2) of this section.

(B) Systems with installed OCCT or re-optimized OCCT and/or State-designated optimal water quality parameters required to collect entry point samples, including as provided in paragraph (b)(3)(iii) of this section, must collect one entry point sample for each applicable water quality parameter at each entry point to the distribution system at least once every two weeks during each monitoring period the system is required to conduct sampling as specified in paragraphs (b)(3) and (4) and (c) of this section.

(2) *Initial sampling for water systems.* A large water system without corrosion control treatment must begin monitoring for water quality parameters as specified in paragraphs (b)(2)(i) and (ii) of this section during the first two six-month monitoring periods beginning no later than January 1 of the calendar year after the system either becomes a large water system or exceeds the practical quantitation limit for lead. Any medium water system without corrosion control treatment that exceeds the lead action level or the copper action level must begin monitoring for applicable distribution system and entry point water quality parameters as specified in paragraphs (b)(2)(i) and (ii) for two consecutive six-month monitoring periods beginning the month immediately following the end of the tap monitoring period in which the action level exceedance occurred. Any small water system that exceeds the lead or copper action level must begin monitoring for applicable distribution system and entry point water quality parameters as specified in paragraphs

(b)(2)(i) and (ii) for two consecutive six-month monitoring periods beginning the month immediately following the end of the tap monitoring period in which the action level exceedance occurred. Systems must continue monitoring as described by paragraphs (b)(3) and (4) of this section.

(i) At sites in the distribution system, collect two samples for:

- (A) pH; and
- (B) Alkalinity.

(ii) At each entry point to the distribution system, collect all the applicable parameters listed in paragraph (a)(2)(ii) of this section.

(3) *Monitoring after installation of OCCT or re-optimized OCCT.* (i) A system that modifies or installs OCCT pursuant to § 141.81(d)(5) or (e)(5) and is required to conduct follow-up monitoring for lead or copper pursuant to § 141.81(d)(6) or (e)(6) must monitor for applicable distribution system and entry point water quality parameters as specified in paragraphs (a)(1) and (2) of this section every six months until the State designates new water quality parameter values for OCCT pursuant to § 141.82(f). Water systems must collect these samples at a regular frequency throughout the six-month monitoring period to reflect seasonal variability.

(ii) Any ground water system can limit entry point sampling described in paragraph (a)(2) of this section to those entry points that are representative of water quality and treatment conditions throughout the system. If water from untreated ground water sources mixes with water from treated ground water sources, the system must monitor for water quality parameters both at representative entry points receiving treatment and representative entry points receiving no treatment. Prior to the start of any monitoring under this paragraph (b)(3)(ii), the water system must provide to the State, written information and documentation identifying the selected entry points, including information on seasonal variability, sufficient to demonstrate that the sites are representative of water quality and treatment conditions throughout the system.

(iii) States may require small water systems with corrosion control treatment for which the State has not designated optimal water quality parameters that do not exceed the lead action level or copper action level to conduct water quality parameter monitoring as described in this paragraph (b) or the State can develop its own water quality parameter monitoring structure for these systems.

(4) *Monitoring by systems with State-designated optimal water quality*

parameter values for OCCT. Monitoring must occur at a regular frequency throughout the monitoring period to reflect seasonal variability and be consistent with the requirements in paragraphs (a)(1) and (2) of this section.

(i) Medium water systems with corrosion control treatment and all large water systems must sample for the applicable water quality parameters designated by the State and determine compliance with the requirements of § 141.82(g) every six months with the first six-month monitoring period to begin on either January 1 or July 1, whichever comes first, after the State specifies the optimal values under § 141.82(f).

(ii) A small water system with corrosion control treatment that exceeds the lead action level or copper action level must begin monitoring during the standard six-month tap monitoring period immediately following the tap monitoring period in which the action level exceedance(s) occurs and continue monitoring until the water system no longer exceeds the lead action level and/or copper action level and meets the State-designated optimal water quality parameters in two consecutive six-month tap monitoring periods under § 141.86(c). For any small water system that is subject to a reduced monitoring frequency pursuant to § 141.86(d) at the time of the action level exceedance, the start of the six-month monitoring period under this paragraph (b)(4)(ii) must coincide with the start of the tap monitoring period under § 141.86(c).

(iii) Compliance with State-designated optimal water quality parameter values must be determined as specified under § 141.82(g).

(iv) States have the discretion to require systems described in paragraph (b)(4)(ii) of this section to continue to monitor optimal water quality parameters.

(c) *Reduced monitoring.* (1) A medium or large water system that maintains the range of values for the water quality parameters reflecting OCCT specified by the State under § 141.82(f) and does not exceed the lead action level or copper action level in either of the two consecutive six-month monitoring periods under paragraph (b)(4) of this section must collect two distribution system samples for applicable water quality parameters specified in paragraph (a)(1)(ii) of this section from each of the minimum number of sites listed in table 2 to this paragraph (c)(1) during each six-month monitoring period. These water systems must collect these samples at a regular frequency throughout the six-month monitoring period to reflect seasonal

variability. A system meeting the requirements of this paragraph (c)(1) must continue to monitor at the entry point(s) to the distribution system as specified in paragraph (a)(2) of this section. Systems with sites added as a result of the Distribution System and Site Assessment requirements in § 141.82(j) must continue to sample at the added sites up to a maximum of not more than twice the minimum number of sites specified in table 1 to paragraph (b)(1)(i) of this section.

TABLE 2 TO PARAGRAPH (C)(1)

System size (number of people served)	Reduced minimum number of sites for water quality parameters
>100,000	10
10,001 to 100,000	7
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
≤100	1

(2)(i) A water system that maintains the range of values for the water quality parameters reflecting OCCT specified by the State under § 141.82(f) and does not exceed the lead action level or copper action level during three consecutive years of monitoring may reduce the frequency with which it collects distribution system samples for applicable water quality parameters specified in paragraph (a)(1)(ii) of this section from each of the minimum number of sites listed in table 2 to paragraph (c)(1) of this section from every six months to annually. This sampling must begin during the calendar year immediately following the end of the monitoring period in which the third consecutive year of six-month monitoring occurs.

(ii) A water system may reduce the frequency with which it collects distribution system samples for applicable water quality parameters specified in paragraph (c)(1) of this section to every year if it demonstrates during two consecutive monitoring periods that its tap water lead level at the 90th percentile is less than or equal to the practical quantitation limit for lead of 0.005 mg/L, that its tap water copper level at the 90th percentile is less than or equal to 0.65 mg/L as calculated in accordance with § 141.80(c)(3), and that it also has maintained the range of values for the water quality parameters reflecting OCCT specified by the State under § 141.82(f).

- (3) A water system that conducts sampling at taps for water quality parameters annually must collect these samples at a regular frequency throughout the year to reflect seasonal variability.
- (4) A water system monitoring at a reduced frequency that fails to operate at or within the range of values for the optimal water quality parameters designated by the State in § 141.82(f) for more than nine cumulative days, as specified in § 141.82(g), in any six-month period under paragraph (b)(4) of this section must resume distribution system sampling in accordance with the number and frequency requirements in paragraph (b)(4). Such a system may resume annual monitoring for water quality parameters in the distribution system at the reduced number of sites specified in paragraph (c)(1) of this section after it has completed two subsequent consecutive six-month rounds of monitoring that meet the criteria of paragraph (c)(1) of this section and/or may resume annual monitoring for water quality parameters in the distribution system at the reduced number of sites after it demonstrates through subsequent rounds of monitoring that it meets the criteria of either paragraph (c)(2)(i) or (ii) of this section.
- (5) Any water system monitoring at a reduced frequency that exceeds the lead action level or copper action level must resume standard water quality parameter monitoring beginning with the six-month period immediately following the tap monitoring period in which the action level exceedance(s) occurs. When the water system no longer exceeds the lead action level and/or copper action level and meets the State-designated optimal water quality parameters in two consecutive six-month tap monitoring periods, the system may then reduce monitoring in accordance with paragraphs (c)(1) and (2) of this section.
- (d) *Additional monitoring by systems.* The results of any monitoring conducted in addition to the minimum requirements of this section must be considered by the water system and the State in determining concentrations of water quality parameters under this section or § 141.82.
- 12. Amend § 141.90 by:
 - a. Revising paragraphs (a), (b), and (c)(1) and (4);
 - b. Adding paragraph (c)(5);
 - c. Revising paragraph (e);
 - d. Revising and republishing paragraph (f); and
 - e. Revising paragraphs (g) through (i) and (j)(1) and (2).

- The revisions and addition read as follows:
- § 141.90 Reporting requirements.**
* * * * *
- (a) *Reporting requirements for tap monitoring for lead and copper and for distribution system and entry point monitoring for water quality parameters.* (1) By the start of a system's first lead and copper tap monitoring period in § 141.86(c) and (d), water systems must submit the following to the State:
- (i) A site sample plan, including a list of tap sample site locations for lead and copper sampling identified from the inventory in § 141.84(a), and a list of tap sampling sites and entry point to the distribution system sites for water quality parameter monitoring selected under § 141.87(a)(1) and (2). Changes to the site sample plan require systems to submit an updated site sample plan to the State before the start of the next tap sampling period conducted by the system. The State may require modifications to the site sample plan as necessary.
- (A) Water systems with lead, galvanized requiring replacement, and/or lead status unknown service lines in the service line inventory conducted under § 141.84(a) and (b) must evaluate the tap sampling locations for lead and copper used in their sampling pool prior to the start of each tap sampling period, beginning with the compliance date specified in § 141.80(a)(3). Evaluations that result in changes to the site sample plan require systems to submit an updated site sample plan to the State prior to each tap sampling period conducted by the system.
- (B) A water system that cannot identify enough sampling sites with premise plumbing made of lead and/or served by lead service lines to meet the minimum number of sample sites required in § 141.86(c)(1) or (d)(1), as required under § 141.86(a)(3), must submit documentation, including documentation of applicable customer refusals for sampling, in support of the conclusion that there are an insufficient number of available sites with premise plumbing made of lead and/or served by lead service lines, prior to the next tap sampling period.
- (ii) A copy of the sample collection instructions that are provided to individuals who are sampling, which meets the requirements of § 141.86(b). If the water system seeks to modify its sample collection instructions specified in this paragraph (a)(1)(ii), it must submit the updated version of the instructions to the State for review prior to the next tap sampling period.

(2) Notwithstanding the requirements of § 141.31(a), a water system must report the information specified in paragraphs (a)(2)(i) through (vii) of this section, for all lead and copper tap samples specified in § 141.86 and for all water quality parameter distribution system and entry point samples specified in § 141.87, within the first 10 days following the end of each applicable sampling period specified in §§ 141.86 and 141.87, unless the State has specified an earlier reporting requirement. For tap sampling periods with a duration less than six months, the end of the sampling period is the last date samples can be collected as specified in § 141.86.

(i) The results of all tap samples for lead and copper collected during the tap sampling period, including results for both first- and fifth-liter samples collected at lead service line sites, the location of each site, and the site selection criteria under § 141.86(a)(3) and (4) used as the basis for which the site was selected for the water system's sampling pool;

(ii) Documentation for each tap water lead or copper sample for which the water system requests invalidation pursuant to § 141.86(f);

(iii) With the exception of initial tap sampling conducted pursuant to § 141.86(c)(2)(i), a certification that the results of monitoring from the tap monitoring period before the applicable tap monitoring period described in this paragraph (a)(2) were made publicly accessible, as specified in § 141.86(h);

(iv) The 90th percentile lead and copper concentrations calculated from lead and copper tap water samples collected during each tap sampling period in accordance with § 141.80(c)(3), unless the State calculates the water system's 90th percentile lead and copper levels under paragraph (h) of this section;

(v) With the exception of initial tap sampling conducted pursuant to § 141.86(c)(2)(i), the water system must identify any site which was not sampled during the tap monitoring period previous to the applicable tap monitoring period described in this paragraph (a)(2), and include an explanation of why sampling sites have changed;

(vi) The results of all tap samples for water quality parameters that are required to be collected under § 141.87(b) through (d);

(vii) The results of all samples collected at the entry point(s) to the distribution system for applicable water quality parameters under § 141.87(b) through (d); and

(viii) The number of sites from which the system requested customer participation for sampling during the tap sampling period and the customer was either non-responsive after two attempts or refused to participate.

(3) For a non-transient non-community water system, or a community water system meeting the criteria of § 141.85(b)(8), that does not have enough taps that can provide first liter or first-and fifth-liter paired samples meeting the six-hour minimum stagnation time, the water system must either:

(i) Provide written documentation identifying standing times and locations for samples that do not meet the six-hour minimum stagnation time to make up a system's sampling pool in order to meet the minimum number of sites to sample as required in § 141.86(b)(3) by the start of the system's first applicable tap monitoring period under § 141.86(c), or if there are changes to the documentation, prior to the next tap sampling period, unless the State has waived prior approval of sample sites not meeting the six-hour stagnation time selected by the water system pursuant to § 141.86(b)(3); or

(ii) If the State has waived prior approval of sample sites not meeting the six-hour stagnation time selected by the system, identify, in writing, each site that did not meet the six-hour minimum stagnation time and the length of standing time for that particular substitute sample collected pursuant to § 141.86(b)(3) and include this information with the lead and copper tap sample results required to be submitted pursuant to paragraph (a)(2)(i) of this section.

(4) At a time specified by the State, or if no specific time is designated, as early as possible but no later than six months prior to the addition of a new source or any long-term change in water treatment, a water system must submit written documentation describing the addition of a new source or long-term change in treatment to the State. Systems may not implement the addition of a new source or long-term treatment change without State approval. The State must review and approve the addition of a new source or a long-term change in water treatment before it can be implemented by the water system. The State may require any such water system to take actions before or after the addition of a new source or long-term treatment change to ensure that the water system will operate and maintain optimal corrosion control treatment, such as additional water quality parameter monitoring, additional lead or copper tap sampling,

and re-evaluating corrosion control treatment. Examples of long-term treatment changes include but are not limited to the addition of a new treatment process or modification of an existing treatment process. Examples of modifications include switching secondary disinfectants, switching coagulants (e.g., alum to ferric chloride), and switching corrosion inhibitor products (e.g., orthophosphate to blended phosphate). Long-term treatment changes can also include dose changes to existing chemicals if the system is planning long-term changes to its finished water pH or residual inhibitor concentration. Long-term treatment changes would not include chemical dose fluctuations associated with daily raw water quality changes where a new source has not been added.

(5) Any system serving 3,300 or fewer persons applying for a monitoring waiver under § 141.86(g), or subject to a waiver granted pursuant to § 141.86(g)(3), must provide the following information to the State in writing by the specified deadline:

(i) By the start of the system's first applicable tap monitoring period in § 141.86(c) and (d), any water system applying for a monitoring waiver must provide the documentation required to demonstrate that it meets the waiver criteria of § 141.86(g)(1) and (2) to the State.

(ii) Prior to the beginning of each tap monitoring period in which the system desires to maintain its monitoring waiver pursuant to § 141.86(g)(2) or (4), the system must provide the information required by § 141.86(g)(4)(i) and (ii) to the State.

(iii) No later than 60 days after it becomes aware that it is no longer free of lead-containing and/or copper-containing material, as appropriate, each system with a monitoring waiver must provide written notification to the State setting forth the circumstances resulting in the lead-containing and/or copper-containing materials being discovered in the system and what corrective action, if any, the system plans to take to remove these materials.

(6) Each ground water system that limits water quality parameter monitoring to a subset of entry points under § 141.87(b)(3)(ii) must provide, by the commencement of such monitoring, written correspondence to the State that identifies the selected entry points and includes information sufficient to demonstrate that the sites are representative of water quality and treatment conditions throughout the system.

(b) *Source water monitoring reporting requirements.* A water system must

report the following within the first 10 days following the end of each source water monitoring period (*i.e.*, annually, per compliance period, per compliance cycle) specified in § 141.88.

(1) The sampling results for all source water samples collected in accordance with § 141.88.

(2) With the exception of the first round of source water sampling conducted pursuant to § 141.88(b), the system must specify any site which was not sampled during the previous monitoring period, and include an explanation of why the sampling point has changed.

(c) * * *

(1) For water systems demonstrating that they have already optimized OCCT without optimized water quality parameters set by the State, information required in § 141.81(b)(1) through (3).

* * * * *

(4) For systems required to install OCCT or re-optimized OCCT designated by the State under § 141.82(d), a letter certifying that the system has completed installing that treatment.

(5) For systems not required to complete the corrosion control treatment steps under § 141.81(f), a letter certifying that the system has completed the mandatory service line replacement program or that the system has met the minimum annual replacement rate calculated under § 141.81(f)(1)(ii).

* * * * *

(e) *Service line inventory and replacement reporting requirements.* For the purposes of this paragraph (e), the first mandatory service line replacement “program year” is from the compliance date specified in § 141.80(a)(3) to the end of the next calendar year, where every program year afterwards is on a calendar year basis. Water systems must report the following information to the State to demonstrate compliance with the requirements of § 141.84:

(1) No later than October 16, 2024, the water system must submit an initial inventory of service lines as required in § 141.84(a)(1), including the following:

(i) The number of lead service lines in the initial inventory;

(ii) The number of galvanized requiring replacement service lines in the initial inventory;

(iii) The number of lead status unknown service lines in the initial inventory; and

(iv) Where ownership of the service line is shared, the system must report the information in paragraphs (e)(1)(i) through (iii) of this section counting each full service line only once.

(2) No later than the compliance date in § 141.80(a)(3), the water system must

submit to the State a baseline inventory of service lines and connectors as required in § 141.84(a)(2) through (4), including the following:

(i) The total number of lead service lines in the baseline inventory;

(ii) The total number of galvanized requiring replacement service lines in the baseline inventory;

(iii) The total number of lead status unknown service lines in the baseline inventory;

(iv) The total number of non-lead service lines in the baseline inventory;

(v) The total number of lead connectors in the baseline inventory;

(vi) The total number of connectors of unknown material in the baseline inventory; and

(vii) Where ownership of the service line is shared, the system must report the information in paragraphs (e)(2)(i) through (vi) of this section counting each full service line only once.

(3) Any water system that has inventoried one or more lead, galvanized requiring replacement, or lead status unknown service lines in its distribution system must:

(i) No later than the compliance date in § 141.80(a)(3), submit a service line replacement plan as specified in § 141.84(c) to the State.

(ii) By January 30 after the end of the first program year, and annually by January 30 thereafter, certify to the State that there have been no updates to the service line replacement plan or, if there have been updates, submit an updated service line replacement plan. A water system may provide instructions on how to access the updated plan online instead of providing the entire updated plan to the State.

(iii) Systems replacing service lines under a schedule based on the deferred deadlines criteria in § 141.84(d)(5)(vi) must also meet the requirements described in § 141.84(c)(3) for submitting information to the State.

(4) The water system must provide the State with an updated inventory by January 30 after the end of the first program year, and annually by January 30 thereafter. The updated inventory must conform with inventory requirements under § 141.84(a) and (b). A water system must provide the information regarding service line material identification and replacement as specified in § 141.84(b)(2)(iv) if providing instructions on how to access the updated inventory online instead of providing a fixed copy of the entire updated inventory as described in § 141.84(b) to the State.

(i) When the water system has demonstrated that its inventory does not contain lead, galvanized requiring

replacement, and lead status unknown service lines, and known lead connectors and connectors of unknown material, it is no longer required to submit inventory updates to the State, except as required in paragraph (e)(4)(ii) of this section.

(ii) In the case that a water system meeting the requirements of paragraph (e)(4)(i) of this section subsequently discovers any lead or galvanized requiring replacement service lines or lead connectors in its distribution system, it must notify the State within 60 days of discovering the service line(s) and connector(s) and prepare an updated inventory in accordance with § 141.84(b) on a schedule established by the State.

(5) By January 30 after the end of the first program year, and annually by January 30 thereafter, the water system must certify to the State that it replaced any encountered lead connectors in accordance with § 141.84(e) or that it encountered no lead connectors during the calendar year.

(6) By January 30 after the end of the first program year, and annually by January 30 thereafter, the water system must certify to the State that it conducted the notification and mitigation requirements for any partial and full service line replacements in accordance with § 141.84(h) or that it conducted no replacements of lead or galvanized requiring replacement service lines during the calendar year.

(7) The water system must provide the following information about customer-initiated lead and galvanized requiring replacement service line replacements:

(i) By January 30 after the end of the first program year, and annually by January 30 thereafter, the water system must certify that it completed all customer-initiated lead and galvanized requiring replacement service line replacements in accordance with § 141.84(f).

(ii) If the water system cannot meet the 45-day deadline to complete a customer-initiated lead or galvanized requiring replacement service line replacement pursuant to § 141.84(f), it must notify the State within 30 days following the replacement deadline.

(8) By January 30 after the end of the first program year, and annually by January 30 thereafter, water systems conducting mandatory service line replacement pursuant to § 141.84(d) must submit the following information to the State:

(i) The following information from the most recent updated inventory submitted under paragraph (e)(4) of this section, in accordance with table 2 to § 141.84(d)(6)(iii)(A):

(A) The total number of lead service lines in the inventory;

(B) The total number of galvanized requiring replacement service lines in the inventory;

(C) The total number of lead status unknown service lines in the inventory;

(D) The total number of non-lead service lines in the inventory;

(E) The total number of lead connectors in the inventory;

(F) The total number of connectors of unknown material in the inventory; and

(G) Where ownership of the service line is shared, the system must report the information in paragraphs (e)(8)(i)(A) through (F) of this section counting each full service line only once;

(ii) The total number of full lead service line replacements and full galvanized requiring replacement service line replacements that have been conducted in the preceding program year and the address associated with each replaced service line;

(iii) The total number of partial lead service line replacements and partial galvanized requiring replacement service line replacements that have been conducted in the preceding program year and the address associated with each partially replaced service line;

(iv) The total number of lead connectors that have been replaced or removed in each preceding program year and the address associated with each replaced or removed lead connector;

(v) The number of service lines in the replacement pool updated at the beginning of the preceding program year in accordance with § 141.84(d)(6)(i);

(vi) The total number of lead status unknown service lines determined to be non-lead in the preceding program year;

(vii) The address of each non-lead service line discovered in the preceding program year to be a lead or galvanized requiring replacement service line and the method(s) originally used to categorize the material of the service line;

(viii) The applicable deadline for completion of service line replacement and the expected date of completion of service line replacement; and

(ix) The total number of lead and galvanized requiring replacement service lines not replaced because the system does not have access to conduct full service line replacement.

(9) Systems validating service line inventories pursuant to § 141.84(b)(5) must submit a list of the locations of any non-lead service lines identified to be a lead or galvanized requiring replacement service line as well as the method(s) used to categorize the service

lines as a result of the assessment. The system must submit the specific version (including the date) of the service line inventory used to determine the number of non-lead service lines used when the number of non-lead service lines in the validation pool was determined. The system may not use an inventory older than the inventory update that was submitted to the State pursuant to § 141.84(b)(2)(iv) at the start of the year in which the validation pool was determined. The information must be submitted no later than January 30 following seven years after the compliance date in § 141.80(a)(3) unless otherwise specified by the State in accordance with § 141.84(b)(5)(iv). Documentation of previous validation efforts may be submitted by the compliance date in § 141.80(a)(3) for approval by the State as described in § 141.84(b)(5)(vi).

(10) By January 30 after the end of the first program year, and annually by January 30 thereafter, the water system must submit to the State documentation of the reasons for each service line not replaced due to lack of access in accordance with § 141.84(d)(2). The system must also submit to the State documentation of each reasonable effort conducted where the system was not able to obtain property owner consent in accordance with § 141.84(d)(3) where consent is required by State or local law.

(11) [Reserved]

(12) Any system that collects samples following a partial or full lead or galvanized requiring replacement service line replacement required by § 141.84(h)(1)(iv) or (h)(3)(iv) must report the results to the State within the first ten days following the month in which the system receives the results or as specified by the State. Systems must also report any additional information as specified by the State, and in a time and manner prescribed by the State, to verify that all partial lead and galvanized requiring replacement service line replacement activities have taken place.

(13) By January 30 after the end of the first program year, and annually by January 30 thereafter, the water system must certify to the State that it offered to inspect service lines that consumers who suspected the inventory incorrectly categorized their service line material within 30 days of receiving the customer notification in accordance with § 141.84(b)(4).

(f) *Public education program reporting requirements.* (1) Any water system conducting public education requirements in § 141.85 must submit a copy of all written public education materials to the State prior to delivery.

The State may require the system to obtain approval of the content of written public education materials prior to delivery in accordance with § 141.85(a)(1).

(2) Any water system that is subject to the public education requirements in § 141.85 must, within 10 days after the end of each period in which the system is required to perform public education in accordance with § 141.85(b), send written documentation to the State that contains:

(i) The public education materials that were delivered, and a statement certifying that the water system has delivered the public education materials that meet the content requirements in § 141.85(a) and the delivery requirements in § 141.85(b); and

(ii) A list of all the newspapers, radio stations, television stations, and facilities and organizations to which the system delivered public education materials during the period in which the system was required to perform public education tasks. Unless required by the State, a system that previously has submitted this information need not resubmit it as long as there have been no changes in the distribution list and the system certifies that the public education materials were distributed to the same list submitted previously.

(3) Each water system must send an example copy of the consumer notification of tap results to the State along with a certification that the notification has been distributed in a manner consistent with the requirements of § 141.85(d), according to the schedule as follows:

(i) No later than three months following the end of the tap sampling period, for tap samples used to calculate the 90th percentile value as described in § 141.86, an example copy of the consumer notification provided and a certification that the notification has been distributed in a manner consistent with the requirements of § 141.85(d).

(ii) Annually by January 30, for tap samples from the previous program year that are not included in paragraph (f)(3)(i) of this section, including, but not limited to consumer-requested samples outside the tap sampling period for systems on reduced monitoring, an example copy of the consumer notification provided and a certification that the notification has been distributed in a manner consistent with the requirements of § 141.85(d).

(4) Annually by January 30, the water system must certify to the State that it delivered annual notification and service line information materials to customers and all persons served by the water system at the service connection

with a lead, galvanized requiring replacement, or lead status unknown service line in accordance with § 141.85(e) for the previous calendar year. The water system must also provide an example copy of the notification and information materials for lead, galvanized requiring replacement, and lead status unknown service lines to the State.

(5) [Reserved]

(6) Annually by January 30, the water system must certify to the State that it delivered notification to affected customers and the persons served by the water system at the service connection and complied with the filter requirements after any disturbance of a service line known to contain or potentially containing lead in accordance with § 141.85(f) for the previous calendar year, or that the water system has not caused any disturbance of a service line known to contain or potentially contain lead, during the preceding year. The water system must also submit an example copy of the notification to the State. Water systems that are required to provide filters under § 141.85(f) must also report the number of sites with disturbances that require filters as specified under § 141.85(f) and number of filters provided.

(7) Annually by January 30, the water system must certify to the State that it conducted an outreach activity in accordance with § 141.85(h) when it does not meet the service line replacement rate as specified in § 141.84(d) for the previous calendar year. The water system must also submit a copy to the State of the outreach materials provided.

(8) Annually by January 30, the water system must certify to the State that it delivered the required distribution system and site assessment information and public education materials to the State and local health departments for the previous calendar year in accordance with § 141.85(i).

(9) No later than 60 days after a water system exceeds the lead action level for the second time in a rolling five-year period, the system must submit a filter plan to the State as specified in § 141.85(j)(3). Thereafter, a system is not required to resubmit a filter plan unless requested by the State or if the system has made updates to its plan.

(10) Every six months, specifically by January 30 and July 30, any water system that meets the criteria of multiple lead action level exceedances in § 141.85(j)(1) must:

(i) Certify compliance with the filter requirements in the previous six months (the previous July through December for January 30 reports and the previous

January through June for July 30 reports) in accordance with § 141.85(j)(2) and report the number of filters provided; and

(ii) Certify that the water system completed a public outreach activity in the previous six months (the previous July through December for January 30 reports and the previous January through June for July 30 reports) in accordance with § 141.85(j)(4) and submit a copy of the public education materials provided to consumers.

(g) *Reporting of additional monitoring data.* (1) Any water system which collects more samples than the minimum required, must report the results to the State within the first 10 days following the end of the applicable monitoring period under §§ 141.86, 141.87, and 141.88 during which the samples are collected. This includes the monitoring data pertaining to distribution system and site assessment pursuant to §§ 141.82(j) and 141.86(b)(1)(iv).

(2) The system must certify to the State the number of customer refusals or non-responses for follow-up sampling under § 141.82(j)(2) it received and documentation explaining why it was unable to collect a follow-up sample, within the first 10 days following the end of the applicable tap monitoring period in which an individual sample exceeded the action level.

(h) *Reporting of 90th percentile lead and copper concentrations where the State calculates a water system's 90th percentile concentrations.* A water system is not required to report the 90th percentile lead and copper concentrations measured from all lead and copper tap water samples collected during each tap sampling period, as required by paragraph (a)(2)(iv) of this section if:

(1) The State has previously notified the water system that it will calculate the water system's 90th percentile lead and copper concentrations, based on the lead and copper tap results submitted pursuant to paragraph (h)(2)(i) of this section, and the water system provides the results of lead and copper tap water samples no later than 10 days after the end of the applicable tap sampling period; and

(2) The system has provided the following information to the State by the date specified in paragraph (h)(1) of this section:

(i) The results of all tap samples for lead and copper including the location of each site and the site selection criteria under § 141.86(a)(4) used as the basis for which the site was selected for the water system's sampling pool; and

(ii) An identification of sampling sites utilized during the current monitoring period that were not sampled during previous monitoring periods, and an explanation of why sampling sites have changed; and

(3) The State has provided the results of the 90th percentile lead and copper calculations, in writing, to the water system within 15 days of the end of the tap sampling period.

(i) *Reporting requirements for a community water system's public education and sampling in schools and child care facilities.* (1) A community water system must provide a list of the schools and child care facilities they serve, or provide certification that no schools or child care facilities are served, to the State by the compliance date in § 141.80(a)(3) in accordance with § 141.92(b)(1). A water system that certifies that no schools or child care facilities are served by the water system is not required to report the information in paragraphs (i)(2) and (3) of this section. Annually by January 30, beginning one year after the compliance date in § 141.80(a)(3), the system must certify that there are no schools or child care facilities served by the water system. When the system becomes aware of one or more schools or child care facilities that it serves, it must provide a list to the State and begin to report the information in paragraphs (i)(2) and (3) of this section.

(2) A community water system must report the lead analytical sampling results for schools and child care facilities within 30 days of receipt of the results in accordance with § 141.92(g)(1)(iii).

(3) Beginning one year after the compliance date in § 141.80(a)(3), a community water system must send a report to the State annually by January 30 for the previous year's activity as calculated from the compliance date in § 141.80(a)(3). The report must include the following:

(i) Certification that the water system made a good faith effort to identify schools and child care facilities in accordance with § 141.92(b). The good faith effort may include reviewing customer records and requesting lists of schools and child care facilities from the State or other licensing agency. If there are changes to the list of schools and child care facilities that a water system serves, an updated list must be submitted at least once every five years in accordance with § 141.92(b)(2). If there are no changes to the list of schools or child care facilities the water system serves, the water system must certify there are no changes to the list.

(ii) Certification that the water system has delivered information about health risks from lead in drinking water to the school and child care facilities that they serve in accordance with § 141.92(c)(1).

(iii) During the first five years after the compliance date in § 141.80(a)(3), certification that the water system has completed the notification and sampling requirements in § 141.92(c)(2)(i) and (d)(1) for elementary schools and child care facilities and the information in paragraphs (i)(3)(iii)(A) through (E) of this section.

(A) The number and names of schools and child care facilities served by the water system;

(B) The number and names of schools and child care facilities sampled in the previous year;

(C) The number and names of elementary schools and child care facilities that declined sampling;

(D) The number and names of elementary schools and child care facilities that did not respond to outreach attempts for sampling; and

(E) Information pertaining to outreach attempts for sampling that were declined or not responded to by the elementary school or child care facility.

(iv) During the first five years after the compliance date in § 141.80(a)(3), certification that the water system has completed the notification and sampling requirements of § 141.92(c)(2)(ii) and (e) for secondary schools and the information in paragraphs (i)(3)(iii)(A) and (B) of this section.

(v) Starting with the sixth year after the compliance date in § 141.80(a)(3), the water system must certify completion of the notification requirements of § 141.92(c)(3) and sampling requirements of § 141.92(d)(2) in elementary schools and child care facilities and § 141.92(e) for secondary schools and the information in paragraphs (i)(3)(iii)(A) and (B) of this section, thereafter.

(vi) Certification that sampling results were provided to schools, child care facilities, and local and State health departments.

(j) * * *

(1) Small water systems serving 3,300 or fewer and non-transient non-community water systems implementing the point-of-use device option under § 141.93(c)(1), must report the results from the tap sampling required under § 141.93(c)(1)(iv) no later than 10 days after the end of the tap sampling period. If corrective action is not completed within 30 days of a POU sample exceeding 0.010 mg/L, the system must provide documentation to the State within 30 days explaining why it was unable to correct the issue.

Unless waived by the State, the water system must provide documentation to certify maintenance of the point-of-use devices.

(2) Small water systems serving 3,300 or fewer and non-transient non-community water systems implementing the small system compliance flexibility option to replace all lead-bearing plumbing under § 141.93(c)(2) must provide certification to the State that all lead-bearing material has been replaced on the schedule established by the State, within one year of designation of the option under § 141.93(c)(2).

■ 13. Revise § 141.92 to read as follows:

§ 141.92 Monitoring for lead in schools and child care facilities.

(a) *General requirements.* (1) All community water systems must conduct public education and lead monitoring at the schools and child care facilities they serve unless those schools or child care facilities:

(i) Were constructed or had full plumbing replacement on or after January 1, 2014, or the date the State adopted standards that meet the definition of lead free in accordance with section 1417 of the Safe Drinking Water Act, as amended by the Reduction of Lead in Drinking Water Act, whichever is earlier; and

(ii) Are not served by a lead, a galvanized requiring replacement, or an unknown service line.

(2) The provisions of this section do not apply to a school or child care facility that is regulated as a public water system.

(b) *List of schools and child care facilities.* (1) All community water systems must compile a list of schools and child care facilities they serve that meet the criteria of paragraph (a) of this section and submit the list to the State in accordance with § 141.90(i)(1) by the compliance date specified in § 141.80(a)(3).

(2) Within five years following the compliance date in § 141.80(a)(3) and at least once every five-year period after, all community water systems must either certify in writing to the State there have been no changes to the list of schools and child care facilities or submit a revised list to the State in accordance with § 141.90(i)(3)(i).

(c) *Public education to schools and child care facilities.* (1) At least once a year beginning with the compliance date in § 141.80(a)(3), community water systems must contact all schools and child care facilities identified by the system in paragraph (b) of this section to provide information about the health risks from lead in drinking water

consistent with the content requirements of § 141.85(a)(1)(ii) through (iv) and (vi).

(2) Within the first five years following the compliance date in § 141.80(a)(3), community water systems must:

(i) Notify elementary schools and child care facilities, in accordance with the frequency requirements in paragraph (d)(1) of this section, that they are eligible to be sampled for lead by the water system. This notice must include:

(A) A proposed schedule for sampling at the facility; and

(B) Information about sampling for lead in schools and child care facilities (EPA's 3Ts for Reducing Lead in Drinking Water Toolkit, EPA-815-B-18-007, or subsequent EPA guidance).

(ii) Notify all secondary schools identified in paragraph (b) of this section at least once a year that they are eligible to be sampled for lead by the community water system on request. The notice must provide:

(A) Information on how to request sampling for lead at the facility; and

(B) Information about sampling for lead in schools and child care facilities (EPA's 3Ts for Reducing Lead in Drinking Water Toolkit, EPA-815-B-18-007, or subsequent EPA guidance).

(3) Starting with the sixth year after the compliance date in § 141.80(a)(3), a community water system must contact all elementary schools, secondary schools, and child care facilities identified in paragraph (b) of this section to notify them that they are eligible to be sampled for lead by the community water system on request and provide the information in paragraphs (c)(2)(ii)(A) and (B) of this section.

(4) Thirty days prior to any sampling event, community water systems must provide schools and child care facilities with instructions to identify outlets for lead sampling and prepare for a sampling event.

(d) *Frequency of sampling at elementary schools and child care facilities.* (1) Within the first five years following the compliance date in § 141.80(a)(3), community water systems must collect samples from at least 20 percent of the total of elementary schools served by the system per year and at least 20 percent of the total of child care facilities served by the system per year, or according to an alternative schedule approved by the State, until all elementary schools and child care facilities identified under paragraph (b) of this section have been sampled once or have declined to participate or are non-responsive.

(i) Community water systems must provide documentation to the State in accordance with § 141.90(i)(3)(iii)(D) and (E) if an elementary school or child care facility is non-responsive or otherwise declines to participate in the monitoring or education requirements of this section. For the purposes of this section:

(A) A community water system may consider an elementary school or child care facility non-responsive after the community water system makes at least two separate outreach attempts to contact the facility to schedule sampling and does not receive any response on either attempt; and

(B) A community water system may count a refusal or non-response from an elementary school or child care facility as part of the minimum 20 percent of elementary schools and child care facilities sampled per year.

(ii) [Reserved]

(2) Starting with the sixth year after the compliance date in § 141.80(a)(3), community water systems must conduct sampling as specified in paragraph (f) of this section when requested by an elementary school or child care facility.

(i) A community water system is not required under this paragraph (d)(2) to sample more than 20 percent of the elementary schools and child care facilities identified in paragraph (b) of this section in any given year. A community water system is not required under this paragraph (d)(2) to sample an individual elementary school or child care facility more than once in any five-year period.

(ii) [Reserved]

(3) The first time a water system includes an elementary school or child care facility in an update to the list of schools and child care facilities required to be submitted to the State in paragraph (b)(2) of this section, the water system must conduct outreach at those elementary schools and child care facilities as specified in paragraph (c)(2) of this section once prior to conducting sampling in accordance with paragraph (d)(2) of this section.

(i) A community water system may consider an elementary school or child care facility non-responsive after the community water system makes at least two separate outreach attempts to contact the facility to schedule sampling and does not receive any response on either attempt.

(ii) [Reserved]

(e) *Frequency of sampling at secondary schools.* (1) Starting with the compliance date in § 141.80(a)(3), community water systems must conduct sampling as specified in paragraph (f) of

this section when requested by a secondary school.

(2) A community water system is not required under this paragraph (e) to sample more than 20 percent of the secondary schools identified in paragraph (b) of this section in any given year. A community water system is not required under this paragraph (e) to sample an individual secondary school more than once in any five-year period.

(f) *Lead sampling protocol for schools and child care facilities.* (1) Community water systems must collect five samples per school and two samples per child care facility at outlets typically used to provide water for human consumption. Except as provided in paragraphs (f)(1)(iii) through (v) of this section, the outlets cannot have point-of-use devices. The community water system must sample the following types and number of outlets:

(i) For schools, two drinking water fountains, one kitchen faucet used for drinking or cooking, one classroom faucet or other outlet used to provide water for human consumption, and one nurse's office faucet, as available.

(ii) For child care facilities, one drinking water fountain, and one of either a kitchen faucet used for drinking or cooking or one classroom faucet or other outlet used to provide water for human consumption.

(iii) If any school or child care facility has fewer than the required number of outlets, the community water system must sample all outlets used to provide water for human consumption.

(iv) The community water system may sample at outlets with point-of-use devices if the facility has point-of-use devices installed on all outlets typically used to provide water for human consumption of if the school or child care facility has fewer than the required number of outlets.

(v) If any school or child care facility does not contain the type of outlet listed in paragraphs (f)(1)(i) through (iv) of this section, the community water system must collect a sample from another outlet typically used to provide water for human consumption as identified by the facility, to meet the required number of samples as provided in this paragraph (f)(1).

(2) Community water systems must collect the samples from the cold water tap subject to the following additional requirements:

(i) Each sample for lead must be a first draw sample;

(ii) The sample must be 250 ml in volume;

(iii) The water must have remained stationary in the plumbing system of the

sampling site (building) for at least 8 but no more than 18 hours; and

(iv) Samples must be analyzed using acidification and the corresponding analytical methods in § 141.89.

(3) Community water system, school, or child care facility staff, or other appropriately trained individuals must collect samples in accordance with paragraphs (f)(1) and (2) of this section.

(g) *Notification of results.* (1) Community water systems must provide sampling results, regardless of lead sample concentration, as soon as practicable but no later than 30 days after receipt of the results to:

(i) The sampled school or child care facility, along with information about potential options to remediate lead in drinking water (consistent with EPA's 3Ts for Reducing Lead in Drinking Water Toolkit, EPA-815-B-18-007, or subsequent EPA guidance);

(ii) The local and State health department; and

(iii) The State in accordance with § 141.90(i).

(2) [Reserved]

(h) *Alternative school and child care lead sampling programs.* (1) If schools and child care facilities served by a community water system are sampled for lead in drinking water under a State or local law or program, the State may exempt one or more community water system(s) from the sampling requirements of this section by issuing a written waiver:

(i) If the sampling meets the frequency requirements in paragraph (d) of this section for elementary schools and child care facilities and paragraph (e) of this section for secondary schools and the protocol requirements in paragraph (f) of this section; or

(ii) If the sampling meets the frequency requirements in paragraph (d) of this section for elementary schools and child care facilities and paragraph (e) of this section for secondary schools and the protocol requirements in paragraph (f) of this section with the exception of sample size and stagnation time in paragraphs (f)(2)(ii) and (iii) of this section and the sampling is conducted in addition to any of the following actions to remediate lead in drinking water:

(A) Disconnect affected fixtures;

(B) Replace affected fixtures with fixtures certified as lead free; and

(C) Install and maintain point-of-use devices certified by an American National Standards Institute accredited certifier to reduce lead levels; or

(iii) If the sampling is conducted in schools and child care facilities served by the community water system less frequently than once every five years

and that sampling is conducted in addition to any of the actions to remediate lead in drinking water specified in paragraph (h)(1)(ii) of this section; or

(iv) If the school or child care facility maintains point-of-use devices as defined in § 141.2 on all outlets used to provide water for human consumption; or

(v) If the sampling is conducted under a grant awarded under section 1464(d) of the SDWA, consistent with the requirements of the grant and at least the minimum number of samples required in paragraph (f) of this section are collected.

(2) The duration of the waiver cannot exceed the time period covered by the sampling and will automatically expire at the end of any 12-month period during which sampling is not conducted at the required number of schools or child care facilities.

(3) The State must only issue a waiver to the community water system for the subset of the schools or child care facilities served by the system as designated under paragraph (b) of this section that are sampled under an alternative program as described in paragraph (h)(1) of this section.

(4) The State may issue a written waiver applicable to more than one community water system (e.g., one waiver for all community water systems subject to a statewide sampling program that meets the requirements of this paragraph (h)).

(5) The State may issue a waiver for community water systems to conduct the sampling requirements of this section for the first five years following the compliance date in § 141.80(a)(3) in the schools and child care facilities that were sampled for lead between January 1, 2021, and the compliance date in § 141.80(a)(3) that otherwise meets the requirements of paragraph (h)(1) of this section.

■ 14. Revise § 141.93 to read as follows:

§ 141.93 Small water system compliance flexibility.

Small community water systems serving 3,300 or fewer persons and all non-transient non-community water systems that exceed the lead action level, but do not exceed the copper action level, may elect to use this provision in lieu of the corrosion control treatment requirements otherwise applicable to small systems and non-transient non-community water systems in § 141.81(a)(3), if approved by the State. This compliance flexibility is not available to water systems where the State has obtained primacy for this subpart and the State does not adopt

regulations to provide compliance flexibility consistent with this section.

(a) Small community water systems and non-transient non-community water systems that elect to use this section must:

(1) For water systems with corrosion control, collect water quality parameters in accordance with § 141.87 and, if the system has not re-optimized OCCT in accordance with § 141.81(d), evaluate compliance options in paragraphs (c)(1) and (2) of this section and corrosion control treatment under § 141.81(d)(1). Water systems with corrosion control treatment in place must continue to operate and maintain optimal corrosion control treatment until the State determines, in writing, that it is no longer necessary, and meet any requirements that the State determines to be appropriate before implementing a State approved alternative compliance option described in this section.

(2) For systems without corrosion control, collect water quality parameters in accordance with § 141.87 and, if the system has not installed OCCT in accordance with § 141.81(e), evaluate compliance options in paragraphs (c)(1) and (2) of this section and corrosion control treatment under § 141.81(e)(1).

(b) The system must make a compliance option recommendation to the State within six months of the end of the tap sampling period in which the lead action level exceedance occurred. Within six months of the recommendation by the water system, the State must approve or disapprove the recommendation. If the State disapproves the recommendation, the State may designate the other compliance alternative as an option for the system. If the State does not designate the other compliance alternative as an option for the system, the system must comply with the otherwise applicable corrosion control treatment requirements under § 141.81(d) for systems with corrosion control or § 141.81(e) for systems without corrosion control treatment. Water systems must follow the schedules in § 141.81(d) or (e), beginning with step 3 in § 141.81(d)(3) or (e)(3) unless the State specifies optimal corrosion control treatment pursuant to either § 141.81(d)(2) or (e)(2), as applicable. If the system fails to implement the approved alternative compliance option, or the State revokes approval for the alternative compliance option, then the system must follow the requirements for small and non-transient non-community water systems as described under § 141.81(a)(3).

(c)(1) *Alternative compliance option: point-of-use devices.* A water system

that elects the compliance option in this paragraph (c)(1), must install, maintain, and monitor POU devices in each household and each building served by the water system.

(i)(A) A community water system must install a minimum of one POU device (at one tap) in every household and at every tap that is used for cooking and/or drinking in every non-residential building in its distribution system on a schedule specified by the State, but not to exceed one year after State approval.

(B) A non-transient non-community water system must provide a POU device to every tap that is used for cooking and/or drinking on a schedule specified by the State, but not to exceed three months.

(ii) The POU device must be independently certified by a third party to meet the American National Standards Institute standard applicable to the specific type of POU unit to reduce lead in drinking water.

(iii) The POU device must be maintained by the water system in accordance with the manufacturer's recommendations or on a more frequent schedule if required by the State to ensure continued effective filtration, including but not limited to changing filter cartridges and resolving any operational issues. The POU device must be equipped with mechanical warnings to ensure that consumers are automatically notified of operational problems. The water system must provide documentation to the State to certify maintenance of the POU devices, unless the State waives this requirement, in accordance with § 141.90(j)(1).

(iv) The water system must monitor, in accordance with this paragraph (c)(1)(iv), one-third of the POU devices each year and all POU devices must be monitored within a three-year cycle. First liter tap samples collected under this section must be taken after water passes through the POU device to assess its performance. Samples must be one liter in volume and have had a minimum 6-hour stagnation time. All samples must be at or below 0.010 mg/L. Water systems must report the results from the tap sampling no later than 10 days after the end of the tap sampling period in accordance with § 141.90(j)(1). If a sample exceeds 0.010 mg/L, the water system must notify the persons served by the POU device, and/or building management no later than one business day of receiving the tap sample results. The system must document and take corrective action at each site where the sample result exceeds the lead action level. Corrective action must be completed within 30 days. If the

corrective action is not completed within 30 days, the system must provide documentation to the State within 30 days explaining why it was unable to correct the issue.

(v) The water system must provide public education to consumers to inform them of proper use of POU devices.

(A) *Content.* All small community water systems serving 3,300 or fewer persons and non-transient non-community water systems that are approved to implement POU devices under this paragraph (c)(1) must provide public education materials to inform users how to properly use POU devices to maximize the units' effectiveness in reducing lead levels in drinking water. Public education materials must meet the requirements of § 141.85(a)(1)(ii) through (iv).

(B) *Timing.* Water systems must provide the public education materials at the time of POU device delivery.

(C) *Delivery.* Water systems must provide the public education materials in person, by mail, or by another method approved by the State, to persons at locations where the system has delivered POU devices.

(vi) The water system must operate and maintain the POU devices even if the system is at or below the action level in future tap monitoring periods until the system receives State approval to select the other compliance flexibility option or follow § 141.81(d) or (e) and the system has fully implemented it.

(2) *Alternative compliance option: replacement of lead-bearing plumbing.* A water system that has control over all plumbing in its buildings, and is not served by lead, galvanized requiring replacement, or unknown service lines, must replace all plumbing that does not meet the definition of "lead free" in section 1417 of the Safe Drinking Water Act, as amended by the Reduction of Lead in Drinking Water Act and any future amendments applicable at the time of replacement. The replacement of all lead-bearing plumbing must occur on a schedule established by the State but not to exceed one year. Water systems must provide certification to the State that all lead-bearing material has been replaced in accordance with § 141.90(j)(2).

■ 15. Amend § 141.152 by revising paragraph (a) to read as follows:

§ 141.152 Compliance dates.

(a) Between June 24, 2024, and December 31, 2026, community water systems must comply with 40 CFR 141.151 through 141.155 (except § 141.153(d)(4)(xii)), as codified on July 1, 2023. Beginning January 1, 2027,

community water systems must comply with 40 CFR 141.151 through 141.156 (except § 141.153(h)(i)), as codified on July 1, 2024. Beginning November 1, 2027, community water systems must comply with 40 CFR 141.151 through 141.156, as codified on July 1, 2025.

* * * * *

■ 16. Amend § 141.153 by revising paragraph (f)(3) and revising and republishing paragraph (h)(8) to read as follows:

§ 141.153 Content of the reports.

* * * * *

(f) * * *

(3) Lead and copper control requirements prescribed by subpart I of this part. For systems that fail to take one or more actions prescribed by §§ 141.80 through 141.93, the report must include the applicable language of appendix A to this subpart for lead, copper, or both.

* * * * *

(h) * * *

(8) Systems required to comply with subpart I of this part.

(i) The report must notify consumers that complete lead tap sampling data are available for review and must include information on how to access the data.

(ii) The report must include a statement that a service line inventory (including inventories where the publicly accessible inventory consists of a written statement that there are no lead, galvanized requiring replacement, or lead status unknown service lines, known lead connectors or connectors of unknown material) has been prepared and include instructions to access the publicly accessible service line inventory. If the service line inventory is available online, the report must include the direct link to the inventory.

(iii) For systems with lead, galvanized requiring replacement, or lead status unknown service lines in the system's inventory pursuant to § 141.84(a) and (b), the report must include information on how to obtain a copy of the service line replacement plan or a direct link to the plan if the system is required to make the service line replacement plan available online.

(iv) The report must contain a plainly worded explanation of the corrosion control efforts the system is taking in accordance with subpart I of this part. Corrosion control efforts consist of treatment (e.g., pH adjustment, alkalinity adjustment, or corrosion inhibitor addition) and other efforts contributing to the control of the corrosivity of water (e.g., monitoring to assess the corrosivity of water). The system may use one of the following

templates or use their own explanation that includes equivalent information.

(A) For systems with State or EPA-designated Optimal Corrosion Control Treatment:

(1) Corrosion of pipes, plumbing fittings, and fixtures may cause lead and copper to enter drinking water. To assess corrosion of lead and copper, [name of system] conducts tap sampling for lead and copper at selected sites [insert frequency at which system conducts tap sampling]. [Name of system] treats water using [identify treatment method] to control corrosion, which was designated as the optimal corrosion control treatment by [the State or EPA, as applicable]. To ensure the treatment is operating effectively, [name of system] monitors water quality parameters set by the [the State or EPA, as applicable] [insert frequency at which system conducts water quality parameter monitoring].

(2) If applicable add: [Name of system] is currently conducting a study of corrosion control to determine if any changes to treatment methods are needed to minimize the corrosivity of the water.

(B) For systems without State or EPA designated Optimal Corrosion Control Treatment:

(1) Corrosion of pipes, plumbing fittings and fixtures may cause metals, including lead and copper, to enter drinking water. To assess corrosion of lead and copper, [name of system] conducts tap sampling for lead and copper at selected sites [insert frequency at which system conducts tap sampling].

(2) If applicable, add: [Name of system] treats water using [identify treatment method] to control corrosion.

(3) If applicable add: [Name of system] is currently conducting a study of corrosion control to determine if any changes to treatment methods are needed to minimize the corrosivity of the water.

(v) The report must include a statement that the water system is required to sample for lead in schools and licensed child care facilities as requested by the facility and that directs the public to contact their school or child care facility for further information about potential sampling results.

■ 17. Amend § 141.154 by revising paragraph (d)(1) to read as follows:

§ 141.154 Required additional health information.

* * * * *

(d) * * *

(1) A short informational statement about lead in drinking water and its

effects on children. The statement must include the information in figure 1 to this paragraph (d)(1):

Figure 1 to Paragraph (d)(1)

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. [INSERT NAME OF SYSTEM] is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect

yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you

may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact [INSERT NAME OF SYSTEM and CONTACT INFORMATION]. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

* * * * *

■ 18. Amend appendix A to subpart O of part 141 under the heading “Inorganic contaminants” by removing the entry for “Lead” and adding the entry “Lead (mg/L)” in its place to read as follows:

Appendix A to Subpart O of Part 141—Regulated Contaminants

Contaminant (units)	Traditional MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	MCLG	Major sources in drinking water	Health effects language
*	*	*		*	*	*
Inorganic contaminants						
*	*	*		*	*	*
Lead (mg/L)	AL = 0.010	1,000	AL = 10 ...	0	Corrosion of household plumbing systems and service lines connecting buildings to water mains, erosion of natural deposits.	There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.
*	*	*		*	*	*

* * * * *

■ 19. Amend § 141.202 by revising paragraph (b)(1) to read as follows:

§ 141.202 Tier 1 Public Notice—Form, manner, and frequency of notice.

* * * * *

(b) * * *

(1) Provide a public notice as soon as practical but no later than 24 hours after the system learns of the violation or situation requiring Tier 1 public notice;

* * * * *

■ 20. Amend appendix A to subpart Q of part 141 in section I by revising the

entry “1. Lead and Copper Rule (TT)” under the heading “C. Lead and Copper Rule (Action Level for lead is 0.015 mg/L, for copper is 1.3 mg/L)” to read as follows:

**Appendix A to Subpart Q of Part 141—
NPDWR Violations and Other
Situations Requiring Public Notice ¹**

Contaminant	MCL/MRDL/TT violations ²		Monitoring & testing procedure violations	
	Tier of public notice required	Citation	Tier of public notice required	Citation
I. * * *				
C. Lead and Copper Rule (Action Level for lead is 0.010 mg/L, for copper is 1.3 mg/L).				
1. Lead and Copper Rule (TT)	2	141.80 (except paragraph (c) through 141.84, 141.85(a) through (c) (except paragraphs (c)(3)), (h), and (j), and 141.93.	3	141.86 through 141.90, 141.92.
*	*	*	*	*

Appendix A—Endnotes

* * * * *

1. Violations and other situations not listed in this table (e.g., failure to prepare Consumer Confidence Reports), do not require notice, unless otherwise determined by the primacy agency. Primacy agencies may, at their option, also require a more stringent public notice tier (e.g., Tier 1

instead of Tier 2 or Tier 2 instead of Tier 3) for specific violations and situations listed in this Appendix, as authorized under § 141.202(a) and § 141.203(a).

2. MCL—Maximum contaminant level, MRDL—Maximum residual disinfectant level, TT—Treatment technique

* * * * *

■ 21. Amend appendix B to subpart Q of part 141 by revising the entry for “23. Lead” under the heading “D. Lead and Copper Rule” and endnote 13 to read as follows:

**Appendix B to Subpart Q of Part 141—
Standard Health Effects Language for
Public Notification**

Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard health effects language for public notification			
National Primary Drinking Water Regulations (NPDWR)						
*	*	*	*	*	*	*

D. Lead and Copper Rule

23. Lead	zero	TT ¹³	There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.		
*	*	*	*	*	*

* * * * *

Appendix B—Endnotes

* * * * *

1. MCLG—Maximum contaminant level goal

2. MCL—Maximum contaminant level

* * * * *

13. Action Level = 0.010 mg/L

* * * * *

**PART 142—NATIONAL PRIMARY
DRINKING WATER REGULATIONS
IMPLEMENTATION**

■ 22. The authority citation for part 142 continues to read as follows:

Authority: 42 U.S.C. 300f, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–4, 300j–9, and 300j–11.

■ 23. Amend § 142.14 by revising paragraphs (d)(8) and (9) and (d)(10)(ii) to read as follows:

§ 142.14 Records kept by States.

* * * * *

(d) * * *

(8) Records of the currently applicable or most recent State determinations, including all supporting information and an explanation of the technical basis for each decision, made under the provisions of 40 CFR part 141, subpart I, listed in paragraphs (d)(8)(i) through

(xix) of this section for the control of lead and copper. For the records identified in paragraphs (d)(8)(i) through (xix), if no change is made to State determinations during a 12-year retention period, the State must retain the record until a new decision, determination, or designation has been issued.

(i) Section 141.81(b)—for any water system deemed to be optimized under § 141.81(b) of this chapter, any conditions imposed by the State on specific water systems to ensure the continued operation and maintenance of corrosion control treatment in place;

(ii) Sections 141.81(b)(4) and (h) and 141.86(c)(2)(iii)(G) and (g)(4)(iii)—determinations of additional monitoring requirements and/or other actions required to maintain optimal corrosion control by systems that change treatment or add a new source of water;

(iii) Section 141.82(b)—decisions to require a water system to conduct corrosion control treatment studies;

(iv) Section 141.82(d)—designations of optimal corrosion control treatment and any simultaneous compliance considerations that factored into the designation;

(v) Section 141.82(f)—designations of optimal water quality parameters;

(vi) Section 141.83(b)(2)—determinations of source water treatment;

(vii) Section 141.83(b)(4)—designations of maximum permissible concentrations of lead and copper in source water;

(viii) Section 141.84(d)(5)(v)—determinations as to whether a shortened replacement deadline and associated replacement rate is feasible for mandatory full lead and galvanized requiring replacement service line replacement;

(ix) Section 141.84(d)(5)(vi)—for every system using a deferred deadline and associated replacement rate for their mandatory service line replacement program as defined in § 141.84(d)(5)(vi) of this chapter, every written determination as to whether a shorter deadline is feasible, either by approving continued use of the identified deferred deadline and rate or by setting a shorter deadline and faster replacement rate, including those made by the end of the second program year, and subsequent determinations every three years thereafter;

(x) Section 141.85—system-specific decisions regarding the content of written public education materials and/or the distribution of these materials;

(xi) Section 141.86(b)(3)—system-specific determinations regarding use of samples that do not meet the six hour minimum stagnation time at non-transient non-community water systems, and community water systems meeting the criteria of § 141.85(b)(8) of this chapter, that operate 24 hours a day;

(xii) Section 141.86(d)—system-specific designations of sampling locations for systems subject to reduced monitoring;

(xiii) Section 141.86(d)(3)—system-specific determinations pertaining to alternative sample collection periods for systems subject to reduced monitoring;

(xiv) Section 141.86(g)—determinations of small system

monitoring waivers, waiver recertifications, and waiver revocations;

(xv) Section 141.87(b)(3)(ii)—determinations regarding representative entry point locations at ground water systems;

(xvi) Sections 141.81(h) and 141.90(a)(4)—evaluation and approval of water system source water or long-term treatment changes;

(xvii) Sections 141.90(e)(6) and (12)—system-specific determinations regarding the submission of information to demonstrate compliance with partial lead and galvanized requiring replacement service line replacement requirements;

(xviii) Section 141.90(f)—system-specific decisions regarding the resubmission of detailed documentation demonstrating completion of public education requirements, including resubmission of filter plans under § 141.90(f)(9) of this chapter; and

(xix) Section 141.93—identification of community water systems and non-transient non-community water systems utilizing the compliance alternatives, and the compliance alternative selected by the water system and the compliance option approved by the State.

(9) Records of reports and any other information submitted by PWSs under § 141.90 of this chapter, including:

(i) Records of any 90th percentile values calculated by the State under § 141.90(h) of this chapter;

(ii) Completed initial service line inventories, baseline inventories, and required updates to inventories and information under § 141.90(e) of this chapter;

(iii) Service line replacement plans under § 141.90(e)(3) of this chapter and any updates to the plan under § 141.90(e)(4) of this chapter; and

(iv) Compliance sampling pools in site sample plan and any changes to sampling pools under § 141.90(a)(1) of this chapter.

(10) * * *

(ii) Verify compliance with the requirements related to partial or customer-initiated lead and galvanized requiring replacement service line replacement under § 141.84(f), (g), and (h)(1) and (2), compliance with full service line replacement under § 141.84(h)(3) of this chapter, and compliance with lead connector replacement when encountered under § 141.84(e) of this chapter; and

* * * * *

■ 24. Amend § 142.15 by revising and republishing paragraph (c)(4) to read as follows:

§ 142.15 Reports by States.

* * * * *

(c) * * *

(4) *Timing.* States must report quarterly, with the exception of the requirements in paragraphs (c)(4)(iii)(G) and (H) of this section, in a format and on a schedule prescribed by the Administrator, the following information related to each system's compliance with the treatment techniques for lead and copper under 40 CFR part 141, subpart I, during the preceding calendar quarter. Specifically, States must report as follows:

(i) through (ii) [Reserved]

(iii) States must report the PWS identification number of each water system identified in paragraphs (c)(4)(iii)(A) through (H) of this section.

(A) For each public water system, regardless of size, all 90th percentile lead levels calculated during each tap sampling period specified in § 141.86 of this chapter, and the first and last days of the tap sampling period for which the 90th percentile lead level was calculated.

(B) For each water system, regardless of size, the 90th percentile copper level calculated during each tap sampling period specified in § 141.86 of this chapter, in which the system exceeds the copper action level, and the first and last days of each tap sampling period in which an exceedance occurred.

(C) For each water system for which the State has designated optimal water quality parameters under § 141.82(f) of this chapter, the specific corrosion control treatment designated, the date of the determination, and the paragraph(s) under § 141.82(f) which the State made its determination, the water system's optimal water quality parameters.

(D) For each water system the total number of lead service lines, galvanized requiring replacement service lines, lead status unknown service lines, non-lead service lines, lead connectors, and connectors of unknown material in its inventory, reported separately.

(E) For each water system required to conduct mandatory replacement of lead and galvanized requiring replacement service lines as specified in § 141.84(d) of this chapter, the total number and type of service lines replaced, the applicable deadline for the system to complete replacement of all lead and galvanized requiring replacement service lines, and the expected date of completion of mandatory service line replacement.

(F) For each water system that has implemented optimal corrosion control pursuant to § 141.82 of this chapter, completed applicable source water treatment requirements pursuant to § 141.83 of this chapter, and/or completed mandatory service line

replacement requirements pursuant to § 141.84(d) of this chapter, and the date of the State's determination that these requirements have been met. The date reported must be the latest of the following events:

(1) The date the State received the results of corrosion control evaluations under § 141.82(d) or (e) of this chapter or optimal corrosion control treatment recommendation by the system;

(2) For systems for which the State has designated optimal corrosion control treatment or re-optimized optimal corrosion control treatment under § 141.82(d) of this chapter, the date of the determination and the date the system completed installation of treatment as certified under § 141.90(c)(4) of this chapter;

(3) The date the State designates optimal water quality parameters under § 141.82(f) of this chapter or deems the system to have optimized corrosion control pursuant to § 141.81(b)(1) or (3) of this chapter;

(4) For systems which the State has required to install source water treatment under § 141.83(b)(2) of this chapter, the date of the determination, the date the State designates maximum permissible source water levels under § 141.83(b)(4) of this chapter or determines pursuant to § 141.83(b)(2) that source water treatment is not required; or

(5) For systems required to conduct mandatory service line replacement, the date the system completes mandatory service line replacement pursuant to § 141.84(d) of this chapter.

(6) For systems not required to complete the corrosion control treatment steps under § 141.81(f) of this chapter, the date the system is required to complete mandatory service line replacement pursuant to § 141.84(d) of this chapter.

(G) Each State which has primary enforcement responsibility must submit to the Administrator the 90th percentile lead concentration calculated during each tap sampling period in which the system exceeds the lead action level in § 141.80(c)(1) of this chapter within the first 15 days following the end of each tap sampling period specified in § 141.86 of this chapter or 24 hours of receiving notification of an action level exceedance, whichever is earlier.

(H) For each water system that is eligible for and plans to use a deferred deadline and associated replacement rate for their mandatory service line replacement program as described in § 141.84(d)(5)(vi) of this chapter, as soon as practicable, but no later than the end of second program year of mandatory service line replacement as defined in

§ 141.84(d)(5)(iii) of this chapter, and every three program years thereafter, the result of the State's written determination as to whether the deferred deadline and associated replacement rate are the fastest feasible, the number of years and months needed to complete mandatory service line replacement, the date of completion of mandatory service line replacement at the fastest feasible rate, and the reasons for the State's determination.

* * * * *

■ 25. Amend § 142.16 by revising paragraphs (d)(1)(ii) and (d)(3) through (10) and adding paragraphs (d)(11) through (13) to read as follows:

§ 142.16 Special primacy requirements.

* * * * *

(d) * * *

(1) * * *

(ii) Section 141.82(g)—designating an alternative approach for aggregating multiple measurements collected during the same day for a water quality parameter at a sampling location, if the State elects to adopt a formula other than the one specified in § 141.82(g)(2)(i) of this chapter.

* * * * *

(3) Section 141.90(e)—verifying compliance with service line replacement schedules and completion of all partial lead and galvanized requiring replacement service line replacement activities.

(4) Section 141.86(d)(3)(i)—designating an alternative period for sample collection for community water systems subject to reduced monitoring.

(5) Section 141.84(b) as follows—

(i) Providing or requiring the review of any evidence-based resource, information, or identification method for the development of the baseline inventory or inventory updates. Requiring water systems whose inventories contain no lead, galvanized requiring replacement, or lead status unknown service lines, no known lead connectors, and no connectors of unknown material to prepare an updated inventory on a schedule determined by the State if the system subsequently finds a lead service line, galvanized requiring replacement service line, or lead connector within its system.

(ii) Providing or requiring the review of inventory validations described in § 141.84(b) of this chapter, including making determinations on whether previous inventory validations are at least as stringent as the requirements specified in § 141.84(b)(5)(i) through (iii) of this chapter and providing written approval to the system, and

requiring additional actions for systems based on the results of the inventory validations.

(6) Section 141.84(d)(5)(v)—determining whether a shortened service line replacement deadline is feasible for mandatory lead and galvanized requiring replacement service line replacement and notifying the system of the determination in writing at any time throughout a system's replacement program. For systems required to replace service lines in accordance with a shortened deadline, or for systems eligible for a deferred deadline, determining the deadline to complete inventory validation in accordance with § 141.84(b)(5) of this chapter.

(7) Section 141.82—verifying compliance with Distribution System and Site Assessment requirements in accordance with § 141.82(j) of this chapter.

(8) Section 141.84(d)—identifying State laws, including statutes and constitutional provisions, that pertain to a water system's access to conduct full service line replacement and notifying water systems in writing whether such laws exist or not by the compliance date specified in § 141.80(a) of this chapter and within six months of the enactment of new or revised State law that pertains to a water system's access to conduct full service line replacement.

(9) Section 141.84(d)(5)(vi)—making determinations in writing about systems using deferred deadlines, including reviewing the systems' eligibility calculation and information on deferred deadlines provided in the service line replacement plans as described in § 141.84(c)(1)(x) of this chapter, determining whether the deferred deadline and associated cumulative average replacement rate are the fastest feasible or setting a new deferred deadline and replacement rate at the fastest feasible for the system, and reporting the results of these determinations to EPA as described in § 142.15(c)(4)(H).

(10) Section 141.85(b)(1)—making determinations about which water systems serve a large proportion of consumers with limited English proficiency and providing technical assistance to those systems in meeting the requirement of § 141.85(b)(1) of this chapter to either translate a copy of the public education materials or provide translation assistance to consumers with limited English proficiency. Examples of technical assistance include providing water systems with contact information for inclusion in the system's public education materials where consumers can contact the State

for translation assistance upon request, or providing resources for water systems to translate their public education materials, including EPA-provided translations of required content for public education materials (*e.g.*, health effects language, definitions) and translated templates through a website.

(11) Section 141.88 and 141.81(h)—reviewing any change in source water or treatment and making related determinations, including approval; establishment of additional requirements to ensure the system will operate and maintain optimal corrosion control treatment; and an evaluation of how this change may impact compliance with other National Primary Drinking Water Regulations in part 141 of this chapter.

(12) Section 141.92—reviewing lists of schools and child care facilities to ensure entries conform to the definitions of school and child care facility as defined in § 141.2 of this chapter and is complete.

(13) Section 141.92—determining whether any existing State or local testing program for schools and child care facilities is at least as stringent as the Federal requirements, including how the State will use the definitions of elementary school, secondary school, and child care facility as defined in § 141.2 of this chapter to issue waivers.

* * * * *

■ 26. In § 142.19, revise paragraph (a) introductory text and paragraph (a)(2) to read as follows:

§ 142.19 EPA review of State implementation of national primary drinking water regulations for lead and copper.

(a) Pursuant to the procedures in this section, the Regional Administrator may review State determinations establishing corrosion control or source water treatment requirements for lead or copper and may issue an order establishing Federal treatment requirements for a public water system pursuant to §§ 141.82(d), (f) and (h) and 141.83(b)(2) and (4) of this chapter where the Regional Administrator finds that:

* * * * *

(2) A State has abused its discretion; or

* * * * *

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Part III

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Endangered Species
Status for Ocmulgee Skullcap and Designation of Critical Habitat; Final
Rule

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**[Docket No. FWS-R4-ES-2021-0059;
FXES1111090FEDR-256-FF09E21000]

RIN 1018-BE01

Endangered and Threatened Wildlife and Plants; Endangered Species Status for Ocmulgee Skullcap and Designation of Critical Habitat**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), list the Ocmulgee skullcap (*Scutellaria ocmulgee*), a plant species from Georgia and South Carolina as an endangered species under the Endangered Species Act of 1973 (Act), as amended. We also designate critical habitat. In total, approximately 6,661 acres (2,696 hectares) in Bibb, Bleckley, Burke, Columbia, Houston, Monroe, Pulaski, Richmond, Screven, and Twiggs Counties, Georgia, and in Aiken and Edgefield Counties, South Carolina, fall within the boundaries of the critical habitat designation. This rule extends the protections of the Act to this species and its designated critical habitat.

DATES: This rule is effective November 29, 2024.

ADDRESSES: This final rule is available on the internet at <https://www.regulations.gov>. Comments and materials we received are available for public inspection at <https://www.regulations.gov> at Docket No. FWS-R4-ES-2021-0059.

Availability of supporting materials: Supporting materials we used in preparing this rule, such as the species status assessment report, are available at <https://www.regulations.gov> at Docket No. FWS-R4-ES-2021-0059. For the critical habitat designation, the coordinates or plot points or both from which the maps are generated are included in the decision file for this critical habitat designation and are available at <https://www.regulations.gov> at Docket No. FWS-R4-ES-2021-0059.

FOR FURTHER INFORMATION CONTACT: Peter Maholland, Field Supervisor, U.S. Fish and Wildlife Service, Georgia Ecological Services Field Office, 355 East Hancock Avenue, Room 320, Athens, GA 30601; telephone 706-613-9493. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access

telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION:**Executive Summary**

Why we need to publish a rule. Under the Act, a species warrants listing if it meets the definition of an endangered species (in danger of extinction throughout all or a significant portion of its range) or a threatened species (likely to become endangered within the foreseeable future throughout all or a significant portion of its range). If we determine that a species warrants listing, we must list the species promptly and designate the species' critical habitat to the maximum extent prudent and determinable. We have determined that the Ocmulgee skullcap meets the Act's definition of an endangered species; therefore, we are listing it as such and finalizing a designation of its critical habitat. Both listing a species as an endangered or threatened species and designating critical habitat can be completed only by issuing a rule through the Administrative Procedure Act rulemaking process (5 U.S.C. 551 *et seq.*).

What this document does. This rule lists the Ocmulgee skullcap as an endangered species and designates critical habitat for the species in 18 units totaling approximately 6,661 acres (ac) (2,696 hectares (ha)) within portions of 10 counties in Georgia and 2 counties in South Carolina.

The basis for our action. Under the Act, we may determine that a species is an endangered or threatened species because of any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We have determined that the Ocmulgee skullcap is an endangered species due to the following threats: habitat loss and fragmentation due to development and urbanization (Factor A); competition and encroachment from nonnative, invasive species (Factors A and E); and herbivory from white-tailed deer (*Odocoileus virginianus*) (Factor C).

Section 4(a)(3) of the Act requires that the Secretary of the Interior (Secretary) to the maximum extent prudent and determinable, concurrently with listing

designate critical habitat for the species. Section 3(5)(A) of the Act defines critical habitat as (i) the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protections; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. Section 4(b)(2) of the Act states that the Secretary must make the designation on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impacts of specifying any particular area as critical habitat.

Previous Federal Actions

Please refer to the proposed listing and critical habitat rule (87 FR 37378) for the Ocmulgee skullcap published on June 22, 2022, for a detailed description of previous Federal actions concerning this species.

Peer Review

A species status assessment (SSA) team prepared an SSA report for the Ocmulgee skullcap. The SSA team was composed of Service biologists, in consultation with other species experts. The SSA report represents a compilation of the best scientific and commercial data available concerning the status of the species, including the impacts of past, present, and future factors (both negative and beneficial) affecting the species.

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), and our August 22, 2016, memorandum updating and clarifying the role of peer review of listing actions under the Act, we solicited independent scientific review of the information contained in the Ocmulgee skullcap SSA report. As discussed in the June 22, 2022, proposed rule (87 FR 37378), we sent the SSA report to three independent peer reviewers and received one response. The peer review can be found at the docket on <https://www.regulations.gov>. In preparing the proposed rule, we incorporated the results of the review, as appropriate, into the SSA report, which was the foundation for the proposed rule and this final rule. A summary of the peer review comments and our responses can be found under Summary of Comments and Recommendations, below.

Summary of Changes From the Proposed Rule

This final rule incorporates changes from our June 22, 2022, proposed rule (87 FR 37378) based on the comments that we received and respond to in this document as discussed in the Summary of Comments and Recommendations. Based on the comments and new information received (as described below) and our further consideration of the threats to the species, we determined the current risk of extinction is higher (see Determination of Ocmulgee Skullcap's Status, below) than we characterized in the proposal to list the Ocmulgee skullcap as a threatened species (87 FR 37378; June 22, 2022). We reassessed our analysis and found that habitat conditions in some areas, along with the low resiliency condition of most of the known Ocmulgee skullcap populations, places the species at a currently high risk of extinction throughout its range. Thus, after evaluating the best available information and the Act's regulations and policies, we determined that the Ocmulgee skullcap meets the definition of an endangered species, and such status is more appropriate than that of a threatened species as originally proposed. Because we determined that the Ocmulgee skullcap meets the definition of an endangered species, a 4(d) rule is inapplicable; consequently, we have removed that portion of the proposed rule issued under the authority of section 4(d) of the Act from this final rule.

New information (*i.e.*, updated surveys and habitat condition in areas considered extirpated or containing no suitable habitat, including updates regarding the Savannah River Bluffs Natural Heritage Preserve and Horse Creek sites) was submitted to us during the proposed rule's comment period. This new information and the comments we received during the comment period prompted us to reevaluate the best available information around the inclusion of sites previously considered extirpated in the SSA report, which is reflected in a new version of the SSA report (version 1.3) (Service 2023, pp. 21–22; 20–28). Applying the methodology to designate critical habitat (see Criteria Used to Identify Critical Habitat, below) to the new information, we determined that it is appropriate to add an occupied subunit to the critical habitat designation. The results of this updated analysis have been incorporated into this final rule and revises Unit 1 to add a new Subunit 1d, based on the area that we found to meet the definition of critical habitat, as

described in this rule. The addition of Subunit 1d increases the total critical habitat designation by 84 ac (34 ha) from the proposed critical habitat designation. The full descriptions of the designated units and subunits follow in III. Critical Habitat, below.

We changed the name of critical habitat Unit 9 from Robins Air Force Base to Adjoins Robins Air Force Base, to clarify the unit does not extend onto Robins Air Force Base but is immediately adjacent to the installation. In addition, we erroneously stated that Unit 9 consisted of 455 ac (184 ha) and that it included 231 ac (93 ha) of privately owned land and 224 ac (91 ha) of Department of Defense owned lands, even though the Robins Air Force Base was exempted. We changed the unit description to accurately reflect the exemption of the Robins Air Force Base, leaving 231 ac (93 ha) of privately owned land in Unit 9.

In the Summary of Biological Status and Threats, we clarified the significance of silvicultural and agricultural land uses on Ocmulgee skullcap populations.

Further, we have made minor editorial or stylistic changes and corrections to the June 22, 2022, proposed rule (87 FR 37378) in this final rule.

Summary of Comments and Recommendations

In the proposed rule published on June 22, 2022 (87 FR 37378), we requested that all interested parties submit written comments on the proposal by August 22, 2022. We also contacted appropriate Federal and State agencies, scientific experts, organizations, and other interested parties and invited them to comment on the proposal. Newspaper notices inviting general public comment were published in the Aiken Standard, Augusta Chronicle, and Macon Telegraph newspapers on June 23, 2022. We did not receive any requests for a public hearing. All substantive information we received during comment periods has either been incorporated directly into this final determination or is addressed below.

Peer Reviewer Comments

As discussed in Peer Review above, we received comments from one peer reviewer on the draft SSA report. We reviewed the comments we received from the peer reviewer for substantive issues and new information regarding the contents of the SSA report. Peer reviewer comments are addressed in the following summary. As discussed above, because we conducted this peer

review prior to the publication of our proposed rule, we had already incorporated all applicable peer review comments into version 1.2 of the SSA report, which was the foundation for the proposed rule and this final rule.

The peer reviewer generally concurred with our methods and conclusions and provided support for thorough and descriptive narratives of assessed issues, additional information, clarifications, and suggestions to improve the final SSA report (version 1.2, Service 2020, entire). No substantive changes to our analysis and conclusions within the SSA report were deemed necessary, and the peer reviewer comments are addressed in versions 1.2 (Service 2020, entire) of the SSA report, which is available for public review at <https://www.regulations.gov> under Docket No. FWS-R4-ES-2021-0059.

(1) *Comment:* The peer reviewer suggested that the threat of land conversion to industrial silviculture or agriculture should be included in the future condition scenarios.

Our response: Our SSA report identifies urbanization and deer herbivory as the primary threats to the species. Although industrial silviculture or agriculture land uses may occur near the species' occurrences, the species typically occurs on steep slopes and bluffs that are less suitable for conversion to silviculture and agriculture. Thus, silviculture and agriculture activities that do not implement State-approved best management practices (BMPs) to buffer slopes (*i.e.*, Ocmulgee skullcap habitat) from erosion may impact populations. At least one occurrence, Boggy Gut Creek, has been affected by land use change associated with silviculture. The Boggy Gut Creek occurrence was last observed in 1999, but the entire site was clearcut in 2005, planted in loblolly pine (*Pinus taeda*), and subsequently cut in 2014 and 2017. In the most recent rangewide survey, Ocmulgee skullcap was not observed on the site and is categorized as "possibly extirpated" (Bradley 2019, p. 30).

At this time, the best available information is not sufficiently detailed to determine the level of BMP implementation in sites with Ocmulgee skullcap occurrences. However, implementation of State-approved BMPs for forestry activities are reportedly high for streamside management zones (SMZs) across Georgia and South Carolina, 91 and 99 percent, respectively (South Carolina Forestry Commission 2020, p. 6; Georgia Forestry Commission 2021, p. 3). Further, given the steep slopes associated with most

Ocmulgee skullcap occurrences, if BMP implementation is high in these areas, forestry activities are less likely to impact the species. Finally, in our future scenarios analysis in the SSA report, we describe how populations that occur on protected lands would not only be protected from urbanization but would also be protected from direct impacts from silviculture and agriculture (Service 2023, pp. 38–41).

Public Comments

(2) *Comment:* Several commenters stated their view that the Ocmulgee skullcap warrants listing as an endangered species rather than a threatened species. In support of this assertion, these commenters point to: (a) the current low or very low resiliency exhibited by 16 of 19 delineated populations, (b) 11 of 19 populations occurring on lands not categorized as protected lands, and (c) the effects of climate change, in addition to the effects of other threats, on the species.

Our response: We further considered our analysis and the impacts of individual and cumulative threats to the current condition of the Ocmulgee skullcap. After further consideration of current threats to the species, the low resiliency condition of most of the known Ocmulgee skullcap populations, and new information on habitat condition in some areas, we determined the current risk of extinction for the Ocmulgee skullcap is higher (see Determination of Ocmulgee Skullcap's Status, below), than we characterized in the proposal to list the species as a threatened species. Therefore, we have determined the Ocmulgee skullcap is currently at risk of extinction as a result of the threats of habitat degradation and loss from development, competition and encroachment from nonnative and invasive (plant) species, and herbivory by white-tailed deer.

However, the best available information does not indicate that the effects of climate change have negatively impacted or are currently negatively impacting the Ocmulgee skullcap's viability. In the future, projected changes due to climate change, including the frequency and severity of drought and changes in rainfall patterns, may negatively impact the species in the future as the effects of climate change increase or may exacerbate the effects of other threats.

(3) *Comment:* One commenter suggested our determination that the threats are not concentrated in any portion of the Ocmulgee skullcap's range at a biologically meaningful scale

is not appropriate. The commenter recommended we revise our significant portion of the range analysis to evaluate the 16 of 19 populations that the commenter notes are impacted by small population size and isolation, as well as the threats to 11 populations that do not occur on protected lands.

Our response: Under the Act and our implementing regulations, a species may warrant listing if it is in danger of extinction or likely to become so in the foreseeable future throughout all or a significant portion of its range. As stated above under *Our Response to (2) Comment*, we have determined that the Ocmulgee skullcap meets the definition of an endangered species (see Determination of Ocmulgee Skullcap's Status, below), and we accordingly did not undertake or revise an analysis of any significant portions of its range.

(4) *Comment:* One commenter recommended we include areas surrounding existing Ocmulgee skullcap populations in the critical habitat designation.

Our response: For Ocmulgee skullcap populations to be sufficiently resilient, life-history requirements must be met, including areas of suitable habitat large enough to support pollinators needed for Ocmulgee skullcap reproduction. These areas of suitable habitat include habitat that acts to prevent or delay encroachment by nonnative, invasive species. To address this life-history requirement, we:

(a) Address the species' requirement of intact hardwood forest to provide the appropriate canopy conditions in large enough areas to prevent or delay encroachment of nonnative, invasive species. We recognize the life-history requirement for habitat conditions to reduce encroachment and competition, and we include that habitat as a physical or biological feature essential to the conservation of the species (see *Summary of Essential Physical or Biological Features*, below) to impede the invasion of competitors.

(b) Address the need for critical habitat areas to include habitat surrounding Ocmulgee skullcap occurrences that support the life-history requirements for pollinators. We delineated populations of Ocmulgee skullcap using a 2-kilometer (km) (1.24-mile (mi)) radius circle around species' occurrences, with overlapping areas determined to be within the same population based on the need for sufficient space and resources for required pollinators (NatureServe 2020, entire; Service 2023, p. 21). The SSA report contains the best available

information used to identify critical habitat for the Ocmulgee skullcap, which includes existing monitoring data, population status surveys, and maps using the best available Geographic Information Systems (GIS) layers (Service 2023, pp. 21, 37–38, appendix A).

(5) *Comment:* A commenter requested that we include areas with historical and current Ocmulgee skullcap occurrences, including the Horse Creek occurrence and 15 other sites (as described in Morris 1999), in the final critical habitat designation.

Our response: In our delineation of critical habitat for the Ocmulgee skullcap, we relied on the best available scientific and commercial information, including Morris (1999). We also incorporated occurrence data (1961 to present) obtained from peer-reviewed articles, unpublished survey reports, and survey records contained in agency and partner databases (*i.e.*, Georgia and South Carolina Natural Heritage databases), including the most recent rangewide species survey (Bradley 2019, entire; Service 2022, entire).

Of the 16 sites described by the commenter, 13 are included in the final critical habitat designation (see table 1, below). As noted below in table 1, two occurrences described by the commenter were misidentified as Ocmulgee skullcap until 2018, when the sites were resurveyed and the occurrences correctly identified as the congeneric Mellichamp's skullcap (*Scutellaria mellichampii*) (Bradley 2019, pp. 42–45; Service 2023, pp. 6–7; 87 FR 37378, June 22, 2022, p. 37380). In table 1, below, we list the 16 sites recommended for inclusion by the commenter, the county and State where the site is located, the corresponding site name in Bradley (2019), and the proposed and final critical habitat unit where the site occurs, or the correct identification of the species.

Ocmulgee skullcap was last observed in 1961 on the remaining site, Horse Creek. In a recent survey, some Ocmulgee skullcap habitat characteristics were documented but no Ocmulgee skullcap were found in the area of the 1961 Horse Creek occurrence (Service 2022, entire). Given that Ocmulgee skullcap has not been observed in the Horse Creek area for more than 60 years and there is limited suitable habitat, it is unlikely this area would support the conservation of the species. Therefore, we did not include the Horse Creek occurrence in our delineation of critical habitat.

TABLE 1—SITES RECOMMENDED FOR INCLUSION IN CRITICAL HABITAT DESIGNATION BY THE COMMENTER

Site	County, State	Recent survey description	Proposed critical habitat unit	Final critical habitat unit
Augusta Lock and Dam	Columbia County, Georgia	Bradley 2019, pp. 25–27; Site 4.	Unit 1: Columbia/Richmond.	Unit 1: Columbia/Richmond.
Augusta Canal	Richmond County, Georgia	Bradley 2019, pp. 25–27; Site 4.	Unit 2: Barney Bluff	Unit 2: Barney Bluff.
Barney Bluff	Richmond County, Georgia	Bradley 2019, p. 29; Site 6	Unit 2: Barney Bluff	Unit 2: Barney Bluff.
McBean Creek-Beazley Property.	Burke County, Georgia	Bradley 2019, pp. 29–30; Site 7.	Unit 3: Burke North	Unit 3: Burke North.
McBean Creek—Miller Property.	Burke County, Georgia	Bradley 2019, pp. 29–30; Site 7.	Unit 3: Burke North	Unit 3: Burke North.
Boggy Gut Creek	Burke County, Georgia	Bradley 2019, pp. 30–31; Site 8.	Unit 3: Burke North	Unit 3: Burke North.
Shell Bluff North	Burke County, Georgia	Bradley 2019, pp. 31–32; Site 9.	Unit 3: Burke North	Unit 3: Burke North.
Shell Bluff South	Burke County, Georgia	Bradley 2019, pp. 31–32; Site 9.	Unit 3: Burke North	Unit 3: Burke North.
Blue Buff	Burke County, Georgia	Bradley 2019, pp. 33–35; Site 11.	Unit 4: Burke South	Unit 4: Burke South.
Hancock Landing North	Burke County, Georgia	Bradley 2019, pp. 32–33; Site 10.	Unit 4: Burke South	Unit 4: Burke South.
Griffin Landing North	Burke County, Georgia	Bradley 2019, pp. 35–36; Site 12.	Unit 4: Burke South	Unit 4: Burke South.
Griffin Landing South	Burke County, Georgia	Bradley 2019, pp. 35–36; Site 12.	Unit 4: Burke South	Unit 4: Burke South.
Prescott Lakes	Screven County, Georgia	Bradley 2019, pp. 38–39; Site 14.	Unit 5: Prescott Lakes	Unit 5: Prescott Lakes.
Blue Springs Landing	Screven County, Georgia	<i>Scutellaria mellichampii</i> , see Bradley 2019, pp. 42–43.	Not included	Not included.
Porters Landing	Effingham County, Georgia	<i>Scutellaria mellichampii</i> , see Bradley 2019, pp. 43–45.	Not included	Not included.
Horse Creek	Aiken County, South Carolina.	Service 2022, entire	Not included	Not included.

I. Final Listing Determination

Background

A thorough review of the taxonomy, life history, and ecology of the Ocmulgee skullcap is presented in the SSA report (version 1.3; Service 2023, pp. 4–11). Ocmulgee skullcap is a perennial herb in the Lamiaceae (mint) family with 4-sided stems that grows up to 16 to 32 inches (in) (40 to 80 centimeters (cm)) tall. It bears blue-violet colored and faintly fragrant flowers in July. Although taxonomy for Ocmulgee skullcap has been consistent through time, identification of the species is difficult; as a result, some occurrences of the congeneric *S. mellichampii* were misidentified as Ocmulgee skullcap prior to 2018.

Ocmulgee skullcap is restricted to the moist, calcareous (calcium rich) north-facing slopes along the Ocmulgee and Savannah River watersheds in Georgia and South Carolina. In these isolated bluff and slope areas, the forest structure is composed of a mixed-hardwood species of trees with a partially open canopy to allow the plants to reach maturity and produce viable seed. The mature, mixed-level canopy provides the mottled shade

required by Ocmulgee skullcap. The river bluffs and steep slopes experience localized disturbances including water runoff that limit the accumulation of leaf litter and limit competition from other plants in the shaded, steep forest environment.

The lifespan of Ocmulgee skullcap is estimated to be 5 to 8 years, with 3 to 6 years of potential viable seed production. The species matures to produce seed in either the first or second year following spring germination. Ocmulgee skullcap reproduces sexually and is pollinated by over 35 different pollinator species, including bees, moths, butterflies, and sometimes flies and wasps (Cruzan 2001, pp. 1577–1578; Adams et al. 2010, p. 53.).

Ocmulgee skullcap seeds release from the plant in response to disturbance of the stem by wind, rain, animal activity, or other means. The seeds require this dislodging and bare soil that is rich in calcium, and under partial shade, in order to germinate. Juvenile Ocmulgee skullcap individuals require sufficient amounts of sunlight, moisture, and calcium, as well as the presence of pollinators and stable soil conditions, to reach maturity and produce seed. In

addition, juvenile plants are sensitive to competition for needed resources. Mature Ocmulgee skullcap plants require the same resources as juvenile plants, including sufficient time without herbivory or other removal of the seed calyx in order to disperse seed.

Regulatory and Analytical Framework

Regulatory Framework

Section 4 of the Act (16 U.S.C. 1533) and the implementing regulations in title 50 of the Code of Federal Regulations set forth the procedures for determining whether a species is an endangered species or a threatened species, issuing protective regulations for threatened species, and designating critical habitat for endangered and threatened species. On April 5, 2024, jointly with the National Marine Fisheries Service, the Service issued a final rule that revised the regulations in 50 CFR 424 regarding how we add, remove, and reclassify endangered and threatened species and what criteria we apply when designating listed species' critical habitat (89 FR 24300). On the same day, the Service published a final rule revising our protections for endangered species and threatened

species at 50 CFR 17 (89 FR 23919). These final rules are now in effect and are incorporated into the current regulations. Our analysis for this final decision applied our current regulations. Given that we proposed listing and critical habitat for this species under our prior regulations (revised in 2019), we have also undertaken an analysis of whether our decision would be different if we had continued to apply the 2019 regulations; we concluded that the decision would be the same. The analyses under both the regulations currently in effect and the 2019 regulations are available on <https://www.regulations.gov>.

The Act defines an “endangered species” as a species that is in danger of extinction throughout all or a significant portion of its range, and a “threatened species” as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether any species is an endangered species or a threatened species because of any of the following factors:

- (A) The present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) Overutilization for commercial, recreational, scientific, or educational purposes;
- (C) Disease or predation;
- (D) The inadequacy of existing regulatory mechanisms; or
- (E) Other natural or manmade factors affecting its continued existence.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species’ continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals of the species, as well as other actions or conditions that may ameliorate any negative effects or may have positive effects.

We use the term “threat” to refer in general to actions or conditions that are known to or are reasonably likely to negatively affect individuals of a species. The term “threat” includes actions or conditions that have a direct impact on individuals (direct impacts), as well as those that affect individuals through alteration of their habitat or required resources (stressors). The term “threat” may encompass—either together or separately—the source of the action or condition or the action or condition itself.

However, the mere identification of any threat(s) does not necessarily mean that the species meets the statutory definition of an “endangered species” or

a “threatened species.” In determining whether a species meets either definition, we must evaluate all identified threats by considering the species’ expected response and the effects of the threats—in light of those actions and conditions that will ameliorate the threats—on an individual, population, and species level. We evaluate each threat and its expected effects on the species, then analyze the cumulative effect of all of the threats on the species as a whole. We also consider the cumulative effect of the threats in light of those actions and conditions that will have positive effects on the species, such as any existing regulatory mechanisms or conservation efforts. The Secretary determines whether the species meets the Act’s definition of an “endangered species” or a “threatened species” only after conducting this cumulative analysis and describing the expected effect on the species.

The Act does not define the term “foreseeable future,” which appears in the statutory definition of “threatened species.” Our implementing regulations at 50 CFR 424.11(d) set forth a framework for evaluating the foreseeable future on a case-by-case basis which is further described in the 2009 Memorandum Opinion on the foreseeable future from the Department of the Interior, Office of the Solicitor (M–37021, January 16, 2009; “M–Opinion,” available online at <https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/M-37021.pdf>). The foreseeable future extends only so far into the future as the U.S. Fish and Wildlife Service and National Marine Fisheries Service (hereafter, the Services) can reasonably make predictions about the threats to the species and the species’ responses to those threats. We need not identify the foreseeable future in terms of a specific period of time. We will describe the foreseeable future on a case-by-case basis, using the best available data and taking into account considerations such as the species’ life-history characteristics, threat-projection timeframes, and environmental variability. In other words, the foreseeable future is the period of time over which we can make reasonably reliable predictions. “Reliable” does not mean “certain”; it means sufficient to provide a reasonable degree of confidence in the prediction, in light of the conservation purposes of the Act.

Analytical Framework

The SSA report documents the results of our comprehensive biological review of the best scientific and commercial

data regarding the status of the species, including an assessment of the potential threats to the species. The SSA report does not represent our decision on whether the species should be listed as an endangered or threatened species under the Act. However, it does provide the scientific basis that informs our regulatory decisions, which involve the further application of standards within the Act and its implementing regulations and policies.

To assess Ocmulgee skullcap’s viability, we used the three conservation biology principles of resiliency, redundancy, and representation (Shaffer and Stein 2000, pp. 306–310). Briefly, resiliency is the ability of the species to withstand environmental and demographic stochasticity (for example, wet or dry, warm or cold years); redundancy is the ability of the species to withstand catastrophic events (for example, droughts, large pollution events), and representation is the ability of the species to adapt to both near-term and long-term changes in its physical and biological environment (for example, climate conditions, pathogens). In general, species viability will increase with increases in resiliency, redundancy, and representation (Smith et al. 2018, p. 306). Using these principles, we identified the species’ ecological requirements for survival and reproduction at the individual, population, and species levels, and described the beneficial and risk factors influencing the species’ viability.

The SSA process can be categorized into three sequential stages. During the first stage, we evaluated the individual species’ life-history needs. The next stage involved an assessment of the historical and current condition of the species’ demographics and habitat characteristics, including an explanation of how the species arrived at its current condition. The final stage of the SSA involved making predictions about the species’ responses to positive and negative environmental and anthropogenic influences. Throughout all of these stages, we used the best available information to characterize viability as the ability of a species to sustain populations in the wild over time, which we then used to inform our regulatory decision.

The following is a summary of the key results and conclusions from the SSA report; the full SSA report can be found at Docket No. FWS–R4–ES–2021–0059 on <https://www.regulations.gov> and at <https://www.fws.gov/office/georgia-ecological-services/library>.

Summary of Biological Status and Threats

In this discussion, we review the biological condition of the species and its resources, and the threats that influence the species' current and future condition, in order to assess the species' overall viability and the risks to that viability. For Ocmulgee skullcap populations to be sufficiently resilient, the needs of individuals (calcium-rich soil, shade or partial shade from canopy cover, adequate precipitation, reduced competition, pollinators) must be met at a large scale. Areas of suitable habitat must be large enough to support pollinators needed for Ocmulgee skullcap reproduction and habitat that acts to prevent or delay encroachment by nonnative, invasive species. At the species level, the Ocmulgee skullcap needs a sufficient number and distribution of healthy populations to withstand environmental stochasticity (resiliency) and catastrophes (redundancy) and to adapt to biological and physical changes in its environment (representation).

Influences on Ocmulgee Skullcap's Viability

In the SSA analysis, we reviewed and summarized the factors that may influence the viability of Ocmulgee skullcap. Threats to Ocmulgee skullcap's viability include the following factors: (1) Habitat destruction and modification; (2) competition from other species (*e.g.*, *Elaeagnus pungens* (thorny olive), *E. umbellata* (autumn olive), *Ligustrum sinense* (Chinese privet), *Lonicera japonica* (Japanese honeysuckle), and *Pueraria montana* var. *lobata* (kudzu)); (3) collection and harvest; (4) herbivory; (5) climate change; and (6) pollinator visitation and reproduction (Service 2023, pp. 12–17). The primary factors driving the species' current and future conditions are habitat loss and fragmentation due to development and urbanization (Factor A); competition and encroachment from nonnative, invasive species (Factors A and E); and herbivory from white-tailed deer (Factor C). Although medicinal properties of other *Scutellaria* species have been investigated (Service 2023, p. 13), there is no evidence that overutilization (Factor B) has impacted Ocmulgee skullcap. In addition, conditions across the species' range are likely to be hotter and subject to variable precipitation including extreme weather events in the future. Although we do not have specific information regarding the species' likely response to these effects of climate change, we expect that the effects of climate change

will negatively affect Ocmulgee skullcap by reducing available resources such as water and limited competition. We have determined that climate change (Factor E) is not a primary risk factor for the species at this time; however, the effects of climate change, including drought and changes in rainfall patterns, may affect the species in the future as changes become more extreme. We also reviewed the conservation efforts being undertaken for the habitat where Ocmulgee skullcap occurs. A brief summary of relevant stressors is presented below; for a more detailed discussion of our evaluation of the biological status of Ocmulgee skullcap and the influences that may affect its continued existence, refer to chapter 3 of the SSA report (Service 2023, pp. 12–20).

Urbanization and Land Conversion

Population growth and associated urbanization and development has increased in the Southeast at a rate 40 percent greater than the rest of the United States over the last 60 years. Much of this growth is in sprawling low-density, suburban areas encompassing large areas of single-family housing and infrastructure (Terando et al. 2014, p. e102261). Land conversion for residential, commercial, and infrastructure development is associated with an increase in population. Two Ocmulgee skullcap populations occur near the city of Macon, Georgia, and another population occurs near the city of Augusta, Georgia. Urbanization and land conversion can directly and indirectly impact Ocmulgee skullcap (Morris et al. 2000, pp. 31–32). Urbanization or land conversion can result in the direct loss of individuals or a population. For example, two occurrences have experienced altered conditions, such as erosion on the bluff due to nearby residential development and a parking lot expansion (Bradley 2019, pp. 27–29).

Further, land use patterns and urbanization near Ocmulgee skullcap occurrences can impact population resiliency. Urbanization modifies surrounding and nearby habitat conditions required by Ocmulgee skullcap by fostering the introduction of nonnative, invasive species and increasing the amount and velocity of water runoff during precipitation events due to an increase of impervious surfaces. As further discussed below, nonnative, invasive species compete with Ocmulgee skullcap for required resources. Increased runoff reduces the availability of nutrients and soil conditions required for successful reproduction, affecting Ocmulgee

skullcap recruitment and resiliency. Because Ocmulgee skullcap grows along steep slopes, when the tops of bluffs are logged or cleared for other land uses without implementation of BMPs runoff and erosion are increased.

Silvicultural Activities

Silviculture (timber harvests) has been documented on bluffs above or adjacent to four extant Ocmulgee skullcap sites: Augusta Canal, Boggy Gut Creek, Hancock Landing North, and Plant Vogtle (Morris 1999, pp. 5, 12, 29, 34, 55–56, 65 and Bradley 2019, p. 29). Because silvicultural activities are primarily occurring upslope or adjacent to sites, erosion into the Ocmulgee skullcap sites has the potential for negative, indirect effects. Two sites (Barney Bluff and Plant Vogtle sites) historically showed signs of erosion from upslope timber harvests (Morris 1999 pp. 5, 65). One site (Boggy Gut Creek) has been directly impacted by clear-cut timber harvests and the status of this population is considered possibly extirpated. However, selective timber harvests (hardwood thinning) within Ocmulgee sites may be beneficial to populations when actions create the mottled shade conditions the species needs (Morris 1999 p. 5, Bradley 2019 pp. 29, 78).

In general, silviculture or timber harvests are not a key driver of species status across the range but may be a threat to individuals or populations when BMPs intended to buffer slopes (*i.e.*, Ocmulgee skullcap habitat) from erosion are not implemented or are implemented improperly. Although Georgia considers the application of BMPs to be quasi-regulatory and South Carolina considers the application of BMPs to be nonregulatory, forest landowners certified under forest certification standards are required to implement appropriate BMPs to maintain certification and BMPs are expected to be protective of habitat conditions in areas where implemented correctly (Englund and Berndes 2015, pp. 34–37; Demarais et al. 2017, p. 6; National Council for Air and Stream Improvement (NCASI) 2022, pp. 2–9). Across all ownership types (non-industrial private forest, private, and public) in the Upper Coastal Plain region of Georgia where the Ocmulgee skullcap occurs, implementation of BMPs associated with streamside management zone (SMZ), stream assessment, timber harvest and mechanical site prep outside SMZs range from 89.5 to 100 percent (GFC 2021, entire). At this time, the best available information is not sufficiently detailed to determine the level of BMP

implementation in sites with Ocmulgee skullcap occurrences. However, given the steep slopes associated with most Ocmulgee skullcap occurrences, and if BMP implementation is high in these areas, silvicultural activities are less likely to impact the species.

Herbivory

Over the last century, white-tailed deer abundance has increased substantially (Horsely et al. 2003, p. 98). White-tailed deer presence results in herbivory (including preferential browsing of native plants) and trampling, causing impacts to plant development and species density, diversity, and composition (Miller et al. 1992, entire; Horsely et al. 2003, p. 113; Averill et al. 2017, p. 2). For many *Scutellaria* species, including Ocmulgee skullcap, immature stems are often browsed by deer; this herbivory can prevent reproduction of that stem for the year if the plant does not flower (Bradley 2019, p. 77). In addition, individual plants may be pulled from the ground during browsing. In contrast, deer herbivory was found to have a potential positive influence on the large-flowered skullcap (*Scutellaria montana*), where deer browsed on all vegetation and large-flowered skullcap individuals benefited from the reduction in competing vegetation (Benson and Boyd 2014, p. 89). However, the direct impacts from white-tailed deer are widely noted across the range of the Ocmulgee skullcap, with herbivory documented in over 75 percent of occurrences and herbivory by deer noted as a limiting factor for Ocmulgee skullcap populations (Cammack and Genachte 1999, entire; Morris 1999, entire; Snow 1999, entire; Morris et al. 2000, entire; Snow 2001, entire; Bradley 2019, entire). In 2018, deer herbivory was observed in every Ocmulgee skullcap population surveyed (n = 6) by Bradley (2019, entire), with severe impacts on reproduction documented at some sites. Therefore, we conclude that deer herbivory continues to be an ongoing threat to Ocmulgee skullcap.

In addition to direct impacts, deer browse affects the vegetative community through facilitation of browse-resilient species and potential increases in species that compete with Ocmulgee skullcap for resources (Horsely et al. 2003, pp. 114–115). Encroaching development has decreased the amount and quality of forage and habitat for white-tailed deer, which can increase the probability of herbivory within Ocmulgee skullcap's suitable habitat. Further, as development increases, restrictions on deer harvest in proximity

to residential areas may lead to an increase in deer populations and associated herbivory of Ocmulgee skullcap.

The Ocmulgee skullcap occurrence at the Savannah River Bluffs Heritage Preserve in Aiken County, South Carolina, has been impacted by severe deer herbivory (Bradley 2019, p. 24). The preserve is the site of intense public recreation; therefore, deer harvest is not permitted within the preserve for public safety reasons. In addition, residents in housing developments adjacent to the preserve feed the deer and may maintain large piles of “deer corn” (Bradley 2019, p. 24). This abundance of food and lack of hunting pressure has resulted in an unnaturally dense deer population surrounding this occurrence. Although suitable habitat remains at this site; it has previously been described as depauperate, with an almost barren herbaceous layer.

Nonnative, Invasive Species

Invasive plant species limit the available resources (nutrients, space, sunlight, pollinators) necessary for Ocmulgee skullcap germination, growth, and reproduction. The introduction and spread of nonnative invasive species often occur with development (McKinney 2002, p. 888). However, nonnative invasive species can also be introduced from other types of adjacent land uses, such as agriculture and silviculture. This introduction occurs through the creation of transitional areas between natural and anthropogenic affected habitat types and associated edge effects (Brown and Boutin 2009, p. 1654; Honu et al. 2009, p. 182). Nonnative invasive plant species have been documented at 8 of the 32 Ocmulgee skullcap occurrences (Bradley 2019, entire; Morris 1999, entire).

Nonnative, invasive species known to affect multiple Ocmulgee skullcap populations include: *Elaeagnus pungens* (thorny olive), *E. umbellata* (autumn olive), *Ligustrum sinense* (Chinese privet), *Lonicera japonica* (Japanese honeysuckle), and *Microstegium vimineum* (Japanese stiltgrass) (Morris et al. 2000, p. 31; Bradley 2019, p. 77). On some sites, other nonnative, invasive species, including *Pueraria montana* var. *lobata* (kudzu), *Vinca minor* (periwinkle), *Citrus trifoliata* (hardy orange), and *Pyrus communis* (common pear), pose localized threats to occurrences or populations (Bradley 2019, p. 77). These nonnative, invasive species, when present, compete with Ocmulgee skullcap plants for required resources, including sunlight, water, and space.

Intact forested habitat with a mature canopy and discrete disturbances provides important habitat for Ocmulgee skullcap populations which limits encroachment of competing nonnative, invasive plants. Competition with other native species and nonnative, invasive species can restrict seedlings, vegetative plants, and flowering plants from obtaining the three key resources (water, sunlight, and soil) needed to grow and reproduce; therefore, healthy Ocmulgee skullcap individuals and populations need reduced competition.

Climate Change

In the southeastern United States, several climate change models have projected more frequent drought, more extreme air temperatures, increased heavy precipitation events (e.g., flooding), and more intense storms (e.g., frequency of major hurricanes increases) (Burkett and Kusler 2000, p. 314; Klos et al. 2009, p. 699; IPCC 2013, pp. 3–29). When taking into account future climate projections for temperature and precipitation where Ocmulgee skullcap occurs, warming is expected to be greatest in the summer, which is predicted to increase drought frequency. Additionally, annual mean precipitation is expected to increase, but only slightly, leading to a slight increase in flooding events (Alder and Hostetler 2013, unpaginated; IPCC 2013, entire; USGS 2020, unpaginated).

To understand how climate change is projected to change where Ocmulgee skullcap occurs, we used the National Climate Change Viewer (NCCV), a climate-visualization tool developed by the U.S. Geological Survey (USGS), to generate future climate projections across the range of the species. The NCCV is a web-based tool for visualizing projected changes in climate and water balance at watershed, State, and county scales (USGS 2020, unpaginated). To evaluate the effects of climate change in the future, we used projections from representative concentration pathway (RCP) 4.5 and RCP8.5 to characterize projected future changes in climate and water resources, averaged for the State of Georgia and encompassing the majority of the range of the Ocmulgee skullcap. The projections estimate change in mean annual values for maximum air temperature, minimum air temperature, monthly precipitation, and monthly runoff, among other factors, from historical (1950–2005) to future (2040–2060) time series.

Within the range of the Ocmulgee skullcap, the NCCV projects that under the RCP4.5 scenario, maximum air temperature will increase by 3.4 degrees

Fahrenheit (°F) (1.9 degrees Celsius (°C)), minimum air temperature will increase by 3.2 °F (1.8 °C), precipitation will increase by 0.2 in (5.36 millimeters (mm)) per month, and runoff will remain the same in the 2040–2060 time period (USGS 2020, unpaginated). Under the more extreme RCP8.5 emissions scenario, the NCCV projects that maximum air temperature will increase by 5.0 °F (2.8 °C), minimum air temperature will increase by 4.9 °F (2.7 °C), precipitation will increase by 0.2 in (5.36 mm) per month, and runoff will remain the same (USGS 2020, unpaginated). These estimates indicate that, despite projected minimal increases in annual precipitation, anticipated increases in maximum and minimum air temperatures will likely offset those gains. Based on these projections, Ocmulgee skullcap will, on average, be exposed to increased air temperatures across its range, despite limited increases in precipitation in scenarios based on RCP4.5 and RCP8.5. The increase of maximum and minimum temperatures and variability in precipitation are expected to result in an increased probability of longer and more severe droughts in the future.

Within the mixed hardwood forests where Ocmulgee skullcap occurs, drought conditions due to higher temperatures and variable precipitation could reduce the available resources required for plant survival, including water and reduced competition. Extreme rainfall events may increase negative effects associated with erosion on the steep slopes where the species occurs and with increased mobilization of pollutants and sedimentation carried in runoff from urbanized areas near species sites. Increased competition from other species that are more tolerant of drought and extreme rainfall events may also limit the ability of Ocmulgee skullcap to produce viable seed and sustain populations in the wild over time. The species occupies hardwood forests with mature overstory and midstory canopy cover, and these more mesic, shaded habitats may provide a buffer to changes induced by climate change (such as increased temperatures). If precipitation increases slightly, as predicted in some models, and extreme rainfall events are infrequent, the effects to Ocmulgee skullcap could be beneficial, although this scenario is quite uncertain and climate change is not expected to benefit the species (Alder and Hostetler 2013, unpaginated).

The potential risks associated with long-term climate change as described above will affect ecosystem processes in Ocmulgee skullcap habitat, but there is

uncertainty in how the ecosystems and species will respond. Overall, we do not expect the effects of climate change to be beneficial to the species, but the extent of the negative effects cannot be estimated with the available information on the species' responses to increased temperature and variability in precipitation. Likewise, the threshold or level at which changes in temperature (prolonged hot weather) and rainfall (drought or extreme rainfall events) are expected to affect Ocmulgee skullcap is not available for the species or its congeners. We have determined that climate change is not a primary risk factor for the species at this time; however, the effects of climate change, including drought and changes in rainfall patterns, may affect the species in the future as changes become more extreme.

Small Population Size

Some plant species, such as Ocmulgee skullcap, are naturally distributed as small and disjunct populations in heterogeneous landscapes because of their requirements for specific habitat conditions. The specific habitat requirement of Ocmulgee skullcap (*i.e.*, calcium-rich soil on forested bluffs) is disjunct, and, therefore, populations are generally very small, with 16 of 19 populations having fewer than 60 individuals and 9 populations having 10 or fewer individuals. Only three populations have more than 100 individuals (Service 2023, appendix A). It is unknown whether Ocmulgee skullcap was historically more abundant but given the magnitude and scope of past habitat loss and modification, it is likely the species' numbers are lower than in the past. In addition, small and isolated populations offer limited nectar and pollen resources available to pollinators, making visitation to these sites more energetically expensive. Small, isolated populations of rare plant species often receive less pollinator visitation in comparison with larger or more widespread plant species (Ellstrand and Elam 1993, p. 227).

Small populations are vulnerable to habitat impacts and face a higher risk of extinction (Matthies et al. 2004, p. 481). Small population size may increase the extinction risk of individual populations due to stochasticity of demographic (fluctuations in population size) and genetic (fluctuations in gene expression) characteristics, environmental stochasticity (spatiotemporal fluctuations in environmental conditions), or impacts from catastrophic events (*e.g.*, hurricanes) (Lande 1993, entire). Within each population, genetic, phenotypic,

and demographic structure must have adequate representation for populations to respond to environmental change over time.

Genetic stochasticity due to small population size can contribute to population extirpation, especially when population fragmentation disrupts gene flow. Two genetic consequences of small population size are increased genetic drift and inbreeding. Genetic drift is the random change in allele frequency that occurs because gametes transmitted from one generation to the next carry only a sample of the alleles present in the parental generation. In large populations, changes due to chance in allele frequency from drift are generally small. In contrast, in small populations (*e.g.*, fewer than 100 individuals), allele frequencies may undergo large and unpredictable fluctuations due to drift that can erode genetic variation (diversity) over time and may decrease the potential for a species to persist in the face of environmental change (Ellstrand and Elam 1993, pp. 219, 224). Inbreeding, which can be caused by genetic drift, is the mating of related individuals. Inbreeding can lead to increased homozygosity in a population above levels expected under random mating (Barrett and Kohn 1991, p. 19). Small population size alone may not necessarily be a threat to the long-term viability of a given population, as small populations of some isolated endemic plant species are known to maintain stable populations for at least 40 years (Abeli 2010, p. 6). However, the synergistic effect of habitat fragmentation, reduced population size, and inbreeding may lead to inbreeding depression and reduced fitness.

Conservation Efforts and Regulatory Mechanisms

Ocmulgee skullcap is listed as threatened in Georgia (Patrick et al. 1995, pp. 173–174) and is not listed or otherwise protected in South Carolina. In Georgia, the Georgia Wildflower Preservation Act of 1973 (Georgia Code, title 12, chapter 6, article 3, sections 12–6–170 to 12–6–176) protects Ocmulgee skullcap growing on State lands from cutting, digging, pulling, or removing unless the Georgia Department of Natural Resources has authorized such acts. The six populations occurring on State-owned or State-managed wildlife management areas in Georgia receive the benefits of protection under the Georgia Wildflower Preservation Act of 1973.

Throughout the range of the species, portions of eight populations occur on lands owned and managed by State or

Federal entities that prioritize conservation as a management objective. The Robins Air Force Base Integrated Natural Resources Management Plan (INRMP) specifically considers and manages for one Ocmulgee skullcap population (three occurrences) on the installation (for more information, see Exemptions, below). The State conservation lands owned or leased and managed by the Georgia Department of Natural Resources where six Ocmulgee skullcap populations occur include Yuchi Creek Wildlife Management Area (WMA), Ocmulgee WMA, and the Oaky Woods WMA. One Ocmulgee skullcap population occurs on the Savannah River Heritage Preserve owned and managed by the South Carolina Department of Natural Resources. It is expected that the eight Ocmulgee skullcap populations are positively affected by protection from development on these State-owned and State-managed lands. However, State-owned or managed land and the Georgia Wildflower Protection Act do not require or ensure species appropriate habitat management (*e.g.*, invasive species and deer management) that may be needed to conserve the species. The one population on Federal land (Robins Air Force Base) is protected and managed via an INRMP. However, the negative impacts associated with herbivory and the effects of climate change continue to impact Ocmulgee skullcap populations on all protected lands.

Synergistic and Cumulative Effects

We note that, by using the SSA framework to guide our analysis of the scientific information documented in

the SSA report, we have analyzed the cumulative effects of identified threats and conservation actions on the species. To assess the current and future condition of the species, we evaluate the effects of all the relevant factors that may be influencing the species, including threats and conservation efforts. Because the SSA framework considers not just the presence of the factors, but to what degree they collectively influence risk to the entire species, our assessment integrates the cumulative effects of the factors and replaces a standalone cumulative-effects analysis.

In addition to factors impacting Ocmulgee skullcap individually, it is likely that several of the threats summarized above are acting synergistically or cumulatively on the species. The combined impacts of multiple threats are likely more harmful than a single threat acting alone. Development and urbanization may remove or degrade habitat where Ocmulgee skullcap occurs and may also bring an increase in encroaching nonnative, invasive species and white-tailed deer due to hunting restrictions near inhabited areas. In addition, herbivory by white-tailed deer may change the community structure to favor plants more resistant to deer browse. The impacts of herbivory by white-tailed deer and competition from nonnative, invasive species were recently noted in several populations (Bradley 2019, entire).

Methods To Assess Current Condition

To evaluate the biological status of Ocmulgee skullcap both currently and into the future, we assessed a range of

conditions to consider the species' resiliency, redundancy, and representation. For the purposes of our analysis, representative units (RUs) were delineated to describe the breadth of known genetic, phenotypic, and ecological diversity within the species. We divided the Ocmulgee skullcap range into two noncontiguous RUs, the Ocmulgee and Savannah River watersheds. We used the 2-km separation distance rule in NatureServe's habitat-based plant element occurrence delineation guidance (NatureServe 2020, entire) to delineate populations. We delineated populations of the Ocmulgee skullcap using occurrence data obtained from peer-reviewed articles, unpublished survey reports, and survey records (1961 to present) contained in agency and partner databases (*i.e.*, Georgia and South Carolina Natural Heritage databases).

Occurrences are defined as an individual or group of individuals in close proximity in an area not widely separated from other individuals. Rangewide, each of the 32 occurrences was buffered by a 2-km (1.24-mi) radius circle and occurrences with overlapping buffers were considered within the same population, resulting in 19 Ocmulgee skullcap populations (13 in the Ocmulgee RU and 6 in Savannah RU) (see table 2, below). Historical occurrence data are limited, but we assumed that the current distribution of Ocmulgee skullcap populations represents at least most of the historical range of the species within the Ocmulgee and Savannah watersheds in Georgia and South Carolina.

TABLE 2—POPULATIONS USED TO ASSESS VIABILITY OF THE OCMULGEE SKULLCAP IN THE OCMULGEE AND SAVANNAH REPRESENTATIVE UNITS

Ocmulgee representative unit populations	Savannah representative unit populations
James Dykes Memorial Adjoins Robins Air Force Base Savage Branch Bolingbroke Rest Area Crooked Creek Jordan Creek Shellstone Creek Dry Creek Oaky Woods Wildlife Management Area North Oaky Woods Wildlife Management Area South River North Bluff South Shellstone Creek Tributary to Richland Creek	Burke South Burke North Columbia Richmond Barney Bluff Horse Creek Prescott Lakes

After the proposed rule published, we received new information about the Horse Creek population and now consider it a historical population (Service 2022, entire).

The Ocmulgee skullcap needs multiple, sufficiently resilient populations distributed across its range

to maintain viability. A sufficiently resilient population exhibits high or moderate resiliency and is characterized

by 60 or more individuals in stable or increasing numbers of widespread occurrences with no or few invasive

species and no or minor change in habitat condition. A number of factors influence whether Ocmulgee skullcap populations exhibit resiliency to stochastic events. These factors include: (1) Number of individuals in all occurrences within a population; (2) number of flowering individuals (reproductive adults) within a population; (3) number of occurrences (groups of individuals) within a population; (4) change in number of occurrences within a population over time; and (5) condition of habitat, which is directly related to growth, survival, and reproductive success (Service 2023, p. 24). To capture important aspects of the habitat condition, we used two factors, both of which characterize the quality and quantity of native herbaceous ground cover: (1) Presence of nonnative, invasive plant species (competition); and (2) presence of deer herbivory (browsing) (Service 2023, p. 24).

We assessed representation for the Ocmulgee skullcap based on the potential adaptive capacity of the species as expressed in the number of populations across the range of the species and within representative units. Finally, we assessed Ocmulgee skullcap's redundancy (the ability of a species to withstand catastrophic events) by evaluating the number and distribution of sufficiently resilient populations throughout the species' range.

Current Conditions of Ocmulgee Skullcap

As described above, we delineated the range of Ocmulgee skullcap into two representative units and 19 populations for our analyses. Having a greater number of self-sustaining populations

distributed across the known range of the species is associated with an overall higher viability of the species into the future. We determined four condition classes for Ocmulgee skullcap resiliency: very low, low, moderate, and high. A population exhibiting high resiliency is characterized by: 100 or more individuals, with multiple, widespread clusters of individuals; an increasing trend in the number of occurrences; few or no nonnative, invasive plant species; no evident deer browse impacts; and no substantial change in habitat condition. Moderate resiliency populations are characterized by: 60–99 individuals, with a few, somewhat widespread clusters of individuals; stable number of occurrences; few or no nonnative, invasive plant species; evident deer browse impacts; and only minor changes in habitat condition. A population in low resiliency is characterized by: 40–59 individuals, with two clusters of individuals; a decreasing trend in the number of occurrences; presence of nonnative, invasive plant species and deer browse impacts; and moderate change in habitat condition. A very low resiliency population is characterized by: fewer than 40 individuals in a single, isolated site; presence of nonnative, invasive plant species and deer browse; and substantial change in habitat condition. Resiliency categories are further described in the SSA report (Service 2023, p. 24, table 4–1).

Currently, 16 of 19 populations within the species' range exhibit low or very low resiliency (see table 3, below). One population (James Dykes Memorial) within the Ocmulgee RU exhibits moderate resiliency, and two

populations (Burke North and Burke South) within the Savannah RU exhibit moderate or high resiliency (see table 3, below). The majority of Ocmulgee skullcap populations have low or very low resiliency to stochastic events. One occurrence within an extant population in the Savannah RU has been extirpated because of land conversion to pine plantation; currently, there are no known extirpations at the population level. The Horse Creek population is considered historical because it has not been found in over twenty years; however, it has not been surveyed extensively enough since the 1960s to confirm there is no habitat and the plant no longer occurs there (Service 2022, entire).

The Ocmulgee skullcap is found in two non-contiguous RUs (watersheds); and currently occupies the known historical range of the species. One occurrence within a population has been extirpated, but the population is still extant. Thus, representation may be slightly reduced from the species' historical condition. Based on available information, we determined the Ocmulgee skullcap has adaptive capacity or ability to adapt to changing environmental conditions, given that 19 populations occur in two watersheds in two States and no populations have been lost from the known historical range. Sixteen of 19 known populations currently exhibit low to very low resiliency across the range, but these populations are distributed across two watersheds in two States across the historical range. Overall, the Ocmulgee skullcap's current condition is characterized by low or reduced resiliency, moderate representation, and multiple redundant populations.

TABLE 3—CURRENT RESILIENCY CATEGORY OF EACH OCMULGEE SKULLCAP POPULATION
[Service 2023]

Population name	Number of individuals	Overall resiliency category *
Ocmulgee Representative Unit (Ocmulgee River watershed)		
James Dykes Memorial	54	Moderate.
Adjoins Robins Air Force Base	3	Low.
Savage Branch	50	Low.
Bolingbroke Rest Area	8	Low.
Crooked Creek	31	Low.
Jordan Creek	50	Low.
Shellstone Creek	46	Low.
Dry Creek	10	Very low.
Oaky Woods WMA North	1	Very low.
Oaky Woods WMA South	1	Very low.
River North Bluff	1	Very low.
South Shellstone Creek	15	Very low.
Tributary to Richland Creek	6	Very low.

TABLE 3—CURRENT RESILIENCY CATEGORY OF EACH OCMULGEE SKULLCAP POPULATION—Continued
[Service 2023]

Population name	Number of individuals	Overall resiliency category *
Savannah Representative Unit (Savannah River watershed)		
Burke South	319	High.
Burke North	112	Moderate.
Columbia Richmond	450	Low.
Barney Bluff	50	Low.
Horse Creek	0	Very low (historical).
Prescott Lakes	0	Very low.

* Overall resiliency category includes the demographic metrics of the number of individuals, number of occurrences, and change in number of occurrences, and the habitat metric assessment of native herbaceous groundcover/habitat condition.

Future Scenarios

Given the current conditions of Ocmulgee skullcap and the expected influences on viability, we projected the resiliency, redundancy, and representation of Ocmulgee skullcap under three plausible future scenarios. Our projections incorporate the effects of development (urbanization) and habitat management actions that reduce nonnative, invasive species and herbivory from white-tailed deer. However, having determined that the current condition of the Ocmulgee skullcap is consistent with that of an endangered species (see Determination of Ocmulgee Skullcap's Status, below), we are not presenting the results in this final rule. Please refer to the proposed listing and designation of critical habitat rule for the Ocmulgee skullcap (87 FR 37378; June 22, 2022) and the SSA report, version 1.3 (Service 2023, entire) for the full analysis of future conditions and descriptions of the associated scenarios.

Determination of Ocmulgee Skullcap's Status

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species meets the definition of an endangered species or a threatened species. The Act defines an "endangered species" as a species in danger of extinction throughout all or a significant portion of its range, and a "threatened species" as a species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether a species meets the definition of endangered species or threatened species because of any of the following factors: (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational

purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence.

Status Throughout All of Its Range

After evaluating threats to the species and assessing the cumulative effect of the threats under the Act's section 4(a)(1) factors, we determined the Ocmulgee skullcap to be an endangered species throughout all of its range due to current and ongoing threats across the range. We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats, and the cumulative effect of the threats to the Ocmulgee skullcap. Our review of the best available information indicates Ocmulgee skullcap occurs in 19 populations in 2 representative units, the Ocmulgee River watershed in Georgia (13 populations) and the Savannah River watershed in Georgia/South Carolina (6 populations), across the historical range of the species. Recently, there has been one extirpation of an occurrence within a currently extant population in the Savannah River watershed resulting from land use conversion to a pine plantation.

Ocmulgee skullcap populations are generally small. At present, 3 populations contain more than 100 individuals, and 16 populations have fewer than 60 individuals. Generally, the Ocmulgee skullcap has low resiliency to stochastic events at the population level. Sixteen of the known populations have low abundance and exhibit low or very low resiliency to stochastic events. Of the remaining three (out of 19) populations, one population in the Savannah RU has high resiliency and two have moderate resiliency (one in each the Ocmulgee and Savannah RUs).

As stated previously, Ocmulgee skullcap populations are distributed in two watersheds across the historical

range of the species. We determined the Ocmulgee skullcap has some adaptive capacity or representation based on the species occurrences across the known historical range. The species-level redundancy was determined to be reduced from historical condition due to the loss of one occurrence. Although the resiliency of most populations is low or very low, populations are distributed across the species' range, giving it some redundancy and ability to withstand catastrophic events.

Ocmulgee skullcap faces threats from habitat degradation or loss as a result of development and urbanization (Factor A); competition and encroachment from nonnative, invasive species (Factors A and E); and herbivory by white-tailed deer (Factor C). These threats are exacerbated by small population size (Factor E) and existing regulatory mechanisms that do not adequately address the threats (Factor D). Overutilization (Factor B) and disease (Factor C) are not currently affecting Ocmulgee skullcap populations. Climate change (Factor E) is not a primary risk factor for the species at this time; however, the effects of climate change, including drought and changes in rainfall patterns, may affect the species in the future as changes become more extreme.

While we anticipate that the threats will continue to act on the species in the future, they are affecting the species such that it is in danger of extinction now, and therefore, we find that a threatened species status is not appropriate. We find that the Ocmulgee skullcap's vulnerability to ongoing stressors is heightened to such a degree that it is currently in danger of extinction as a result of its low number of populations, low population size, and response to current and ongoing threats. Thus, after assessing the best available information, we determine that Ocmulgee skullcap is in danger of extinction throughout all of its range.

Status Throughout a Significant Portion of Its Range

Under the Act and our implementing regulations, a species may warrant listing if it is in danger of extinction or likely to become so within the foreseeable future throughout all or a significant portion of its range. We have determined that the Ocmulgee skullcap is currently in danger of extinction throughout all of its range and accordingly did not undertake an analysis of any significant portion of its range. Because the Ocmulgee skullcap warrants listing as endangered throughout all of its range, our determination does not conflict with the decision in *Center for Biological Diversity v. Everson*, 435 F. Supp. 3d 69 (D.D.C. 2020), because that decision related to significant portion of the range analyses for species that warrant listing as threatened, not endangered, throughout all of their range.

Determination of Status

Our review of the best scientific and commercial data available indicates that the Ocmulgee skullcap meets the Act's definition of an endangered species. Therefore, we are listing the Ocmulgee skullcap as an endangered species in accordance with sections 3(6) and 4(a)(1) of the Act.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened species under the Act include recognition as a listed species, planning and implementation of recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness, and conservation by Federal, State, Tribal, and local agencies, private organizations, and individuals. The Act encourages cooperation with the States and other countries and calls for recovery actions to be carried out for listed species. The protection required by Federal agencies, including the Service, and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Section 4(f) of the Act calls for the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The goal of this

process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

The recovery planning process begins with development of a recovery outline made available to the public soon after a final listing determination. The recovery outline guides the immediate implementation of urgent recovery actions while a recovery plan is being developed. Recovery teams (composed of species experts, Federal and State agencies, nongovernmental organizations, and stakeholders) may be established to develop and implement recovery plans. The recovery planning process involves the identification of actions that are necessary to halt and reverse the species' decline by addressing the threats to its survival and recovery. The recovery plan identifies recovery criteria for review of when a species may be ready for reclassification from endangered to threatened ("downlisting") or removal from protected status ("delisting"), and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Revisions of the plan may be done to address continuing or new threats to the species, as new substantive information becomes available. The recovery outline, draft recovery plan, final recovery plan, and any revisions will be available on our website as they are completed (<https://www.fws.gov/program/endangered-species>), or from our Georgia Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, Tribes, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (e.g., restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and Tribal lands.

Once this species is listed, funding for recovery actions will be available from a variety of sources, including Federal budgets, State programs, and cost-share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In

addition, pursuant to section 6 of the Act, the States of Georgia and South Carolina will be eligible for Federal funds to implement management actions that promote the protection or recovery of the Ocmulgee skullcap. Information on our grant programs that are available to aid species recovery can be found at: <https://www.fws.gov/service/financial-assistance>.

Please let us know if you are interested in participating in recovery efforts for the Ocmulgee skullcap. Additionally, we invite you to submit any new information on this species whenever it becomes available and any information you may have for recovery planning purposes (see **FOR FURTHER INFORMATION CONTACT**).

Section 7 of the Act is titled "Interagency Cooperation," and it mandates all Federal action agencies to use their existing authorities to further the conservation purposes of the Act and to ensure that their actions are not likely to jeopardize the continued existence of listed species or adversely modify critical habitat. Regulations implementing section 7 are codified at 50 CFR part 402.

Section 7(a)(2) states that each Federal action agency shall, in consultation with the Secretary, ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Each Federal agency shall review its action at the earliest possible time to determine whether it may affect listed species or critical habitat. If a determination is made that the action may affect listed species or critical habitat, formal consultation is required (50 CFR 402.14(a)), unless the Service concurs in writing that the action is not likely to adversely affect listed species or critical habitat. At the end of a formal consultation, the Service issues a biological opinion, containing its determination of whether the Federal action is likely to result in jeopardy or adverse modification.

Examples of discretionary actions for the Ocmulgee skullcap that may be subject to consultation procedures under section 7 include management and any other landscape-altering activities on Federal lands administered by the National Park Service as well as actions on State, Tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as

funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat—and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or carried out by a Federal agency—do not require section 7 consultation. Federal agencies should coordinate with the local Service Field Office (see **FOR FURTHER INFORMATION CONTACT**) with any specific questions on Section 7 consultation and conference requirements.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to endangered plants. The prohibitions of section 9(a)(2) of the Act, and the Service's implementing regulations codified at 50 CFR 17.61, make it illegal for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or to cause to be committed any of the following with regard to any endangered plant: (1) import to, or export from, the United States; (2) remove and reduce to possession from areas under Federal jurisdiction; maliciously damage or destroy on any such area; remove, cut, dig up, or damage or destroy on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law; (3) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity; or (4) sell or offer for sale in interstate or foreign commerce. Certain exceptions to these prohibitions apply to employees or agents of the Service, other Federal land management agencies, and State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving endangered plants under certain circumstances. Service regulations governing permits for endangered plants are codified at 50 CFR 17.62, and general Service permitting regulations are codified at 50 CFR part 13. With regard to endangered plants, a permit may be issued for scientific purposes or for enhancing the propagation or survival of the species. The statute also contains certain exemptions from the prohibitions, which are found in sections 9 and 10 of the Act.

It is the policy of the Services, as published in the **Federal Register** on July 1, 1994 (59 FR 34272), to identify to the extent known at the time a

species is listed, specific activities that will not be considered likely to result in violation of section 9 of the Act. To the extent possible, activities that will be considered likely to result in violation will also be identified in as specific a manner as possible. The intent of this policy is to increase public awareness of the effect of a listing on proposed and ongoing activities within the range of the species.

At this time, we are unable to identify specific activities that will or will not be considered likely to result in violation of section 9 of the Act beyond what is already clear from the descriptions of prohibitions or already excepted through our regulations at 50 CFR 17.61 (e.g., any employee or agent of the Service, any other Federal land management agency, or a State conservation agency, who is designated by that agency for such purposes, may, when acting in the course of official duties, remove and reduce to possession endangered plants from areas under Federal jurisdiction without a permit if such action is necessary to: (i) care for a damaged or diseased specimen; (ii) dispose of a dead specimen; or (iii) salvage a dead specimen which may be useful for scientific study). Also, as discussed above, certain activities that are prohibited under section 9 may be permitted under section 10 of the Act.

Questions regarding whether specific activities would constitute violation of section 9 of the Act should be directed to the Georgia Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

II. Critical Habitat

Background

Section 4(a)(3) of the Act requires that, to the maximum extent prudent and determinable, we designate a species' critical habitat concurrently with listing the species. Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Our regulations at 50 CFR 424.02 define the geographical area occupied

by the species as an area that may generally be delineated around species' occurrences, as determined by the Secretary (*i.e.*, range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (e.g., migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals).

This critical habitat designation was proposed when the regulations defining "habitat" (85 FR 81411; December 16, 2020) and governing the 4(b)(2) exclusion process for the Service (85 FR 82376; December 18, 2020) were in place and in effect. However, those two regulations have been rescinded (87 FR 37757, June 24, 2022; and 87 FR 43433, July 21, 2022) and no longer apply to any designations of critical habitat. Therefore, for this final rule designating critical habitat for the Ocmulgee skullcap, we apply the regulations at 50 CFR 424.19 and the Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act (hereafter, the "2016 Policy"; 81 FR 7226, February 11, 2016).

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation also does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Rather, designation requires that, where a landowner requests Federal agency funding or authorization for an action that may

affect areas designated as critical habitat, the Federal agency consult with the Service under section 7(a)(2) of the Act. If the action may affect the listed species itself (such as for occupied critical habitat), the Federal action agency would have already been required to consult with the Service even absent the critical habitat designation because of the requirement to ensure that the action is not likely to jeopardize the continued existence of the species. Even if the Service were to conclude after consultation that the proposed activity is likely to result in destruction or adverse modification of the critical habitat, the Federal action agency and the landowner are not required to abandon the proposed activity, or to restore or recover the species; instead, they must implement “reasonable and prudent alternatives” to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act’s definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat).

Under the second prong of the Act’s definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data

available, use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information from the SSA report and information developed during the listing process for the species. Additional information sources may include any generalized conservation strategy, criteria, or outline that may have been developed for the species; the recovery plan for the species; articles in peer-reviewed journals; conservation plans developed by States and counties; scientific status surveys and studies; biological assessments; other unpublished materials; or experts’ opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act; (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species; and (3) the prohibitions found in section 9 of the Act. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Physical or Biological Features Essential to the Conservation of the Species

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR

424.12(b), in determining which areas we will designate as critical habitat from within the geographical area occupied by the species at the time of listing, we consider the physical or biological features that are essential to the conservation of the species and which may require special management considerations or protection. The regulations at 50 CFR 424.02 define “physical or biological features essential to the conservation of the species” as the features that occur in specific areas and that are essential to support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity. For example, physical features essential to the conservation of the species might include gravel of a particular size required for spawning, alkaline soil for seed germination, protective cover for migration, or susceptibility to flooding or fire that maintains necessary early-successional habitat characteristics. Biological features might include prey species, forage grasses, specific kinds or ages of trees for roosting or nesting, symbiotic fungi, or absence of a particular level of nonnative species consistent with conservation needs of the listed species. The features may also be combinations of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic essential to support the life history of the species.

In discussing whether features are essential to the conservation of the species, we may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the species. These characteristics include, but are not limited to, space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing (or development) of offspring; and habitats that are protected from disturbance.

Our SSA report for the Ocmulgee skullcap provides the scientific information upon which this critical

habitat designation is based (Service 2023, entire). A thorough account of the ecological needs of the Ocmulgee skullcap can be found in the SSA report (Service 2023, chapter 2, pp. 4–11), and is briefly summarized here in the context of the physical or biological features that are essential to the conservation of the species.

Habitat

As described above under Background, the Ocmulgee skullcap occurs in moist, calcareous hardwood forests on north- to northeast-facing slopes of river bluffs and their floodplains in the Ocmulgee and Savannah River watersheds in Georgia and South Carolina. River bluffs and steep slopes are subject to localized disturbances that limit the accumulation of leaf litter and competition. Ocmulgee skullcap individuals require reduced competition to grow and reproduce within suitable habitat.

These hardwood forests are characterized by a mature, mixed-level canopy with spatial heterogeneity that provides mottled shade required by Ocmulgee skullcap. Intact calcareous forests are characterized by a diverse

species composition ranging from short-lived pioneer species to long-lived, shade-tolerant species (Edwards et al. 2013, p. 406). Communal species in these areas may consist of red buckeye (*Aesculus pavia*), eastern redbud (*Cercis canadensis*), white oak (*Quercus alba*), basswood (*Tilia americana*), American holly (*Ilex opaca*), and relict trillium (*Trillium reliquum*) (Edwards et al. 2013, p. 409; Bradley 2019, pp. 21–28). The herbaceous layer in this forest type includes a rich diversity of grasses and forbs that support the required pollinators for the species in adequate numbers to facilitate Ocmulgee skullcap reproduction. The upper canopy of mixed hardwoods in a forest with suitable habitat provides the partial shade required for germination, growth, and reproduction.

Intact forested habitat with a mature canopy and discrete disturbances provides important habitat for Ocmulgee skullcap populations to decrease encroachment of competing nonnative, invasive plants. Competition with other native species and nonnative, invasive species can restrict seedlings, vegetative plants, and flowering plants from obtaining the three key resources

(water, sunlight, and soil) needed to grow and reproduce; therefore, healthy Ocmulgee skullcap individuals and populations need reduced competition.

Soils

The calcareous hardwood forests where Ocmulgee skullcap occurs are influenced by outcroppings of limestone or marl that provide the calcium-rich parent material for soils. Ocmulgee skullcap requires well-drained soils or shallow, calcium-rich soils that are buffered or circumneutral (pH between 6.5 and 7.5) to germinate. These soils occur within regions underlain or otherwise influenced by limestone or marl.

Summary of Resource Needs

More detail on the species’ habitat and life-history needs is provided above under Background, and a thorough review is available in the SSA report (Service 2023, entire; available at <https://www.regulations.gov> under Docket No. FWS–R4–ES–2021–0059).

A summary of the resource needs of the Ocmulgee skullcap is provided below in table 5.

TABLE 5—OCMULGEE SKULLCAP INDIVIDUAL RESOURCES NEEDS BY LIFE STAGE

[Key resource needs are in bolded text and include precipitation (water), partial sunlight, soil, and reduced competition (Collins 1976, pp. 1, 70; Chafin 2008, p. 2)]

Life stage	Resources and circumstances needed for individuals to complete life stage	Resource function *
Seed	Fall/winter precipitation	N
	Bare mineral calcium-rich soil	H, N, R
	Partial sunlight	N
Seedling	Sufficient summer/fall precipitation	N
	Calcium-rich soil	H, N
	Reduced competition from invasives/encroaching plants	H
Vegetative plant	Partial sunlight for photosynthesis	N
	Spring/summer precipitation	N
	Calcium-rich soil	H, N
Flowering plant	Reduced competition from invasives/encroaching plants	H
	Partial sunlight for photosynthesis	N
	Spring/summer precipitation	N
	Calcium-rich soil	H, N
	Reduced competition from invasives/encroaching plants	H
	Pollinators	R
	Partial sunlight for photosynthesis	N

* H = Habitat, N = Nutrition, and R = Reproduction.

Summary of Essential Physical or Biological Features

We derive the specific physical or biological features essential to the conservation of Ocmulgee skullcap from studies of the species’ habitat, ecology, and life history as described below. Additional information can be found in the SSA report (Service 2023, entire; available on <https://www.regulations.gov> under Docket No. FWS–R4–ES–2021–0059). We have

determined that the following physical or biological features are essential to the conservation of Ocmulgee skullcap:

- (1) River bluffs with steep and/or shallow soils that are subject to localized disturbances that limit the accumulation of leaf litter and competition within the Upper Gulf Coastal Plain and Piedmont of Georgia.
- (2) Well-drained soils that are buffered or circumneutral (pH between 6.5 and 7.5) generally within regions

underlain or otherwise influenced by limestone or marl (mixed carbonate-clay rock).

- (3) A mature, mixed-level canopy with spatial heterogeneity, providing mottled shade and often including a rich diversity of grasses and forbs characterizing the herbaceous layer.
- (4) Intact forested habitat that is ecologically functional (*i.e.*, with mature canopy and discrete disturbances) and

buffered by surrounding habitat to impede the invasion of competitors.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection. The features essential to the conservation of Ocmulgee skullcap may require special management considerations or protection to reduce the following threats: development; nonnative, invasive species (plants); and indirect effects on habitat quality due to herbivory by white-tailed deer and adjacent land uses such as silviculture and agriculture.

Special management considerations or protection may be required within critical habitat areas to address these threats. Management activities that could ameliorate these threats include, but are not limited to, local review of proposed county and State projects and other development projects that may affect Ocmulgee skullcap habitat to determine whether or not the project will avoid impacts to the species' habitat; control and reduction of nonnative, invasive species; harvest of deer to reduce changes in plant community and increase in browse-resistant plants in affected populations; implementation of BMPs (for silvicultural and agricultural land uses); and habitat restoration projects. These management activities would protect the physical or biological features for the species by promoting intact vegetative community with mixed heterogeneity, mottled shade, and a diverse herbaceous layer.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. The SSA report, version 1.3 (Service 2023, entire), contains the best available information used to identify critical habitat for the Ocmulgee skullcap, which includes existing monitoring data, population status surveys, and relevant Geographic Information Systems (GIS) layers (Service 2023, pp. 21, 37–38, appendix A). In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the species and identify specific areas within the geographical area occupied

by the species at the time of listing and any specific areas outside the geographical area occupied by the species to be considered for designation as critical habitat. We are not designating any areas outside the geographical area occupied by the species because we have not identified any unoccupied areas that meet the definition of critical habitat. The protection of the current extant populations in both representative units will sufficiently reduce the risk of extinction, and improving the resiliency within these currently occupied units should increase viability to the point that the protections of the Act are no longer necessary. We have determined that the areas we are designating as critical habitat are sufficient for the recovery of the species and align with our conservation strategy for Ocmulgee skullcap.

To determine and select appropriate occupied areas that contain the physical or biological features essential to the conservation of the species, we developed a conservation strategy for the species. The goal of the conservation strategy for the Ocmulgee skullcap is to recover the species to the point where the protections of the Act are no longer necessary. The role of critical habitat in achieving this conservation goal is to identify the specific areas within the species' range that provide essential physical or biological features, without which rangewide resiliency, redundancy, and representation could not be achieved. We anticipate that recovery will require continued protection of existing populations and habitats that contribute to the viability of the species: ensuring there are adequate numbers of individual plants in populations; and ensuring multiple sufficiently resilient populations in each representative unit and across the current range of the species. This approach may lead to connectivity among populations and will help to ensure that catastrophic events cannot simultaneously affect all known populations of the Ocmulgee skullcap. Recovery considerations, such as striving for representation of both watersheds in the species' current range, were considered in formulating this designation.

Ocmulgee skullcap populations, with the exception of one large area, are confined to small patches (ranging in size from 0.24 to 24 ac (0.1 to 9.7 ha)). Ocmulgee skullcap requires areas of intact hardwood forest to provide the appropriate canopy conditions in large enough areas to protect the species from encroachment of nonnative, invasive species. The small patches typically do

not provide enough habitat to support the species or provide connectivity among populations. In addition, the small populations in these patches experience the exacerbation of other threats associated with small population size (see *Influences on Ocmulgee Skullcap's Viability*, above).

Based on the Act's implementing regulations (see 50 CFR 424.12(d)), when habitats are in close proximity to one another, an inclusive area may be designated. We delineated populations of Ocmulgee skullcap using a 2-km (1.24-mi) radius circle, with overlapping buffers determined to be within the same population based on the need for sufficient space and resources for required pollinators (NatureServe 2020, entire; Service 2023, p. 21). Therefore, the habitat areas surrounding Ocmulgee skullcap occurrences are also included within these occupied units, because they have the physical or biological features essential to the conservation of the species, provide space for population expansion that would increase the resiliency within these units, provide connectivity between individual patches of occupied habitat, and support the conditions that Ocmulgee skullcap individuals and populations require.

In summary, for areas within the geographic area occupied by the species at the time of listing, we delineated critical habitat unit boundaries using the following criteria:

- We identified areas that are considered to be occupied at the time of listing within the historical range of the species, and
- We determined if those areas contain the physical or biological features to support life-history functions that are essential for the conservation of the species.

For the purposes of the critical habitat designation, and for areas within the geographic area occupied by the species at the time of listing, we determined a unit to be occupied if it contains a recent observation (*i.e.*, observed since 1999). These areas are consistent with the identified populations in the SSA report that were derived using occurrence data and a 2-km separation distance for sufficient space and resources for required pollinators (NatureServe 2020, entire; Service 2023, p. 21). Suitable habitat within the identified populations was determined through site specific surveys and GIS analyses that identified the areas with appropriate aspect, geomorphons (landform pattern), temperature, burned area, soil type, vegetation cover, and land cover, using source data from the National Elevation Dataset, Landsat,

WorldClim, NatureServe landcover map, and the GAP/LANDFIRE National Terrestrial Ecosystems dataset. Information specific to calcium-rich soils was not available; therefore, we rely on species occurrence data to represent presence of this identified species need.

Based on this analysis, the following areas meet the critical habitat criteria for the species at the time of listing: Columbia/Richmond, Barney Bluff, Burke North, Burke South, Prescott Lakes, Bolingbroke Rest Area, River North Bluff, Savage Branch, Adjoins Robins Air Force Base, Tributary (Trib) Richland Creek, Oaky Woods North, Crooked Creek, Shellstone Creek, Oaky Woods South, Dry Creek, James Dykes Memorial, South Shellstone Creek, and Jordan Creek. These areas are known to be occupied by the species, including the element occurrence at Savannah River Bluffs Natural Heritage Preserve. These areas meet our conservation strategy and provide the essential physical or biological features necessary to support and increase resiliency, redundancy, and representation for the Ocmulgee skullcap. Designating critical habitat units in these areas will sufficiently lead to the protection, and eventual reduction in risk of extirpation of the species.

Sources of data for this designation of critical habitat include multiple databases maintained by universities and State agencies in Georgia and South Carolina, as well as numerous reports from surveys conducted in suitable habitat throughout the species' range. Other sources of available information

on habitat requirements for this species include studies conducted at occupied sites and published in peer-reviewed articles, agency reports, and data collected during monitoring efforts (Cammack and Genachte 1999, entire; Morris 1999, entire; Snow 1999 and 2001, entire; Bradley 2019, entire; Service 2022, entire; Service 2023, entire). Occurrence records were compiled and provided to us by State partners during the SSA analysis.

When determining critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features necessary for Ocmulgee skullcap. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action will affect the physical or biological features in the adjacent critical habitat.

The critical habitat designation is defined by the maps, as modified by any accompanying regulatory text, presented at the end of this document under Regulation Promulgation. We include more detailed information on the boundaries of the critical habitat

designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on <https://www.regulations.gov> at Docket No. FWS-R4-ES-2021-0059, and on our internet site <https://www.fws.gov/office/georgia-ecological-services/library>.

Final Critical Habitat Designation

We are designating 18 units as critical habitat for Ocmulgee skullcap. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for Ocmulgee skullcap. The 18 areas we designate as critical habitat are: (1) Columbia/Richmond; (2) Barney Bluff; (3) Burke North; (4) Burke South; (5) Prescott Lakes; (6) Bolingbroke Rest Area; (7) River North Bluff; (8) Savage Branch; (9) Adjoins Robins Air Force Base; (10) Trib Richland Creek; (11) Oaky Woods North; (12) Crooked Creek; (13) Shellstone Creek; (14) Oaky Woods South; (15) Dry Creek; (16) James Dykes Memorial; (17) South Shellstone Creek; and (18) Jordan Creek. All 18 critical habitat units are currently considered occupied by Ocmulgee skullcap. Table 6 shows the critical habitat units and the approximate area of each unit. Approximately 84.2 percent of the designated critical habitat occurs on private lands, 0.4 percent occurs on county lands, and the remaining 15.3 percent occurs on State-owned or State-managed lands. No Federal lands are included in this critical habitat designation.

TABLE 6—FINAL CRITICAL HABITAT UNITS FOR OCMULGEE SKULLCAP
[Area estimates reflect all land within critical habitat unit boundaries]

Critical habitat unit No. and name	Land ownership by type	Size of unit in acres (hectares)
1a: Columbia/Richmond	Richmond County; Private	106 (43)
1b: Columbia/Richmond	Private	117 (47)
1c: Columbia/Richmond	Private	334 (135)
1d: Columbia/Richmond	State of South Carolina	84 (34)
2: Barney Bluff	Private	415 (168)
3: Burke North	Private	526 (213)
4: Burke South	State of Georgia; Private	976 (395)
5: Prescott Lakes	Private	81 (33)
6: Bolingbroke Rest Area	Private	338 (137)
7: River North Bluff	State of Georgia; Private	115 (46)
8: Savage Branch	Private	115 (46)
9: Adjoins Robins Air Force Base	Private	231 (93)
10: Trib Richland Creek	State of Georgia; Private	340 (138)
11: Oaky Woods North	State of Georgia; Private	657 (266)
12: Crooked Creek	State of Georgia; Private	205 (83)
13: Shellstone Creek	State of Georgia; Private	160 (65)
14: Oaky Woods South	State of Georgia; Private	363 (147)
15: Dry Creek	State of Georgia; Private	330 (133)
16: James Dykes Memorial	State of Georgia; Private	515 (208)
17: South Shellstone Creek	State of Georgia; Private	403 (163)
18: Jordan Creek	Private	250 (101)

TABLE 6—FINAL CRITICAL HABITAT UNITS FOR OCMULGEE SKULLCAP—Continued

[Area estimates reflect all land within critical habitat unit boundaries]

Critical habitat unit No. and name	Land ownership by type	Size of unit in acres (hectares)
Total		6,661 (2,696)

Note: Area sizes may not sum due to rounding.

We present brief descriptions of all units, and reasons why they meet the definition of critical habitat for Ocmulgee skullcap, below.

Unit 1: Columbia/Richmond

Unit 1 consists of four subunits comprising 641 ac (259 ha) in Columbia and Richmond Counties, Georgia, and Aiken and Edgefield Counties, South Carolina. This unit consists of land owned by Richmond County (4 percent), the State of South Carolina (13 percent), and private landowners (83 percent), with 35 percent of Unit 1 held in a conservation easement. All subunits are located near Interstate 20 along the Savannah River and the South Carolina-Georgia State border.

Subunit 1a consists of 106 ac (43 ha) in Columbia County, Georgia. This subunit lies on the west side of the Savannah River, just north of the City of Augusta. Richmond County owns and manages 28 ac (11.3 ha) in this subunit, and the other 78 ac (31.7 ha) are privately owned. The essential physical or biological feature concerning intact forested habitat is degraded in this subunit, which is adjacent to developed areas. Special management considerations or protection may be required in Subunit 1a to address and alleviate impacts from stressors that have led to the loss or degradation of the habitat, including urbanization and commercial development and nonnative, invasive species (see Special Management Considerations or Protection, above). Special management considerations related to developed areas that would benefit the habitat in this subunit include, but are not limited to, review of county development plans and other projects considering land use changes with recommendations to avoid areas occupied by Ocmulgee skullcap, and control or removal of nonnative, invasive species.

Subunit 1b consists of 117 ac (47 ha) in Richmond County, Georgia, on lands in private ownership. This subunit lies on the west side of the Savannah River, just north of the City of Augusta. The essential physical or biological feature concerning intact forested habitat is degraded in this subunit, which is adjacent to developed areas. Special management considerations or

protection may be required in Subunit 1b to address and alleviate impacts from stressors that have led to the loss or degradation of the habitat, including urbanization and commercial development and nonnative, invasive species (see Special Management Considerations or Protection, above). Special management considerations related to developed areas that would benefit the habitat in this subunit include, but are not limited to, review of county development plans and other projects considering land use changes with recommendations to avoid areas occupied by Ocmulgee skullcap, and control or removal of nonnative, invasive species.

Subunit 1c consists of 334 ac (135 ha) in Aiken and Edgefield Counties, South Carolina. This subunit lies on the east side of the Savannah River, just north of the City of Augusta. The Nature Conservancy owns and manages the 224-ac (90-ha) Greystone Preserve for conservation in this subunit, and the remaining 110 ac (45 ha) are in private ownership. Special management considerations or protection may be required within Subunit 1c to alleviate impacts from stressors that have led to the loss and degradation of the habitat, including urbanization and residential and commercial development; nonnative, invasive species; and herbivory by deer. Special management considerations related to encroachment of nonnative, invasive species and herbivory by deer that would benefit the habitat in this subunit include, but are not limited to, removal of nonnative, invasive species via prescribed burning or mechanical or chemical treatments; restoration of forest conditions; and increased harvest/hunting or exclusion of white-tailed deer. In addition, special management considerations related to developed areas that would benefit the habitat in this subunit include, but are not limited to, review of county development plans and other projects considering land use changes with recommendations to avoid areas occupied by Ocmulgee skullcap; native vegetation restoration in right-of-way and transmission line vegetation maintenance areas (edge effect); and removal of nonnative, invasive species.

Subunit 1d consists of 84 ac (34 ha) in Aiken County, South Carolina. This subunit lies on the east side of the Savannah River, just east of the City of Augusta. The South Carolina Department of Natural Resources owns and manages the 84-ac (34-ha) Savannah River Bluffs Heritage Preserve for conservation in this subunit. Special management considerations or protection may be required within Subunit 1d to alleviate impacts from stressors that have led to the loss and degradation of the habitat, including nonnative, invasive species and herbivory by deer. Special management considerations related to encroachment of nonnative, invasive species and herbivory by deer that would benefit the habitat in this subunit include, but are not limited to, removal of nonnative, invasive species via prescribed burning or mechanical or chemical treatments; restoration of forest conditions; and increased harvest/hunting or exclusion of white-tailed deer.

Unit 2: Barney Bluff

Unit 2 consists of 415 ac (168 ha) in the southeast portion of Richmond County, Georgia. This unit lies to the west of the Savannah River south of the City of Augusta on land in private ownership. Special management considerations or protection may be required within Unit 2 to alleviate impacts from stressors that have led to the degradation of the habitat, including urbanization and development, erosion due to logging practices that do not properly implement BMPs, and herbivory by deer. Such special management or protection may include conservation efforts to reduce deer browsing through hunting/harvest or exclusion. Special management or protection to reduce erosion may also include habitat restoration efforts and implementation of State-approved BMPs for silviculture or logging activities. In addition, special management considerations related to developed areas that would benefit the habitat in this unit include, but are not limited to, review of county development plans and other projects considering land use changes with recommendations to avoid areas occupied by Ocmulgee skullcap.

Unit 3: Burke North

Unit 3 consists of 526 ac (213 ha) in the northwestern portion of Burke County, Georgia. The unit lies to the west of the Savannah River on land in private ownership. A conservation easement is in place on 9 ac (3.6 ha) of private land within the unit. Special management considerations or protection may be required within Unit 3 to alleviate impacts from stressors that have led to the loss or degradation of the habitat, including the effects of silviculture and logging that do not properly implement BMPs, as well as herbivory by deer. Such special management or protection may include conservation efforts to reduce deer browsing through hunting/harvest or exclusion. Special management or protection may also include habitat restoration efforts and implementation of State-approved BMPs for silviculture or logging activities.

Unit 4: Burke South

Unit 4 consists of 976 ac (395 ha) in the western portion of Burke County, Georgia. This unit lies west of the Savannah River on lands owned by the Georgia Department of Natural Resources (199 ac (80 ha) on the Yuchi Wildlife Management Area), and on lands in private ownership (777 ac (314 ha)). Special management considerations or protection may be required within Unit 4 to alleviate impacts from stressors that have led to the degradation of the habitat, including urbanization and development, and herbivory by deer. In some cases, these threats are being addressed or coordinated with our partners and landowners to implement needed actions. Such special management or protection may include conservation efforts to reduce or control nonnative, invasive plants via prescribed burning or mechanical or chemical treatments, and to reduce deer browsing through hunting/harvest or exclusion. In addition, special management considerations related to developed areas that would benefit the habitat in this unit include, but are not limited to, review of county development plans and other projects considering land use changes with recommendations to avoid areas occupied by Ocmulgee skullcap. Special management or protection may also include habitat restoration efforts.

Unit 5: Prescott Lakes

Unit 5 consists of 81 ac (33 ha) in the northern portion of Screven County, Georgia. This unit is adjacent to the main stem of the Savannah River and lies on lands in private ownership.

Special management considerations or protection may be required within Unit 5 to alleviate impacts from stressors that have led to the loss or degradation of the habitat, including land conversion to agriculture and herbivory by deer. Such special management or protection may include conservation efforts to reduce or control nonnative, invasive plants via prescribed burning or mechanical or chemical treatments, and to reduce deer browsing through hunting/harvest or exclusion. Special management or protection may also include habitat restoration efforts.

Unit 6: Bolingbroke Rest Area

Unit 6 consists of 338 ac (137 ha) in southern Monroe County, Georgia. This unit falls on lands in private ownership adjacent to the main stem of the Ocmulgee River, north of the city of Macon. Special management considerations or protection may be required within Unit 6 to alleviate impacts from stressors that have led to the loss or degradation of the habitat, including commercial development, silviculture and logging activities without properly implemented BMPs, road maintenance, and herbivory by deer. Such special management or protection may include conservation efforts to reduce or control nonnative, invasive plants via prescribed burning or mechanical or chemical treatments, and to reduce deer browsing through hunting/harvest or exclusion. Special management or protection may also include habitat restoration efforts and implementation of State-approved BMPs for silviculture and logging activities. In addition, special management considerations related to developed areas that would benefit the habitat in this unit include, but are not limited to, review of county development plans and other projects considering land use changes with recommendations to avoid areas occupied by Ocmulgee skullcap.

Unit 7: River North Bluff

Unit 7 consists of 115 ac (46 ha) in the northern corner of Bibb County, Georgia. This unit is adjacent to the main stem of the Ocmulgee River, north of the city of Macon. This unit contains land owned by the Georgia Department of Natural Resources (10 ac (4 ha) on the Echeconnee Wildlife Management Area), and lands in private ownership (105 ac (42 ha)). Special management considerations or protection may be required within Unit 7 to alleviate impacts from stressors that have led to the degradation of the habitat, including competition and encroachment by nonnative, invasive species. In some cases, these threats are being addressed

or coordinated with our partners and landowners to implement needed actions. Such special management or protection may include conservation efforts to reduce or control nonnative, invasive plants via prescribed burning or mechanical or chemical treatments. Special management or protection may also include habitat restoration efforts.

Unit 8: Savage Branch

Unit 8 consists of 115 ac (46 ha) in the northern portion of Bibb County, Georgia. This unit is adjacent to the main stem of the Ocmulgee River, north of the city of Macon, and falls on lands in private ownership. Special management considerations or protection may be required within Unit 8 to alleviate impacts from stressors that have led to the loss or degradation of the habitat, including urbanization and development and nonnative, invasive species. Such special management or protection may include conservation efforts to reduce or control nonnative, invasive plants via prescribed burning or mechanical or chemical treatments. In addition, special management considerations related to developed areas that would benefit the habitat in this unit include, but are not limited to, review of county development plans and other projects considering land use changes with recommendations to avoid areas occupied by Ocmulgee skullcap. Special management or protection may also include habitat restoration efforts.

Unit 9: Adjoins Robins Air Force Base

Unit 9 consists of 231 ac (93 ha) in western Houston County, Georgia. This unit is adjacent to Robins Air Force Base and the main stem of the Ocmulgee River. All lands in this unit are in private ownership. Special management considerations or protection may be required within Unit 9 to alleviate impacts from stressors that have led to the degradation of the habitat, including urbanization and development and nonnative, invasive species. Such special management or protection may include conservation efforts to reduce or control nonnative, invasive plants via prescribed burning or mechanical or chemical treatments. In addition, special management considerations related to developed areas that would benefit the habitat in this unit include, but are not limited to, review of county development plans and other projects considering land use changes with recommendations to avoid areas occupied by Ocmulgee skullcap. Special management or protection may also include habitat restoration efforts.

Unit 10: Trib Richland Creek

Unit 10 consists of 340 ac (138 ha) in eastern Twiggs County, Georgia. This unit lies east of Robins Air Force Base and along a tributary of the Ocmulgee River. The unit falls on lands leased by the Georgia Department of Natural Resources (242 ac (98 ha) on the Ocmulgee Wildlife Management Area), and lands in private ownership (98 ac (40 ha)). Special management considerations or protection may be required within Unit 10 to alleviate impacts from stressors that have led to the loss or degradation of the habitat, including land conversion to agriculture and herbivory by deer. In some cases, these threats are being addressed or coordinated with our partners and landowners to implement needed actions. Such special management or protection may include conservation efforts to reduce deer browsing through hunting/harvest or exclusion. Special management or protection related to land conversion may also include consideration of Ocmulgee skullcap in agriculture conversion plans and habitat restoration efforts in affected field/forest edges.

Unit 11: Oaky Woods North

Unit 11 consists of 657 ac (266 ha) in western Houston County, Georgia. This unit lies adjacent to the county line, along a tributary of the Ocmulgee River. The unit falls on lands owned by the Georgia Department of Natural Resources (228 ac (92 ha) on the Oaky Woods Wildlife Management Area) and lands in private ownership (429 ac (174 ha)). Special management considerations or protection may be required within Unit 11 to alleviate impacts from stressors that have led to the degradation of the habitat, including limited effects of nonnative, invasive species and herbivory by deer. In some cases, these threats are being addressed or coordinated with our partners and landowners to implement needed actions. Such special management or protection may include conservation efforts to reduce or control nonnative, invasive plants via prescribed burning or mechanical or chemical treatments, and to reduce deer browsing through hunting/harvest or exclusion. Special management or protection may also include habitat restoration efforts.

Unit 12: Crooked Creek

Unit 12 consists of 205 ac (83 ha) in southeastern Twiggs County, Georgia. This unit is located south of Highway 96, and along a tributary of the Ocmulgee River. The unit falls on lands leased by the Georgia Department of

Natural Resources (201 ac (81 ha) on the Ocmulgee Wildlife Management Area) and on lands in private ownership (4 ac (1.6 ha)). Special management considerations or protection may be required within Unit 12 to alleviate impacts from stressors that have led to the degradation of the habitat, including nonnative, invasive species and herbivory by deer. In some cases, these threats are being addressed or coordinated with our partners and landowners to implement needed actions. Such special management or protection may include continued conservation efforts to reduce deer browsing through hunting/harvest or exclusion. Special management or protection may also include habitat restoration efforts.

Unit 13: Shellstone Creek

Unit 13 consists of 160 ac (65 ha) in southeastern Twiggs County, Georgia. This unit lies east of Unit 12, along a tributary of the Ocmulgee River. The unit falls on lands leased by the Georgia Department of Natural Resources (15 ac (6 ha) on the Ocmulgee Wildlife Management Area) and on lands in private ownership (145 ac (59 ha)). Special management considerations or protection may be required within Unit 13 to alleviate impacts from stressors that have led to the loss or degradation of the habitat, including forest conversion to agriculture; residential development; nonnative, invasive species; and herbivory by deer. In some cases, these threats are being addressed or coordinated with our partners and landowners to implement needed actions. Such special management or protection may include conservation efforts to reduce or control nonnative, invasive plants via prescribed burning or mechanical or chemical treatments, and to reduce deer browsing through hunting/harvest or exclusion. Special management or protection related to land conversion may also include consideration of Ocmulgee skullcap in agriculture conversion plans and habitat restoration efforts in affected field/forest edges. Special management or protection may also include habitat restoration efforts.

Unit 14: Oaky Woods South

Unit 14 consists of 363 ac (147 ha) in western Houston County, Georgia. This unit is west of units 15 and 16, and along a tributary of the Ocmulgee River. This unit falls on lands leased by the Georgia Department of Natural Resources (84 ac (34 ha) on the Oaky Woods Wildlife Management Area), and on lands in private ownership (279 ac (113 ha)). Special management

considerations or protection may be required within Unit 14 to alleviate impacts from stressors that have led to the loss or degradation of the habitat, including urbanization and commercial development. In some cases, these threats are being addressed or coordinated with our partners and landowners to implement needed actions. Such special management or protection may include considerations related to developed areas that would benefit the habitat in this unit include, but are not limited to, review of county development plans and other projects considering land use changes with recommendations to avoid areas occupied by Ocmulgee skullcap. Special management or protection may also include habitat restoration efforts.

Unit 15: Dry Creek

Unit 15 consists of 330 ac (133 ha) in western Houston and northern Pulaski Counties, Georgia. This unit is adjacent to the county line, and along a tributary of the Ocmulgee River. This unit falls on lands leased by the Georgia Department of Natural Resources (50 ac (20 ha) on the Ocmulgee Wildlife Management Area), and lands in private ownership (280 ac (113 ha)). Special management considerations or protection may be required within Unit 15 to alleviate impacts from stressors that have led to the degradation of the habitat, including nonnative, invasive species and herbivory by deer. In some cases, these threats are being addressed or coordinated with our partners and landowners to implement needed actions. Such special management or protection may include conservation efforts to reduce or control nonnative, invasive plants via prescribed burning or mechanical or chemical treatments, and to reduce deer browsing through hunting/harvest or exclusion. Special management or protection may also include habitat restoration efforts.

Unit 16: James Dykes Memorial

Unit 16 consists of 515 ac (208 ha) in eastern Bleckley County and northern Pulaski County, Georgia. This unit is adjacent to the main stem of the Ocmulgee River, west of the City of Cochran. This unit falls on lands owned by the Georgia Department of Natural Resources (497 ac (201 ha) on the Ocmulgee Wildlife Management Area), and on lands in private ownership (18 ac (7.3 ha)). Special management considerations or protection may be required within Unit 16 to alleviate impacts from stressors that have led to the loss or degradation of the habitat, including land conversion to agriculture; nonnative, invasive species;

and herbivory by deer. In some cases, these threats are being addressed or coordinated with our partners and landowners to implement needed actions. Such special management or protection may include conservation efforts to reduce or control nonnative, invasive plants via prescribed burning or mechanical or chemical treatments, and to reduce deer browsing through hunting/harvest or exclusion. Special management or protection related to land conversion may also include consideration of Ocmulgee skullcap in agriculture conversion plans and habitat restoration efforts in affected field/forest edges. Special management or protection may also include habitat restoration efforts.

Unit 17: South Shellstone Creek

Unit 17 consists of 403 ac (163 ha) in eastern Bleckley County, Georgia. This unit is adjacent to a tributary of the Ocmulgee River, north of the City of Cochran. This unit falls on lands owned by the Georgia Department of Natural Resources (4 ac (1.6 ha)) and on lands in private ownership (399 ac (161 ha)). Special management considerations or protection may be required within Unit 17 to alleviate impacts from stressors that have led to the loss or degradation of the habitat, including land conversion to agriculture. In some cases, these threats are being addressed or coordinated with our partners and landowners to implement needed actions. Special management or protection related to land conversion may also include consideration of Ocmulgee skullcap in agriculture conversion plans and habitat restoration efforts in affected field/forest edges. Special management or protection may also include habitat restoration efforts.

Unit 18: Jordan Creek

Unit 18 consists of 250 ac (101 ha) in northern Pulaski County, Georgia. This unit is adjacent to a tributary of the Ocmulgee River, north of the City of Hawkinsville. The unit falls on lands in private ownership. Special management considerations or protection may be required within Unit 18 to alleviate impacts from stressors that have led to the degradation of the habitat, including limited urbanization and development. In addition, special management considerations related to developed areas that would benefit the habitat in this unit include, but are not limited to, review of county development plans and other projects considering land use changes with recommendations to avoid areas occupied by Ocmulgee skullcap. Special management or protection may also include habitat restoration efforts.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species.

Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species (50 CFR 402.02).

Compliance with the requirements of section 7(a)(2) is documented through our issuance of:

- (1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or
- (2) A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

- (1) Can be implemented in a manner consistent with the intended purpose of the action,
- (2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,
- (3) Are economically and technologically feasible, and
- (4) Would, in the Service Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 set forth requirements for Federal agencies to reinstate consultation. Reinitiation of consultation is required and shall be requested by the Federal agency, where

discretionary Federal involvement or control over the action has been retained or is authorized by law and: (1) if the amount or extent of taking specified in the incidental take statement is exceeded; (2) if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion or written concurrence; or (4) if a new species is listed or critical habitat designated that may be affected by the identified action. As provided in 50 CFR 402.16, the requirement to reinstate consultations for new species listings or critical habitat designation does not apply to certain agency actions (e.g., land management plans issued by the Bureau of Land Management in certain circumstances).

Destruction or Adverse Modification of Critical Habitat

The key factor related to the destruction or adverse modification determination is whether implementation of the proposed Federal action directly or indirectly alters the designated critical habitat in a way that appreciably diminishes the value of the critical habitat as a whole for the conservation of the listed species. As discussed above, the role of critical habitat is to support physical or biological features essential to the conservation of a listed species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires that our **Federal Register** notices “shall, to the maximum extent practicable also include a brief description and evaluation of those activities (whether public or private) which, in the opinion of the Secretary, if undertaken may adversely modify [critical] habitat, or may be affected by such designation.” Activities that may be affected by designation of critical habitat for the Ocmulgee skullcap include those that may affect the physical or biological features of the Ocmulgee skullcap’s critical habitat (see Physical or Biological Features Essential to the Conservation of the Species).

Exemptions

Application of Section 4(a)(3) of the Act

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the

conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

- (1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;
- (2) A statement of goals and priorities;
- (3) A detailed description of management actions to be implemented to provide for these ecological needs; and
- (4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that the Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense (DoD), or designated for its use, that are subject to an INRMP prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.

We consult with the military on the development and implementation of INRMPs for installations with listed species. We analyzed INRMPs developed by military installations located within the range of the critical habitat designation for Ocmulgee skullcap to determine if they meet the criteria for exemption from critical habitat under section 4(a)(3) of the Act. The following areas are DoD lands with completed, Service-approved INRMPs within the critical habitat designation.

Approved INRMPs

Robins Air Force Base, 224 ac (91 ha)

Robins Air Force Base (AFB) has an approved INRMP. The U.S. Air Force is committed to working closely with the Service and the Georgia Department of Natural Resources to continually refine

the existing INRMP as part of the Sike's Act INRMP review process.

Robins AFB completed an INRMP in 2017, which serves as the principal management plan governing all natural resource activities on the installation (Robins AFB INRMP 2017, entire). The 2017 INRMP includes benefits for Ocmulgee skullcap through: (1) control or elimination of competing, nonnative vegetation (mowing or hand clearing during winter months when Ocmulgee skullcap is dormant); (2) limiting recreational and other activities that may impact the species near Ocmulgee skullcap locations; and (3) promoting natural regeneration of the dominant plant species in upland hardwood bluff forest communities. Further, Robins AFB environmental staff review projects and enforce existing regulations and orders that, through their implementation, avoid and minimize impacts to natural resources, including Ocmulgee skullcap and its habitat. In addition, Robins AFB INRMP provides protection to forested habitat for Ocmulgee skullcap by implementing forest management activities, designating stream and wetland protection zones, and engaging in public outreach and education. Robins AFB INRMP specifies periodic monitoring of the distribution and abundance of the Ocmulgee skullcap populations on the base.

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified lands are subject to the Robins AFB INRMP and that conservation efforts identified in the INRMP will provide a benefit to Ocmulgee skullcap. Therefore, lands within this installation are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 224 ac (91 ha) of forested habitat on Robins AFB in this final critical habitat designation because of this exemption.

Consideration of Impacts Under Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. Exclusion decisions are governed by the regulations at 50 CFR 424.19 and the Policy Regarding Implementation of

Section 4(b)(2) of the Endangered Species Act (hereafter, the “2016 Policy”; 81 FR 7226, February 11, 2016)—both of which were developed jointly with the National Marine Fisheries Service (NMFS). We also refer to a 2008 Department of the Interior Solicitor's opinion entitled, “The Secretary's Authority to Exclude Areas from a Critical Habitat Designation under Section 4(b)(2) of the Endangered Species Act” (M–37016). We explain each decision to exclude areas, as well as decisions not to exclude, to demonstrate that the decision is reasonable.

The Secretary may exclude any particular area if she determines that the benefits of such exclusion outweigh the benefits of including such area as part of the critical habitat, unless she determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making the determination to exclude a particular area, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor. In this final rule, we are not excluding any areas from critical habitat.

Exclusions Based on Economic Impacts

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. In order to consider economic impacts, we prepared an incremental effects memorandum (IEM) and screening analysis which, together with our narrative and interpretation of effects, we consider our economic analysis of the critical habitat designation and related factors (Industrial Economics, Inc. 2021). The analysis, dated February 12, 2021, was made available for public review from June 22, 2022, through August 22, 2022 (87 FR 37378). The economic analysis addresses probable economic impacts of critical habitat designation for Ocmulgee skullcap. Following the close of the comment period, we reviewed and evaluated all information submitted during the comment period that may pertain to our consideration of the probable incremental economic impacts of this critical habitat designation. We did not receive any comments or information related to the economic impacts of the critical habitat designation. Additional information relevant to the probable incremental economic impacts of critical habitat designation for the Ocmulgee skullcap

is summarized below and available in the screening analysis for the Ocmulgee skullcap, available at <https://www.regulations.gov>.

The full description of the findings from the economic analysis are outlined in the June 22, 2022, proposed rule (87 FR 37378). The critical habitat designation for the Ocmulgee skullcap totals approximately 6,661 ac (2,696 ha) in 10 Georgia counties and 2 South Carolina counties. All 18 designated critical habitat units are considered occupied because they contain current (1999–2020) occurrences of Ocmulgee skullcap. We are not designating any units of unoccupied habitat. In occupied areas, any actions that may affect the species or its habitat would also affect designated critical habitat, and it is unlikely that any additional conservation efforts would be recommended to address the adverse modification standard over and above those recommended as necessary to avoid jeopardizing the continued existence of the Ocmulgee skullcap. Therefore, the potential incremental economic effects of the critical habitat designation are expected to be limited to administrative costs and minor costs of conservation efforts. Administrative costs include the additional effort from the Service and the Federal action agency to consider critical habitat for Ocmulgee skullcap in a section 7 consultation that already considers the presence of Ocmulgee skullcap.

The probable incremental economic impacts of the Ocmulgee skullcap critical habitat designation are expected to be limited to additional administrative effort and minor costs of conservation efforts resulting from a small number of future section 7 consultations (Industrial Economics, Inc. 2020, entire). The analysis projects that approximately 73 section 7 consultations (approximately 1 formal consultation, 2 informal consultations, and 70 technical assistance efforts including species lists) will occur annually in the critical habitat areas, based on the previous consultation history in the area. The annual costs to the Service and other action agencies are estimated at approximately \$39,700. Units 1, 3, 4, and 7 are projected to have the highest number of consultations with six or more per unit. At approximately \$10,000 per formal programmatic consultation, the burden resulting from the designation of critical habitat for Ocmulgee skullcap, based on the anticipated annual number of consultations and associated consultation costs, is not expected to exceed \$39,700 in most years (Industrial Economics, Inc. 2020, pp. 1–2, 11, 13).

The designation is unlikely to trigger additional requirements under State or local regulations. Thus, the annual administrative burden is relatively low. As discussed above, we considered the economic impacts of the critical habitat designation, and the Secretary is not exercising her discretion to exclude any areas from this designation of critical habitat for the Ocmulgee skullcap based on economic impacts.

Exclusions Based on Impacts on National Security and Homeland Security

In preparing this rule, we determined that there are no lands within the designated critical habitat for the Ocmulgee skullcap that are owned or managed by the DoD or Department of Homeland Security, and, therefore, we anticipate no impact on national security or homeland security. We did not receive any additional information during the public comment period for the proposed designation regarding impacts of the designation on national security or homeland security that would support excluding any specific areas from the final critical habitat designation under authority of section 4(b)(2) and our implementing regulations at 50 CFR 424.19, as well as the 2016 Policy.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security as discussed above. To identify other relevant impacts that may affect the exclusion analysis, we consider a number of factors, including whether there are permitted conservation plans covering the species in the area such as HCPs, conservation benefit agreements, safe harbor agreements, or candidate conservation agreements with assurances, or whether there are non-permitted conservation agreements and partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at whether Tribal conservation plans or partnerships, Tribal resources, or government-to-government relationships of the United States with Tribal entities may be affected by the designation. We also consider any State, local, social, or other impacts that might occur because of the designation.

We are not excluding any areas from critical habitat. In preparing this final rule, we have determined that there are currently no HCPs or other management plans for Ocmulgee skullcap, and the designation does not include any Tribal

lands or trust resources. We anticipate no impact on Tribal lands, partnerships, or permitted plans from this final critical habitat designation. We did not receive any additional information during the public comment period for the proposed rule regarding other relevant impacts to support excluding any specific areas from the final critical habitat designation under authority of section 4(b)(2) and our implementing regulations at 50 CFR 424.19, as well as the 2016 Policy. Accordingly, the Secretary is not exercising her discretion to exclude any areas from this designation based on other relevant impacts.

Required Determinations

Regulatory Planning and Review (Executive Orders 12866, 13563, and 14094)

Executive Order 14094 reaffirms the principles of E.O. 12866 and E.O. 13563 and states that regulatory analysis should facilitate agency efforts to develop regulations that serve the public interest, advance statutory objectives, and are consistent with E.O. 12866 and E.O. 13563. Regulatory analysis, as practicable and appropriate, shall recognize distributive impacts and equity, to the extent permitted by law. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

Executive Order 12866, as reaffirmed by E.O. 13563 and E.O. 14094, provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. OIRA has determined that this rule is not significant.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 et seq.), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 et seq.), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will

not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term “significant economic impact” is meant to apply to a typical small business firm’s business operations.

Under the RFA, as amended, and as understood in light of recent court decisions, Federal agencies are required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself; in other words, the RFA does not require agencies to evaluate the potential impacts to indirectly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the agency is not likely to destroy or adversely modify critical habitat. Therefore, under section 7, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, it is our position that only Federal action agencies will be directly regulated by this designation. The RFA does not require evaluation of the potential impacts to entities not directly regulated. Moreover, Federal agencies

are not small entities. Therefore, because no small entities will be directly regulated by this rulemaking, we certify that this critical habitat designation will not have a significant economic impact on a substantial number of small entities.

During the development of this final rule, we reviewed and evaluated all information submitted during the comment period on the proposed rule (87 FR 37378; June 22, 2022) that may pertain to our consideration of the probable incremental economic impacts of this critical habitat designation. Based on this information, we affirm our certification that this critical habitat designation will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare statements of energy effects “to the extent permitted by law” when undertaking actions identified as significant energy actions (66 FR 28355; May 22, 2001). E.O. 13211 defines a “significant energy action” as an action that (i) is a significant regulatory action under E.O. 12866 or E.O. 14094 (88 FR 21879; Apr. 11, 2023); and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy. This rule is not a significant regulatory action under E.O. 12866 or 14094. Therefore, this action is not a significant energy action, and there is no requirement to prepare a statement of energy effects for this action.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following finding:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or Tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or Tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty

arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and Tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or Tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions are not likely to destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments because, apart from privately owned lands, the lands designated as critical habitat are owned by Richmond County (in the State of Georgia) and the States of Georgia and South Carolina. These governments do not fit the definition of “small governmental jurisdiction,” nor does the designation of critical habitat impose an obligation on State or local

governments. Small governments will be affected only to the extent that any programs having Federal funds, permits, or other authorized activities must ensure that their actions will not adversely affect the designated critical habitat. In addition, this rule will not produce a Federal mandate of \$200 million or greater in any year; that is, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. Therefore, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for Ocmulgee skullcap in a takings implications assessment. The Act does not authorize us to regulate private actions on private lands or confiscate private property as a result of critical habitat designation. Designation of critical habitat does not affect land ownership, or establish any closures, or restrictions on use of or access to the designated areas. Furthermore, the designation of critical habitat does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. However, Federal agencies are prohibited from carrying out, funding, or authorizing actions that would destroy or adversely modify critical habitat. A takings implications assessment has been completed and concludes that this designation of critical habitat for the Ocmulgee skullcap does not pose significant takings implications for lands within or affected by the designation.

Federalism—Executive Order 13132

In accordance with E.O. 13132 (Federalism), this rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of this critical habitat designation with, appropriate State resource agencies. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, this final rule

does not have substantial direct effects either on the States, or on the relationship between the national government and the States, or on the distribution of powers and responsibilities among the various levels of government. The designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical or biological features of the habitat necessary for the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist State and local governments in long-range planning because they no longer have to wait for case-by-case section 7 consultations to occur.

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) of the Act will be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule will not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, this final rule identifies the physical or biological features essential to the conservation of the species. The designated areas of critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain information collection requirements, and a submission to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) is not required. We may not conduct or sponsor and you are not required to respond to a

collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

Regulations adopted pursuant to section 4(a) of the Act are exempt from the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) and do not require an environmental analysis under NEPA. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This includes listing, delisting, and reclassification rules, as well as critical habitat designations. In a line of cases starting with *Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), the courts have upheld this position.

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951, May 4, 1994), Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), the President's memorandum of November 30, 2022 (Uniform Standards for Tribal Consultation; 87 FR 74479, December 5, 2022), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with federally recognized Tribes and Alaska Native Corporations (ANCs) on a government-to-government basis. In accordance with Secretaries' Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that Tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes. We have coordinated with the Catawba Tribe regarding the SSA that informed this listing determination and critical habitat designation and provided the Tribe with an opportunity to review the SSA report. We informed the Catawba Tribe of the proposed rule publication and opportunity to comment. We have determined that no Tribal lands fall within the boundaries of the critical habitat designation for the Ocmulgee skullcap, so no Tribal lands will be affected by the designation.

References Cited

A complete list of references cited in this rulemaking is available on the internet at <https://www.regulations.gov> and upon request from the Georgia Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this final rule are the staff members of the Fish and Wildlife Service's Species Assessment Team and the Georgia Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Plants, Reporting and recordkeeping requirements, Transportation, Wildlife.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

■ 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245, unless otherwise noted.

■ 2. In § 17.12, in paragraph (h), amend the List of Endangered and Threatened Plants by adding an entry for “*Scutellaria ocmulgee*” in alphabetical order under FLOWERING PLANTS to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Scientific name	Common name	Where listed	Status	Listing citations and applicable rules
FLOWERING PLANTS				
* * * * *				
<i>Scutellaria ocmulgee</i>	Ocmulgee skullcap	Wherever found	E	89 [INSERT FEDERAL REGISTER PAGE WHERE DOCUMENT BEGINS], 10/30/2024; 50 CFR 17.96(a). ^{CH}
* * * * *				

■ 3. In § 17.96, amend paragraph (a) by adding an entry for “Family Lamiaceae: *Scutellaria ocmulgee* (Ocmulgee skullcap)” following the entry for “Family Lamiaceae: *Monardella viminea* (willow monardella)”, to read as follows:

§ 17.96 Critical habitat—plants.

(a) *Flowering plants.*

* * * * *

Family Lamiaceae: *Scutellaria ocmulgee* (Ocmulgee skullcap)

(1) Critical habitat units are depicted for Bibb, Bleckley, Burke, Columbia, Houston, Monroe, Pulaski, Richmond, Screven, and Twiggs Counties in Georgia, and Aiken and Edgefield Counties in South Carolina, on the maps in this entry.

(2) Within these areas, the physical or biological features essential to the conservation of Ocmulgee skullcap consist of the following components:

(i) River bluffs with steep and/or shallow soils that are subject to localized disturbances that limit the

accumulation of leaf litter and competition within the Upper Gulf Coastal Plain and Piedmont of Georgia.

(ii) Well-drained soils that are buffered or circumneutral (pH between 6.5 and 7.5) generally within regions underlain or otherwise influenced by limestone or marl.

(iii) A mature, mixed-level canopy with spatial heterogeneity, providing mottled shade and often including with a rich diversity of grasses and forbs characterizing the herbaceous layer.

(iv) Intact forested habitat that is ecologically functional (*i.e.*, with mature canopy and discrete disturbances) and buffered by surrounding habitat to impede the invasion of competitors.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on November 29, 2024.

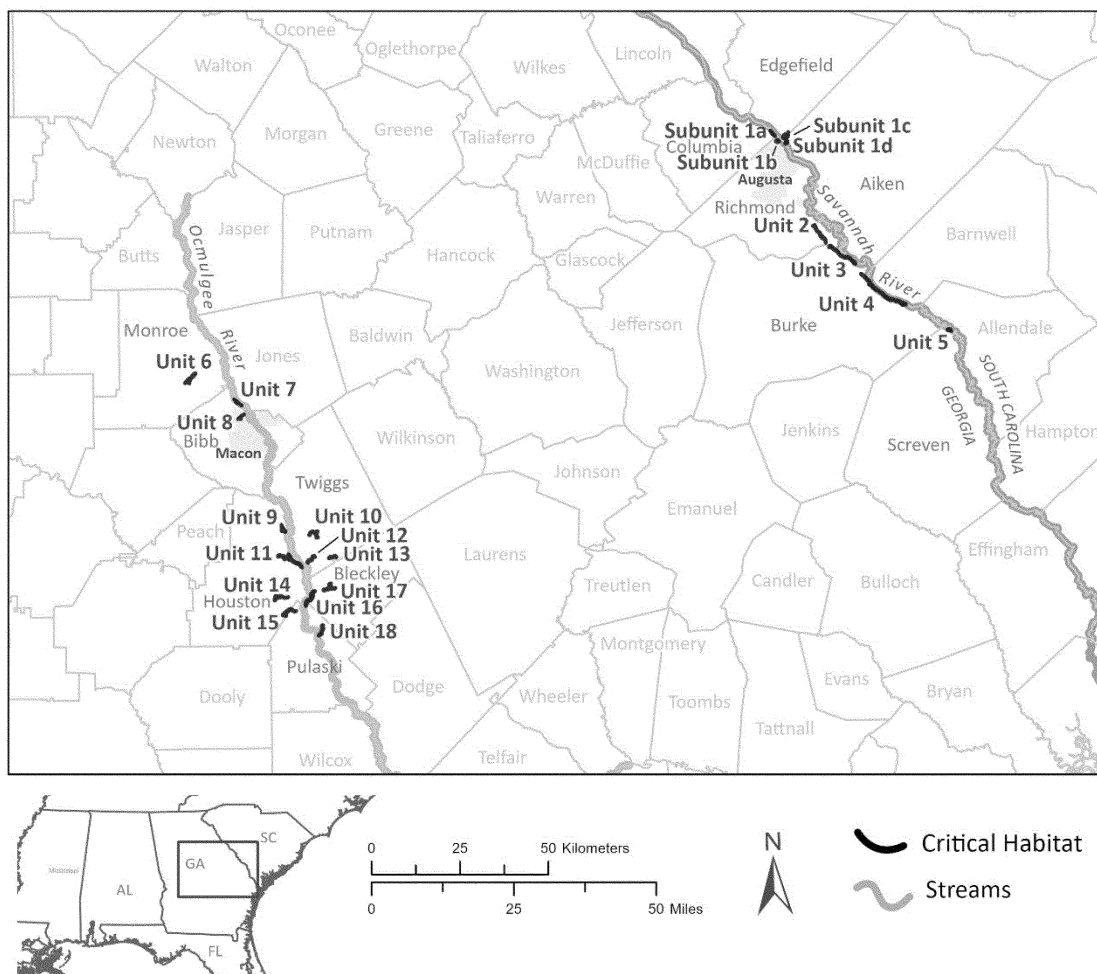
(4) Data layers defining map units were created using ArcMap version 10.6 (Environmental Systems Research

Institute, Inc.), a geographic information systems program on a base of USA Topo Maps. Critical habitat units were then mapped using North American Datum (NAD) 1983, Universal Transverse Mercator (UTM) Zone 17N coordinates. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's internet site at <https://www.fws.gov/office/georgia-ecological-services/library>, at <https://www.regulations.gov> at Docket No. FWS-R4-ES-2021-0059, and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Index map follows:

Figure 1 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (5)

BILLING CODE 4333-15-P

Critical Habitat Index Map for Ocmulgee Skullcap (*Scutellaria ocmulgee*)

(6) Unit 1: Columbia/Richmond; Columbia and Richmond Counties, Georgia, and Aiken and Edgefield Counties, South Carolina.

(i) Unit 1 includes four subunits:

(A) Subunit 1a consists of 106 acres (ac) (43 hectares (ha)) in Columbia County, Georgia. The lands in this subunit are owned and managed by

Richmond County (28 ac (11.3 ha)) and privately owned (78 ac (31.7 ha)).

(B) Subunit 1b consists of 117 ac (47 ha) in Richmond County, Georgia. The lands in this subunit are privately owned.

(C) Subunit 1c consists of 334 ac (135 ha) in Aiken and Edgefield Counties, South Carolina. The lands in this subunit are privately owned.

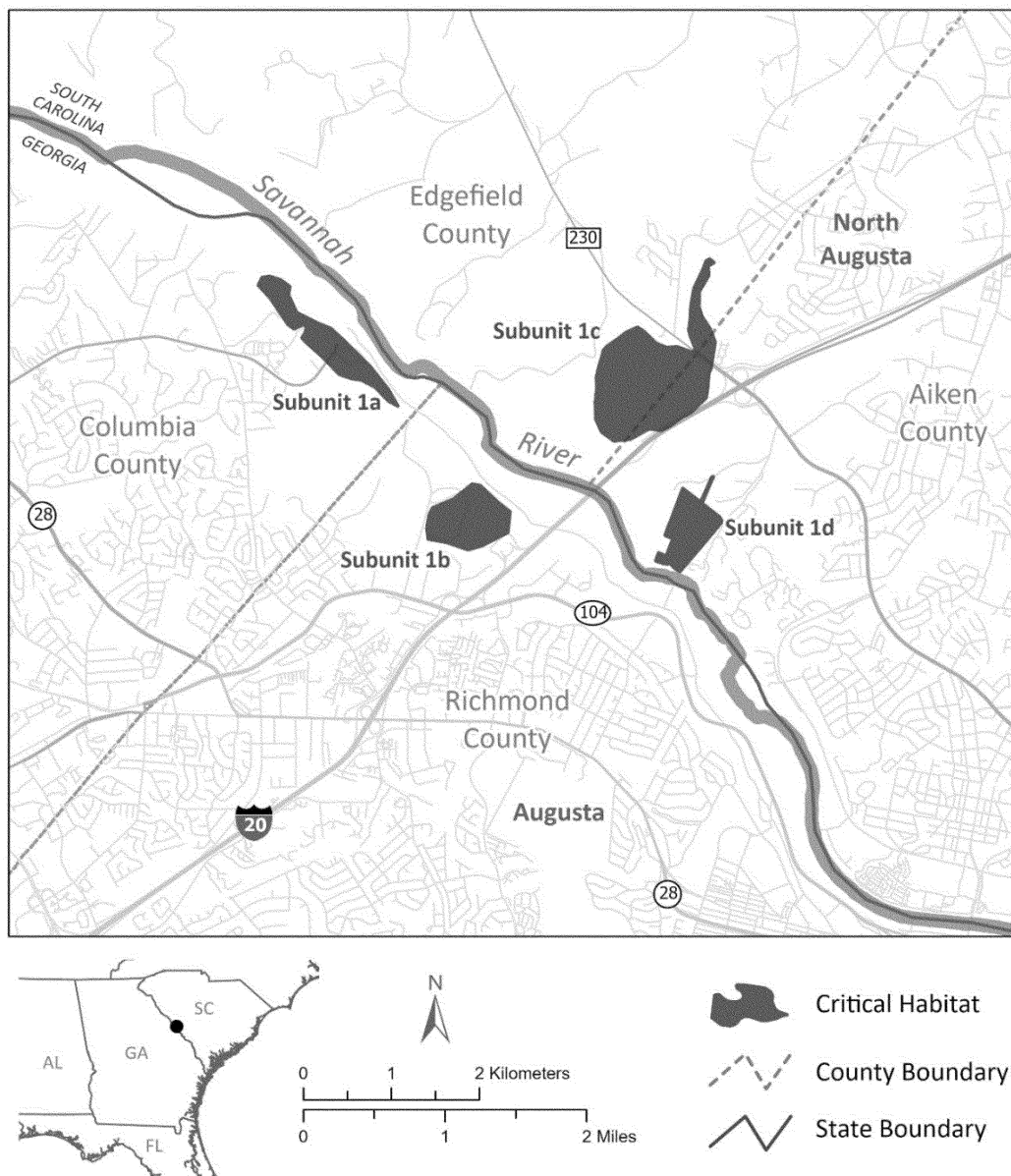
(D) Subunit 1d consists of 84 ac (34 ha) in Aiken County, South Carolina. The lands in this subunit are owned and managed by the State of South Carolina and include the Savannah River Bluffs Heritage Preserve.

(ii) Map of Unit 1 follows:

Figure 2 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (6)(ii)

Critical Habitat for Ocmulgee skullcap Unit 1, Columbia/Richmond

Georgia - Columbia and Richmond Counties South Carolina - Edgefield and Aiken Counties



(7) Unit 2: Barney Bluff; Richmond County, Georgia.

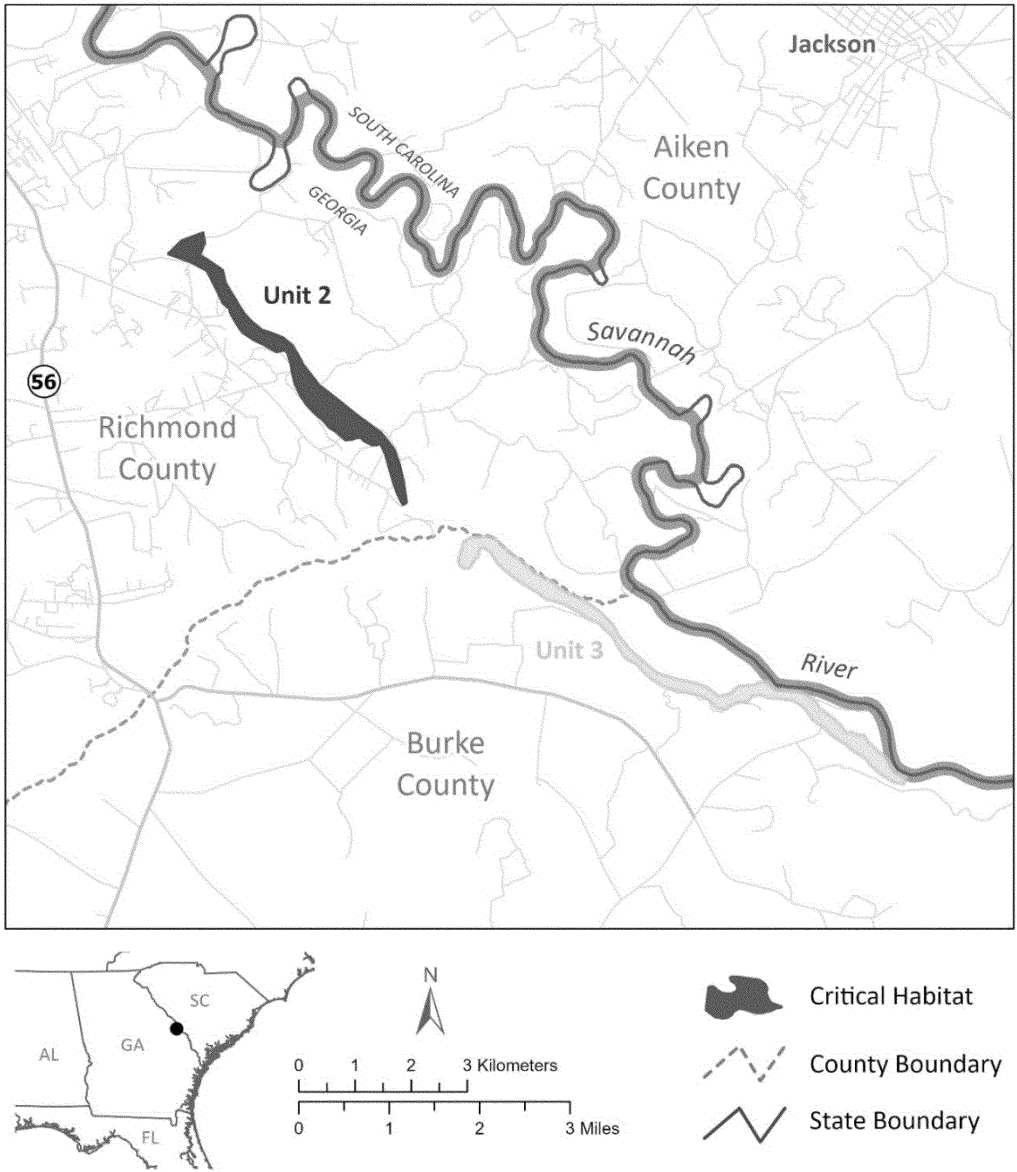
(i) Unit 2 consists of 415 ac (168 ha) in Richmond County, Georgia, and is

composed of lands in private ownership.

(ii) Map of Unit 2 follows:

Figure 3 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (7)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 2, Barney Bluff, Richmond County, GA

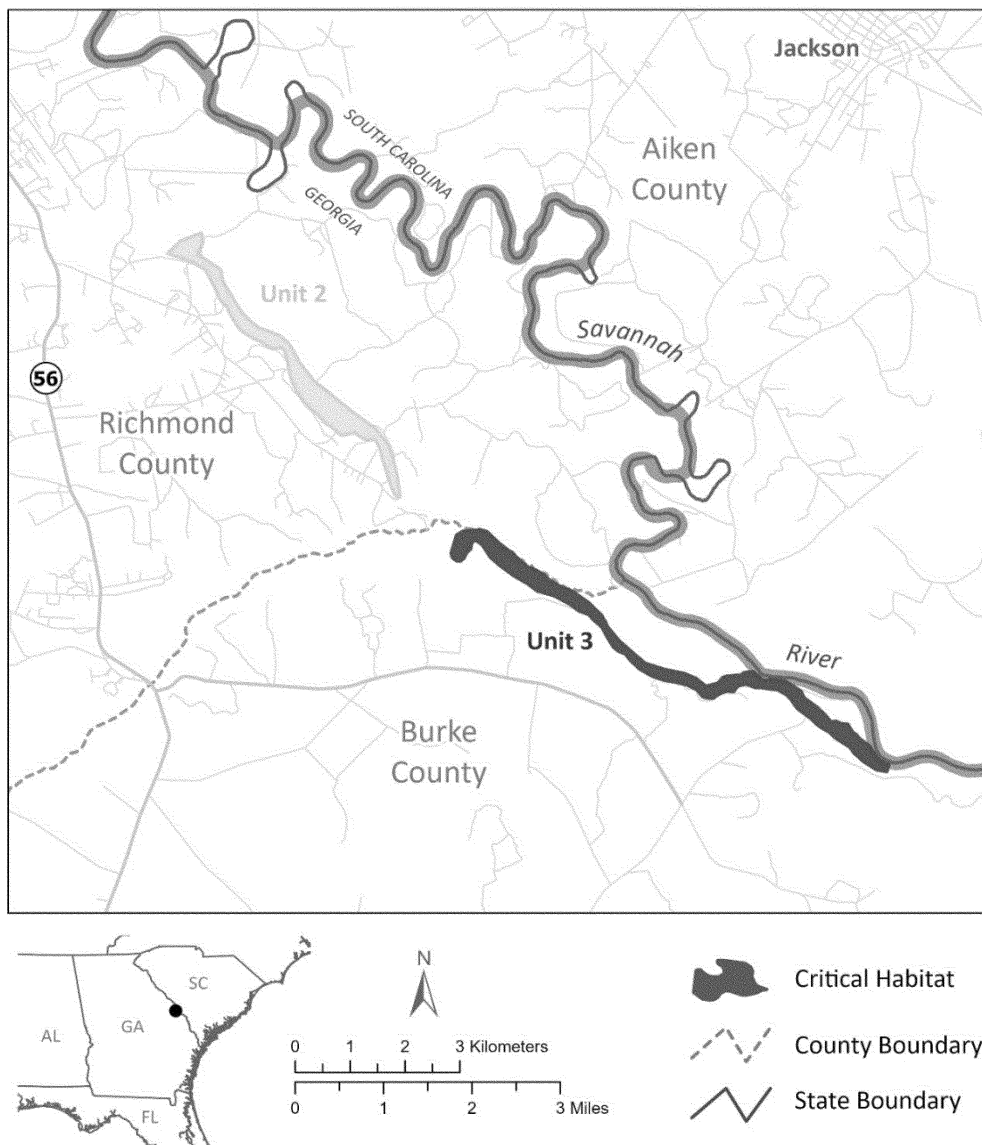


(8) Unit 3: Burke North; Burke County, Georgia.
(i) Unit 3 consists of 526 ac (213 ha) in Burke County, Georgia, and is

composed of lands in private ownership.
(ii) Map of Unit 3 follows:

Figure 4 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (8)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 3, Burke North, Burke County, Georgia



(9) Unit 4: Burke South; Burke County, Georgia.

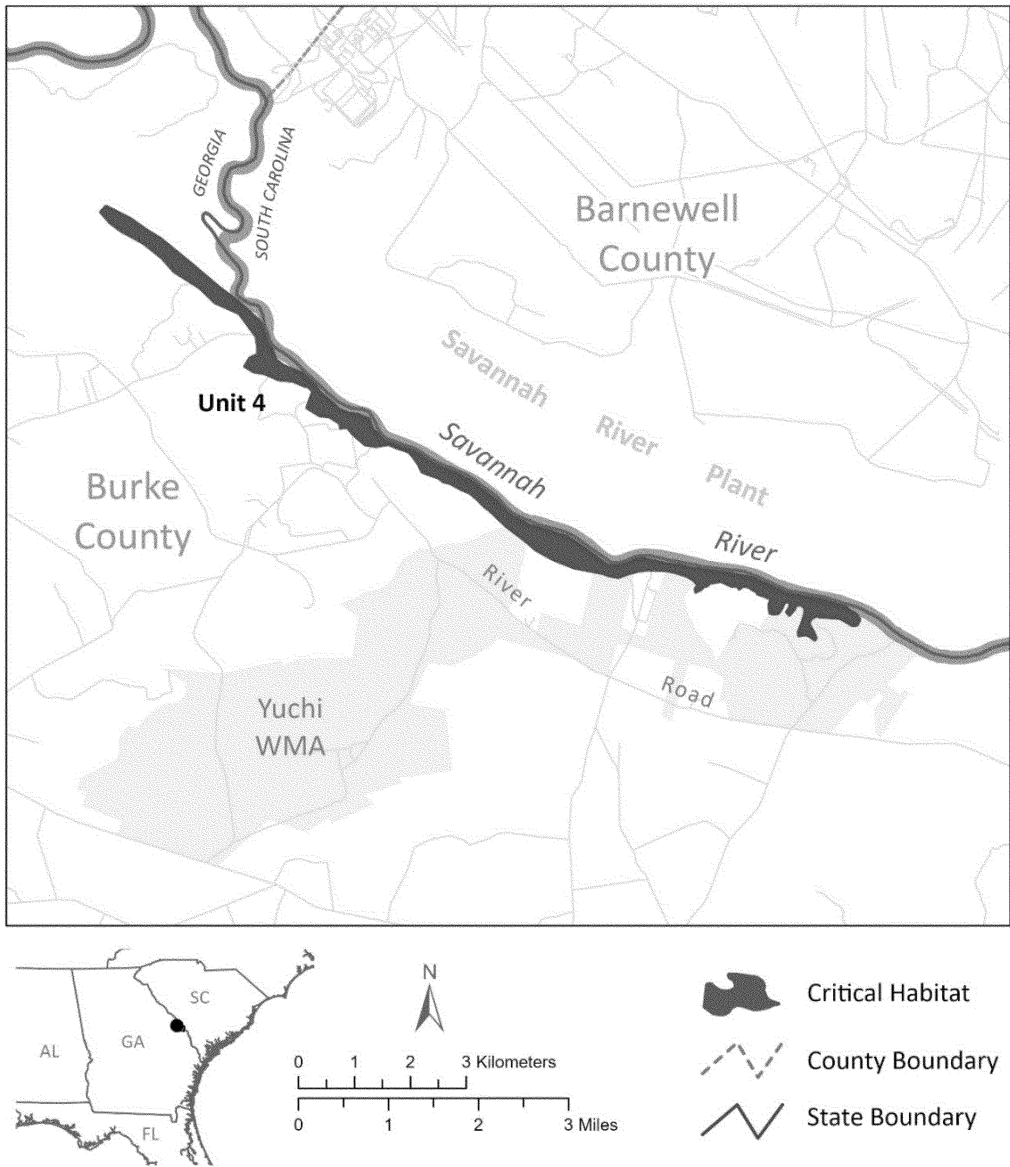
(i) Unit 4 consists of 976 ac (395 ha) in Burke County, Georgia, and is

composed of lands in State (199 ac (80 ha)) and private (777 ac (314 ha)) ownership.

(ii) Map of Unit 4 follows:

Figure 5 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (9)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 4, Burke South, Burke County, Georgia

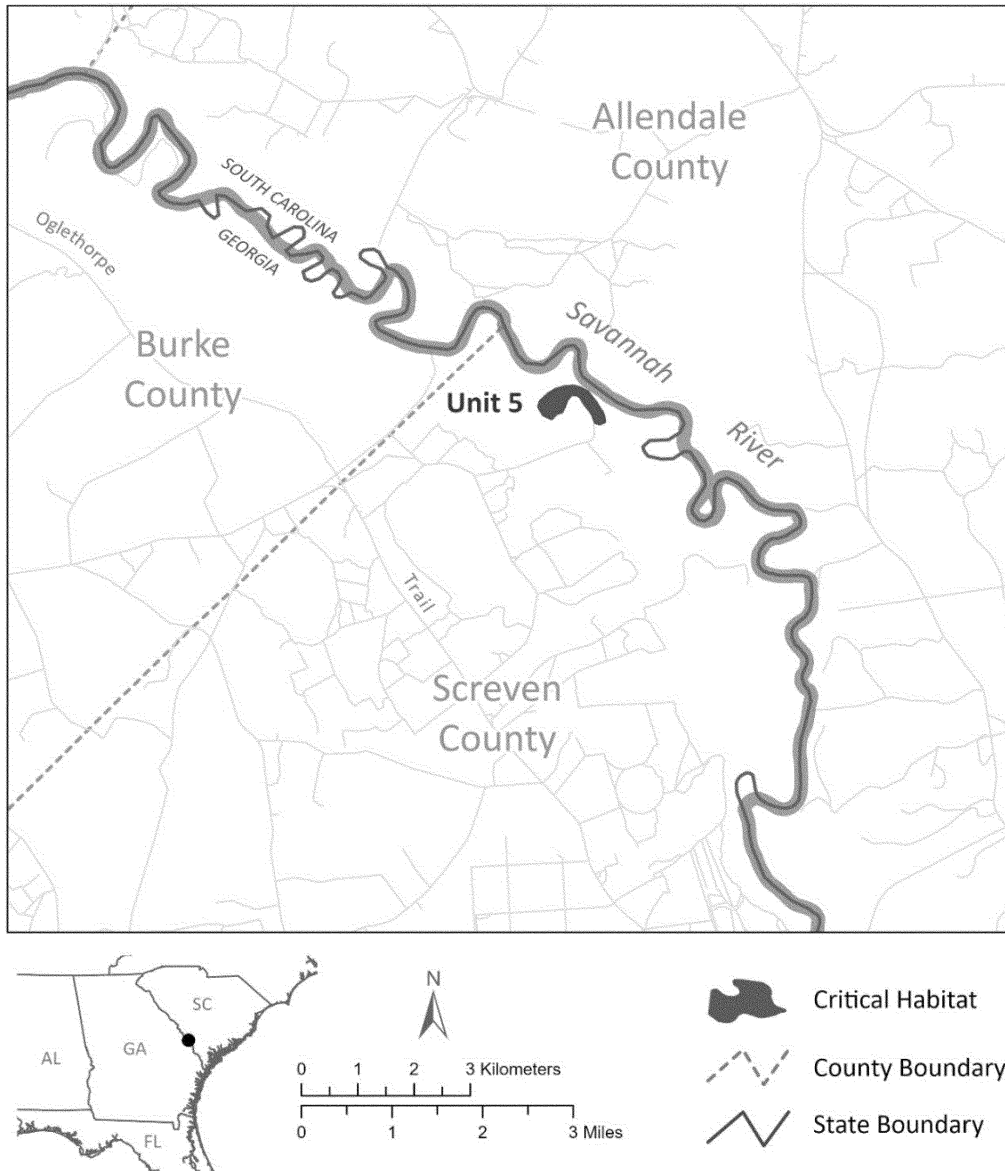


(10) Unit 5: Prescott Lakes; Screven County, Georgia.
(i) Unit 5 consists of 81 ac (33 ha) in Screven County, Georgia, and is

composed of lands in private ownership.
(ii) Map of Unit 5 follows:

Figure 6 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (10)(ii)

**Critical Habitat for Ocmulgee skullcap
Unit 5, Prescott Lakes, Screven County, Georgia**



(11) Unit 6: Bolingbroke Rest Area; Monroe County, Georgia.

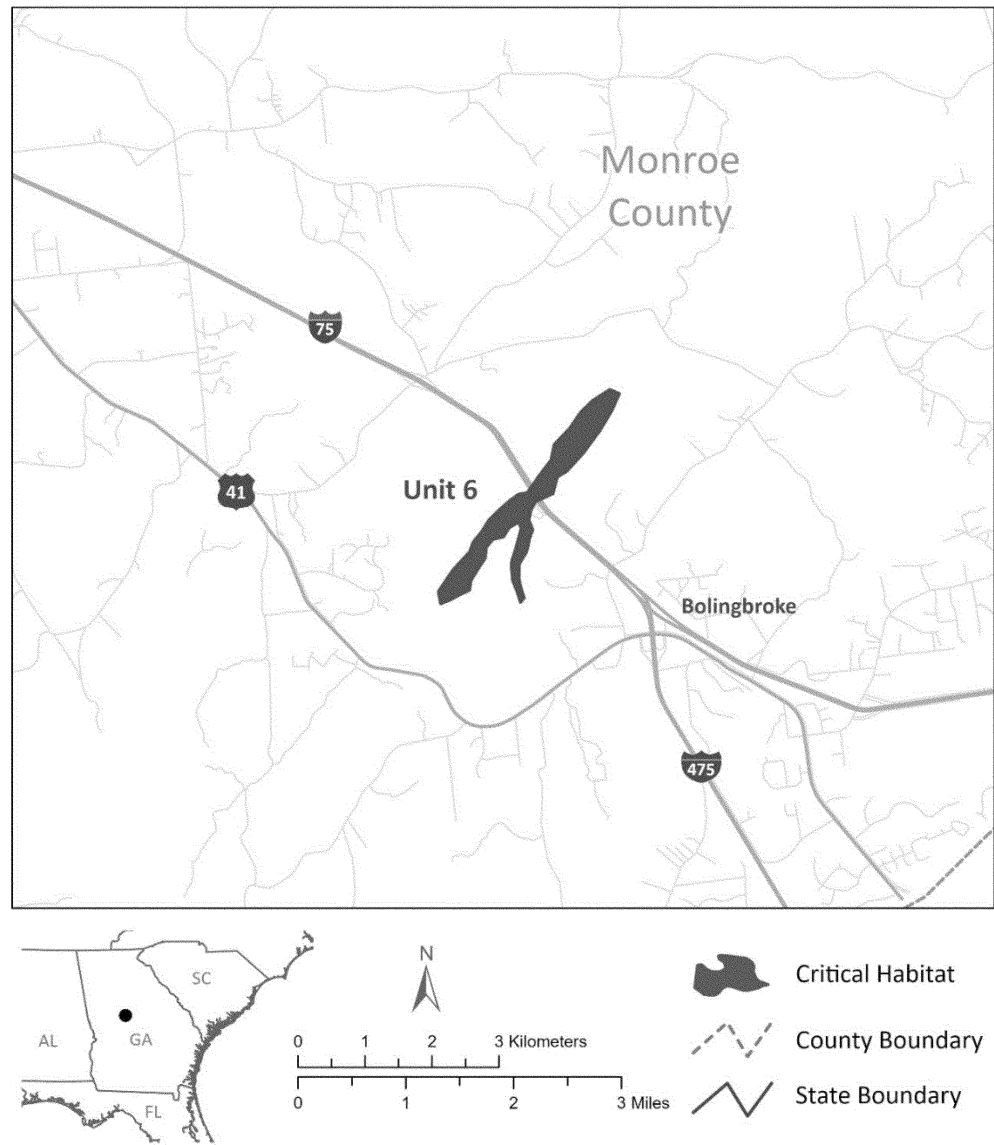
(i) Unit 6 consists of 338 ac (137 ha) in Monroe County, Georgia, and is

composed of lands in private ownership.

(ii) Map of Unit 6 follows:

Figure 7 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (11)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 6, Bolingbroke Rest Area, Monroe County, Georgia

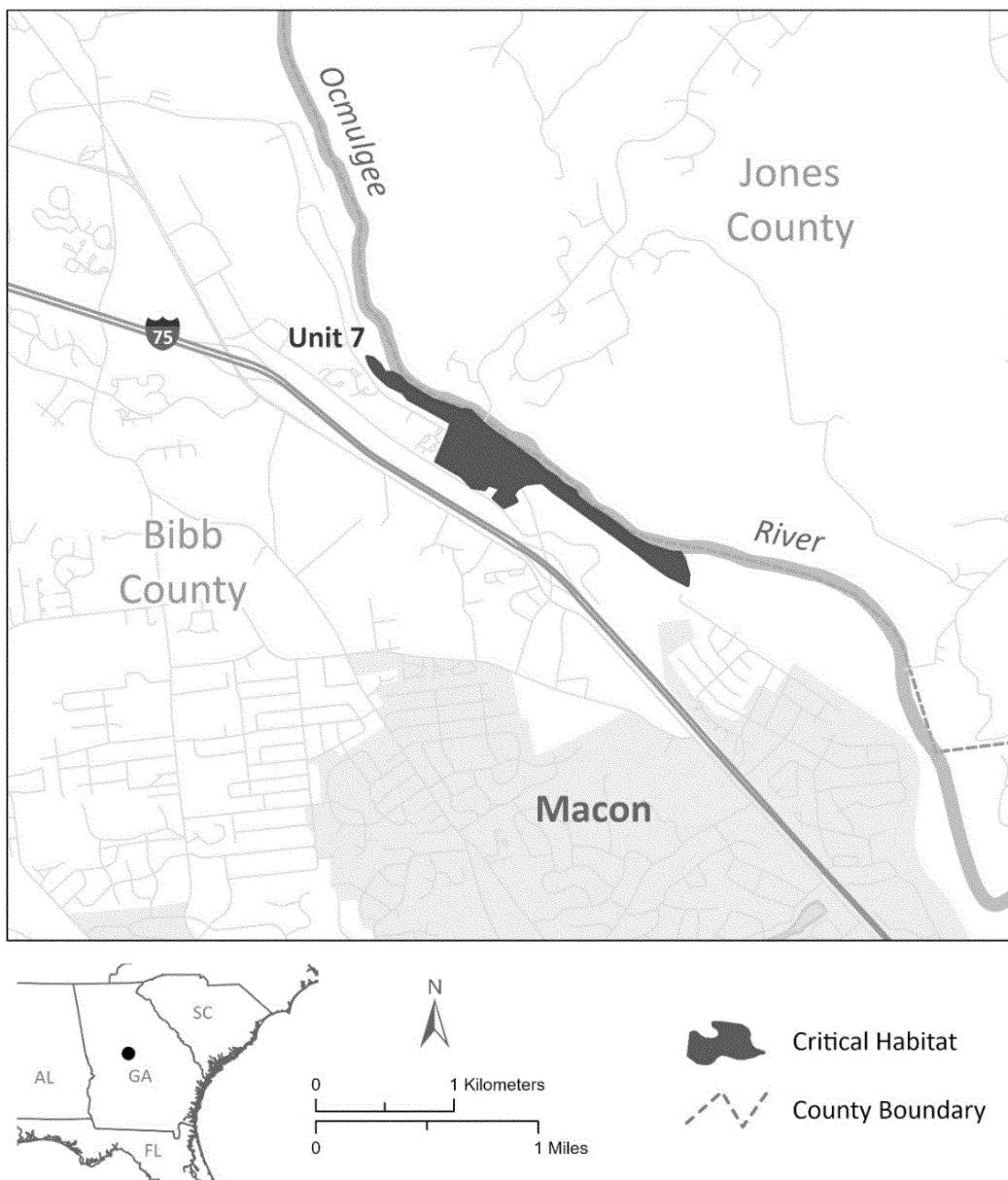


(12) Unit 7: River North Bluff; Bibb County, Georgia.
(i) Unit 7 consists of 115 ac (46 ha) in Bibb County, Georgia, and is composed

of lands in State (10 ac (4 ha)) and private (105 ac (42 ha)) ownership.
(ii) Map of Unit 7 follows:

Figure 8 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (12)(ii)

**Critical Habitat for Ocmulgee skullcap
Unit 7, River North Bluff, Bibb County, Georgia**

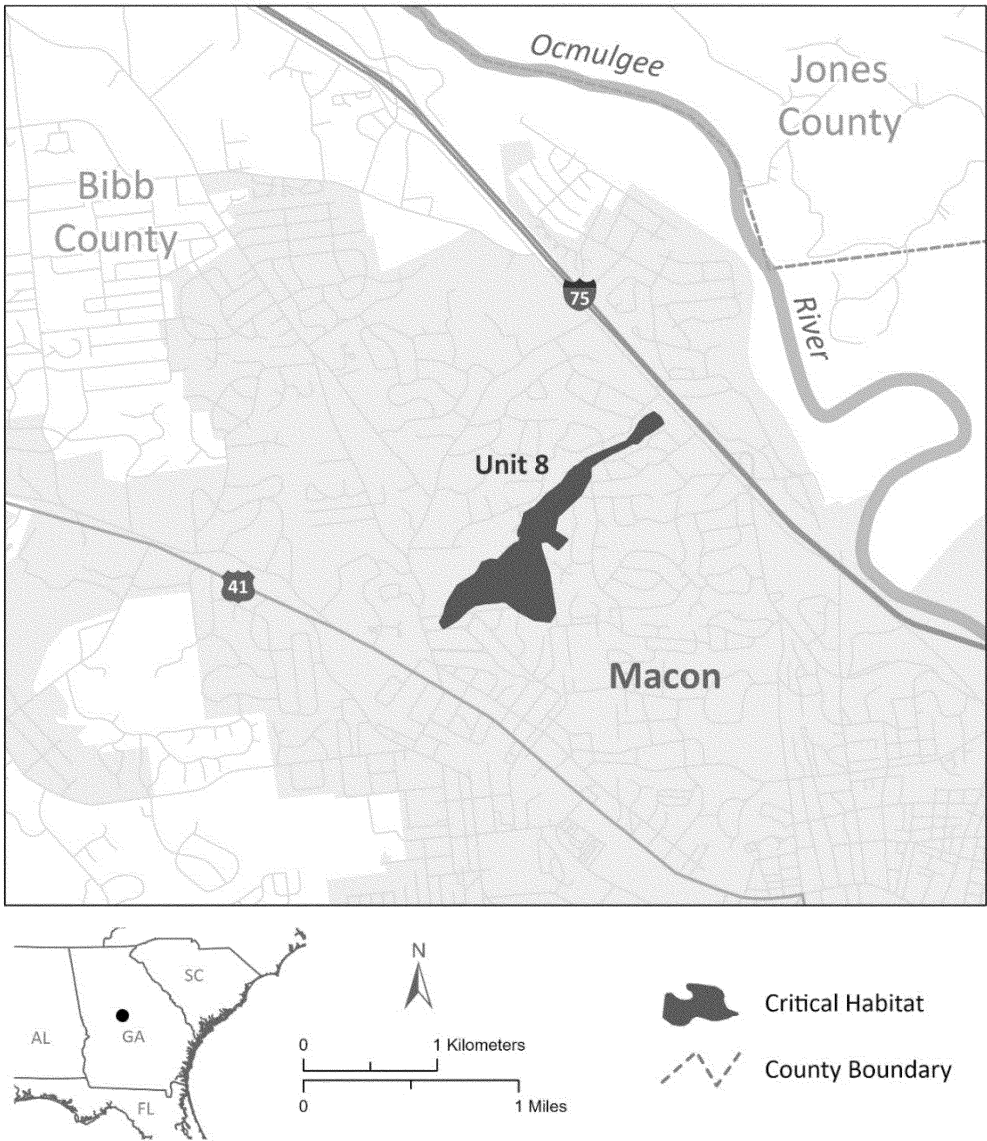


(13) Unit 8: Savage Branch; Bibb County, Georgia.

(i) Unit 8 consists of 115 ac (46 ha) in Bibb County, Georgia, and is composed of lands in private ownership.
(ii) Map of Unit 8 follows:

Figure 9 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (13)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 8, Savage Branch, Bibb County, Georgia

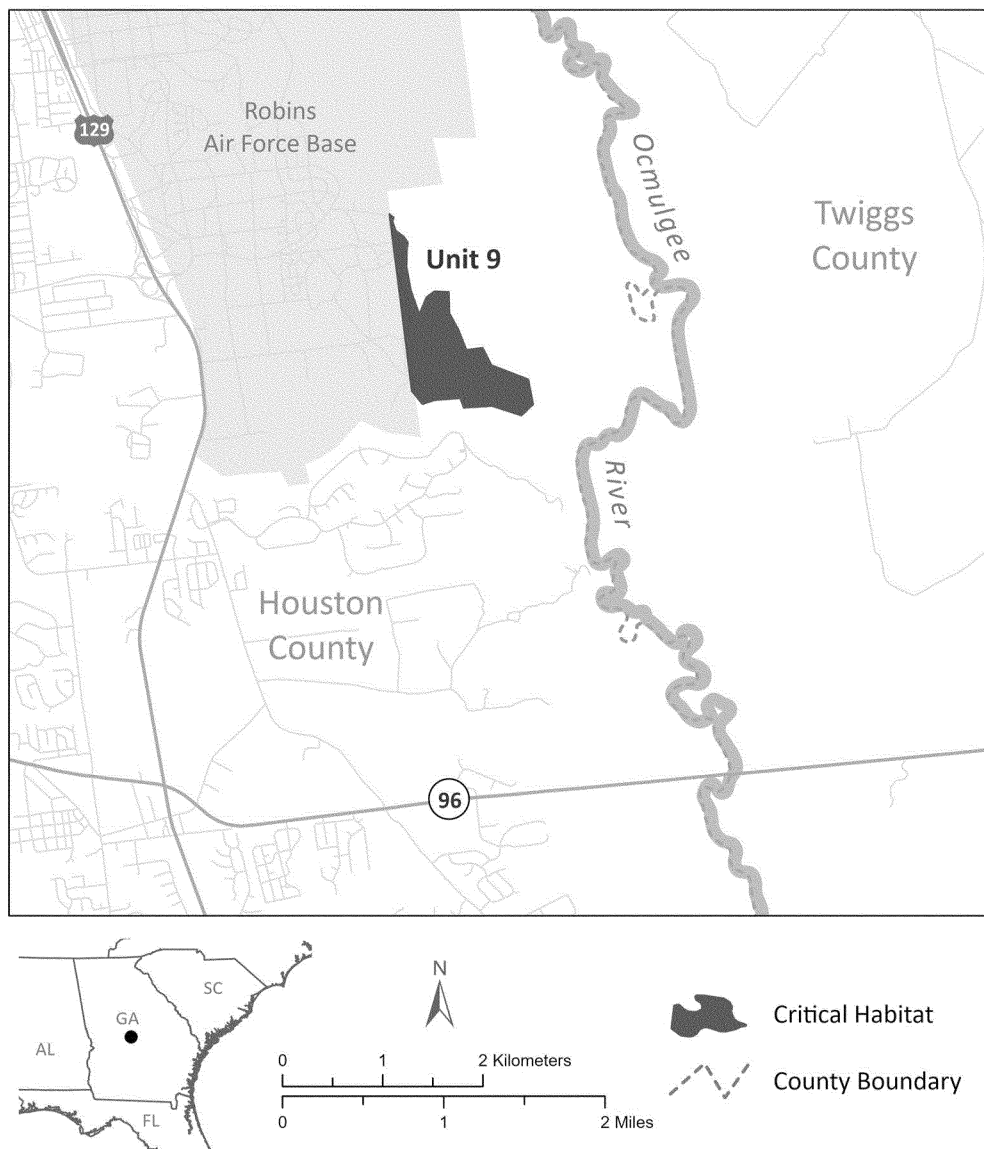


(14) Unit 9: Adjoins Robins Air Force Base; Houston County, Georgia.
(i) Unit 9 consists of 231 ac (93 ha) in Houston County, Georgia, and is

composed of lands in private ownership.
(ii) Map of Unit 9 follows:

Figure 10 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (14)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 9, Adjoins Robins Air Force Base, Houston County, Georgia



(15) Unit 10: Trib Richland Creek; Twiggs County, Georgia.

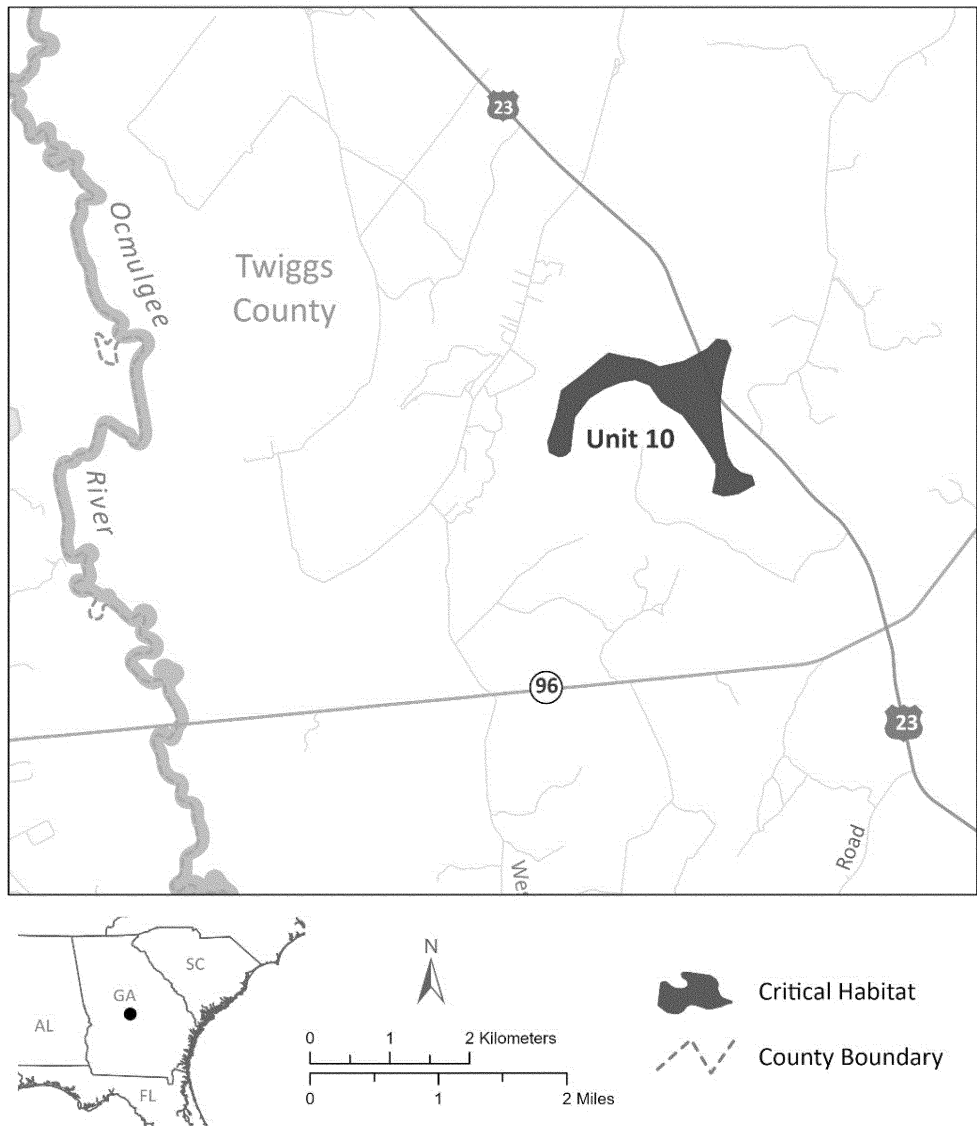
(i) Unit 10 consists of 340 ac (138 ha) in Twiggs County, Georgia, and is

composed of lands in State (242 ac (98 ha)) and private (98 ac (40 ha)) ownership.

(ii) Map of Unit 10 follows:

Figure 11 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (15)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 10, Trib Richland Creek, Twiggs County, Georgia

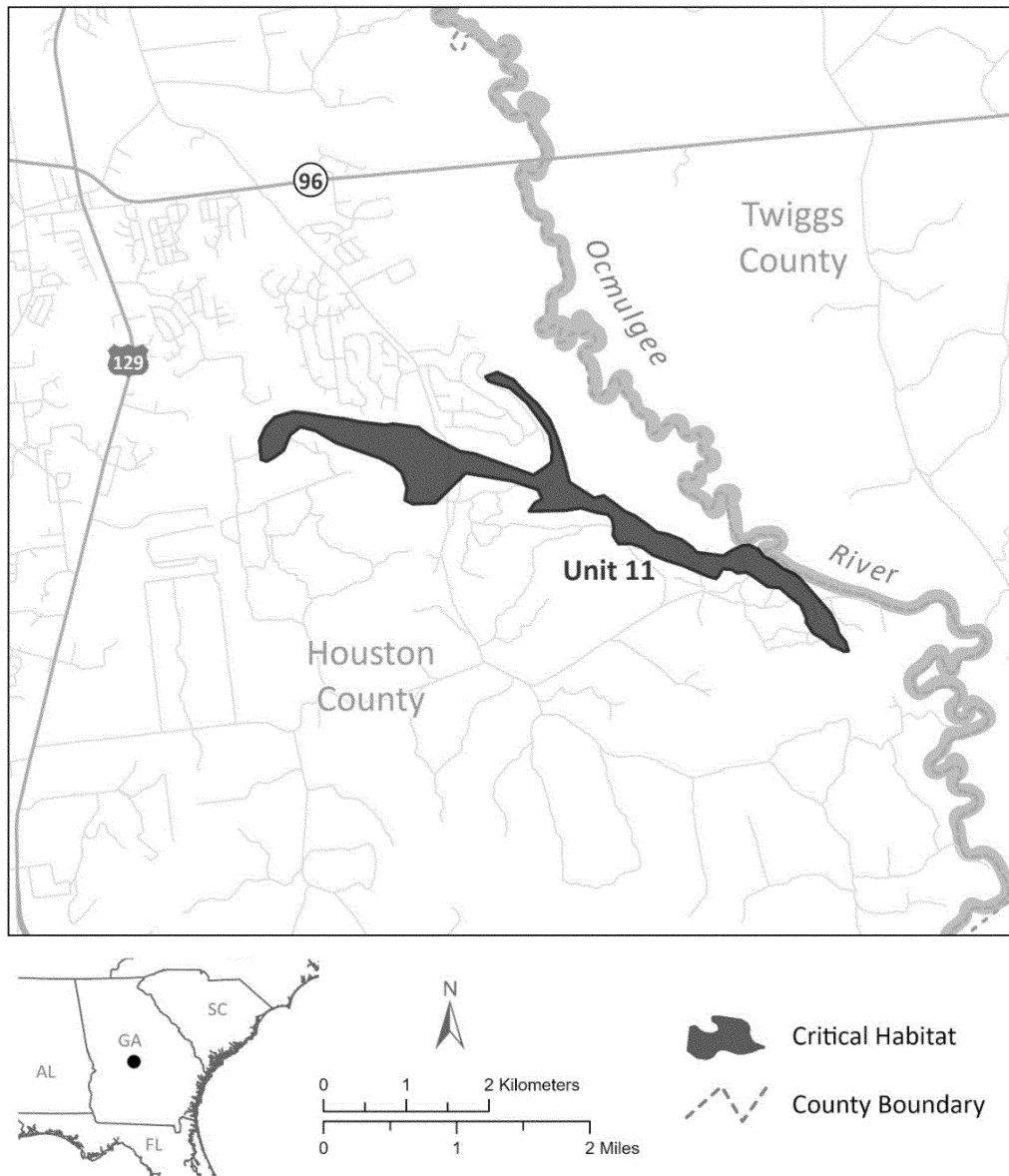


(16) Unit 11: Oaky Woods North;
Houston County, Georgia.
(i) Unit 11 consists of 657 ac (266 ha)
in Houston County, Georgia, and is

composed of lands in State (228 ac (92
ha)) and private (429 ac (174 ha))
ownership.
(ii) Map of Unit 11 follows:

Figure 12 to *Scutellaria ocmulgee*
(Ocmulgee skullcap) paragraph
(16)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 11, Oaky Woods North, Houston County, Georgia



(17) Unit 12: Crooked Creek; Twiggs County, Georgia.

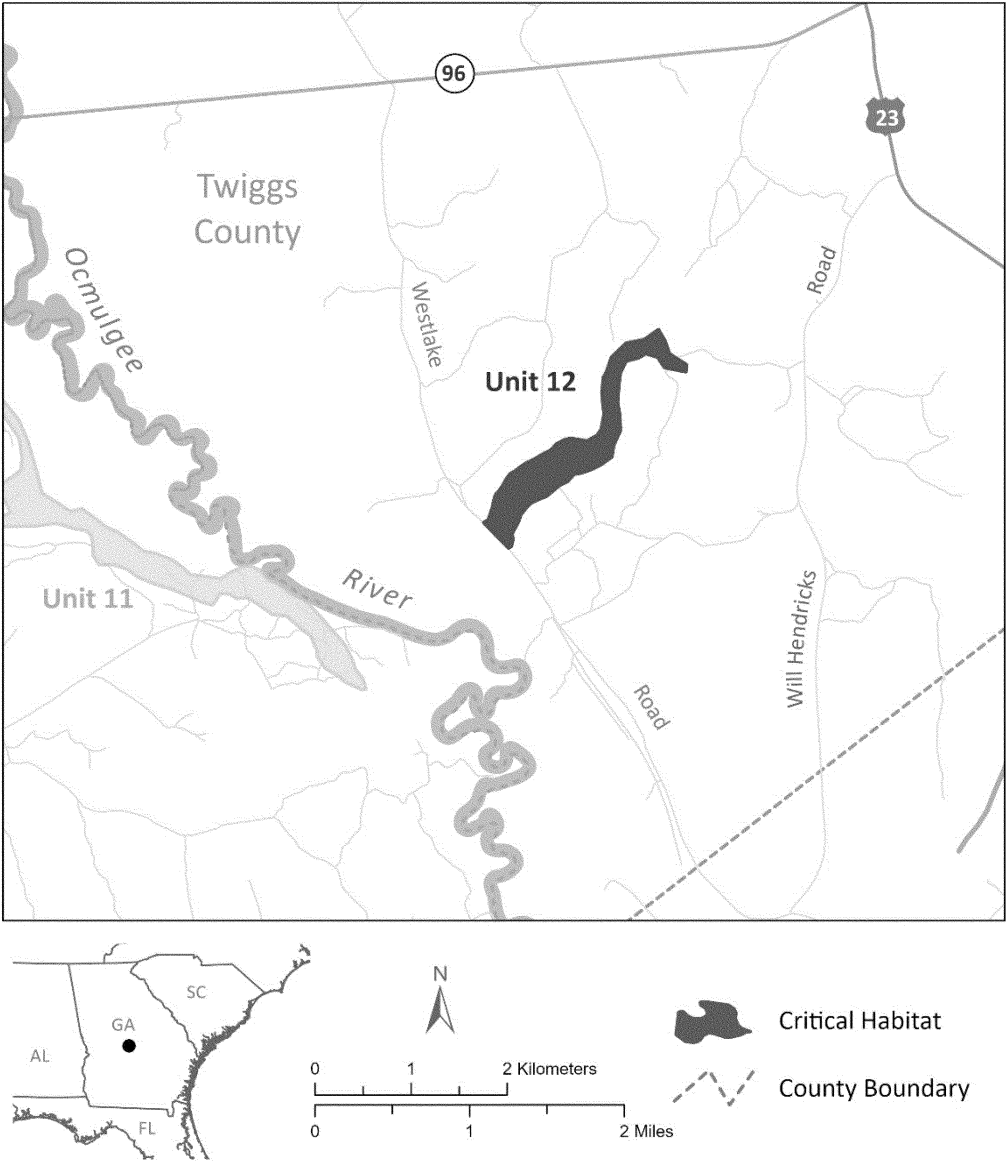
(i) Unit 12 consists of 205 ac (83 ha) in Twiggs County, Georgia, and is

composed of lands in State (201 ac (81 ha)) and private (4 ac (1.6 ha)) ownership.

(ii) Map of Unit 12 follows:

Figure 13 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (17)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 12, Crooked Creek, Twiggs County, Georgia

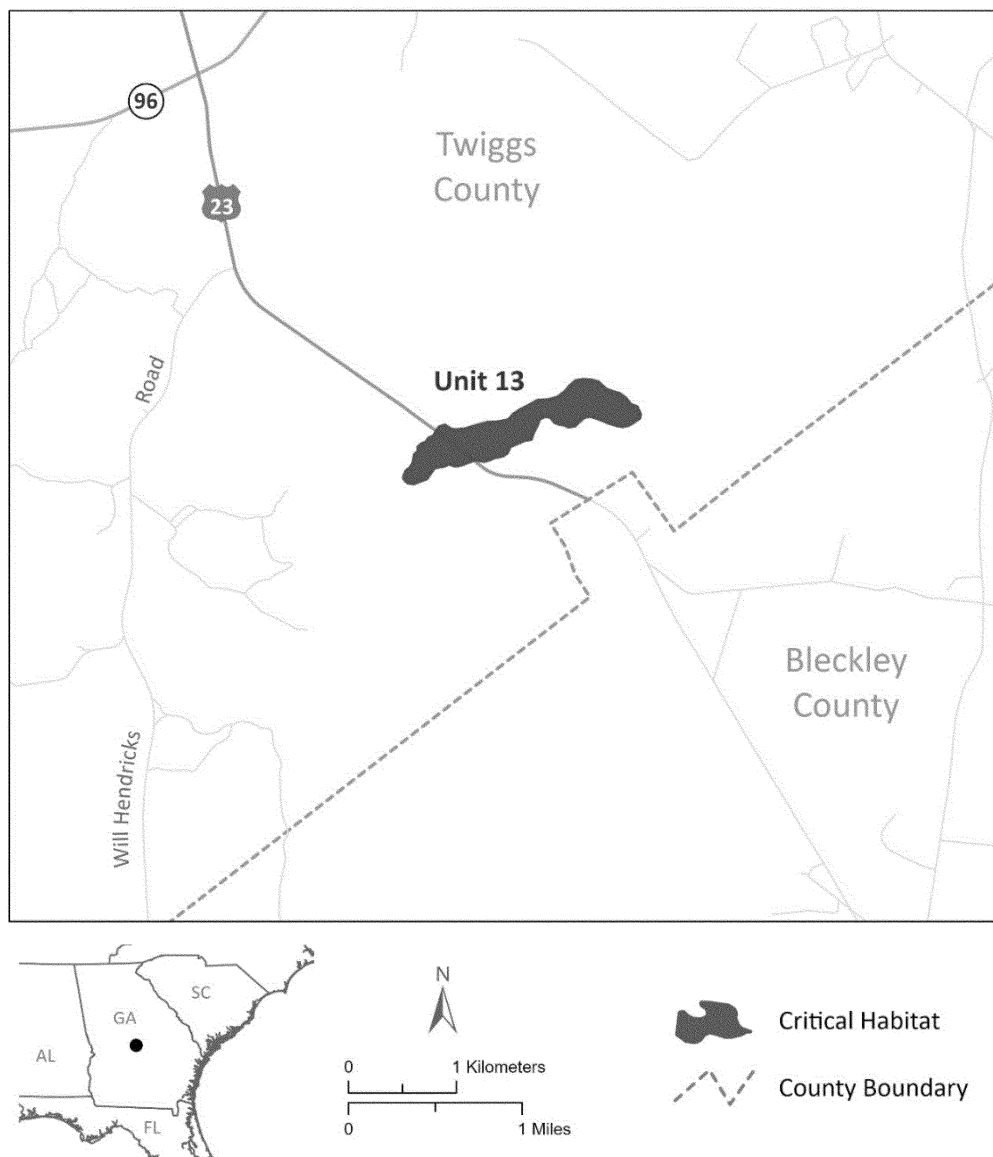


(18) Unit 13: Shellstone Creek; Twiggs County, Georgia.
(i) Unit 13 consists of 160 ac (65 ha) in Twiggs County, Georgia, and is

composed of lands in State (15 ac (6 ha)) and private (145 ac (59 ha)) ownership.
(ii) Map of Unit 13 follows:

Figure 14 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (18)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 13, Shellstone Creek, Twiggs County, Georgia



(19) Unit 14: Oaky Woods South; Houston County, Georgia.

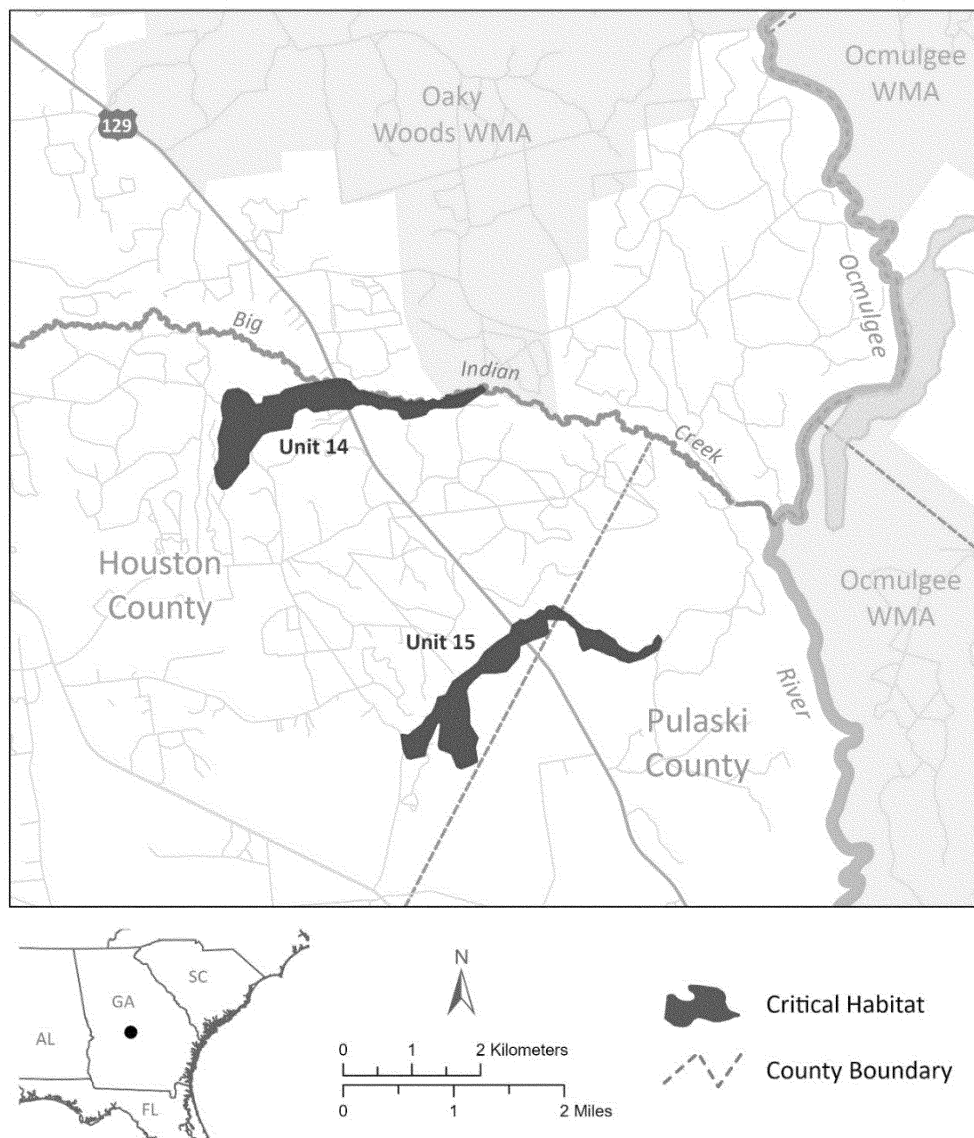
(i) Unit 14 consists of 363 ac (147 ha) in Houston County, Georgia, and is

composed of lands in State (84 ac (34 ha)) and private (279 ac (113 ha)) ownership.

(ii) Map of Units 14 and 15 follows:

Figure 15 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (19)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 14, Oaky Woods South, Houston County, Georgia
Unit 15, Dry Creek, Houston and Pulaski Counties, Georgia



(20) Unit 15: Dry Creek; Houston and Pulaski Counties, Georgia.

(i) Unit 15 consists of 330 ac (133 ha) in Houston and Pulaski Counties, Georgia, and is composed of lands in State (50 ac (20 ha)) and private (280 ac (113 ha)) ownership.

(ii) Map of Unit 15 is provided at paragraph (19)(ii) of this entry.

(21) Unit 16: James Dykes Memorial; Bleckley and Pulaski Counties, Georgia.

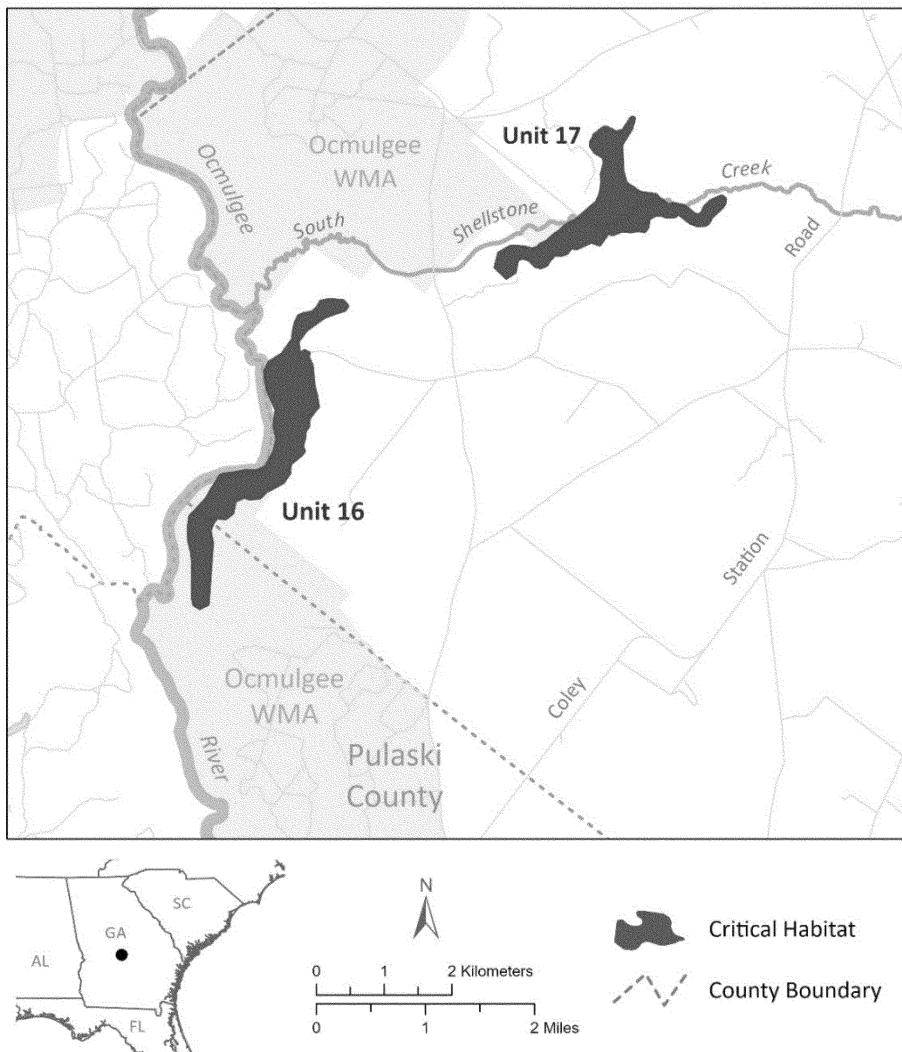
(i) Unit 16 consists of 515 ac (208 ha) in Bleckley and Pulaski Counties, Georgia, and is composed of lands in

State (497 ac (201 ha)) and private (18 ac (7.3 ha)) ownership.

(ii) Map of Units 16 and 17 follows:

Figure 16 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (21)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 16, James Dykes Memorial, Bleckley and Pulaski Counties, Georgia
Unit 17, South Shellstone Creek, Bleckley County, Georgia



(22) Unit 17: South Shellstone Creek; Bleckley County, Georgia.

(i) Unit 17 consists of 403 ac (163 ha) in Bleckley County, Georgia, and is composed of lands in State (4 ac (1.6 ha)) and private (399 ac (161 ha)) ownership.

(ii) Map of Unit 17 is provided at paragraph (21)(ii) of this entry.

(23) Unit 18: Jordan Creek; Pulaski County, Georgia.

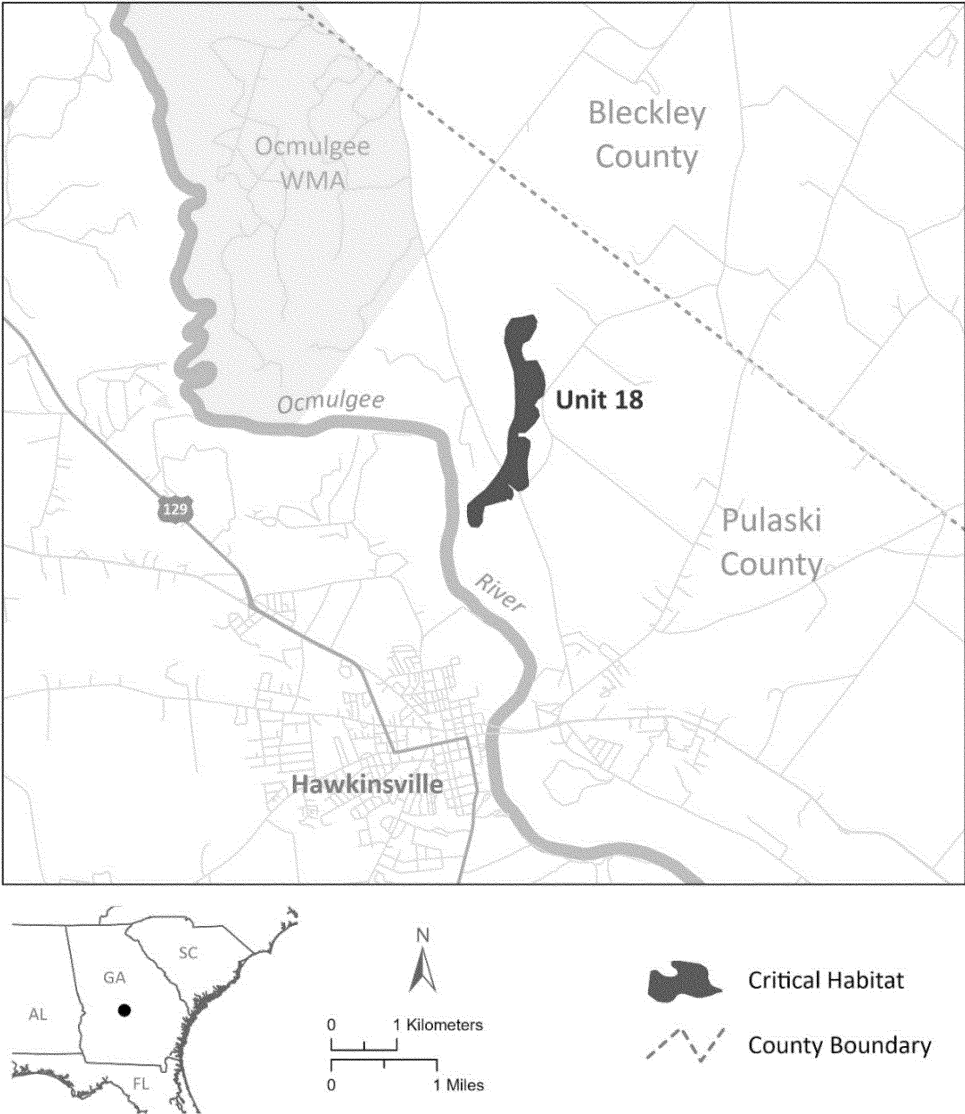
(i) Unit 18 consists of 250 ac (101 ha) in Pulaski County, Georgia, and is

composed of lands in private ownership.

(ii) Map of Unit 18 follows:

Figure 17 to *Scutellaria ocmulgee* (Ocmulgee skullcap) paragraph (23)(ii)

Critical Habitat for Ocmulgee skullcap
Unit 18, Jordan Creek, Pulaski County, Georgia



* * * * *

Martha Williams,
Director, U.S. Fish and Wildlife Service.
[FR Doc. 2024–24897 Filed 10–29–24; 8:45 am]
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