

(3) *Step 3.* Water systems shall evaluate the results of the monitoring conducted under this paragraph (j)(3) to determine if either localized or centralized adjustment of the *optimal corrosion control treatment* 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 the lead action level. Corrosion control treatment modification may not be necessary to address every exceedance. 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 optimal corrosion control treatment under paragraphs (a) through (f) of this section do not need to submit a treatment recommendation for find-and-fix.

(4) *Step 4.* The State shall approve the treatment recommendation or specify a different approach within six months of completion of Step 3 as described in paragraph (j)(3) of this section.

(5) *Step 5.* If the State-approved treatment recommendation requires the water system to adjust the *optimal corrosion control treatment* process, the water system must complete modifications to its corrosion control treatment within 12 months after completion of Step 4 as described in paragraph (j)(4) of this section. Systems without corrosion control treatment required to install *optimal corrosion control treatment* must follow the schedule in §141.81(e).

(6) *Step 6.* Water systems adjusting its *optimal corrosion control treatment* must complete follow-up sampling (§§141.86(d)(2) and 141.87(c)) within 12 months after completion of Step 5 as described in paragraph (j)(5) of this section.

(7) *Step 7.* For water systems adjusting its *optimal corrosion control treatment*, the State must review the water system's modification of corrosion control treatment and designate optimal

water quality control parameters (§141.82(f)(1)) within six months of completion of Step 6 as described in paragraph (j)(6) of this section.

(8) *Step 8.* For a water system adjusting its *optimal corrosion control treatment*, the water system must operate in compliance with the State-designated optimal water quality control parameters (§141.82(g)) and continue to conduct tap sampling (§§141.86(d)(3) and 141.87(d)).

[86 FR 4287, Jan. 15, 2021]

§ 141.83 Source water treatment requirements.

Systems shall complete the applicable source water monitoring and treatment requirements (described in the referenced portions of paragraph (b) of this section, and in §§141.86, and 141.88) by the following deadlines.

(a) *Deadlines for completing source water treatment steps—*(1) *Step 1:* A system exceeding the lead or copper action level shall complete lead and copper source water monitoring (§141.88(b)) and make a treatment recommendation to the State (§141.83(b)(1)) no later than 180 days after the end of the monitoring period during which the lead or copper action level was exceeded.

(2) *Step 2:* The State shall make a determination regarding source water treatment (§141.83(b)(2)) within 6 months after submission of monitoring results under step 1.

(3) *Step 3:* If the State requires installation of source water treatment, the system shall install the treatment (§141.83(b)(3)) within 24 months after completion of step 2.

(4) *Step 4:* The system shall complete follow-up tap water monitoring (§141.86(d)(2) and source water monitoring (§141.88(c)) within 36 months after completion of step 2.

(5) *Step 5:* The State shall review the system's installation and operation of source water treatment and specify maximum permissible source water levels (§141.83(b)(4)) within 6 months after completion of step 4.

(6) *Step 6:* The system shall operate in compliance with the State-specified maximum permissible lead and copper source water levels (§141.83(b)(4)) and

continue source water monitoring (§141.88(d)).

(b) *Description of source water treatment requirements*—(1) *System treatment recommendation*. Any system which exceeds the lead or copper action level shall recommend in writing to the State the installation and operation of one of the source water treatments listed in paragraph (b)(2) of this section. A system may recommend that no treatment be installed based upon a demonstration that source water treatment is not necessary to minimize lead and copper levels at users' taps.

(2) *State determination regarding source water treatment*. The State shall complete an evaluation of the results of all source water samples submitted by the water system to determine whether source water treatment is necessary to minimize lead or copper levels in water delivered to users' taps. If the State determines that treatment is needed, the State shall either require installation and operation of the source water treatment recommended by the system (if any) or require the installation and operation of another source water treatment from among the following: Ion exchange, reverse osmosis, lime softening or coagulation/filtration. If the State requests additional information to aid in its review, the water system shall provide the information by the date specified by the State in its request. The State shall notify the system in writing of its determination and set forth the basis for its decision.

(3) *Installation of source water treatment*. Each system shall properly install and operate the source water treatment designated by the State under paragraph (b)(2) of this section.

(4) *State review of source water treatment and specification of maximum permissible source water levels*. The State shall review the source water samples taken by the water system both before and after the system installs source water treatment, and determine whether the system has properly installed and operated the source water treatment designated by the State. Based upon its review, the State shall designate the maximum permissible lead and copper concentrations for finished water entering the distribution system. Such levels shall reflect the contami-

nant removal capability of the treatment properly operated and maintained. The State shall notify the system in writing and explain the basis for its decision.

(5) *Continued operation and maintenance*. Each water system shall maintain lead and copper levels below the maximum permissible concentrations designated by the State at each sampling point monitored in accordance with §141.88. The system is out of compliance with this paragraph if the level of lead or copper at any sampling point is greater than the maximum permissible concentration designated by the State.

(6) *Modification of State treatment decisions*. 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 the source water treatment under paragraph (b)(2) of this section, or maximum permissible lead and copper concentrations for finished water entering the distribution system under paragraph (b)(4) of this section. A request for modification by a system or other interested party shall be in writing, explain why the modification is appropriate, and provide supporting documentation. The State may modify its determination where it concludes that such change is necessary to ensure that the system continues to minimize lead and copper concentrations in source water. A revised determination shall be made in writing, set forth the new treatment requirements, explain the basis for the State's decision, and provide an implementation schedule for completing the treatment modifications.

(7) *Treatment decisions by EPA in lieu of the State*. Pursuant to the procedures in §142.19, the EPA Regional Administrator may review treatment determinations made by a State under paragraphs (b) (2), (4), or (6) of this section and issue Federal treatment determinations consistent with the requirements of those paragraphs where the Administrator finds that:

(i) A State has failed to issue a treatment determination by the applicable deadlines contained in §141.83(a),

(ii) A state has abused its discretion in a substantial number of cases or in

cases affecting a substantial population, or

(iii) The technical aspects of a State's determination would be indefensible in an expected Federal enforcement action taken against a system.

[56 FR 26548, June 7, 1991, as amended at 72 FR 57815, Oct. 10, 2007]

§ 141.84 Lead service line replacement requirements.

(a) *Lead service line inventory.* All water systems must develop an inventory to identify the materials of service lines connected to the public water distribution system. The inventory must meet the following requirements:

(1) All water systems must develop an initial inventory by October 16, 2024, and submit it to the primacy agency in accordance with § 141.90(e).

(2) 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 would include both the portion of the service line owned by the water system and the customer-owned portion of the service line).

(3) A water system must use any information on lead and galvanized iron or steel that it has identified pursuant to § 141.42(d) when conducting the inventory of service lines in its distribution system for the initial inventory under paragraph (a)(1) of this section. The water system must also review the sources of information listed in paragraphs (a)(3)(i) through (iv) of this section to identify service line materials for the initial inventory. The water system may use other sources of information not listed in paragraphs (a)(3)(i) through (iv) of this section if approved by the State.

(i) All construction and plumbing codes, permits, and existing records or other documentation which indicates the service line materials used to connect structures to the distribution system.

(ii) All water system records, including distribution system maps and drawings, historical records on each service connection, meter installation records, historical capital improvement or master plans, and standard operating procedures.

(iii) All inspections and records of the distribution system that indicate the material composition of the service connections that connect a structure to the distribution system.

(iv) Any resource, information, or identification method provided or required by the State to assess service line materials.

(4) Each service line, or portion of the service line where ownership is split, must be categorized in the following manner:

(i) "Lead" where the service line is made of lead.

(ii) "Galvanized Requiring Replacement" where a galvanized service line is or was at any time downstream of a lead service line or is currently downstream of a "Lead Status Unknown" service line. If the water system is unable to demonstrate that the galvanized service line was never downstream of a lead service line, it must presume there was an upstream lead service line.

(iii) "Non-lead" where the service line is determined through an evidence-based record, method, or technique not to be lead or galvanized requiring replacement. The water system may classify the actual material of the service line (*i.e.*, plastic or copper) as an alternative to classifying it as "Non-lead."

(iv) "Lead Status Unknown" where the service line material is not known to be lead, galvanized requiring replacement, or a non-lead service line, such as where there is no documented evidence supporting material classification. The water system may classify the line as "Unknown" as an alternative to classifying it as "Lead Status Unknown," however, all requirements that apply to "Lead Status Unknown" service lines must also apply to those classified as "Unknown." Water systems may elect to provide more information regarding their unknown lines as long as the inventory clearly distinguishes unknown service lines from those where the material has been verified through records or inspection.

(5) Water systems shall identify and track service line materials in the inventory as they are encountered in the course of its normal operations (e.g., checking service line materials when