ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2024–0303; FRL–7623–02–OAR]

RIN 2060–AU73

National Emission Standards for Hazardous Air Pollutants: Chemical Manufacturing Area Sources Technology Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is finalizing amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Chemical Manufacturing Area Source (CMAS) categories pursuant to a technology review under Clean Air Act (CAA) section 112(d)(6). Specifically, the EPA is finalizing new leak detection and repair (LDAR) requirements for equipment leaks and heat exchange systems in organic hazardous air pollutant (HAP) service. In addition, the EPA is taking final action to add standards for pressure relief devices (PRDs) and pressure vessels; require electronic reporting for notification of compliance status (NOCS), performance test reports, and periodic reports; and require continuous performance testing of non-flare air pollution control devices (APCD). The EPA is not finalizing the proposed area source category for chemical manufacturing with ethylene oxide (EtO) or related standards at this time.

DATES: This final rule is effective on April 1, 2026. The Director of the **Federal Register** (FR) has approved incorporation by reference of certain publications listed in the rule as of April 1, 2026.

ADDRESSES: The EPA established a docket for this action under Docket ID No. EPA–HQ–OAR–2024–0303. All documents in the docket are available at *https://www.regulations.gov.* Although listed, some information is not publicly available, *e.g.,* Confidential Business Information or other information whose disclosure is restricted by statute. The EPA does not place certain other material, such as copyrighted material, on the internet; this material is publicly available only as portable document format (PDF) versions accessible only on EPA computers in the docket office reading room. The public cannot download certain databases and physical items from the docket but may request these items by contacting the docket office at (202) 566–1744. The docket office has 10 business days to respond to these requests. With the exception of such material, publicly available docket materials are available electronically at *https://www.regulations.gov* or on the EPA computers in the docket office reading room at the EPA Docket Center, WJC West Building, Room Number 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Time (ET), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the EPA Docket Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For information about this final rule, contact U.S. EPA, Attn: William Gallagher, Mail Drop: Industrial Processing and Power Division (E140C), 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–2336; and email address: *Gallagher.William@epa.gov.*

SUPPLEMENTARY INFORMATION:

Preamble acronyms and abbreviations. Throughout this notice the use of ''we,'' ''us,'' or ''our'' refers to the EPA. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

AMEL Alternative Means of Emission Limitation
APCD air pollution control device
CAA Clean Air Act
CDX Central Data Exchange
CEDRI Compliance and Emissions Data Reporting Interface
CFR Code of Federal Regulations
CMAS Chemical Manufacturing Area Source(s)
CMPU chemical manufacturing process unit
EAV equivalent annualized value
EPA Environmental Protection Agency
ERT Electronic Reporting Tool
EtO ethylene oxide
FR Federal Register
GACT generally available control technology
gpm gallons per minute
G/V gas/vapor
HAP hazardous air pollutant(s)
HL heavy liquid
HON Hazardous Organic NESHAP
ICR information collection request
kPa kilopascal(s)
LDAR leak detection and repair
LDSN leak detection and sensor network
LL light liquid
MACT maximum achievable control technology
MON Miscellaneous Organic Chemical Manufacturing NESHAP
NAICS North American Industry Classification System
NESHAP national emission standards for hazardous air pollutants
NOCS notification of compliance status
NRDC Natural Resources Defense Council
NTTAA National Technology Transfer and Advancement Act
OAR Office of Air and Radiation
OGI optical gas imaging
OMB Office of Management and Budget
OSHA Occupation Safety and Health Administration
PDF portable document format
PEPO Polyether Polyols
ppmv parts per million by volume
ppmw parts per million by weight
PRA Paperwork Reduction Act
PRD pressure relief device
PV present value
RFA Regulatory Flexibility Act
RTR risk and technology review
tpy tons per year
UMRA Unfunded Mandates Reform Act
U.S.C. United States Code
VCS voluntary consensus standards
VOC volatile organic compound(s)

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Background information. On January 22, 2025, the EPA proposed revisions to the CMAS NESHAP based on the Agency's technology review undertaken pursuant to CAA section 112(d)(6).[1] In that action, the EPA also proposed to list and establish standards, pursuant to CAA sections 112(c)(3) and (d)(5) respectively, for a new source category for area sources that produce a material or family of materials described by North American Industry Classification System (NAICS) code 325 using EtO.[2]

In this final rule, the EPA is establishing standards for existing CMAS categories based on the CAA section 112(d)(6) technology review. This preamble summarizes some of the more significant comments the EPA received regarding the proposed CAA section 112(d)(6) technology review and provides the Agency's responses. A summary of all other public comments on the proposed CAA section 112(d)(6) technology review and the EPA's responses to those comments are in the document *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources,* which is in the docket for this rulemaking.[3] A ''track changes'' version of the regulatory language that incorporates the changes in this action is also in the docket for this rulemaking.

The EPA is not taking final action at this time on the proposed listing and regulation of EtO from area sources producing a material or family of materials described by NAICS code 325. The EPA received numerous comments and information both in favor of and opposed to the proposed listing and regulation of EtO from area sources that produce a material or family of materials described by NAICS code 325 (chemical manufacturing), and the Agency needs additional time to consider those comments before taking final action. The EPA intends to coordinate a final action on this issue with the regulation of EtO from major sources of HAP. The EPA will address EtO-specific comments on the proposed listing and regulation when the Agency takes final action on those portions of the proposal.

I. General Information

A. Executive Summary

In 2009, the EPA promulgated standards to regulate HAP emissions of 15 air toxics from CMAS pursuant to CAA section 112(c)(3) and (k)(3). In 2012, the EPA granted and finalized reconsideration of the CMAS NESHAP in response to petitioner concerns on topics such as title V permitting, overlap provisions, leak inspections, requirements for covers and lids, and the applicability of the NESHAP. As part of the 2012 rules, the EPA proposed and finalized additional standards for periods of startup, shutdown, and malfunction, metal HAP process vents, and technical corrections.

CAA section 112(d)(6) requires the EPA to review and revise emission standards ''as necessary'' no less often than every eight years (*i.e.,* a technology review). On January 22, 2025, the EPA proposed changes to the CMAS NESHAP and solicited public comment.[4] This final action fulfills the EPA's obligation under CAA section 112(d)(6) and an associated consent decree. The EPA proposed addressing EtO emissions from area source chemical manufacturers by proposing to list a new area source category and proposing EtO-specific standards for several emission process groups. In addition, the EPA proposed more general standards and management practices to address fugitive emissions from CMAS chemical manufacturing process units (CMPUs), including updates to water monitoring methods for heat exchange systems, an instrument monitoring program, and new standards for PRDs and pressure vessels. Also, the EPA proposed several changes to align the CMAS NESHAP with other, similar chemical sector rules. The proposed changes included establishing electronic reporting, requiring regular performance testing, restricting bypasses, and removing certain affirmative defense provisions.

In this final rule, the EPA is finalizing the non-EtO provisions as proposed with only clarifying changes and technical corrections. The EPA determined that the costs of the final revisions are reasonable and not overly burdensome based on the Agency's technical analyses, which are available in the docket, and on the Agency's assumption that CMAS CMPUs operate similarly to CMPUs subject to major source NESHAP.[5] While commenters expressed some concerns with the proposed standards, the EPA did not receive sufficient information to change the analyses. The EPA is not taking final action on the proposed EtO area source category and emission standards at this time.

The EPA estimates that this action will have present value (PV) costs of $72 million at a three percent discount rate and $56 million at a seven percent discount rate over the 2027 to 2041 timeframe (in 2024 dollars). The EPA estimates that the final action will have an equivalent annualized value (EAV) of $6.1 million and $6.2 million per year at the same discount rates, respectively (in 2024 dollars).

B. Does this action apply to me?

Regulated entities. Table 1 of this preamble lists categories and entities potentially regulated by this action.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION

NESHAP and source categories	NAICS code
Agricultural Chemicals and Pesticides Manufacturing	325311, 325312, and 325320.
Cyclic Crude and Intermediate Production	32511 and 325120.
Industrial Inorganic Chemical Manufacturing	325120, 325130, and 32518.
Industrial Organic Chemical Manufacturing	325130, 32519, 3256, and 3259.

[1] 90 FR 7942 (Jan. 22, 2025).
[2] *Id.*
[3] Docket ID No. EPA–HQ–OAR–2024–0303.
[4] 90 FR 7942 (Jan. 22, 2025).
[5] Docket ID No. EPA–HQ–OAR–2024–0303.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION—Continued

NESHAP and source categories	NAICS code
Inorganic Pigments Manufacturing	325130.
Miscellaneous Organic Chemical Manufacturing	325130, 32519, 3256, and 3259.
Pharmaceutical Production Manufacturing	325411, 325412, and 325414.
Plastic Materials and Resins	325211.
Synthetic Rubber Manufacturing	325212.

The EPA does not intend table 1 of this preamble to be exhaustive but rather to provide a guide for readers regarding entities that this final action likely affects for the source categories listed. To determine if this action affects your facility, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

C. What is the statutory authority for this final action?

CAA section 112, as amended (42 U.S.C. 7401 *et seq.*), provides the statutory authority for this final action. CAA section 112(d)(6) requires the EPA to review technology-based standards and revise them ''as necessary (taking into account developments in practices, processes, and control technologies)'' no less often than every eight years following promulgation of those standards. The EPA must conduct this ''technology review'' for standards established under CAA section 112(d), including generally available control technology (GACT) standards that apply to area sources.[6] This action finalizes the CAA section 112(d)(6) technology review for the nine area source categories affected by the CMAS NESHAP.

Several additional CAA sections are relevant to this action, as they specifically address regulation of HAP emissions from area sources. Collectively, CAA sections 112(c)(3), (d)(5), and (k)(3) are the basis of the Area Source Program under the Urban Air Toxics Strategy, which provides the framework for regulation of area sources under CAA section 112.

CAA section 112(k)(3)(B) requires the EPA to identify at least 30 HAP that pose the greatest potential health threat in urban areas with a primary goal of achieving a 75 percent reduction in cancer incidence attributable to HAP emitted from stationary sources. As discussed in the Integrated Urban Air Toxics Strategy, the EPA identified 30 HAP emitted from area sources that pose the greatest potential health threat in urban areas, and these HAP are commonly referred to as the ''30 urban HAP.'' [7]

CAA section 112(c)(3), in turn, requires the EPA to list sufficient categories or subcategories of area sources to ensure that area sources representing 90 percent of the emissions of the 30 urban HAP are subject to regulation. The EPA implemented these requirements through the Integrated Urban Air Toxics Strategy by identifying and setting standards for categories of area sources, including the nine CMAS categories that are addressed in this action.[8]

CAA section 112(d)(5) provides that for area source categories, the EPA may promulgate standards or requirements for area sources ''which provide for the use of generally available control technology or management practices [GACT] by such sources to reduce emissions of hazardous air pollutants'' in lieu of setting maximum achievable control technology (MACT) standards (which are generally required for major source categories). In developing GACT standards, the EPA evaluates the control technologies and management practices that reduce HAP emissions that are generally available for each area source category. Consistent with the legislative history, the EPA can consider costs and economic impacts in determining what constitutes GACT.[9] The EPA set GACT standards for the nine CMAS categories in 2009.[10]

D. Where can I get a copy of this document and other related information?

In addition to the docket, an electronic copy of this final action is available on the internet at *https://www.epa.gov/stationary-sources-air-pollution/chemical-manufacturing-area-sources-national-emission-standards.* Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same website.

E. Judicial Review and Administrative Reconsideration

Under CAA section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by June 1, 2026. Under CAA section 307(b)(2), a party cannot challenge the requirements established by this final rule separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

CAA section 307(d)(7)(B) further provides that only an objection to a rule or procedure which a party raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

F. Severability

This final rule contains several discrete components, which the EPA views as severable as a practical matter—*i.e.,* they are functionally independent and will operate in

[6] For categories of area sources subject to GACT standards, CAA sections 112(d)(5) and (f)(5) do not require the EPA to conduct a residual risk review pursuant to CAA section 112(f)(2). However, the EPA must conduct periodic technology reviews under CAA section 112(d)(6).

[7] 64 FR 38706, 38715 (July 19, 1999).

[8] *See id.*

[9] Sen. Rep. No. 101–228 (1989).

[10] 74 FR 56008 (Oct. 29, 2009).

practice without relying on the other components. Sections III.A through III.C of this preamble and the technical memoranda available in the docket provide detail about these discrete components. In addition, as this final rule revises an existing NESHAP, the standards promulgated in the 2012 final rule would remain in place in the event of an adverse result upon judicial review of this final rule.

II. Background

A. What are the CMAS categories, and how does the NESHAP regulate HAP emissions from the source categories?

The source categories that are the subject of this final action are the Agricultural Chemicals and Pesticides Manufacturing, Cyclic Crude and Intermediate Production, Industrial Inorganic Chemical Manufacturing, Industrial Organic Chemical Manufacturing, Inorganic Pigments Manufacturing, Miscellaneous Organic Chemical Manufacturing, Pharmaceutical Production, Plastic Materials and Resins Manufacturing, and Synthetic Rubber Manufacturing source categories. The EPA promulgated the CMAS NESHAP on October 29, 2009, and codified the NESHAP at 40 Code of Federal Regulations (CFR) part 63, subpart VVVVVV.[11] As promulgated in 2009 and amended on December 21, 2012, the CMAS NESHAP regulates CMPUs at an area source of HAP emissions if HAP listed in table 1 to 40 CFR part 63, subpart VVVVVV are used as a feedstock, generated as a byproduct, or generated as a product by the CMPU.[12] A CMPU includes all process vessels, equipment, and activities necessary to operate a chemical manufacturing process that produces a material or a family of materials described by NAICS code 325, subject to certain exclusions.[13] A CMPU consists of one or more-unit operations and any associated recovery devices. A CMPU also includes each storage tank, transfer operation, surge control vessel, and bottoms receiver associated with the production of such NAICS code 325 materials. The affected source is the facility-wide collection of CMPUs, and each heat exchange system and wastewater system associated with a CMPU that contains one of the table 1 HAP.

The nine affected CMAS categories encompass facilities that use as feedstocks, generate as byproducts, or produce as products any of the following 15 HAP: 1,3-butadiene; 1,3-dichloropropene; acetaldehyde; chloroform; ethylene dichloride; hexachlorobenzene; methylene chloride; quinoline (these eight HAP are referred to as the ''Table 1 organic HAP''); compounds of arsenic, cadmium, chromium, lead, manganese, or nickel (these six HAP are referred to as the ''Table 1 metal HAP''); or hydrazine.[14] [15] In this preamble, we refer to the nine source categories collectively as the CMAS categories. Descriptions of the nine source categories are as follows:

Agricultural Chemicals and Pesticides Manufacturing. NAICS codes 325311 (nitrogenous fertilizer manufacturing), 325312 (phosphatic fertilizer manufacturing), and 325320 (pesticide and other agricultural chemical manufacturing) define the agricultural chemicals and pesticides manufacturing source category. Products of this industry include nitrogenous and phosphatic fertilizer materials including anhydrous ammonia, nitric acid, ammonium nitrate, ammonium sulfate, urea, phosphoric acid, superphosphates, ammonium phosphates, and calcium metaphosphates. The source category also includes the formulation and preparation of ready-to-use agricultural and household pest control chemicals from technical chemicals or concentrates, the production of concentrates which require further processing before use as agricultural pesticides, and the manufacturing or formulating of other agricultural chemicals such as minor or trace elements and soil conditioners.

Organic Chemical Production. This section discusses cyclic crude and intermediate production, industrial organic chemical manufacturing, and miscellaneous organic chemical manufacturing source categories collectively because there is considerable overlap in the NAICS codes that apply to these source categories. These source categories include cellulosic organic fiber manufacturing as well as other source categories designated by NAICS codes 32511 (petrochemical manufacturing), 325130 (synthetic dye and pigment manufacturing), 32519 (other basic organic chemical manufacturing), and 3256 (soap, cleaning compound, and toilet preparation manufacturing). The source category also includes organic gases designated by NAICS code 325120 (industrial gas manufacturing) and production of chemicals such as explosives and photographic chemicals designated by NAICS code 3259 (other chemical product and preparation manufacturing). Raw materials for this industry include, for example, refined petroleum chemicals, coal tars, and wood. The industry manufactures a wide variety of final products as well as numerous chemicals that are used as feedstocks to produce these final products and products in other chemical manufacturing source categories. Examples of types of products include solvents, organic dyes and pigments, plasticizers, alcohols, detergents, and flavorings.

Industrial Inorganic Chemical Manufacturing. NAICS code 325120 (industrial gas manufacturing), manufacturing of inorganic dyes that are designated by NAICS code 325130 (synthetic dye and pigment manufacturing), and most manufacturing designated by NAICS code 325180 (other basic inorganic chemical manufacturing) define the industrial inorganic chemical manufacturing source category. The NESHAP excludes certain NAICS code 325180 productions such as carbon black and mercury cell chlor-alkali production, which are separate source categories.

Inorganic Pigment Manufacturing. Inorganic pigments are part of NAICS code 325130 (synthetic dye and pigment manufacturing). Most inorganic pigments are oxides, sulfides, oxide hydroxides, silicates, sulfates, or carbonates that normally consist of single component particles. Inorganic pigment manufacturing processes can generally be divided between those that use partial combustion and those that use pure pyrolysis. Manufacturers mainly use inorganic pigments to impart colors to a variety of compounds. They may also impart properties of rust inhibition, rigidity, and abrasion resistance. Inorganic pigments are generally insoluble and remain unchanged physically and chemically when mixed with a carrier. Pigment manufacturers supply inorganic colors in a variety of forms including powders, pastes, granules, slurries, and suspensions. Manufacturers of paints and stains, printing inks, plastics, synthetic textiles, paper, cosmetics, contact lenses, soaps, detergents, wax, modeling clay, chalks, crayons, artists'

[11] 74 FR 56008 (Oct. 29, 2009).

[12] 74 FR 56008 (Oct. 29, 2009); 77 FR 75740 (Dec. 21, 2012).

[13] Exclusions: (1) processes classified in NAICS Code 325222, 325314, 325413, or 325998; (2) processes subject to standards for other listed area source categories in NAICS 325; (3) certain fabricating operations; (4) manufacture of photographic film, paper, and plate where material is coated or contains chemicals (but the manufacture of the photographic chemicals is regulated); and (5) manufacture of radioactive elements or isotopes, radium chloride, radium luminous compounds, strontium, and uranium.

[14] Feedstocks are reactants, solvents, or any other additives to the process.

[15] ''Table 1'' refers to table 1 to the CMAS NESHAP.

colors, concrete, masonry products, and ceramics use these pigments for those products.

Pharmaceutical Production. The pharmaceutical manufacturing source category consists of chemical production operations that produce drugs and medication. These operations include chemical synthesis (deriving a drug's active ingredient) and chemical formulation (producing a drug in its final form). NAICS codes 325411 (medicinal and botanical manufacturing), 325412 (pharmaceutical preparation manufacturing), and 325414 (biological product, except diagnostic, manufacturing) define the source category.

Plastic Materials and Resins Manufacturing. NAICS code 325211 (plastics material and resin manufacturing) designates the plastic materials and resins manufacturing source category. Examples of products in this source category include epoxy resins, nylon resins, phenolic resins, polyesters, polyethylene resins, and styrene resins. The source category does not include polyvinyl chloride and copolymers production, which is a separate source category.

Synthetic Rubber Manufacturing. NAICS code 325212 (synthetic rubber manufacturing) defines the synthetic rubber manufacturing source category. Facilities in this source category manufacture synthetic rubber or vulcanizable elastomers by polymerization or copolymerization. For this source category, an elastomer is defined as a rubber-like material capable of vulcanization, such as copolymers of butadiene and styrene, copolymers of butadiene and acrylonitrile, polybutadienes, chloroprene rubbers, and isobutylene-isoprene copolymers.

The HAP emission sources at facilities subject to the CMAS NESHAP include process vents, storage tanks, equipment leaks, transfer operations, and wastewater. Additionally, some facilities have cooling towers or other heat exchangers. The GACT standards for CMAS include emission standards in the form of management practices for each CMPU as well as emission limits for certain emission sources including process vents and storage tanks. The rule also establishes management practices and other emission reduction requirements for wastewater systems and heat exchange systems.

As of September 1, 2025, the EPA identified 251 facilities in operation that are subject to the CMAS NESHAP. In this preamble, the EPA refers to these facilities collectively as ''CMAS facilities.'' The document entitled *List of Facilities Subject to the CMAS NESHAP,* which is in the docket for this rulemaking, presents the list of CMAS facilities located in the United States that are part of the CMAS categories with processes subject to the CMAS NESHAP.[16] The EPA notes that where the Agency refers to ''area source chemical manufacturers,'' we are referring to area sources that manufacture chemicals but are not subject to the CMAS NESHAP.

B. What changes did we propose for the CMAS categories in our January 22, 2025, proposal?

This section provides a brief summary of the EPA's proposed revisions to the CMAS NESHAP.[17] For additional background information, such as how the EPA developed the facility list, refer to section II of the proposal preamble.[18] For descriptions of how the EPA determined GACT and how the EPA conducted the technology review, refer to section III of the proposal preamble.[19]

1. Proposed Actions Related to CAA Section 112(d)(5) for Organic HAP

The EPA proposed first-time requirements under CAA section 112(d)(5) for pressure vessels, PRDs, and closed vent systems containing bypass lines. Specifically, the EPA proposed:

- new monitoring requirements for pressure vessels in organic HAP service,
- new management practices for emissions from PRDs in organic HAP service, and
- expressly prohibiting bypassing an APCD.

2. Proposed Actions Related to CAA Section 112(d)(6) Technology Review

Pursuant to the CAA section 112(d)(6) technology review for the CMAS NESHAP, the EPA proposed that no revisions to the current standards are necessary for wastewater, storage tanks, transfer operations, or flares. However, the EPA proposed additional changes under CAA section 112(d)(6) for equipment leaks, heat exchange systems, and certain process vents.

- For equipment leaks at new and existing affected sources, the EPA proposed that owners and operators with equipment in organic HAP service must monitor pumps in light liquid (LL) service, valves in gas/vapor (G/V) service and LL service, and connectors in G/V service and LL service annually via EPA Method 21 with a leak definition of 10,000 parts per million by volume (ppmv). Additionally, the EPA proposed to incorporate the monitoring requirements from 40 CFR part 63, subpart H for compressors, sampling connection systems, open-ended valves or lines, equipment in heavy liquid (HL) service, closed vent systems and control devices, and agitators in organic HAP service.
- For heat exchange systems in organic HAP service with flow rates greater than or equal to 8,000 gallons per minute (gpm), the EPA proposed requirements that owners or operators conduct quarterly monitoring (after an initial six months of monthly monitoring if not already completed) using the Modified El Paso Method and a leak definition of 6.2 ppmv of total strippable hydrocarbon concentration (as methane) in the stripping gas.[20]
- For process vents, the EPA proposed to remove the 50 ppmv concentration threshold from the definition of ''metal HAP process vent.''

Other Proposed Actions

In addition to the actions described in sections II.B.1 and II.B.2 of this preamble, the EPA proposed:

- to change the recordkeeping and reporting requirements to require the use of the EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI) for notifications of compliance status (NOCS), performance test reports, and periodic reports;
- to remove affirmative defense provisions from the CMAS NESHAP in compliance with *Natural Resources Defense Council (NRDC)* v. *EPA,* 749 F.3d 1055 (D.C. Cir. 2014);
- to require subsequent performance testing once every five years to demonstrate compliance with emission limits for certain process vents;
- to remove an exemption for certain wastewater streams during periods of startup and shutdown;
- to revise the phrasing used in 40 CFR 63.11502(a) to refer to NESHAP

[16] Docket ID No. EPA–HQ–OAR–2024–0303–0028.

[17] On May 24, 2022, the EPA received a complaint alleging that the Agency failed to undertake non-discretionary duties related to the technology review of the CMAS NESHAP. As a result, on December 19, 2023, the EPA entered into a consent decree to finalize a technology review of the CMAS NESHAP by September 17, 2025, later amended by stipulations to March 31, 2026. The EPA issued the 2025 proposal as part of the Agency's efforts to fulfill the consent decree and the Agency's statutory obligations.

[18] 90 FR 7942 (Jan. 22, 2025).

[19] *Id.*

[20] The Modified El Paso Method uses a dynamic or flow-through system for air stripping a sample of the water and analyzing the resultant off-gases for VOC using a common flame ionization detector analyzer. Appendix P of the Texas Commission on Environmental Quality's Sampling Procedures Manual: The Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound (VOC) Emissions from Water Sources describes this method in detail. Appendix P is in the docket for this rulemaking (see Docket ID No. EPA–HQ–OAR–2024–0303–0030).

subpart F in instances where a definition in the CMAS NESHAP points to either NESHAP subpart G or H; and

- to make other technical and editorial corrections for the CMAS NESHAP.

C. What outreach did we conduct following the proposal?

As part of this rulemaking, the EPA conducted listening sessions with representatives of CMAS facility owners and operators through meetings with the American Chemistry Council and Harcros Chemicals Inc. in September 2025. Additional details about these meetings are in the document *Documentation of Meetings with Industry Stakeholders—August and September,* which is in the docket for this rulemaking.[21]

III. What is included in this final rule?

In this action, the EPA is finalizing the Agency's determinations pursuant to the technology review provisions of CAA section 112 for the CMAS categories and amending the CMAS NESHAP based on those determinations (see sections III.A and III.B of this preamble). The EPA also is finalizing other changes to the CMAS NESHAP described in section III.C of this preamble. This action also reflects several changes from the January 22, 2025, proposal in consideration of comments received during the public comment period as described in section IV of this preamble. For the EPA's complete responses to the submitted comments, please see the document entitled *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources* in the docket for this rulemaking.

The EPA is not taking final action on the proposed listing and regulation of EtO emissions from chemical manufacturing area sources because the Agency needs additional time to consider the comments on the proposed listing and regulation of such emissions and because the Agency wants to coordinate the regulation of EtO emissions from area sources with the regulation of such emissions from major sources. The proposed rule distinguished the new listing and regulation of EtO emissions from the mandatory technology review of the CMAS rule. The EPA listed CMAS categories for specific HAP emissions as part of the Urban Air Toxics program under CAA sections 112(c)(3) and 112(k)(3)(B), and EtO emissions were not in that listing. For that reason, the EPA's responsibility under CAA section 112(d)(6) and the consent decree do not apply to the listing and regulation of EtO emissions from chemical manufacturing area sources. Thus, the Agency is deferring a final decision on the proposed listing and regulation of EtO emissions at this time.

A. What are the final rule amendments pursuant to CAA section 112(d)(5) for organic HAP?

For pressure vessels, the EPA is finalizing, as proposed, the definition for pressure vessel by reference to the Hazardous Organic NESHAP (HON) at 40 CFR 63.101, the removal of the exemption for ''pressure vessels designed to operate in excess of 204.9 kilopascals (kPa) and without emissions to the atmosphere,'' from the definition of a storage tank, and a no detectable emissions requirement for pressure vessels (*i.e.,* each point on the pressure vessel where total organic HAP could potentially be emitted must have an instrument reading less than 500 ppmv). The no detectable emissions provisions also require initial and annual monitoring using EPA Method 21 of 40 CFR part 60, Appendix A–7 and routing organic HAP through a closed vent system to a control device (*i.e.,* no releases to the atmosphere through any points on the pressure vessel).

For PRDs, the EPA is finalizing, as proposed, the incorporation of various practices to minimize emissions from PRD releases and leaks. Specifically, the EPA is finalizing PRD management practices that require owners and operators to monitor PRDs in organic HAP service for leaks after placing a PRD into organic HAP service following a pressure release from the PRD. These final provisions also require, as proposed, owners and operators to implement preventative measures, perform root cause analysis and corrective action if a PRD releases directly to atmosphere, and monitor PRDs such that the time and duration of each pressure release can be recorded. The EPA is also finalizing the Agency's proposed definitions for ''pressure relief device or valve'' and ''pressure release'' without changes.

For closed vent systems with bypass lines, the EPA is finalizing, as proposed, that owners and operators may not bypass the APCD at any time and that doing so is a deviation from the emission standards. The EPA is also finalizing, as proposed, that the use of a cap, blind flange, plug, or second valve on open-ended valves or lines is sufficient to prevent a bypass. Lastly, the EPA is finalizing, as proposed, the removal of the exemption for gas streams exiting analyzers.

B. What are the final rule amendments based on the technology review for the CMAS categories?

For equipment leaks in the CMAS categories, the EPA determined that there are developments in practices, processes, and control technologies that warrant revisions to the GACT standards in the CMAS NESHAP pursuant to CAA section 112(d)(6). After considering public input, the EPA is finalizing the proposed instrument monitoring program (*i.e.,* annual monitoring of pumps in LL service, valves in G/V and LL service, and connectors in G/V and LL service) using a leak definition of 10,000 ppmv. Additionally, the EPA is finalizing the Agency's proposal to incorporate all the requirements from 40 CFR part 63, subpart H for compressors, sampling connections systems, open-ended valves or lines, equipment in HL service, closed vent systems and control devices, and agitators.

For heat exchange systems in the CMAS categories, the EPA determined that there are developments in practices, processes, and control technologies that warrant revisions to the GACT standards in the CMAS NESHAP pursuant to CAA section 112(d)(6). After considering public input, the EPA is finalizing the proposed GACT standards, requiring owners and operators to conduct quarterly monitoring for new and existing heat exchange systems with flowrates greater than or equal to 8,000 gpm (after an initial six months of monthly monitoring if not already completed) using the Modified El Paso Method and repair leaks of total strippable hydrocarbon concentration (as methane) in the stripping gas of 6.2 ppmv or greater without changes. The EPA is also finalizing, as proposed, that owners and operators may use the current leak monitoring requirements for heat exchange systems at 40 CFR 63.104(b) in lieu of using the Modified El Paso Method, provided that 99 percent by weight or more of the organic compounds that could leak into the heat exchange system are water soluble and have a Henry's Law Constant less than 5.0E–6 atmospheres-cubic meters per mole at 25 degrees Celsius.

For process vents in the CMAS categories, the EPA determined that there are developments in practices, processes, and control technologies that warrant revisions to the GACT standards in the CMAS NESHAP pursuant to CAA section 112(d)(6). After

[21] Docket ID No. EPA–HQ–OAR–2024–0303–0084.

considering public input, the EPA is revising the definition of ''metal HAP process vent'' to remove the 50 ppmv metal HAP concentration threshold, as proposed.

For storage tanks, wastewater streams, and transfer operations in the CMAS categories, the EPA is finalizing its proposed determination in the technology review that there are no developments in practices, processes, and control technologies that warrant revisions to the GACT standards. The EPA notes that the Agency is finalizing standards for pressure vessels pursuant to CAA section 112(d)(5) (see section III.A of this preamble), which eliminates their exemption from the definition of ''storage tank'' in the CMAS NESHAP.

Section III.D of this preamble provides a detailed discussion of the effective and compliance dates for the requirements the EPA is finalizing in this action for the CMAS NESHAP. Section IV.B.3 of this preamble provides a summary of key comments the EPA received on the CAA section 112(d)(6) provisions and the Agency's responses.

C. What other changes have we made to the NESHAP?

This rule also finalizes, as proposed, revisions to several other CMAS NESHAP requirements. The EPA describes these revisions in this section as well as other proposed provisions that have changed since the proposal.

To increase the ease and efficiency of data submittal and data accessibility, the EPA is finalizing, as proposed, a requirement that owners or operators submit electronic copies of certain required performance test reports, NOCS, and periodic reports through the EPA's CDX using the CEDRI. The document *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules,* available in the docket for this rulemaking, provides a description of the electronic data submissions process.[22] The final rule requires that owners and operators submit performance test results in the format generated through the use of the EPA's Electronic Reporting Tool (ERT) or an electronic file consistent with the XML schema on the ERT website.[23] Electronic files consistent with the XML schema on the ERT website must accompany all information required by 40 CFR 63.7(g)(2) in PDF format. For periodic reports, the final rule requires that owners or operators use the appropriate spreadsheet template to submit information to CEDRI. The EPA has made minor clarifying edits to the spreadsheet templates based on comments received during the public comment period. The final version of the template for these reports will be available on the CEDRI website.[24] The final rule requires that owners or operators submit NOCS as a PDF upload in CEDRI. For a more detailed discussion of these final amendments, see section IV.D.1 of the proposal preamble and sections IV.C and VI.C of this preamble.

The EPA also is finalizing, as proposed, initial and recurring performance testing to demonstrate compliance with certain process vent and storage tank provisions. Additionally, the EPA proposed and is finalizing the removal of the design evaluation and engineering assessment options for process vents in organic HAP service or metal HAP service, respectively. Additionally, consistent with *NRDC,* the EPA is finalizing, as proposed, the elimination of the affirmative defense provisions at 40 CFR 63.11501(e) and the definition of ''affirmative defense'' in 40 CFR 63.11502(b).

Lastly, the EPA is finalizing many of the revisions that the Agency proposed for clarifying text or correcting typographical errors, grammatical errors, and cross-reference errors. These include but are not limited to specifying which version of NAICS codes to reference when reviewing applicability per 40 CFR 63.11494(c)(2)(iv), removing redundant provisions at 40 CFR 63.11496(g)(5), and adding headings at 40 CFR 63.11497(a) and (c). Section IV.D.3 of the proposal preamble discusses the proposed editorial corrections and clarifications. The document entitled *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources,* which is in the docket for this rulemaking, contains the comments on these changes and the EPA's specific responses to these items.

D. What are the effective and compliance dates of the standards?

For the requirements the EPA is finalizing under CAA sections 112(d)(5) and (6), all existing affected sources and all affected sources that were new sources under the previous CMAS NESHAP (*i.e.,* sources that commenced construction or reconstruction after October 6, 2008, and on or before January 22, 2025), must comply with all of the amendments no later than April 1, 2029, or upon startup, whichever is later, as proposed. For existing sources, CAA section 112(i) provides that the compliance date for standards promulgated under CAA section 112(d) shall be as expeditious as practicable but no later than three years after the effective date of the standard.[25] The EPA agrees with the commenters that owners and operators need three years to implement the requirements the Agency is finalizing under CAA sections 112(d)(5) and (6).[26] This rulemaking impacts 251 sources, many of which may be addressing fugitive emissions from certain sources for the first time (*e.g.,* implementing an instrument monitoring program for equipment leaks). Facilities need time to purchase and install additional equipment or systems, such as preventative measures for PRDs. Additionally, the number of CMAS facilities that are near one another could potentially strain certain local resources such as LDAR contractors or equipment vendors. Owners, operators, and relevant authorities may also need to update permits (*e.g.,* New Source Review and/or title V operating permit modifications) to account for the additional NESHAP requirements. Moreover, we recognize that owners and operators may need at least three years to understand the final rule changes; revise site guidance and compliance programs; ensure operations can meet the standards during startup and shutdown; update operation, maintenance, and monitoring plans; and upgrade emissions capture and control systems.

As provided in CAA section 112(i) and 5 U.S.C. 801(a)(3), all new affected sources that commenced construction or reconstruction after January 22, 2025, must comply with all requirements under CAA sections 112(d)(5) and (6) by April 1, 2026, or upon startup, whichever is later. The EPA provided additional rationale for these compliance dates in the preamble to the proposed rule. For the EPA's complete responses regarding compliance dates, please see section 6.0 of the document

[22] Docket ID No. EPA–HQ–OAR–2024–0303–0006.

[23] *https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert.*

[24] *https://www.epa.gov/electronic-reporting-air-emissions/cedri.*

[25] *Ass'n of Battery Recyclers* v. *EPA,* 716 F.3d 667, 672 (D.C. Cir. 2013) (''Section 112(i)(3)'s three-year maximum compliance period applies generally to any emission standard . . . promulgated under [section 112].'').

[26] See section 6.0 of the document entitled *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources* in the docket for this rulemaking.

entitled *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources* in the docket for this rulemaking.

The EPA is also finalizing provisions that allow up to 150 days after the publication date of the final rule for owners or operators of affected sources to comply with the requirement to submit NOCS reports electronically. The EPA is finalizing, as proposed, provisions that allow 60 days after the publication date of the final rule for owners or operators of affected sources to comply with the requirement to submit the results of performance tests electronically, and three years after the publication date of the final rule for owners or operators of affected sources to comply with the requirement to submit periodic reports electronically.

IV. What is the rationale for our final decisions and amendments for the CMAS categories?

For each issue, this section provides a description of what the EPA proposed and what the Agency is finalizing, the EPA's rationale for the final decisions and amendments, and a summary of key comments and responses. For all comments not discussed in this preamble, the document *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources,* which is in the docket for this rulemaking, contains the comment summaries and the EPA's responses to those comments.

A. Amendments Pursuant to CAA Section 112(d)(5) for Organic HAP for the CMAS Categories

What did we propose pursuant to CAA section 112(d)(5) for organic HAP for the CMAS categories?

Based on the EPA's review of existing standards affecting CMPUs in the CMAS categories, the Agency proposed under CAA section 112(d)(5) additional standards for pressure vessels, PRDs, and closed vent systems containing bypass lines. The EPA provides a summary of the Agency's findings, as proposed, in this section.

a. Pressure Vessels

The EPA proposed to define pressure vessel at 40 CFR 63.11502(a)—by reference to 40 CFR 63.101—to mean ''a storage vessel that is used to store liquids or gases and is designed not to vent to the atmosphere as a result of compression of the vapor headspace in the pressure vessel during filling of the pressure vessel to its design capacity'' and to remove the exemption for ''pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere'' from the definition of storage tank in 40 CFR 63.11502(b). The EPA also proposed to require no detectable emissions at all times (*i.e.,* each point on the pressure vessel where total organic HAP could potentially be emitted must have an instrument reading less than 500 ppmv) at 40 CFR 63.11497(f) and item 6 of table 5 to the CMAS NESHAP; initial and annual monitoring using EPA Method 21 of 40 CFR part 60, Appendix A–7; and routing organic HAP through a closed vent system to a control device (*i.e.,* no releases to the atmosphere through any points on the pressure vessel).

b. PRDs

The EPA proposed requirements at 40 CFR 63.11495(a)(6)(iv) (incorporating 40 CFR 63.165(e)(1) through (8)) that owners and operators must: (1) operate each PRD in organic HAP gas or vapor service with less than a 500 ppm difference above background as measured by the method specified in 40 CFR 63.180(c); (2) conduct instrument monitoring no later than five calendar days after the PRD returns to organic HAP gas or vapor service following a pressure release or, if applicable, install a replacement rupture disk as soon as practicable after a pressure release, but no later than five calendar days after the pressure release; (3) implement at least three prevention measures; (4) perform root cause analysis and corrective action if a PRD releases emissions directly to the atmosphere; and (5) monitor PRDs using a system that can identify and record the time and duration of each pressure release and notify operators when a pressure release occurs. The EPA also proposed to define ''pressure relief device or valve'' at 40 CFR 63.11502(a)—by reference to the HON (40 CFR 63.101)—to mean ''a valve, rupture disk, or similar device used only to release an unplanned, nonroutine discharge of gas from process equipment in order to avoid safety hazards or equipment damage. A PRD discharge can result from an operator error, a malfunction such as a power failure or equipment failure, or other unexpected causes. Such devices include conventional, spring-actuated relief valves, balanced bellows relief valves, pilot-operated relief valves, rupture disks, and breaking, buckling, or shearing pin devices. Devices that are actuated either by a pressure of less than or equal to 2.5 pounds per square inch gauge or by a vacuum are not pressure relief devices.'' In addition, the EPA proposed to define ''pressure release'' at 40 CFR 63.11502(a)—by reference to the HON (40 CFR 63.101)—to mean ''the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.[27] This release can be one release or a series of releases over a short time period.''

c. Closed Vent Systems Containing Bypass Lines

The EPA proposed at 40 CFR 63.11495(e) that an owner or operator may not bypass an APCD at any time, that a bypass is an emission standard deviation, and that owners and operators must estimate, maintain records of, and report the quantity of organic HAP released. The EPA also proposed that the use of a cap, blind flange, plug, or second valve on open-ended valves or lines (following the requirements specified in 40 CFR 60.482–6(a)(2), (b), and (c) or following requirements codified in another regulation that are the same as 40 CFR 60.482–6(a)(2), (b), and (c)) is sufficient to prevent a bypass. Lastly, the EPA proposed to remove the exemption for gas streams exiting analyzers from the definition of continuous process vent at 40 CFR 63.11502(b) and to clarify at 40 CFR 63.11495(e) that analyzer vents are not exempt from the continuous process vent standards.

2. How did the new standards for organic HAP from the CMAS categories change?

Except for a clarification regarding the pressure vessel provisions, the EPA is finalizing the new standards pursuant to CAA section 112(d)(5) as proposed. For pressure vessels, based on a comment received during the public comment period, the EPA is revising the final requirements at 40 CFR 63.11497(e)(2) to clarify that the unsafe and difficult/inaccessible monitoring provisions apply to components on pressure vessels as well. Notably, the EPA proposed to include unsafe and difficult/inaccessible monitoring provisions via reference to 40 CFR 63.168(h) and (i) (for valves in G/V and in LL service) and 40 CFR 63.174(f) and (h) (for connectors in G/V and in LL service). However, the EPA's revisions instead incorporate the unsafe and difficult/inaccessible monitoring provisions the Agency proposed and is finalizing as part of the final instrument monitoring program for equipment leaks

[27] The HON includes multiple part 63 subparts, including 40 CFR part 63, subparts F, G, and H. 40 CFR 63.101 refers to the definitions section of 40 CFR part 63, subpart F.

from valves in G/V or LL service, pumps in LL service, and connectors in G/V or LL service (see section IV.B.3.b of this preamble) for components on pressure vessels.

3. What key comments did we receive on the proposal revisions pursuant to CAA section 112(d)(5) for organic HAP, and what are our responses?

This section provides summaries of and responses to the key comments received regarding (1) the EPA's authority to establish requirements for certain emissions sources pursuant to CAA section 112(d)(5) and (2) the Agency's proposed new monitoring requirements for pressure vessels in organic HAP service. The EPA did not receive many substantive comments on the other amendments discussed in this section IV.A of this preamble. The document entitled *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources,* which is in the docket for this rulemaking, contains the comments and the EPA's specific responses to these issues.

a. CAA Authority

Comment: Commenters claimed that the EPA failed to appropriately recognize the fundamental differences between area and major sources as distinct sets of sources with different characteristics, including area sources' unique challenges and constraints, such as facility personnel, time demands, and available resources. The commenters stated that area sources often face these and other pressures in ways that are different but no less serious than their major source counterparts. A commenter provided an example, saying that the smaller universe of facility employees at area sources often means that staff spend more time evaluating, understanding, and planning for new regulatory requirements and the associated compliance needs. As such, the commenter expressed that staff commitments may lead to unplanned disruptions in routine operations elsewhere, which can further strain smaller sources that are already more resource-constrained than other entities.

The commenter stated that CAA section 112(d)(5) allows GACT requirements to accommodate these challenges and is intentionally more streamlined and cost-conscious than other CAA regulatory schemes. However, the commenter asserted that the EPA purposefully erased the distinction in favor of imposing costly new regulatory burdens on smaller entities that would not yield commensurate environmental benefit. The commenter stated that the EPA based the proposed standards on MACT standards, which, they argued, were never intended to apply to area sources. The commenter opined that MACT-level requirements such as quarterly instrument monitoring programs would require a dedicated LDAR contractor and data management system (resulting in several thousand dollars per year of new and potentially unnecessary costs to small facilities) while audio, visual, and olfactory programs (GACT level requirements) are effectively implemented with minimal facility resources.

Response: The EPA acknowledges that some area sources may face distinct challenges from some major sources but disagrees with the commenter that the Agency failed to adequately identify and account for the differences between major and area sources. The EPA establishes MACT standards pursuant to CAA sections 112(d)(2) and (3) using data from the best performing sources. The EPA does not consider cost or burden when establishing the minimum level of stringency required by CAA section 112(d)(3) for initial MACT standards for a source category; rather, the EPA does so when determining whether requiring reductions beyond the minimum level of stringency is appropriate pursuant to CAA section 112(d)(2). Where it is not feasible to prescribe or enforce an emission standard, the EPA may promulgate work practice standards pursuant to CAA section 112(h).

In lieu of MACT standards, the EPA may establish GACT standards for area sources pursuant to CAA section 112(d)(5). GACT includes commercially available methods, practices, and techniques that are appropriate for application considering economic impacts and the technical capabilities of the affected sources.[28] As such, consistent with the EPA's obligations under CAA section 112(d)(5) and the Agency's obligation to complete a technology review pursuant to CAA section 112(d)(6), the EPA reviewed similar NESHAP, assessed existing technologies and practices, and considered other relevant information to identify potential control options to consider when proposing and finalizing revisions to the CMAS NESHAP. Commenters did not present adequate evidence to challenge the EPA's position that many CMAS CMPUs subject to GACT standards resemble process units regulated under MACT standards in the HON, the Miscellaneous Organic Chemical Manufacturing NESHAP (MON), and the Polyether Polyols (PEPO) Production NESHAP. In addition, the EPA is aware that many of the affected CMAS CMPUs are synthetic area sources that have taken emissions limitations or installed federally enforceable control devices to remain below the major source emissions threshold of emitting fewer than 10 tpy of a single HAP and fewer than 25 tpy of any combination of HAP. If not for the emissions limits or control devices, these affected CMAS likely would be major sources of HAP and thus subject to major source NESHAP. Thus, the EPA maintains that CMAS CMPUs operate similarly to CMPUs subject to major source chemical sector rules such as the HON, MON, and PEPO NESHAP.

Also, the EPA considered costs for all of the proposed standards and found that the costs were comparable or less than those the Agency deemed reasonable for organic HAP standards for other chemical sector rulemakings such as the MON, Ethylene Production NESHAP, and PEPO Production NESHAP. Additionally, the EPA compared the cost of complying with the final rule to the annual revenue of an affected entity and found that the cost-to-sales ratio was approximately 0.06 percent (see the document entitled *Economic Impact Analysis for the Final National Emission Standards for Hazardous Air Pollutants: Chemical Manufacturing Area Sources* in the docket for this rulemaking). The EPA notes that while the commenters are correct that area sources may have fewer resources than major sources, operations at area sources are often smaller and less complex (*e.g.,* there are fewer components in organic HAP service to monitor) than those at major sources, and so owners and operators will need comparatively fewer resources to comply with new regulatory requirements.

Further, where the EPA finds it reasonable to establish or revise standards, the level of stringency of a GACT standard may equal the level of stringency of a MACT standard. For example, the GACT standards in 40 CFR part 63, subpart DDDDDD, which is the polyvinyl chlorides and copolymers area source NESHAP, require sources to meet the major source MACT requirements of 40 CFR part 63, subpart HHHHHHH for polyvinyl chlorides and copolymers for equipment leaks. Further, the EPA notes that the GACT standards for process vent emissions for the area source PVC manufacturers are more stringent than the process vent emission limits for major source PVC

[28] Sen. Rep. No. 101–228 (1989).

manufacturers. The proposal preamble as well as the EPA's technical analyses (those referenced in sections IV.A through IV.C of the proposal preamble, and the document entitled *Updated Impact Calculations for the CMAS Categories—Final,* which is in the docket for this rulemaking) outline the basis for the Agency's conclusions that the final standards are both reasonable and cost-effective for area sources regulated under the CMAS NESHAP.

Comment: Commenters asserted that the EPA violated the CAA by only setting standards for area sources that use, generate, or produce one of 15 of the 30 urban HAP to produce a material or family of materials described by NAICS code 325. These commenters argued that the EPA must finalize standards for all area sources within the listed CMAS categories.

A commenter stated that when the EPA listed the nine CMAS categories, the Agency did not limit those listings to sources within those categories that use, generate, or produce one of 15 of the 30 urban HAP, and none of the listing documents limit the CMAS categories to any specific HAP. Additionally, the commenter pointed out that the EPA explained as part of the 2009 CMAS rulemaking that while the Agency limited the final standards to the emissions points that emit one of the 15 urban HAP and were sufficient to satisfy the requirements of CAA sections 112(c)(3) and (k)(3)(B), the EPA was not ''prohibit[ed] . . . from regulating other [hazardous air pollutants] emitted from area sources.''

The commenter continued that the EPA is not prohibited from setting standards for all CMAS but is required to set standards that apply to all sources in the listed source categories. Referencing CAA section 112(c)(1), the commenter claimed that it refers to all HAP, not just the 30 urban HAP. As such, the commenter argued that the EPA can no more set standards for only a subset of area sources than it could for major sources. In addition, the commenter noted that the EPA listed some area source categories alongside categories that are not limited to sources that use, generate, or produce specific urban HAP and provided the example of area source hazardous waste combustors.

To that point, the commenter expressed that the EPA's prior failure to regulate all area sources within the listed CMAS categories resulted in facilities operating unregulated by NESHAP standards. They said that there are many facilities emitting known and unknown HAP that are unlawfully evading regulation and that these facilities are particularly dangerous when considered in the aggregate and combined with major sources. The commenter said that of the 1,300 potentially unregulated area sources within the listed CMAS categories that the EPA identified as part of the 2009 rulemaking, 127 are in Texas and approximately half of those facilities are concentrated in the Greater Houston area. They asserted that areas with concentrations of unregulated area source chemical manufacturers often overlap with cancer risk and other health risk hotspots.

Also, the commenter added that it is critical that the EPA set standards for all area sources within the listed CMAS categories now because major sources may attempt to reclassify as area sources (or subdivide and reclassify as area sources) to evade HAP regulations.

Finally, the commenter identified several facilities that the existing standards do not cover. The commenter noted that these sources emit approximately 75 tons per year (tpy) of methanol, 55 tpy of styrene, 35 tpy of ethylene glycol, 20 tpy of hydrogen chloride, 15 tpy of formaldehyde, and many tons of other HAP. The commenter stated that based on their review of area sources identified by the EPA's Integrated Compliance Information System for Air database, when compared to CMAS facilities regulated by the CMAS NESHAP, unregulated area source chemical manufacturers reported nearly all the emissions of certain HAP including ethylene glycol, formaldehyde, xylene, HCl, styrene, and methanol.

The commenter referenced the 2020 National Emissions Inventory and said that it included more than 700 facilities within the relevant NAICS codes that have emissions less than 10 tpy of one HAP and less than 25 tpy of all HAP. They said that of these facilities, more than 250 do not report emissions of the 15 HAP covered by the existing CMAS standards but still report approximately 481 tpy of HAP emissions. The commenter also provided several example facilities emitting HAP that do not appear to be currently subject to any NESHAP.

The commenter recommended that the EPA conduct a comprehensive analysis to identify all unregulated area source chemical manufacturers, assess whether the unregulated area sources present a threat of adverse effects to human health or the environment, and set strong standards that leave no area sources unregulated.

Response: The EPA disagrees with the commenter that the Agency has not fulfilled our CAA obligations to the CMAS categories pursuant to CAA sections 112(c)(1) and 112(k)(3)(B), which set forth the requirements for the Urban Air Toxics program. CAA section 112(c)(1) states that the Administrator shall ''list categories and subcategories of major sources and area sources (listed under [CAA section 112(c)(3)])'' of the HAP listed pursuant to CAA section 112(b). CAA section 112(c)(3) states that the Administrator shall list sufficient categories or subcategories of area sources such that ''90 percent of the area source emissions of the 30 hazardous air pollutants that present the greatest threat to public health'' are subject to regulation under CAA section 112.

As the commenter identifies, the EPA listed the nine CMAS categories and set standards for CMPUs emitting at least one of 15 urban HAP (see table 1 to the CMAS NESHAP) and producing a material or family of materials described by NAICS code 325 in the CMAS NESHAP to meet these obligations, as well as those of CAA section 112(k)(3)(B). While the commenter is correct that the EPA is not prohibited from establishing standards for other HAP emitted by CMAS, the CAA does not require the EPA to do so. In addition, the EPA notes that the Agency did not propose to expand the applicability of the CMAS NESHAP to include all CMAS within the nine affected source categories. It would not be appropriate for the EPA to finalize an applicability change that could potentially subject hundreds or thousands of facilities to the CMAS NESHAP for the first time without presenting the regulated community an opportunity to comment. The purpose of this action is to fulfill the EPA's statutory review obligations to conduct a technology review pursuant to CAA section 112(d)(6), and this final rule satisfies those mandatory review obligations.

b. Pressure Vessels

Comment: A commenter opposed the proposed requirement to operate a pressure vessel as a closed system that vents through a closed vent system to a control device. The commenter stated that pressure vessels are designed to not vent during filling and argued that the proposed requirements are not necessary, are not cost-effective, would not reduce emissions, and do not represent GACT. As an example, the commenter said that one facility would need to install a flare at an estimated cost of $3,000,000 to control emissions from their pressure vessels even though the facility has not reported any emissions or releases from the affected pressure vessels in the past five years.

The commenter continued that the existing Occupation Safety and Health Administration (OSHA) Process Safety Management requirements that determine the layers of protection needed for accidental releases already adequately control such releases.

Response: The EPA disagrees with the commenter that the requirement to operate a pressure vessel as a closed system that vents through a closed vent system to a control device does not represent GACT. As the commenter states, pressure vessels are designed not to vent during filling so releases from a PRD during filling would reflect irregular operation, and the EPA maintains that these emissions should be controlled given the potential for high volume releases. Additionally, prior to this final action, the definition of storage tank in 40 CFR 63.11502(b) only exempted pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere. As such, the EPA expects that most pressure vessels affected by the addition of the standards at 40 CFR 63.11497(e) and table 5 to the CMAS NESHAP already should have in place preventative measures as well as capture and containment systems capable of preventing emissions from a pressure vessel's PRD(s) releasing to atmosphere. In situations where a facility must vent a pressure vessel to a control device, the EPA anticipates that most facilities will rely on existing APCDs rather than purchasing and installing a new APCD, as the EPA expects emissions from pressure vessels to be irregular and infrequent, as identified by the commenter's example. For additional details on the EPA's expected emissions reductions and cost estimates, see the document entitled *Clean Air Act Section 112(d)(5) GACT Standard Analysis for Pressure Vessels Associated with Processes Subject to the CMAS NESHAP,* in the docket for this rulemaking.[29] In addition, refer to the document entitled *Updated Impact Calculations for the CMAS Categories—Final,* also in the docket for this rulemaking.

While the requirements of other regulations are outside the scope of this action, the EPA emphasizes that OSHA's Process Safety Management provisions do not categorically limit the applicability of or need for NESHAP requirements.

Comment: A commenter pointed out that some pressure vessels that store regulated chemicals are inside containment areas or partially buried such that monitoring the vessel's surface per EPA Method 21 is not possible. The commenter added that some of these vessels are double-walled tanks designed with an additional external shell outside of the pressure vessel shell (*i.e.,* a tank within a shell). As such, the commenter recommended that the EPA require monitoring only for those points on the pressure vessel that are readily accessible and not unsafe-to-monitor.

Response: The EPA proposed to include provisions for exempting equipment that are unsafe or difficult/inaccessible to monitor from the proposed pressure vessel requirements by referencing 40 CFR 63.168(h) and (i) (for valves in G/V and LL service) and 40 CFR 63.174(f) and (h) (for connectors in G/V and LL service). However, because the requirements are the same, for clarity the EPA is revising the final rule to specify that equipment meeting the criteria specified in 40 CFR 63.11495(a)(6)(ii)(A) and (C) (for valves in LL or G/V service) and 40 CFR 63.11495(a)(6)(ii)(A) and (E) (for connectors in LL or G/V service) are exempt from the monitoring requirements for pressure vessels.

4. What is the rationale for our final approach and decisions for the revisions pursuant to CAA section 112(d)(5) for organic HAP?

The EPA evaluated all comments on the Agency's proposed amendments to include standards for pressure vessels, PRDs, and closed vent systems containing bypass lines. The rule did not previously regulate these emissions sources, and the EPA considered whether control of these sources would be cost effective and feasible for CMAS. Based on the analyses discussed in section IV.B of the proposal preamble, the document entitled *Clean Air Act Section 112(d)(5) GACT Standard Analysis for Pressure Vessels Associated with Processes Subject to the CMAS NESHAP,* the document entitled *Clean Air Act Section 112(d)(5) GACT Standards Analysis for Pressure Relief Devices Associated with Processes Subject to the CMAS NESHAP,* and the document entitled *Updated Impact Calculations for the CMAS Categories—Final,* all of which are in the docket for this rulemaking, as well as the prevalence of similar standards in multiple other chemical sector rulemakings, the EPA finds the requirements reasonable and cost-effective for CMAS to implement.[30] [31] While the EPA received several comments on the proposed standards, the commenters did not present any information that led us to change our proposed determinations, and the Agency is finalizing the standards as proposed. However, the EPA is changing the pressure vessel standards to clarify, based on comment, that the unsafe and difficult/inaccessible monitoring provisions apply to equipment on pressure vessels. Section IV.A.3 of this preamble and in the document entitled *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources,* which is in the docket for this rulemaking, contain the relevant comments and the EPA's specific responses and rationale for the Agency's final decisions.

B. Technology Review for the CMAS Categories

1. What did we propose pursuant to CAA section 112(d)(6) for the CMAS categories?

Based on the EPA's technology review for the CMAS categories, the Agency proposed under CAA section 112(d)(6) changes to the CMAS NESHAP for heat exchange systems, process vents, and equipment leaks. The EPA proposed no change under CAA section 112(d)(6) for storage tanks, transfer operations, and wastewater streams. Additionally, with respect to fenceline monitoring, the EPA proposed that none of the 15 urban HAP regulated on table 1 to the CMAS NESHAP either had established fenceline monitoring methods or were sufficiently prevalent across the nine CMAS categories to serve as reasonable surrogates for fugitive emissions. Also, with respect to flaring for compliance with the process vent standards, the EPA proposed that it was not cost effective to update CMAS flares with the suite of monitoring and operational requirements in 40 CFR 63.670 and 40 CFR 63.671. The EPA provides a summary of the Agency's findings, as proposed, in this section of the preamble.

a. Heat Exchange Systems

In the EPA's technology review for the CMAS categories, the Agency identified one development in practices and processes for CMAS heat exchange systems: the use of the Modified El Paso Method for monitoring for leaks from heat exchange systems. The EPA determined that this method is more effective at identifying leaks and measures a larger number of compounds than the methods previously required in

[29] Docket ID No. EPA–HQ–OAR–2024–0303–0035.

[30] Docket ID No. EPA–HQ–OAR–2024–0303–0032.

[31] Docket ID No. EPA–HQ–OAR–2024–0303–0035.

the CMAS NESHAP. After evaluating State and Federal regulations requiring the Modified El Paso Method, as well as emissions data collected for the Refinery Sector risk and technology review (RTR) (see section II.D of the proposal preamble and the Refinery Sector RTR rulemaking docket), pursuant to CAA section 112(d)(6) the EPA proposed to require the use of the Modified El Paso Method at 40 CFR 63.11499(d) and item 1.c of table 8 to the CMAS NESHAP—by reference to the HON (40 CFR 63.104(a) and (f) through (l))—for both new and existing heat exchange systems with flow rates greater than or equal to 8,000 gpm.[32] The EPA proposed a leak definition of 6.2 ppmv of total strippable hydrocarbon concentration (as methane) in the stripping gas to further reduce HAP emissions from these heat exchange systems and proposed to disallow delay of repair of leaks if the measured concentration meets or exceeds 62 ppmv. Based on an evaluation of incremental HAP cost effectiveness to increase the leak monitoring frequency, the EPA proposed no changes to the monitoring frequency previously required by the CMAS NESHAP for heat exchange systems (*i.e.,* monthly monitoring for the first six months following startup of a source and quarterly monitoring thereafter). The EPA also proposed to require re-monitoring at the monitoring location where owners and operators identified a leak to ensure that they fixed any leaks found. Further, the EPA proposed that none of these proposed requirements for heat exchange systems apply to heat exchange systems that have a maximum cooling water flow rate of 10 gallons per minute or less. Additionally, the EPA proposed that owners and operators may use the current leak monitoring requirements for heat exchange systems at 40 CFR 63.104(b) in lieu of using the Modified El Paso Method, provided that 99 percent by weight or more of the organic compounds that could leak into the heat exchange system are water soluble and have a Henry's Law Constant less than 5.0E–6 atmospheres-cubic meters per mole at 25 degrees Celsius. Finally, the EPA proposed that owners and operators may not inject or dispose of water in a heat exchange system if the water is wastewater as defined in 40 CFR 63.11502. Refer to section IV.C.2 of the proposal preamble for a summary of the EPA's rationale for selecting the proposed leak method, leak definition, and limitation on delay of repairs, as well as the Agency's rationale for retaining the previous monitoring schedule. For a detailed discussion of the EPA's findings, see the document entitled *Clean Air Act Section 112(d)(5) GACT Standard Analysis for Heat Exchange Systems that Emit Ethylene Oxide and Section 112(d)(6) Technology Review for Heat Exchange Systems Associated with Chemical Manufacturing Process Units at Area Sources Subject to the CMAS NESHAP.*[33]

b. Process Vents

As part of the EPA's technology review for the CMAS categories, the Agency investigated the basis for the concentration threshold of ''at least 50 ppmv metal HAP'' included in the definition of ''metal HAP process vent.'' The EPA added this threshold to the definition in 40 CFR 63.11502(b) as part of the 2012 reconsideration of the NESHAP in response to commenters arguing that it was necessary to better represent GACT as their sulfuric acid regeneration units already achieved over 95 percent reduction in metal HAP.[34] However, the Agency did not at that time conduct any analysis to justify the change. As such, the EPA proposed pursuant to CAA section 112(d)(6) to remove the 50 ppmv concentration threshold from the definition of ''metal HAP process vent'' to ensure that process vents emitting metal HAP were subject to control. See section IV.C.3 of the proposal preamble for a summary of the EPA's rationale for proposing to remove the concentration threshold from the definition of ''metal HAP process vent.''

c. Equipment Leaks

In the EPA's technology review for the CMAS categories, the Agency identified three control options for further reducing emissions from equipment leaks at CMAS facilities. See section IV.C.1 of the proposal preamble for a summary of the three options. Based on the EPA's evaluation of the feasibility, costs, and emission reductions of each option, the Agency proposed pursuant to CAA section 112(d)(6) to revise the CMAS NESHAP at 40 CFR 63.11495(a)(6) such that owners and operators of new and existing affected sources with equipment in organic HAP service must conduct annual leak detection monitoring of all pumps in LL service, valves in G/V service and LL service, and connectors in G/V service and LL service by following EPA Method 21, with certain exceptions (*e.g.,* pumps, valves, and connectors that are unsafe to monitor). The EPA also proposed at 40 CFR 63.11495(a)(6) that owners and operators must consider a leak from any of these types of equipment ''detected'' if the instrument reading equals or exceeds 10,000 ppmv and that owners and operators must make a first repair attempt no later than five calendar days after a leak is detected. Also, the EPA proposed that owners and operators must repair equipment as soon as practicable but no later than 15 calendar days after the leak is detected, except as allowed in 40 CFR part 63, subpart H for delay of repair at 40 CFR 63.171. Additionally, the EPA proposed the incorporation at 40 CFR 63.11495(a)(6) of the HON LDAR requirements for compressors, sampling connection systems, open-ended valves or lines, equipment in HL service, closed vent systems and control devices, and agitators in G/V or LL service.[35] For a detailed discussion of the EPA's findings, see the document entitled *Clean Air Act Section 112(d)(5) GACT Standard Analysis for Equipment Leaks that Emit Ethylene Oxide and Section 112(d)(6) Technology Review for Equipment Leaks from Chemical Manufacturing Process Units at Area Sources Subject to the CMAS NESHAP.*[36]

2. How did the technology review change for the CMAS categories?

Apart from a minor reference adjustment to the proposed requirements for heat exchange systems in organic HAP service, the EPA is finalizing the results of the technology review pursuant to CAA section 112(d)(6) for the CMAS categories as proposed without changes. The EPA is revising 40 CFR 63.11499(d) and item 1.c of table 8 to the CMAS NESHAP to remove the reference to 40 CFR 63.104(k) and instead revising 40 CFR 63.11499(d)(6) to provide similar language prohibiting owners and operators from injecting or disposing of wastewater via any heat exchange system in an affected CMPU.

3. What key comments did we receive on the technology review, and what are our responses?

This section provides summaries of and responses to the key comments received regarding the portions of the

[32] Docket ID No. EPA–HQ–OAR–2010–0682.

[33] Docket ID No. EPA–HQ–OAR–2024–0303–0031.

[34] 77 FR 75740 (Dec. 21, 2012).

[35] The HON LDAR requirements for compressors, sampling connection systems, open-ended valves or lines, equipment in HL service, closed vent systems and control devices, and agitators in G/V or LL service appear respectively at 40 CFR 63.164, 40 CFR 63.166, 40 CFR 63.167, 40 CFR 63.169, 40 CFR 63.172, and 40 CFR 63.173.

[36] Docket ID No. EPA–HQ–OAR–2024–0303–0027.

EPA's technology review for the CMAS categories related to heat exchange systems, equipment leaks, and flares. The EPA did not receive many substantive comments on the other amendments discussed in this section IV.C of this preamble. Based on the comments the EPA received on the proposed technology review provisions, the Agency is finalizing, as proposed, to require monitoring via the Modified El Paso Method for heat exchange systems with one minor change. The EPA also is finalizing, as proposed, an annual instrument monitoring program for equipment leaks and the Agency's decision not to apply the suite of operational and monitoring requirements outlined in 40 CFR 63.670 and 40 CFR 63.671 to flares in organic HAP service at CMAS facilities.

While the EPA received comments on the Agency's determination that there were no cost-effective developments for storage tanks and wastewater, commenters did not provide any additional information that suggested our analyses were incorrect. Therefore, the EPA is not finalizing any changes to the requirements in the CMAS NESHAP for storage tanks and wastewater at this time. The document entitled *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources,* which is in the docket for this rulemaking, contains the comment summaries and the EPA's responses to these issues as well as to additional issues raised regarding the Agency's technology review's proposed requirements for the CMAS categories. Notably, the EPA did not receive any comments on the Agency's proposal arguing that there are no developments in practices, processes, and control technologies that warrant revisions to the GACT standards for transfer operations.

a. Heat Exchange Systems

Comment: Some commenters objected to the EPA's proposal to replace the existing delay of repair options in 40 CFR 63.104(e) (as referenced in table 8 to the CMAS NESHAP) with those in 40 CFR 63.104(j), which only allow delay of repair for heat exchange systems in organic HAP service if the leak is below an action level of 62 ppmv (as methane) in the stripping gas. The commenters argued that the proposed option will likely lead to facilities with smaller recirculation rates emitting more HAP because they may be required to isolate equipment or to shut down process equipment as opposed to calculating the emissions from a continued leak and delaying repair if they are less than the emissions from a shutdown event. In addition, the commenters argued that the proposed provisions impose a requirement to fix leaks in scenarios that will result in unnecessary emissions and unwarranted safety risks. The commenters requested that the EPA not finalize the proposed delay of repair requirements and instead keep the existing requirements as they provide flexibility for facilities while minimizing environmental impact and safety risks.

Response: The EPA disagrees with the commenters' request to not finalize the incorporation of the delay of repair provisions at 40 CFR 63.104(j) via 40 CFR 63.11499(d) and item 1.c. of table 8 to the CMAS NESHAP. First, the commenters appear to have misunderstood the EPA's proposal to replace the existing delay of repair options in 40 CFR 63.104(e) (as referenced in table 8 to the CMAS NESHAP) with those in 40 CFR 63.104(j). In contrast to the commenters' interpretation, the EPA's proposed rule text at 40 CFR 63.104(j), which the Agency is finalizing, does allow delay of repair until the next scheduled shutdown of the heat exchange system, if the repair is technically infeasible without a shutdown and the total strippable hydrocarbon concentration or total hydrocarbon mass emissions rate is initially and remains less than the delay of repair action level for all monitoring periods during the delay of repair.[37] Second, the final CMAS NESHAP only requires monitoring via the Modified El Paso Method for heat exchange systems with flow rates greater than or equal to 8,000 gpm, and as previously mentioned, the final requirements allow owners and operators of these heat exchange systems to delay repair until the next scheduled shutdown under certain circumstances. Moreover, heat exchange systems with flow rates less than 8,000 gpm are subject to 40 CFR 63.11495(b), which requires owners and operators to develop and operate in accordance with a heat exchange system inspection plan that describes the inspections owners and operators must perform at least once per quarter.[38] As such, the EPA expects that the final requirements already minimize the burden to facilities with heat exchange systems with smaller recirculation rates as they will not be subject to monitoring via the Modified El Paso Method nor the associated repair requirements.

Even considering the minimum flow rate of 8,000 gpm, the EPA believes it is important to address sufficiently large leaks (that are at least an order of magnitude larger than the leak definition) quickly given the potential for large amounts of emissions and a facility's general duty to minimize emissions. Notably, the EPA determined that large leaks are also significantly more cost-effective to fix than small leaks and that the final requirements for heat exchange systems in organic HAP service with flow rates greater than or equal to 8,000 gpm are cost-effective and reasonable when considering a distribution of potential leaks, not just those an order of magnitude larger than the leak definition. For additional details on the expected emissions reductions and costs estimated by the EPA, see the document entitled *Clean Air Act Section 112(d)(5) GACT Standard Analysis for Heat Exchange Systems that Emit Ethylene Oxide and Section 112(d)(6) Technology Review for Heat Exchange Systems Associated with Chemical Manufacturing Process Units at Area Sources Subject to the CMAS NESHAP,* which is in the docket for this rulemaking.[39] In addition, see the document entitled *Updated Impact Calculations for the CMAS Categories—Final,* also in the docket for this rulemaking.

Comment: Commenters requested that the EPA amend the inclusion of the language at 40 CFR 63.104 to clarify that the rule will not require owners and operators to monitor regulated heat exchange systems using water sampling methods or a surrogate indicator pursuant to 40 CFR 63.104(b) or (c) if the heat exchange system is monitored for leaks according to 40 CFR 63.104(g) (*i.e.,* via the Modified El Paso Method). The commenters pointed out that the current language does not allow sources to stop monitoring using the methods in 40 CFR 63.104(b) or (c) once they have begun using the Modified El Paso method. In addition, the commenters noted that neither 40 CFR 63.104 nor the referencing language in table 8 to the CMAS NESHAP provide a means of ceasing compliance with 40 CFR

[37] The delay of repair action level is a total strippable hydrocarbon concentration (as methane) in the stripping gas of 62 ppmv or, for heat exchange systems with a recirculation rate of 10,000 gallons per minute or less, the delay of repair action level is a total hydrocarbon mass emissions rate (as methane) of 1.8 kg/hr.

[38] Inspections as required by 40 CFR 63.11495(b) must provide evidence of hydrocarbons in the cooling water and may include checks for visible floating hydrocarbon on the water, hydrocarbon odor, discolored water, and/or chemical addition rates. Owners and operators of these heat exchange systems must also perform repairs to eliminate the leak within 45 calendar days after indications of the leak are identified but may delay the repair if a reason is documented in the next semiannual compliance report.

[39] Docket ID No. EPA–HQ–OAR–2024–0303–0031.

63.104(d) once a facility begins complying with 40 CFR 63.104(h) through (j).

Response: The EPA agrees with commenters that the final rule should allow sources to stop monitoring using methods in 40 CFR 63.104(b) or (c) once they have begun monitoring using the Modified El Paso method. However, the EPA disagrees with the commenter that the proposed 40 CFR 63.11499(d) did not permit sources to discontinue using water sampling methods or a surrogate indicator once they begin monitoring via the Modified El Paso method. The EPA also disagrees that the proposed provisions did not offer a mechanism to end compliance with the repair requirements at 40 CFR 63.104(d) after a facility begins complying with the repair requirements at 40 CFR 63.104(h) through (j). Under the final rule at 40 CFR 63.11499(a), owners and operators must follow the requirements outlined in table 8 to the CMAS NESHAP, unless certain exceptions apply. According to item 1.c of table 8 to the CMAS NESHAP, once the compliance dates have passed, the provisions in items 1.a and 1.b (*i.e.,* referring to the current monitoring and repair requirements in 40 CFR 63.104(b) through (e)) will no longer apply. Instead, owners and operators then must comply with the requirements in 40 CFR 63.104(f) through (j) and (l). Therefore, no revisions to the requirements are necessary in response to the commenter's request. The EPA is finalizing the proposed rule text without changes, except that in the final rule, the EPA is removing the reference to 40 CFR 63.104(k) and rephrasing 40 CFR 63.11499(d)(7) such that after the compliance dates specified in the final 40 CFR 63.11494(i), owners and operators may not inject water into or dispose of water in a heat exchange system if the water is considered wastewater as defined in 40 CFR 63.11502(b).

b. Equipment Leaks

Comment: A commenter generally supported the EPA's proposed CAA section 112(d)(6) practices for reducing equipment leaks from equipment in organic HAP service (*i.e.,* annual instrument monitoring of connectors in G/V and LL service, valves in G/V and LL service, and pumps in LL service via EPA Method 21 with a leak definition of 10,000 ppmv and following the requirements of 40 CFR part 63, subpart H for compressors, sampling connection systems, open-ended valves or lines, and agitators). However, another commenter contended that the proposed instrument monitoring program was inadequate because the EPA failed to consider certain developments including fenceline monitoring, low-leak and leakless equipment, area monitoring, and ''enhanced LDAR'' programs. The commenter argued that although the EPA considered optical gas imaging (OGI) and leak detection and sensor networks (LDSNs) as developments, the basis for the EPA's rejection was insufficient. The commenter suggested that the EPA could require OGI in conjunction with the existing leak detection practices and processes directed at lower-level leaks given the EPA has previously stated that OGI is less effective at finding smaller leaks. In response to the EPA's statements that OGI cannot observe all chemical compounds, the commenter asserted that OGI does not need to observe all chemicals emitted by CMAS to be an effective tool in identifying leaks.

With respect to LDSNs, the commenter suggested that the EPA has sufficient information to require the practice given what the commenter characterizes as the EPA's collaborative role in developing and testing the technology. The commenter said that the EPA could develop LDSNs for CMAS and pointed out that the EPA has recently approved the use of an LDSN as an Alternative Means of Emission Limitation (AMEL) at the Flint Hills Resources West Refinery in Corpus Christi, Texas.

The commenter also referenced comments on the 2023 HON and 2024 PEPO Production NESHAP RTR proposals and stated that they contain additional information on low-leak and leakless equipment, area monitoring, including components of ''enhanced LDAR programs,'' OGI, and LDSN.

Response: The EPA acknowledges the commenters' support for and opposition to the proposed instrument monitoring program for equipment in organic HAP service. However, the EPA disagrees with the commenter that the Agency failed to account for developments in equipment leak controls pursuant to CAA section 112(d)(6). The EPA assessed feasible options for additional control measures and incorporated those into the proposed rule where they demonstrated cost-effective emissions reductions and could be reasonably implemented.

With respect to OGI, as stated in the technical analysis, the EPA maintains that CMAS emit a wide variety of chemicals and that OGI cannot observe all of them.[40] While the EPA agrees with the commenter that OGI does not necessarily have to observe all chemicals to identify a leak, the CMAS NESHAP covers a wide variety of sources using hundreds of different chemicals. OGI cameras can detect only compounds that have a peak in the spectral range of the filter on the OGI camera (generally around 3.2 to 3.4 micron for cameras used to detect hydrocarbons). While some of the compounds of interest do have a peak in this range, several of the organic compounds listed in table 1 to the CMAS NESHAP have very weak peaks or no peaks in the spectral range common to OGI camera filters, making it extremely difficult for an OGI camera to see these compounds. For example, chloroform's response in this spectral range makes it almost impossible to detect with an OGI camera. For those compounds that an OGI camera can observe, the detection range of the camera varies, and some compounds must be present in high quantities before being detectable. As such, the EPA maintains that the proposed (and finalized) instrument monitoring program for equipment in organic HAP service is most appropriate for detecting equipment leaks from CMAS CMPUs at this time.

With respect to LDSNs, as stated in the technical analysis document, the EPA does not have the information necessary to develop appropriate monitoring requirements that could be incorporated into the final rule.[41] The CMAS NESHAP covers a wide variety of operations that involve numerous different HAP, and while the EPA did participate in developing and testing LDSNs, the EPA recognizes that consent decrees and AMELs are often specific to a facility and not necessarily applicable to the wider source category (or source categories in the case of the CMAS NESHAP). Additionally, some AMELs, like the one mentioned by the commenter, are in use for the first time and need further study before the EPA can apply the AMEL's approach more broadly.

With respect to the additional information provided by the commenter via their comments on the 2023 HON and 2024 PEPO Production NESHAP RTR proposals (which the commenter submitted to the docket for this action), the EPA notes that the final instrument monitoring program for this action is less stringent than the instrument monitoring programs in the HON and the PEPO Production NESHAP. It would not be necessary to use low-leak and

[40] Docket ID No. EPA–HQ–OAR–2024–0303–0027.

[41] Docket ID No. EPA–HQ–OAR–2024–0303–0027.

leakless equipment to achieve compliance with the final CMAS management practices, and low-leak and leakless equipment are typically more expensive than standard components. As such, the EPA did not evaluate a requirement for low-leak or leakless equipment, as standard equipment should be sufficient to meet the proposed, and final, provisions.

With respect to area monitoring, the CMAS NESHAP regulates a wide variety of operations and sources, and the emissions are variable, both in expected compounds and magnitude. Based on that variability, the EPA does not have sufficient data (*e.g.,* designation of monitored compounds for different source categories and different operations, appropriate action levels, and spacing of monitors) to establish an area monitoring program for the wide variety of operations affected by the CMAS NESHAP.

Also, as the commenter noted, ''enhanced LDAR programs'' contain many of the requirements that the EPA proposed and is finalizing in this action. The EPA explained earlier in this response why the Agency chose not to include other elements, such as leakless and low-emission equipment. Owners and operators may need to add other elements of ''enhanced LDAR programs'' to improve an existing LDAR program, but because the CMAS NESHAP did not previously require instrument monitoring for LDAR, the EPA is unable to assess at this time whether additional guidance is necessary.

c. Flares

Comment: Some commenters supported the EPA's decision not to apply the suite of operational and monitoring requirements outlined in 40 CFR 63.670 and 40 CFR 63.671 to flares in organic HAP service at CMAS facilities. Commenters noted that although the EPA has incorporated the revised flare requirements into several recent rules, the EPA has done so selectively based on the flare characteristics of those industries. Additionally, the commenter noted that while the EPA has determined that the general provisions at 40 CFR 63.11 cannot ensure 98 percent control of organic HAP, the GACT process vent and storage tank standards applicable to CMAS CMPUs do not require 98 percent control, and the costs to apply the revised standards outweigh any incremental emissions reductions.

On the other hand, another commenter argued that the EPA should include the suite of flare operational and monitoring requirements in the Refinery Sector NESHAP (outlined in 40 CFR 63.670 and 40 CFR 63.671) in the CMAS NESHAP because some process vent or storage tank standards require control efficiencies that are greater than what the flare standards in 40 CFR 63.11 can guarantee. The commenter noted that the EPA assumed a baseline control efficiency for flares operating under the requirements of 40 CFR 63.11 of 85.9 percent and pointed out that the only CMAS standards below the assumed baseline control efficiency are those for existing batch process vents and periods of startup and shutdown for continuous process vents. The commenter referenced the EPA's proposal, noting that when the EPA promulgated the original CMAS NESHAP in 2009, available data indicated that the provisions in 40 CFR 63.11 would enable flares to achieve 98 percent control of emissions from process vents and storage tanks. The commenter argued that the EPA implied the Agency would not have proposed or finalized flaring as a compliance option in the original rulemaking if the Agency knew that sources could not reliably achieve the assumed 98 percent control level underlying those provisions. The commenter urged the EPA to use the same rationale used in the HON and Group I Polymer and Resins NESHAP (where the flare requirements were updated under CAA section 112(d)(2) and (3)) to update the CMAS standards with the suite of flare operational and monitoring requirements outlined in 40 CFR 63.670 and 40 CFR 63.671.

Response: The EPA acknowledges the commenters' support for and opposition to the requirement that owners and operators operate CMAS flares pursuant to the requirements outlined in 40 CFR 63.670 and 40 CFR 63.671. The EPA agrees with commenters that none of the process vent or storage tank standards for non-flare control devices require a reduction of organic HAP emissions by at least 98 percent by weight, whether through removal or destruction; those standards only require 85 to 95 percent control by weight. The EPA also concurs with the commenter that flares complying with 40 CFR 63.11 have an assumed control efficiency greater than some of the required non-flare APCD control efficiencies. However, the EPA disagrees with the commenter's assertion that the Agency implied that if we were aware that flares complying with 40 CFR 63.11 were not achieving 98 percent control efficiency, then we would not have allowed compliance by use of a flare. GACT standards consider relevant factors such as cost and burden to facilities, whereas MACT standards established under CAA sections 112(d)(2) and (3) do not. The EPA revised the major source flare requirements identified by the commenter pursuant to CAA sections 112(d)(2) and (3) to ensure compliance with the MACT floor that the EPA had established in previous iterations of those rules. However, the CMAS NESHAP does not include MACT standards where the EPA identified potential underperformance requiring updates to those standards, such as changes to the flare requirements in other NESHAP. As such, for the EPA's review of the existing flare standards and practices, the Agency relied on the technology review authority of CAA section 112(d)(6) and considered the development of the suite of operational and monitoring requirements outlined in 40 CFR 63.670 and 40 CFR 63.671, consistent with our typical approaches. It would be speculative to opine on whether the EPA would have established different standards in the original rulemaking if the EPA were aware of the costs of ensuring flares achieve 98 percent control efficiency. Nonetheless, at this time, the EPA considers the costs and burden of operating CMAS flares pursuant to the flare requirements in 40 CFR part 63, subpart CC (*i.e.,* 40 CFR 63.670 and 40 CFR 63.671) unreasonable and not cost-effective for CMAS. The EPA notes that the commenters did not provide sufficient information for the EPA to consider revising this proposed, and now finalized, determination.

Comment: A commenter argued that CAA section 112(d)(6) does not allow the EPA to dismiss developments and refuse to update standards based on cost. The commenter asserted that the D.C. Circuit has recognized that developments are a core requirement of CAA section 112(d)(6) and that it is unlawful, arbitrary, and capricious for the EPA to propose not to incorporate the flare monitoring and operational requirements at 40 CFR 63.670 and 40 CFR 63.671 into the CMAS NESHAP because it ignores statutory purposes that the Agency is required to consider pursuant to *NRDC.*

Response: The EPA disagrees that the Agency has ignored the statutory purpose of CAA section 112(d)(6) and that we are prohibited from considering costs when determining whether additional controls are ''necessary'' when conducting a section 112(d)(6) review. The D.C. Circuit has repeatedly held to the contrary.[42] The purpose of

[42] *See, e.g., Ass'n of Battery Recyclers,* 716 F.3d at 67; *Nat. Res. Def. Council* v. *EPA,* 529 F.3d 1077, 1081–82 (D.C. Cir. 2008) (holding that EPA's

CAA section 112(d)(6) is to periodically review and update emissions standards as necessary. The EPA did not propose any changes to the level of control necessary to comply with the process vent and storage tank standards, nor did the Agency propose that flares are no longer a compliance option for those standards, as established in the original rulemaking. Consistent with the requirements of CAA section 112(d)(6), the EPA reviewed applying the monitoring and operational requirements at 40 CFR 63.670 and 40 CFR 63.671 because those requirements represent a development in the control technology. However, reviews conducted under CAA section 112(d)(6) are not cost-blind. Considering the costs of operating a flare in accordance with 40 CFR 63.670 and 40 CFR 63.671 and other relevant factors, the EPA determined that it was not reasonable or cost-effective to revise the monitoring or operational requirements for CMAS flares in this final action. As such, the EPA is not finalizing any changes to the final rule in response to this comment.

4. What is the rationale for our final approach and decisions for the technology review?

The EPA's technology review focused on the identification and evaluation of developments in practices, processes, and control technologies that have occurred since the 2012 reconsideration.[43] Specifically, the EPA's technology review focused on the existing GACT standards for the various emissions sources in the CMAS categories, including heat exchange systems, storage tanks, process vents, transfer operations, wastewater, and equipment leaks. In the proposal, the EPA identified cost-effective and feasible developments for CMAS heat exchange systems, process vents, and equipment leaks, and the Agency proposed to revise the standards for these three emissions sources under the technology review. The EPA did not identify cost-effective and feasible developments in practices, processes, or control technologies for transfer operations, storage tanks, and wastewater. The proposed rule and the supporting materials in the docket materials for this rulemaking contain further information regarding the technology review.

During the public comment period, the EPA received several comments on the Agency's proposed determinations for the technology review. The document entitled *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources,* which is in the docket for this rulemaking, contains the comments and the EPA's specific responses and rationale for the Agency's final decisions. Commenters did not present information that led us to change our proposed developments for CMAS heat exchange systems, process vents, and equipment leaks, and the EPA is finalizing revised standards for these three emissions sources, as proposed under the technology review. Commenters did not present any information that led us to change our proposed determinations under CAA section 112(d)(6) for transfer operations, storage tanks, wastewater, and flares, and the EPA is finalizing the Agency's determination that no changes to these standards are warranted.

C. Other Amendments to the CMAS NESHAP

1. What other amendments did we propose for the CMAS categories?

The EPA proposed provisions at 40 CFR 63.11496(g)(1)(iv), 40 CFR 63.11497(g)(1)(iv), and 40 CFR 63.11501(b) and (d) that require owners or operators to submit electronic copies of certain required NOCS, performance test reports, and periodic reports through the EPA's CDX using CEDRI. The EPA also proposed two narrow circumstances in which owners or operators may seek extensions to the deadline if conditions outside of their control prevent reporting within five business days of the reporting deadline. The EPA proposed that an extension may be warranted due to outages of the EPA's CDX or CEDRI that precludes an owner or operator from accessing the system and submitting required reports. The EPA proposed that an extension also may be warranted due to a *force majeure* event, such as an act of nature, act of war or terrorism, or equipment failure or safety hazards beyond the control of the facility.

Also, the EPA proposed at 40 CFR 63.11496(f)(2)(i)(E)(ii) that owners or operators conduct performance testing once every five years to demonstrate compliance with emission limits for certain process vents and storage tanks if a source routes emissions to a non-flare control device. Specifically, the EPA proposed removing the design evaluation option at 40 CFR 63.11496(g)(2) and table 5 of the CMAS NESHAP and the engineering assessment option at 40 CFR 63.11496(f)(3)(ii) and instead requiring ongoing performance tests at proposed 40 CFR 63.11496(f)(3)(iv), (4), and (5), and 40 CFR 63.11496(g)(1)(iii) for owners and operators using a control device other than a flare to comply with the emission limits and other requirements for batch and continuous process vents and at 40 CFR 63.11497(g)(1)(iii) for owners and operators using a control device other than a flare to comply with the emission limits and other requirements for storage tanks.

In addition, the EPA proposed to eliminate an exemption for certain wastewater streams related to periods of startup and shutdown. More specifically, the EPA proposed to remove the language at 40 CFR 63.11498(b) stating that the requirements of item 2 to table 6 of 40 CFR part 63, subpart VVVVVV for wastewater streams with a partially soluble HAP concentrations greater than 10,000 parts per million by weight (ppmw) and a separate organic phase do not apply during periods of startup or shutdown.

Additionally, in light of *NRDC,* which vacated affirmative defense provisions in the Portland Cement Manufacturing NESHAP, the EPA proposed eliminating the regulatory affirmative defense provisions from the CMAS NESHAP at 40 CFR 63.11501(e) in their entirety and the definition of ''affirmative defense'' in 40 CFR 63.11502(b).

Finally, the EPA proposed revisions to clarify text or correct typographical errors, grammatical errors, and cross-reference errors. These proposed changes include but are not limited to: referring only to 40 CFR part 63, subpart F when referring to definitions in the HON; identifying the specific version of NAICS codes used to determine rule applicability; removing redundant language; and requiring basic facility details for reporting purposes. Section IV.D.3 of the proposal preamble discusses other proposed editorial corrections and clarifications.

2. How did the other amendments for the CMAS categories change since proposal?

Based on comments received on the proposed rulemaking, the EPA is making a limited number of minor changes to the amendments described in section IV.D.1 of this preamble. With regard to electronic reporting, the EPA is making minor clarifying edits to the spreadsheet reporting templates; the CEDRI website will contain the final versions of these templates. Additionally, the EPA is revising the proposed provisions to allow in the final rule owners and operators to

consideration of costs does not invalidate the Agency's determination under Section 112(d)(6)).

[43] 77 FR 75740 (Dec. 21, 2012).

submit the NOCS up to 150 days after the effective date of the rule. Otherwise, the EPA is finalizing the proposed changes to the CMAS NESHAP identified in section III.C of this preamble and IV.D of the proposal preamble without change.

3. What key comments did we receive on the other amendments for the CMAS categories, and what are our responses?

This section provides summaries of and responses to the key comments received regarding the EPA's proposal to eliminate (1) the design evaluation option at 40 CFR 63.11496(g)(2) and table 5 to the CMAS NESHAP and (2) an exemption at 40 CFR 63.11498(b) for certain wastewater streams during periods of startup and shutdown. The EPA did not receive many substantive comments on the other amendments discussed in this section IV.C of this preamble. The comments the EPA received generally supported the Agency's proposal for owners or operators to submit electronic copies of specified performance test reports and periodic reports via the EPA's CDX using CEDRI, as well as our proposal to remove the affirmative defense provisions. The comments the EPA received regarding other amendments generally include issues related to electronic reporting, ongoing performance testing, and revisions that the Agency proposed for addressing technical and editorial corrections. The document entitled *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources,* available in the docket for this rulemaking, contains the comments and the EPA's specific responses to these issues.

a. Performance Testing

Comment: Some commenters opposed the EPA's proposal to remove the design evaluation option at 40 CFR 63.11496(g)(2) and table 5 to the CMAS NESHAP and instead favored retaining that option rather than requiring periodic performance testing to demonstrate compliance with the storage tank or process vent control requirements.

Commenters claimed that area sources face unique challenges to conducting stack testing, including low flow, small duct/vent diameters, and other measurement obstacles. The commenters also remarked that performance testing represents a significant expense for smaller area sources compared to major sources. These commenters noted that it was unclear why the EPA proposed eliminating the design evaluation option for CMAS, given that in other major source rulemakings the EPA retained similar provisions, such as those for storage vessels with closed vent systems, transfer racks, and wastewater control devices under the HON, as well as those for storage vessels and small control devices under the MON.

Another commenter asserted that periodic performance testing is overly burdensome to facilities that use non-flare control devices for operational or cost reasons and will not result in a commensurate benefit to human health or the environment. The commenter provided that in many instances sampling at the inlet to a control device can create a safety hazard. The commenter requested that, at minimum, the EPA incorporate provisions in the final rule that allow for reduced performance testing frequency based on a history of good performance. Additionally, the commenter asked that the EPA not require repeat performance testing unless there has been a change to the process or to the control device. Conversely, another commenter expressed support for the EPA's proposal to require performance testing of non-flare control devices every five years.

Response: The EPA acknowledges the commenters' support for and opposition to the provisions requiring a performance test of non-flare control devices initially and once every five years subsequently. However, the commenters provided no supporting information for their claim that performance testing represents a significant cost to area sources. The economic analysis conducted for the proposed action identified that the average annual revenue for an affected CMAS entity was approximately $12,500 million.[44] Even for small businesses exclusively, the analysis determined that the average annual revenue was $230 million. As part of the EPA's information collection request (ICR) supporting statement, the Agency estimated that a performance test would cost less than $50,000.[45] As such, the EPA does not anticipate that the costs of initial and subsequent performance tests will significantly impact an average or small entity, given that the estimated costs represent approximately 0.02 percent of the total annual costs to a small entity and are incurred only once every five years.[46]

With respect to unique challenges at area sources, the EPA acknowledges that control devices at CMAS may be smaller than those at major source facilities. While low flow and small duct/vent diameters can present some measurement challenges, the EPA expects facilities will be able to purchase or install equipment, increase throughput, or otherwise address these concerns, as facilities subject to other area source NESHAP that require regular performance testing, such as the gasoline distribution NESHAP, the polyvinyl chloride and copolymers production NESHAP, and the hazardous waste combustors NESHAP, have achieved compliance with similar requirements for many years.[47] Additionally, the EPA notes that many CMAS subject to the NESHAP are synthetic area sources already subject to title V requirements and as such already conduct performance tests to revise and update their permits on a five-year basis. The EPA notes that owners and operators may apply to use an alternative test method in accordance with the provisions of 40 CFR 63.7(f) for site-specific issues that may make the specified methods difficult to use, such as interferants, unusual flow situations, *etc.*

In response to the commenters who pointed out that the EPA has retained the design evaluation option in certain major source rulemakings, the EPA emphasizes that verifying compliance with the standards is especially critical for CMAS. The EPA has found that control devices often fall short of the efficiency levels claimed by manufacturers for various reasons. However, the CAA limits area sources to having a potential to emit less than 10 tpy for any single HAP and 25 tpy for any combination of HAP. Therefore, reduced control efficiency can lead to higher-than-expected emissions, potentially causing a facility to exceed the 10/25 tpy thresholds established by regulation. This potential impact is particularly relevant for synthetic area sources, which take enforceable limits on their control device(s) to remain below major source thresholds. The EPA also notes that a single compliant performance test does not guarantee future good performance. Control efficiency can degrade over time, and it is important to reassess the operation of the control device as it ages. Additionally, operators and practices

[44] Docket ID No. EPA–HQ–OAR–2024–0303–0025.

[45] Docket ID No. EPA–HQ–OAR–2024–0303–0039.

[46] See the document entitled *Economic Impact Analysis for the Final National Emission Standards for Hazardous Air Pollutants: Chemical Manufacturing Area Sources,* available in the docket for this rulemaking.

[47] See 40 CFR part 63 subparts BBBBB, DDDDDD, and EEE, respectively.

may change over time, and a performance test every five years ensures that APCDs continue to meet the standards.

Comment: A commenter requested that the EPA extend the deadline for submitting a NOCS from the proposed 60 days to 150 days after the final rule's effective date. This NOCS, as proposed, would include a summary of performance test results and/or an engineering assessment related to the proposed removal of the design evaluation option in 40 CFR 63.11496(g)(2) and table 5 to the CMAS NESHAP. The commenter stated that additional time is needed to conduct the performance test and that compiling some of the required submission information would involve significant effort. The commenter also noted that other major source rules, like the HON and PEPO Production NESHAP, provide 150 days after the effective date of the final rule to submit the NOCS report. Therefore, the commenter concluded, the final CMAS rule should also provide the same timeline.

Response: The EPA agrees with the commenter that some sources may need to conduct performance testing which can take time to contract, execute, and obtain results. Additionally, the EPA acknowledges that the number of affected CMAS may strain the availability of resources for conducting the required performance tests. Therefore, the EPA is revising the final rule at 40 CFR 63.11496(f)(3)(ii) and 40 CFR 63.11501(b) to extend the NOCS submission deadline to 150 days following the rule's effective date, although sources may submit prior to the deadline.

b. Wastewater

Comment: A commenter objected to the EPA's proposal to remove the language at 40 CFR 63.11498(b) that exempts certain wastewater streams from the control requirements of item 2 in table 6 to the CMAS NESHAP during periods of startup and shutdown. The commenter stated that maintenance wastewater is typically generated during shutdown of process equipment; therefore, the elimination of the exemption would subject maintenance wastewater to the control requirements of item 2 in table 6 to the CMAS NESHAP. As such, the commenter requested that the EPA incorporate the HON's maintenance wastewater provisions at 40 CFR 63.105 into the CMAS NESHAP. The commenter added that in the original HON rulemaking, the EPA acknowledged that maintenance wastewater was distinctly separate from process wastewater and should be managed through facility-specific procedures. Additionally, the commenter stated that determining the stream characteristics of maintenance wastewater is often difficult, given that a controlled drain system does not capture all maintenance wastewater.

Response: The EPA considers the existing standards reasonable to address maintenance wastewater generated by CMAS CMPUs and therefore finds no need to incorporate the provisions at 40 CFR 63.105 into the CMAS NESHAP.

40 CFR 63.11498(a) requires that all wastewater streams from a CMPU subject to the CMAS NESHAP comply with item 1 of table 6 to the CMAS NESHAP (*i.e.,* owners and operators must discharge wastewater streams to onsite or offsite wastewater or hazardous waste treatment). According to 40 CFR 63.11498(a)(1), owners and operators of CMAS must understand the applicability of requirements to all wastewater streams, including maintenance wastewater, based on their concentration at all points in time. While the commenter is correct that 40 CFR 63.11498(b) previously stated that the requirements of item 2 of table 6 to the CMAS NESHAP did not apply during periods of startup or shutdown, that provision did not exempt sources from complying with the other aspects of 40 CFR 63.11498 or table 6 to the CMAS NESHAP. Therefore, owners and operators should already know the concentration of most wastewater streams (including maintenance wastewater) from CMAS CMPUs, and those streams should already be captured and sent to treatment, as required by the original rule.[48]

For maintenance wastewater streams that contain partially soluble HAP at a concentration greater than or equal to 10,000 ppmw and separate water and organic phases, the EPA expects that facilities already have capture and control systems in place due to other wastewater restrictions (*e.g.,* National Pollutant Discharge Elimination System permits, local publicly owned treatment works discharge criteria, *etc.*). Given these other applicable and existing wastewater restrictions, the EPA anticipates that owners and operators cannot discharge wastewater streams containing an unseparated water and organic phase or being treated as hazardous waste (per item 2.b. of table 6 to the CMAS NESHAP). Moreover, the EPA does not expect that facilities would change capture and control systems for these wastewater streams during periods of startup or shutdown. Accordingly, the EPA believes the removal of the exemption to control wastewater for periods of startup and shutdown from the CMAS NESHAP has no impact on CMAS facility operations and still ensures that a CAA section 112 standard is in place at all times.

4. What is the rationale for our final approach and decisions regarding the other amendments for the CMAS categories?

Based on the comments received for these other amendments, the EPA is generally finalizing all proposed requirements. In a few instances, the EPA received comments that led to additional minor editorial corrections and technical clarifications being made in the final rule. Section IV.D.3 of this preamble and the document entitled *Summary of Public Comments and Responses for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources,* which is in the docket for this rulemaking, contain the EPA's rationale for these corrections and technical clarifications.

V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted

A. What are the affected facilities?

The EPA estimates that this final rule will affect 251 facilities subject to the CMAS NESHAP. The document entitled *List of Facilities Subject to the CMAS NESHAP* which is in the docket for this rulemaking, lists these facilities.[49]

B. What are the air quality impacts?

This final action will reduce HAP and volatile organic compound (VOC) emissions from CMAS. The EPA estimates that the final amendments to the NESHAP will reduce overall HAP emissions from CMAS by approximately 160 tpy based on the finalized provisions detailed in sections III.A through C of this preamble. Additionally, the EPA estimates that the final amendments will reduce VOC emissions by 1,582 tpy.

The document entitled *Economic Impact Analysis for the Final National Emission Standards for Hazardous Air Pollutants: Chemical Manufacturing Area Sources* (which is in the docket for this rulemaking), the analyses referenced in sections IV.B through D of the proposal preamble, and the document entitled *Updated Impact Calculations for the CMAS Categories—Final Rule* (which is in the docket for this rulemaking) contain more information about the estimated

[48] 74 FR 56008 (Oct. 29, 2009).

[49] Docket ID No. EPA–HQ–OAR–2024–0303–0028.

emissions reductions associated with this final rulemaking.

C. What are the cost impacts?

The EPA estimates the costs of the final requirements detailed in sections III.A through III.C of this preamble will be approximately $18.4 million in total capital costs (in 2024 dollars for the entire period of analysis) and $5.7 million in total annual costs (including product recovery). The ''total annual costs'' are the sum of the annualized capital costs and other annual costs (*e.g.,* operating and maintenance costs, recordkeeping and reporting costs). To obtain annualized capital costs, the EPA multiplies a capital recovery factor by the capital costs. The EPA bases the capital recovery factor on the lifetime of the capital equipment as well as the interest rate.

The documents referenced in sections IV.B through IV.D of the preamble to the proposed rule and in the document entitled *Updated Impact Calculations for the CMAS Categories—Final,* which is in the docket for this rulemaking, contain more information about the estimated cost of this final action for the CMAS NESHAP.

D. What are the economic impacts?

The document entitled *Economic Impact Analysis for the Final National Emission Standards for Hazardous Air Pollutants: Chemical Manufacturing Area Sources,* which is in the docket for this rulemaking, discusses expected economic impacts, including the impacts to small entities, of this final action.

The EPA estimates the PV of the costs over the 15-year analytical period from 2027 to 2041 in accordance with Executive Orders 12866 and 13563. Costs are in 2024 dollars, and the EPA discounts them to 2025 at 3 and 7 percent discount rates per the recommendation in Office of Management and Budget (OMB) Circular A–4 (2003) and the EPA's Guidelines for Preparing Economic Analyses (2024).[50] [51] The EPA also presents the EAV at 3 and 7 percent discount rates. The EAV takes the non-uniform stream of costs (*i.e.,* different costs in different years) and converts them into a single annual value that, if paid each year from 2027 to 2041, would equal the original stream of values in PV terms.

The EPA estimates the PV of the costs over the 15-year period from 2027 to 2041 including the value of product recovery (*i.e.,* the cost savings) to be $72 million at a 3 percent discount rate and the EAV is $6.1 million. Additionally, the EPA estimates the PV of the costs including the value of product recovery to be $56 million at a 7 percent discount rate and the EAV is $6.2 million.

This final action impacts 55 small entities, which own a total of 61 CMAS facilities. The EPA evaluates economic impacts of rulemakings on small entities by examining total annual cost estimates compared to the annual revenues of the companies (*i.e.,* entities) that are the ultimate owners of the facilities affected by the rule. The EPA estimates cost-to-sales ratios, which are the total annual costs estimated for each entity divided by the entity's annual revenues. This ratio provides a measure of the direct economic impact to ultimate owners of CMAS facilities.

The EPA estimates the average cost-to-sales ratio for small entities impacted by this final rule will be 0.18 percent with a maximum cost-to-sales ratio estimated at 1.37 percent, not considering the value of product recovery due to compliance. With product recovery, the EPA estimates that the average cost-to-sales ratio for small entities impacted by this final rule will be 0.14 percent with a maximum cost-to-sales ratio of 1.35 percent. The EPA estimates that approximately 5 percent of impacted small entities (three small entities out of a total of 55) will incur total annual costs greater than 1 percent of their annual revenue, and zero small entities will incur total annual costs greater than 3 percent of their annual revenue. The EPA does not anticipate that this final rule will have a substantial impact on a significant number of small entities. The EPA also does not expect this final rule to have significant market impacts or employment impacts. For more explanation of these economic impacts, refer to section VI.D of this preamble and the economic impact analysis accompanying this rulemaking.[52]

E. What are the benefits?

The emissions impacts estimated for this final include reductions in HAP emissions. In keeping with longstanding practice, the EPA did not monetize the benefits from the estimated HAP emission reductions associated with this final action. The EPA currently does not have sufficient methods to monetize benefits associated with HAP reductions and risk reductions for this rulemaking. While they are not monetized, the EPA expects that there will be health benefits associated with the estimated HAP emissions reductions. For additional information on the nonmonetized benefits of this rulemaking, refer to the economic impact analysis accompanying this rulemaking.[53]

The emission impacts estimated for this final action include net reductions in VOC emissions. Consistent with the proposed rulemaking, the EPA was not able to monetize the health and environmental impacts associated with the estimated changes in criteria air pollutant emissions for this final rule, which includes changes in VOC emissions, which impact the formation of ground-level ozone. Specifically, the EPA did not attempt to monetize the health benefits of reductions in HAP emissions in this analysis due to methodology and data limitations.

VI. 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 13563: Improving Regulation and Regulatory Review

This action is a significant regulatory action that the EPA submitted to the OMB for review. Any changes made in response to Executive Order 12866 review have been documented in the docket. The EPA prepared an economic analysis of the potential costs and benefits associated with this action. This analysis, *Economic Impact Analysis for the Final National Emission Standards for Hazardous Air Pollutants: Chemical Manufacturing Area Sources,* is in the docket for this rulemaking.

B. Executive Order 14192: Unleashing Prosperity Through Deregulation

This action is considered an Executive Order 14192 *de minimis* regulatory action, rendering this action exempt from applicable Executive Order 14192 requirements.

C. Paperwork Reduction Act (PRA)

The EPA submitted information collection activities in this rule for approval to OMB under the PRA. The ICR document that the EPA prepared has been assigned EPA ICR number 2323.10. You can find a copy of the ICR in the docket for this rulemaking, and it is briefly summarized here. The

[50] *https://www.whitehouse.gov/wp-content/uploads/2025/08/CircularA-4.pdf.*

[51] *https://www.epa.gov/system/files/documents/2024-12/guidelines-for-preparing-economic-analyses_final_508-compliant_compressed.pdf.*

[52] Refer to the document entitled *Economic Impact Analysis for the Final National Emission Standards for Hazardous Air Pollutants: Chemical Manufacturing Area Sources,* available in the docket for this rulemaking.

[53] *Id.*

information collection requirements are not enforceable until OMB approves them.

The EPA is finalizing amendments to the CMAS NESHAP to add new monitoring requirements for heat exchange systems, add monitoring requirements for pressure vessels, add new monitoring practices for PRDs, clarify regulatory provisions for vent control bypasses, and add practices for instrument monitoring of equipment in organic HAP service. In addition, the EPA is finalizing amendments to the CMAS NESHAP that add requirements for electronic reporting of NOCS, periodic reports, and performance test results and make other minor clarifications and corrections. The EPA will collect this information to ensure compliance with the CMAS NESHAP.

Respondents/affected entities: Owners or operators of CMAS facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart VVVVVV).

Estimated number of respondents: 251 (assumes 0 new respondents over the next three years).

Frequency of response: Initially, semiannually, and annually.

Total estimated burden: 10,700 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: Average annual cost is $3,710,000 (per year) which includes $2,530,000 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 EPA 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 in this final rule.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. The small entities subject to the requirements of this action are small businesses with the CMAS categories (see section II.A of this preamble). The EPA identified 55 small entities that this final action will affect. The EPA has determined that three of the 251 facilities in the CMAS categories affected by this final action may experience an impact greater than 1 percent of their total annual revenue. The EPA estimates that these three facilities will each incur approximately $81,000 in total capital costs and $31,000 in annual costs not including the value of product recovery (in 2024 dollars). Additional details of this analysis are presented in section V.D of this preamble and the document entitled *Economic Impact Analysis for the Final National Emission Standards for Hazardous Air Pollutants: Chemical Manufacturing Area Sources,* which is in the docket for this rulemaking.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million (adjusted annually for inflation) or more (in 1995 dollars) as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The costs involved in this action are estimated not to exceed $187 million in 2024 dollars ($100 million in 1995 dollars adjusted for inflation using the GDP implicit price deflator) or more in any one year.

F. 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.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have Tribal implications as specified in Executive Order 13175. This action will not impose substantial direct compliance costs on Federally recognized Tribal governments nor preempt Tribal law. Thus, Executive Order 13175 does not apply to this action.

Consistent with the EPA Policy on Consultation and Coordination with Indian Tribes, the EPA offered to consult with Tribal officials during the development of this action. A copy of that government-to-government consultation offer is in a letter dated January 8, 2025, in the docket for this rulemaking.[54]

H. Executive Order 13045: Protection of Children From Environmental Health Risks 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 not subject to Executive Order 13045 because it is not a significant regulatory action under section 3(f)(1) of Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The final rule lowers HAP emissions and is projected to improve overall health for all individuals, including children.

However, EPA's *Policy on Children's Health* applies to this action. The EPA does not believe this final action affecting the nine CMAS categories will result in a disproportionate impact to children's health. While the EPA is finalizing provisions that will reduce HAP emissions (see sections IV.A through IV.C of this preamble), these emission reductions will not benefit children more significantly than any other group.

I. Executive Order 13211: Actions Concerning Regulations 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 EPA expects this final action would not reduce crude oil supply, fuel production, coal production, natural gas production, or electricity production. The EPA estimates that this final action would have minimal impact on the amount of imports or exports of crude oils, condensates, or other organic liquids used in the energy supply industries. Given the minimal impacts on energy supply, distribution, and use as a whole nationally, no significant adverse energy effects are expected to occur.

J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

This action involves technical standards. The EPA incorporates by reference and is finalizing VCS ASTM D6784–24, ''Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)'' as an acceptable alternative to EPA Method 29 (referenced in the CMAS NESHAP at 40 CFR 63.11496(f)(3)(iii)) in this action with the following caveats. The EPA has approved this ASTM procedure as an alternative to EPA Method 29 only when the target compound is mercury,

[54] Docket ID No. EPA–HQ–OAR–2024–0303–0037.

and the ASTM procedure applies only to concentrations approximately 0.5 to 100 micrograms per cubic meter. This test method was developed initially for the measurement of mercury in coal-fired power plants; however, it has also been extensively used on other stationary combustion sources including sources having a flue gas composition with high levels of hydrochloric acid and low levels of sulfur dioxide. The test method includes equipment and procedures for obtaining samples from effluent ducts and stacks, equipment and procedures for laboratory analysis, and procedures for calculating results of elemental, oxidized, particle-bound, and total mercury emissions. ASTM D6784–24 is available at ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428–2959.[55] The cost of obtaining these methods is not a significant financial burden, making the methods reasonably available to stakeholders.

As discussed in the proposal preamble, the EPA conducted searches for the CMAS NESHAP through the Enhanced National Standards Systems Network Database managed by the American National Standards Institute. The EPA also conducted a review of voluntary consensus standards (VCS) organizations and accessed and searched their databases. The EPA conducted searches for EPA Methods 5, 5D, 21, and 29 of 40 CFR part 60, appendix A. During the EPA's VCS search, if the title or abstract (if provided) of the VCS described technical sampling and analytical procedures that are similar to the EPA's reference method, the EPA ordered a copy of the standard and reviewed it as a potential equivalent method. The EPA reviewed all potential standards to determine the practicality of the VCS for this rulemaking. This review requires significant method validation data that meet the requirements of EPA Method 301 for accepting alternative methods or scientific, engineering, and policy equivalence to procedures in the EPA reference methods. The EPA may reconsider determinations of impracticality when additional information is available for particular VCS.

While the EPA identified seven other VCS as potentially applicable, the Agency decided these methods are impractical as alternatives because of the lack of equivalency, documentation, validation data, and other important technical and policy considerations. The EPA did not identify any applicable VCS for EPA Methods 5D and 21, and none were brought to its attention in comments. The EPA documented the search and review results in the document entitled *Voluntary Consensus Standard Results for Technology Review of the National Emissions Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources,* which is in the docket for this rulemaking.[56] Additional information for the VCS search and determinations is in this document.

K. 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 is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

Lee Zeldin,

Administrator.

For the reasons stated in the preamble, the Environmental Protection Agency amends part 63 of title 40, chapter I, of the Code of Federal Regulations as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq.*

Subpart A—General Provisions

■ 2. Amend § 63.14 by:

■ a. Redesignating paragraphs (i)(106) through (120) as (i)(107) through (121); and

■ b. Adding new paragraph (i)(106).

The addition reads as follows:

§ 63.14 Incorporations by reference.

* * * * *

(i) * * *

(106) ASTM D6784–24, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), Approved March 1, 2024; IBR approved for § 63.11496(f).

* * * * *

Subpart VVVVVV—National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources

■ 3. Amend § 63.11494 by revising paragraph (a)(2) introductory text, paragraphs (a)(2)(i), (c)(2)(iv), and (f) through (h) and adding paragraph (i) to read as follows:

§ 63.11494 What are the applicability requirements and compliance dates?

(a) * * *

(2) HAP listed in table 1 to this subpart (Table 1 HAP) are present in the CMPU, as specified in paragraph (a)(2)(i), (ii), (iii), or (iv) of this section.

(i) The CMPU uses as feedstock, any material that contains quinoline, manganese, and/or trivalent chromium at an individual concentration greater than 1.0 percent by weight, or any other Table 1 HAP at an individual concentration greater than 0.1 percent by weight. To determine the Table 1 HAP content of feedstocks, you may rely on formulation data provided by the manufacturer or supplier, such as the Safety Data Sheet (SDS) for the material. If the concentration in an SDS is presented as a range, use the upper bound of the range.

* * * * *

(c) * * *

(2) * * *

(iv) Manufacture of chemicals classified using the 2007 version of NAICS code 325222, 325314, 325413, or 325998.

* * * * *

(f) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions in this subpart no later than March 21, 2013, except as specified otherwise in paragraph (i) of this section.

(g) If you start up a new affected source on or before October 29, 2009, you must achieve compliance with the applicable provisions of this subpart no later than October 29, 2009, except as specified otherwise in paragraph (i) of this section.

(h) If you start up a new affected source after October 29, 2009, you must achieve compliance with the provisions in this subpart upon startup of your affected source, except as specified otherwise in paragraph (i) of this section.

(i) All affected sources that commenced construction or reconstruction on or before January 22, 2025, must be in compliance with the requirements in §§ 63.11495(a)(6), (b)(4), and (e), 63.11496(e)(6)(iii), (f)(3)(iv), (f)(4), (g)(1)(iii), (g)(2)(ii), and (g)(4)(iii),

[55] *https://www.astm.org/.*

[56] Docket ID No. EPA–HQ–OAR–2024–0303–0005.

and 63.11499(d), item 5 to table 5 to this subpart, and item 1.c to table 8 to this subpart upon initial startup, or on April 1, 2029, whichever is later. All affected sources that commenced construction or reconstruction after January 22, 2025, must be in compliance with the requirements in §§ 63.11495(a)(6), (b)(4), and (e), 63.11496(e)(6)(iii), (f)(3)(iv), (f)(4), (g)(1)(iii), (g)(2)(ii), and (g)(4)(iii), and 63.11499(d), item 5 to table 5 to this subpart, and item 1.c to table 8 to this subpart upon initial startup, or on April 1, 2026, whichever is later.

■ 4. Amend § 63.11495 by:
■ a. Revising paragraph (a) and paragraph (b) introductory text;
■ b. Adding paragraph (b)(4);
■ c. Revising paragraph (d); and
■ d. Adding paragraph (e).

The revisions and additions read as follows:

§ 63.11495 What are the management practices and other requirements?

(a) *Management practices.* If you have a CMPU subject to this subpart, you must comply with paragraphs (a)(1) through (6) of this section.

(1) Each process vessel must be equipped with a cover or lid that must be closed at all times when it is in organic HAP service or metal HAP service, except for manual operations that require access, such as material addition and removal, inspection, sampling and cleaning. This requirement does not apply to process vessels containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (*e.g.,* metal HAP that is in ingot, paste, slurry, or moist pellet form or other form).

(2) You must use any of the methods listed in paragraphs (a)(2)(i) through (iv) of this section to control total organic HAP emissions from transfer of liquids containing HAP listed in table 1 to this subpart to tank trucks or railcars. You are not required to comply with this paragraph (a)(2) if you have notified the Administrator in your initial notification that a material is reactive or resinous, and you will not be able to comply with any of the methods in paragraphs (a)(2)(i) through (iv) of this section for the transfer of such material.

(i) Use submerged loading or bottom loading.

(ii) Route emissions to a fuel gas system or process in accordance with § 63.982(d).

(iii) Vapor balance back to the storage tank or another storage tank connected by a common header.

(iv) Vent through a closed-vent system to a control device.

(3) Except as specified in paragraph (a)(6) of this section, you must conduct inspections of process vessels and equipment for each CMPU in organic HAP service or metal HAP service, as specified in paragraphs (a)(3)(i) through (v) of this section, to demonstrate compliance with paragraph (a)(1) of this section and to determine that the process vessels and equipment are sound and free of leaks. Alternatively, except when the subject CMPU contains metal HAP as particulate, inspections may be conducted while the subject process vessels and equipment are in VOC service, provided that leaks can be detected when in VOC service.

(i) Inspections must be conducted at least quarterly.

(ii) For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period.

(iii) As an alternative to conducting inspections, as specified in paragraph (a)(3)(ii) of this section, you may use Method 21 of 40 CFR part 60, appendix A–7, with a leak definition of 500 ppmv to detect leaks. You may also use Method 21 with a leak definition of 500 ppmv to determine if indications of a leak identified during an inspection conducted in accordance with paragraph (a)(3)(ii) of this section are due to a condition other than loss of HAP. The procedures in this paragraph (a)(3)(iii) may not be used as an alternative to the inspection required by paragraph (a)(3)(ii) of this section for process vessels that contain metal HAP as particulate.

(iv) Inspections must be conducted while the subject CMPU is operating.

(v) No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service or metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.

(4) Except as specified in paragraph (a)(6) of this section, you must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph (a)(4), a leak will be considered ''repaired'' if a condition specified in paragraph (a)(4)(i), (ii), or (iii) of this section is met.

(i) The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; or

(ii) No bubbles are observed at potential leak sites during a leak check using soap solution; or

(iii) The system will hold a test pressure.

(5) Except as specified in paragraph (a)(6) of this section, you must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.

(6) Beginning no later than the compliance dates specified in § 63.11494(i) for equipment in organic HAP service, as determined by § 63.180(d), paragraphs (a)(3) through (5) of this section no longer apply. Instead, you must comply with the requirements specified in paragraphs (a)(6)(i) through (xiv) of this section. Equipment that is in vacuum service is excluded from the requirements of this paragraph (a)(6). Equipment that is in organic HAP service less than 300 hours per calendar year is excluded from the requirements of this paragraph (a)(6) if it is identified as required in § 63.11501(c)(9)(i)(D).

(i) Except as specified in paragraph (a)(6)(ii) of this section, conduct leak detection monitoring annually for all pumps in light liquid service, valves in gas/vapor service and in light liquid service, and connectors in gas/vapor service and in light liquid service as specified in paragraphs (a)(6)(i)(A) through (C) of this section.

(A) Use the method specified in § 63.180(b)(1) through (3).

(B) The calibration gases must be zero air (less than 10 ppm of hydrocarbon in air); and methane and air at a concentration of 10,000 ppm methane. At the end of each monitoring day, check the instrument using the same calibration gas that was used to calibrate the instrument before use. Follow the procedures specified in Method 21 of 40 CFR part 60, appendix A–7, section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. If multiple scales are used, record the instrument reading for each scale used. Divide the arithmetic difference of the initial and post-test calibration response by the corresponding calibration gas value for each scale and multiply by 100 to express the calibration drift as a percentage. If a calibration drift assessment shows a negative drift of more than 10 percent, then re-monitor all equipment monitored since the last calibration with instrument readings between the leak definition and the leak definition multiplied by (100 minus the

percent of negative drift) divided by 100. If any calibration drift assessment shows a positive drift of more than 10 percent from the initial calibration value, then, at your discretion, all equipment with instrument readings above the leak definition and below the leak definition multiplied by (100 plus the percent of positive drift) divided by 100 monitored since the last calibration may be re-monitored.

(C) The instrument reading that defines a leak is 10,000 ppm or greater. When a leak is detected, the following requirements apply:

(*1*) Clearly identify the leaking equipment. A weatherproof and readily visible identification, marked with the equipment identification number, must be attached to the leaking equipment. The identification on the equipment may be removed after it is repaired.

(*2*) A first attempt at repair must be made no later than 5 calendar days after the leak is detected.

(*3*) The piece of equipment must be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in paragraph (a)(6)(viii) of this section.

(*4*) The leak is repaired when instrument re-monitoring of the equipment does not detect a leak.

(*5*) It is a deviation to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a deviation. However, if the repairs are unsuccessful, a leak is detected and you must take further action as required by applicable provisions of this paragraph (a)(6).

(ii) The following types of equipment are exempt from the monitoring requirements specified in paragraph (a)(6)(i) of this section if the equipment meets one of the requirements in paragraphs (a)(6)(ii)(A) through (E) of this section.

(A) Any pump in light liquid service, valve in gas/vapor service or light liquid service, or connector in gas/vapor service or light liquid service that is designated as unsafe-to-monitor if:

(*1*) You determine that the pump, valve, or connector is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a)(6)(i) of this section; and

(*2*) You have a written plan that requires monitoring of the pump, valve, or connector as frequently as practical during safe-to-monitor times, but not more frequently than the annual leak detection monitoring.

(B) Any pump in light liquid service if it meets one of the requirements in § 63.163(e)(1) through (6), (f), or (g). If the pump is located within the boundary of an unmanned plant site then it is exempt from the weekly visual inspection requirement of § 63.163(e)(4), and the daily requirements of § 63.163(e)(5), provided that each pump is visually inspected as often as practicable and at least monthly.

(C) Any valve in gas/vapor service or light liquid service that is designated as a difficult-to-monitor valve if:

(*1*) You determine that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner;

(*2*) The CMPU within which the valve is located is an existing source or you designate less than 3 percent of the total number of valves in a new source as difficult-to-monitor; and

(*3*) You follow a written plan that requires monitoring of the valve as frequently as practical, but not more frequently than the annual leak detection monitoring.

(D) Any connector in gas/vapor service or light liquid service that is designated as an unsafe-to-repair connector if:

(*1*) You determine that repair personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a)(6)(i) of this section; and

(*2*) The connector will be repaired before the end of the next scheduled CMPU shutdown.

(E) Any connector in gas/vapor service or light liquid service that is inaccessible or is ceramic or ceramic-lined (*e.g.,* porcelain, glass, or glass-lined); however, if any inaccessible or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, a first attempt at repair must be made no later than 5 calendar days after the leak is detected. The leak must be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in paragraphs (a)(6)(viii) and (a)(6)(ii)(D) of this section. An inaccessible connector is defined in § 63.11502(b).

(iii) For compressors, comply with the requirements in § 63.164.

(iv) For pressure relief devices in gas/vapor service or light liquid service, comply with the requirements in § 63.165(e)(1) through (8), except as specified in paragraphs (a)(6)(iv)(A) through (D) of this section.

(A) Substitute ''violation'' with ''deviation''.

(B) Section 63.165(e)(3)(v)(D) does not apply.

(C) Substitute each occurrence of April 25, 2023 with April 1, 2026.

(D) Substitute the occurrence of July 15, 2027 with April 1, 2029.

(v) For sampling connection systems, comply with the requirements in § 63.166.

(vi) For open-ended valves or lines, comply with the requirements in § 63.167.

(vii) For pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service, comply with the requirements in § 63.169 except a leak is detected if the instrument reading equals or exceeds 10,000 ppmv for pumps, valves, and connectors instead of the leak definitions specified in § 63.169(b).

(viii) For delay of repair, comply with the requirements in § 63.171 except the phrase ''Except as specified in paragraph (f) of this section,'' and § 63.171(f) do not apply.

(ix) For closed vent systems and control devices, comply with the requirements in § 63.172 except as specified in paragraphs (a)(6)(ix)(A) through (G) of this section.

(A) Substitute ''§ 63.162(b) of this subpart'' with ''paragraph (a)(6)(xi) of this section''.

(B) Section 63.172(d) does not apply.

(C) Flares used to comply with this paragraph (a)(6) must comply with the requirements in subpart SS of this part.

(D) Substitute ''violation'' with ''deviation''.

(E) Substitute ''For each source as defined in § 63.101, and for each source as defined in § 63.191, beginning no later than the compliance dates specified in § 63.100(k)(10)'' with ''For each affected source as described in § 63.11494(d), beginning no later than the compliance dates specified in § 63.11494(i)''.

(F) Substitute ''After the compliance dates specified in § 63.100 of subpart F of this part'' with ''After the compliance dates specified in § 63.11494(i)''.

(G) Substitute ''periodic report required by § 63.182(d)'' with ''semiannual compliance report required by paragraph (a)(6)(xiv) of this section''.

(x) For agitators in gas/vapor service and in light liquid service, comply with the requirements in § 63.173.

(xi) You may use the alternative means of emission limitation provided in §§ 63.178 and 63.179. You may also request a determination of alternative means of emission limitation to the requirements in this paragraph (a)(6) as provided in § 63.177. If the

Administrator makes a determination that an alternative means of emission limitation is permissible, you must comply with the alternative.

(A) Substitute ''§§ 63.163 through 63.171 and §§ 63.173 through 63.176'' and ''§ 63.163, through 63.171, and §§ 63.173 and 63.174 of this subpart'' with ''paragraphs (a)(6)(i) through (viii) and (x) of this section''.

(B) Substitute ''§ 63.181'' with ''§ 63.11501(c)(9)''.

(C) Substitute ''§ 63.163, §§ 63.168 and 63.169, and §§ 63.173 through 63.176 of this subpart'' with ''paragraphs (a)(6)(i), (ii), and (vii) through (x) of this section''.

(D) Substitute ''§ 63.180(b) of this subpart'' with ''paragraph (a)(6)(i)(A) and (B) of this section''.

(E) Substitute ''§§ 63.163 through 63.170, and §§ 63.172 through 63.176 of this subpart'' with ''paragraphs (a)(6)(i) through (vii), (ix), and (x) of this section''.

(F) Substitute ''§ 63.174 of this subpart'' with ''paragraph (a)(6)(i) of this section''.

(G) Section 63.178(c)(3)(iii) and (iv) does not apply.

(H) Substitute ''§ 63.172 of this subpart'' with ''paragraph (a)(6)(ix) of this section''.

(xii) Keep records as specified in § 63.11501(c)(9).

(xiii) Submit the Notification of Compliance Status as specified in § 63.11501(b)(6).

(xiv) Submit the Semiannual Compliance Report as specified in § 63.11501(d)(9).

(b) *Small heat exchange systems.* For each heat exchange system subject to this subpart with a cooling water flow rate less than 8,000 gallons per minute (gal/min) and not meeting one or more of the conditions in § 63.104(a)(1) through (4), you must comply with paragraphs (b)(1) through (4) of this section, or as an alternative, you may comply with any one of the requirements in item 1.a, 1.b, or 1.c of table 8 to this subpart. Beginning on April 1, 2029, for purposes of compliance with this paragraph (b), § 63.104(a)(3) and (4) no longer apply.

* * * * *

(4) Beginning no later than the compliance dates specified in § 63.11494(i), you must not inject water into or dispose of water in the heat exchange system if the water is considered wastewater as defined in § 63.11502.

* * * * *

(d) *General duty.* At all times, you must operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU.

(e) *Bypass provisions.* Beginning no later than the compliance dates specified in § 63.11494(i), the use of a bypass line at any time on a closed vent system to divert emissions subject to any of the requirements in §§ 63.11495 through 63.11498 to the atmosphere, or to a control device not meeting the requirements specified in §§ 63.11495 through 63.11498, is an emissions standards deviation. If you are subject to the bypass monitoring requirements of § 63.983(a)(3), then you must continue to comply with the requirements in § 63.983(a)(3) and the recordkeeping and reporting requirements in §§ 63.998(d)(1)(ii) and 63.999(c)(2)(ii) and (iii), except the phrase ''Except for equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines'' in § 63.983(a)(3) does not apply. Instead, the exemptions specified in paragraphs (e)(1) and (2) of this section apply. Owners or operators of closed-vent systems and control devices used to comply with the equipment leak provisions specified in paragraph (a)(6)(ix) of this section are not subject to this paragraph (e).

(1) Except for pressure relief devices subject to § 63.165(e)(4), equipment such as low leg drains and equipment subject to the requirements specified in paragraph (a)(6) of this section are not subject to this paragraph (e).

(2) Open-ended valves or lines that use a cap, blind flange, plug, or second valve and follow the requirements specified in 40 CFR 60.482–6(a)(2), (b), and (c) or follow requirements codified in another regulation that are the same as 40 CFR 60.482–6(a)(2), (b), and (c) are not subject to this paragraph (e).

■ 5. Amend § 63.11496 by:

■ a. Revising paragraphs (a)(3), (e)(6), (f)(3) through (5), and (g)(1) through (4); and

■ b. Removing and reserving paragraph (g)(5).

The revisions read as follows:

§ 63.11496 What are the standards and compliance requirements for process vents?

(a) * * *

(3) If your current estimate is that emissions from batch process vents from a CMPU are less than 10,000 lb/yr, then you must keep a record of the number of batches of each process operated per month. Also, you must reevaluate your total emissions from batch process vents prior to making any process changes that affect emission calculations in paragraphs (a)(1) and (2) of this section. If projected emissions increase to 10,000 lb/yr or more, you must be in compliance with the options for batch process vents in table 2 to this subpart upon initiating operation under the new operating conditions. You must maintain records documenting the results of all updated emissions calculations.

* * * * *

(e) * * *

(6) Except as specified in paragraphs (e)(6)(i) through (iii) of this section, the CEMS requirements and data reduction requirements for CEMS specified in § 63.2450(j) apply.

(i) Substitute April 1, 2026'' for ''August 12, 2020'' in § 63.2450(j)(1).

(ii) Section 63.2450(j)(3) does not apply. Instead, you must conduct a performance evaluation of each CEMS according to the requirements in § 63.8 and according to the applicable Performance Specification of 40 CFR part 60, appendix B, except that the schedule in § 63.8(e)(4) does not apply, and before January 22, 2025, the results of the performance evaluation must be included in the notification of compliance status report. Beginning on and after January 22, 2025, the results of the performance evaluation must be submitted in accordance with § 63.2520(g).

(iii) Substitute ''§ 63.11494(i)'' for each occurrence of ''§ 63.2445(g)''.

(f) * * *

(3) If you have an existing source subject to the HAP metals emission limits specified in table 4 to this subpart, you must comply with the initial and continuous compliance and monitoring requirements in paragraphs (f)(3)(i) through (iv) of this section. You must keep records of monitoring results to demonstrate continuous compliance.

(i) You must prepare a monitoring plan containing the information in paragraphs (f)(3)(i)(A) through (E) of this section. The plan must be maintained on-site and be available on request. You

must operate and maintain the control device according to a site-specific monitoring plan at all times.

(A) A description of the device;

(B) Results of a performance test or engineering assessment conducted in accordance with paragraph (f)(3)(ii) of this section verifying the performance of the device for reducing HAP metals or particulate matter (PM) to the levels required by this subpart;

(C) Operation and maintenance plan for the control device (including a preventative maintenance schedule consistent with the manufacturer's instructions for routine and long-term maintenance) and continuous monitoring system (CMS);

(D) A list of operating parameters that will be monitored to maintain continuous compliance with the applicable emissions limits; and

(E) Operating parameter limits based on either monitoring data collected during the performance test or established in the engineering assessment.

(ii) Except as specified in paragraph (f)(3)(iv) of this section, you must conduct a performance test or an engineering assessment for each CMPU subject to a HAP metals emissions limit in table 4 to this subpart and on or before June 1, 2026 report the results in your Notification of Compliance Status (NOCS), after June 1, 2026 include a summary of results of a performance test submitted according to paragraph (g)(1)(iv) of this section and the results of an engineering assessment in your NOCS. If the performance test was not submitted according to paragraph (g)(1)(iv) of this section, submit the complete report with the NOCS. Each performance test or engineering assessment must be conducted under representative operating conditions, and sampling for each performance test must be conducted at both the inlet and outlet of the control device. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent the entire range of normal operation, including operational conditions for maximum emissions if such emissions are not expected during maximum production. You shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. If you own or operate an existing affected source, you are not required to conduct the initial performance test if a prior performance test was conducted within the 5 years prior to the effective date using the same methods specified in paragraph (f)(3)(iii) of this section, and, either no process changes have been made since the test, or, if you can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

(iii) Except as specified in paragraph (f)(3)(iv) of this section, if you elect to conduct a performance test, it must be conducted according to requirements in § 63.11410(j)(1). As an alternative to conducting a performance test using Method 5 or 5D to determine the concentration of PM, you may use Method 29 of 40 CFR part 60, appendix A–8 of this chapter to determine the concentration of HAP metals. ASTM D6784–24 (incorporated by reference, see § 63.14) may also be used in lieu of Method 29, if the target compound is mercury and concentrations are approximately 0.5 to 100 micrograms per cubic meter. You have demonstrated compliance if the overall reduction of either HAP metals or total PM is equal to or greater than 95 percent.

(iv) Beginning on the compliance dates specified in § 63.11494(i), the option to use an engineering assessment (as specified in paragraph (f)(3)(ii) of this section for determining compliance with a HAP metals emissions limit in table 4 to this subpart) no longer applies. Instead, you must comply with the performance test requirements in paragraphs (f)(3)(ii) and (iii) of this section. If a performance test has never been conducted, conduct an initial performance test no later than the compliance dates specified in § 63.11494(i) or within 180 days after startup of the source, whichever is later. Begin conducting subsequent performance tests no later than the compliance dates specified in § 63.11494(i) or 60 calendar months after the previous performance test, whichever is later.

(4) If you have a new source using a baghouse as a control device, you must install, operate, and maintain a bag leak detection system on all baghouses used to comply with the HAP metals emissions limit in table 4 to this subpart. You must comply with the testing, monitoring, and recordkeeping requirements in § 63.11410(g), (i), and (j)(1), except you are not required to submit the monitoring plan required by § 63.11410(g)(2) for approval. If a performance test has never been conducted, conduct an initial performance test no later than the compliance dates specified in § 63.11494(i) or within 180 days after startup of the source, whichever is later. Begin conducting subsequent performance tests no later than the compliance dates specified in § 63.11494(i) or 60 calendar months after the previous performance test, whichever is later.

(5) If you have a new source using a control device other than a baghouse to comply with the HAP metals emission limits in table 4 to this subpart, you must comply with the initial and continuous compliance and monitoring requirements in paragraphs (f)(3)(i) through (iv) of this section.

(g) * * *

(1) *Requirements for performance tests.* (i) If you are complying with a percent reduction, mass emission limit, or outlet concentration performance standard in table 2 to this subpart for batch process vents or in table 3 to this subpart for continuous process vents, then the requirements specified in paragraphs (g)(1)(ii) through (iv) of this section and in § 63.2450(g)(1) through (4) apply instead of, or in addition to, the requirements specified in subpart SS of this part.

(ii) Upon request, you shall make available to the Administrator, such records as may be necessary to determine the conditions of performance tests.

(iii) If a performance test has never been conducted, conduct an initial performance test no later than 180 days after the compliance dates specified in § 63.11494(i). Begin conducting subsequent performance tests no later than 180 days after the compliance dates specified in § 63.11494(i) or 60 calendar months after the previous performance test, whichever is later. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent the entire range of normal operation, including operational conditions for maximum emissions if such emissions are not expected during maximum production. The owner or operator may not conduct performance tests during periods of malfunction.

(iv) Beginning on June 1, 2026 within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedure specified in § 63.9(k). Submit the data in a file format generated using the EPA's Electronic Reporting Tool (ERT). Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-*

reporting-tool-ert) accompanied by the other information required by § 63.7(g)(2) in PDF format.

(2) *Design evaluation.* (i) Except as specified in paragraph (g)(2)(ii) of this section, to determine initial compliance with a percent reduction or outlet concentration emission limit, you may elect to conduct a design evaluation as specified in § 63.1257(a)(1) instead of a performance test as specified in subpart SS of this part. You must establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For batch process vents, the design evaluation must be conducted under worst-case conditions, as specified in § 63.2460(c)(2).

(ii) Beginning on the compliance dates specified in § 63.11494(i), paragraph (g)(2)(i) of this section does not apply. Instead, the owner or operator must comply with the performance test requirements in paragraph (g)(1) of this section.

(3) *Outlet concentration correction for combustion devices.* When § 63.997(e)(2)(iii)(C) requires you to correct the measured concentration at the outlet of a combustion device to 3 percent oxygen if you add supplemental combustion air, the requirements in either paragraph (g)(3)(i) or (ii) of this section apply for the purposes of this subpart.

(i) You must correct the concentration in the gas stream at the outlet of the combustion device to 3 percent oxygen if you add supplemental gases, as defined in § 63.2550, to the vent stream, or;

(ii) You must correct the measured concentration for supplemental gases using equation 1 to § 63.2460(e)(6); you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.

(4) *Continuous parameter monitoring.* The provisions in § 63.2450(k)(1) through (7) apply in addition to the requirements for continuous parameter monitoring systems (CPMS) in subpart SS of this part, except as specified in paragraphs (g)(4)(i) through (iii) of this section.

(i) You may measure pH or caustic strength of the scrubber effluent at least once per day for any halogen scrubber within a CMPU subject this section.

(ii) The requirements in § 63.2450(k)(6) to request approval of a procedure to monitor operating parameters does not apply for the purposes of this subpart. You must provide the required information in your NOCS report required by § 63.11501(b).

(iii) In § 63.2450(k)(7), substitute ''§ 63.11494(i)'' for ''§ 63.2445(g)''.

* * * * *

■ 6. Amend § 63.11497 by revising paragraphs (a) and (c) and adding paragraphs (e) and (f) to read as follows:

§ 63.11497 What are the standards and compliance requirements for storage tanks?

(a) *Organic HAP emissions from storage tanks.* You must comply with the emission limits and other requirements in table 5 to this subpart and in paragraphs (b) through (f) of this section for organic HAP emissions from each of your storage tanks that meet the applicability criteria in table 5 to this subpart.

* * * * *

(c) *SSM provisions.* References to SSM provisions in subparts that are referenced in paragraphs (a) or (b) of this section or table 5 to this subpart do not apply.

* * * * *

(e) *Pressure vessels.* If you are required to comply with this paragraph (e) as specified in item 5 of table 5 to this subpart (for each pressure vessel with a design capacity greater than or equal to 20,000 gallons), you must operate and maintain the pressure vessel, as specified in paragraphs (e)(1) through (5) of this section.

(1) The pressure vessel must be designed to operate with no detectable emissions at all times.

(2) Except for equipment that meet the criteria specified in § 63.11495(a)(6)(ii)(A) (for valves, connectors, and pumps in gas/vapor service and in light liquid service that are unsafe to monitor), § 63.11495(a)(6)(ii)(C) (for valves in gas/vapor service and in light liquid service that are difficult-to-monitor), and § 63.11495(a)(6)(ii)(E) (for connectors in gas/vapor service and in light liquid service that are inaccessible or ceramic or ceramic-lined), you must monitor each point on the pressure vessel through which organic HAP could potentially be emitted by conducting initial and annual performance tests using Method 21 of appendix A–7 to part 60 of this chapter.

(3) Each instrument reading greater than 500 ppmv is a deviation.

(4) Estimate the flow rate and total regulated material emissions from the defect. Assume the pressure vessel has been emitting for half of the time since the last performance test, unless other information supports a different assumption.

(5) Whenever organic HAP are in the pressure vessel, you must operate the pressure vessel as a closed system that vents through a closed vent system to either a control device (other than a flare) in accordance with § 63.982(c); or a flare in accordance with § 63.982(b). For purposes of compliance with this paragraph, a release of organic HAP through a pressure vessel's pressure relief device to the atmosphere is a deviation.

(f) *Exceptions and alternatives to subpart SS of this part.* If you are complying with a percent reduction, mass emission limit, or outlet concertation performance standard in table 5 to this subpart for storage tanks, then the provisions in paragraphs (f)(1) and (2) of this section apply in addition to the provisions in subpart SS of this part.

(1) *Requirements for performance tests.* (i) The requirements specified in paragraphs (f)(1)(ii) through (iv) of this section apply instead of, or in addition to, the requirements specified in subpart SS of this part.

(ii) Upon request, you shall make available to the Administrator, such records as may be necessary to determine the conditions of performance tests.

(iii) If a performance test has never been conducted, conduct an initial performance test no later than 180 days after the compliance dates specified in § 63.11494(i). Begin conducting subsequent performance tests no later than 180 days after the compliance dates specified in § 63.11494(i) or 60 calendar months after the previous performance test, whichever is later. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent the entire range of normal operation, including operational conditions for maximum emissions if such emissions are not expected during maximum production.

(iv) Beginning on June 1, 2026, within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedure specified in § 63.9(k). Submit the data in a file format generated using the EPA's Electronic Reporting Tool (ERT). Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website (*https://www.epa.gov/electronic-*

reporting-air-emissions/electronic-reporting-tool-ert) accompanied by the other information required by § 63.7(g)(2) in PDF format.

(2) *Design evaluation.* Beginning on the compliance dates specified in § 63.11494(i), the option to use a design evaluation to demonstrate compliance in § 63.985(b)(1)(i) does not apply. Instead, the owner or operator must comply with the performance test requirements in § 63.985(b)(1)(ii) and paragraph (f)(1) of this section.

■ 7. Amend § 63.11498 by revising paragraph (a) introductory text and paragraph (b) to read as follows:

§ 63.11498 What are the standards and compliance requirements for wastewater systems?

(a) You must comply with the requirements in paragraph (a)(1) and (2) of this section and in table 6, item 1 to this subpart for all wastewater streams from a CMPU subject to this subpart. If the partially soluble HAP concentration in a wastewater stream is equal to or greater than 10,000 ppmw and the wastewater stream contains a separate organic phase, then you must also comply with table 6, item 2 to this subpart for that wastewater stream. Partially soluble HAP are listed in table 7 to this subpart.

* * * * *

(b) References to SSM provisions in subparts that are referenced in paragraph (a) of this section or table 6 to this subpart do not apply.

■ 8. Amend § 63.11499 by revising paragraph (a) and adding paragraph (d) to read as follows:

§ 63.11499 What are the standards and compliance requirements for heat exchange systems?

(a) Except as specified in paragraph (d) of this section, if the cooling water flow rate in your heat exchange system is equal to or greater than 8,000 gal/min and is not meeting one or more of the conditions in § 63.104(a)(1) through (4), then you must comply with one of the requirements specified in table 8 to this subpart.

* * * * *

(d) If you are required to comply with the requirements in § 63.104(f) through (j) and (l) as specified in item 1.c of table 8 to this subpart (for heat exchange systems with a cooling water flow rate greater than or equal to 8,000 gal/min), then you must also comply with the requirements in paragraphs (d)(1) through (6) of this section.

(1) Replace each occurrence of ''For each source as defined in § 63.101,'' with ''For each affected source as described in § 63.11494(d),''.

(2) Replace each reference to § 63.100(k)(10) with § 63.11494(i).

(3) Replace each occurrence of ''semi-annual periodic report required by § 63.152(c)'', ''semi-annual periodic report'', or ''periodic report'' with ''semiannual compliance report''.

(4) The phrase ''Except as specified in paragraph (g)(6) of this section,'' in § 63.104(g)(4) does not apply.

(5) Section 63.104(g)(6) and (h)(6) do not apply.

(6) Beginning no later than the compliance dates specified in § 63.11494(i), you must not inject water into or dispose of water in the heat exchange system if the water is considered wastewater as defined in § 63.11502.

■ 9. Amend § 63.11500 by revising paragraphs (a)(2) and (b) to read as follows:

§ 63.11500 What compliance options do I have if part of my plant is subject to both this subpart and another Federal standard?

* * * * *

(a) * * *

(2) After the compliance dates specified in § 63.11494, at an offsite reloading or cleaning facility subject to § 63.1253(f), as referenced from § 63.2470(e) and table 5 to this subpart, compliance with the monitoring, recordkeeping, and reporting provisions of any other subpart of this part constitutes compliance with the monitoring, recordkeeping, and reporting provisions of § 63.1253(f)(7)(ii) or (iii). You must identify in your notification of compliance status report required by § 63.11501(b) the subpart of this part with which the owner or operator of the offsite reloading or cleaning facility complies.

(b) *Compliance with subparts of part 60 of this chapter.* If any part of a CMPU that is subject to the provisions of this subpart is also subject to the provisions of subpart VV, VVa, VVb, DDD, III, IIIa, NNN, NNNa, RRR, or RRRa in part 60 of this chapter, then compliance with any of the requirements in part 60 of this chapter, subpart VV, VVa, VVb, DDD, III, IIIa, NNN, NNNa, RRR, or RRRa that are at least as stringent as the corresponding requirements in this subpart constitutes compliance with this subpart.

* * * * *

■ 10. Amend § 63.11501 by:

■ a. Revising the section heading and paragraph (b) introductory text;

■ b. Adding paragraph (b)(6);

■ c. Revising paragraphs (c) and (d); and

■ d. Removing paragraph (e).

The revisions and addition read as follows:

§ 63.11501 What are the notification, recordkeeping, and reporting requirements?

* * * * *

(b) *Notification of compliance status (NOCS).* Beginning August 31, 2026, the owner or operator must submit all subsequent Notification of Compliance Status reports in PDF format to the EPA following the procedure specified in § 63.9(k). Your NOCS required by § 63.9(h) must include the following additional information specified in paragraphs (b)(1) through (5) of this section, as applicable. Within 150 days after the first applicable compliance date, you must also submit the information in paragraph (b)(6) of this section for equipment subject to the requirements of § 63.11495(a)(6).

* * * * *

(6) For equipment subject to the requirements of § 63.11495(a)(6), you must also submit the information specified in paragraphs (b)(6)(i) through (iv) of this section.

(i) CMPU identification,

(ii) Number of each equipment type (*e.g.,* valves, pumps) excluding equipment in vacuum service; and

(iii) Method of compliance with the standard (*e.g.,* ''annual leak detection and repair'' or ''equipped with dual mechanical seals'').

(iv) For pressure relief devices subject to the pressure release management work practice standards in § 63.165(e), you must submit the information listed in paragraphs (b)(6)(iv)(A) and (B) of this section.

(A) A description of the monitoring system to be implemented, including the relief devices and process parameters to be monitored, and a description of the alarms or other methods by which operators will be notified of a pressure release.

(B) A description of the prevention measures to be implemented for each affected pressure relief device.

(c) *Recordkeeping.* You must maintain files of all information required by this subpart for at least 5 years following the date of each occurrence according to the requirements in § 63.10(b)(1). If you are subject, you must comply with the recordkeeping and reporting requirements of § 63.10(b)(2)(iii) and (vi) through (xiv), and the applicable requirements specified in paragraphs (c)(1) through (11) of this section.

(1) For each CMPU subject to this subpart, you must keep the records specified in paragraphs (c)(1)(i) through (viii) of this section.

(i) Except as specified in paragraph (c)(9) of this section, records of management practice inspections,

repairs, and reasons for any delay of repair, as specified in § 63.11495(a)(5).

(ii) Except as specified in paragraph (c)(11) of this section, records of small heat exchange system inspections, demonstrations of indications of leaks that do not constitute leaks, repairs, and reasons for any delay in repair as specified in § 63.11495(b).

(iii) If batch process vent emissions are less than 10,000 lb/yr for a CMPU, records of batch process vent emission calculations, as specified in § 63.11496(a)(1), the number of batches operated each month, as specified in § 63.11496(a)(3), and any updated emissions calculations, as specified in § 63.11496(a)(3). Alternatively, keep records of the worst-case processes or organic HAP usage, as specified in § 63.11496(a)(2) and (4), respectively.

(iv) Records of all TRE calculations for continuous process vents as specified in § 63.11496(b)(2).

(v) Records of metal HAP emission calculations as specified in § 63.11496(f)(1) and (2). If total uncontrolled metal HAP process vent emissions from a CMPU subject to this subpart are estimated to be less than 400 lb/yr, also keep records of either the number of batches per month or operating hours, as specified in § 63.11496(f)(2).

(vi) Records identifying wastewater streams and the type of treatment they receive, as specified in table 6 to this subpart.

(vii) Before April 1, 2029, records of the date, time, and duration of each malfunction of operation of process equipment, control devices, recovery devices, or continuous monitoring systems used to comply with this subpart that causes a failure to meet a standard. The record must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions. After April 1, 2029, for any deviation, records of the start date, start time, duration in hours, cause, a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(viii) Before April 1, 2029, records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.11495(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. After April 1, 2029, for any deviation, records of actions taken to minimize emissions in accordance with § 63.11495(d), and any corrective action taken to return the affected unit to its normal or usual manner of operation.

(2) For batch process vents subject to table 2 to this subpart and continuous process vents subject to table 3 to this subpart, you must keep records specified in paragraphs (c)(2)(i) or (ii) of this section, as applicable.

(i) If you route emissions to a control device other than a flare, keep records of performance tests, if applicable, as specified in § 63.998(a)(2)(ii) and (4), keep records of the monitoring system and the monitored parameters, as specified in § 63.998(b) and (c), and keep records of the closed-vent system, as specified in § 63.998(d)(1). If you use a recovery device to maintain the TRE above 1.0 for a continuous process vent, keep records of monitoring parameters during the TRE index value determination, as specified in § 63.998(a)(3).

(ii) If you route emissions to a flare, keep records of the flare compliance assessment, as specified in § 63.998(a)(1)(i), keep records of the pilot flame monitoring, as specified in § 63.998(a)(1)(ii) and (iii), and keep records of the closed-vent system, as specified in § 63.998(d)(1).

(3) For metal HAP process vents subject to table 4 to this subpart, you must keep records specified in paragraph (c)(3)(i) or (ii) of this section, as applicable.

(i) For a new source using a control device other than a baghouse and for any existing source, maintain a monitoring plan, as specified in § 63.11496(f)(3)(i), and keep records of monitoring results, as specified in § 63.11496(f)(3).

(ii) For a new source using a baghouse to control metal HAP emissions, keep a site-specific monitoring plan, as specified in §§ 63.11496(f)(4) and 63.11410(g), and keep records of bag leak detection systems, as specified in §§ 63.11496(f)(4) and 63.11410(g)(4).

(4) For each storage tank subject to table 5 to this subpart, you must keep records specified in paragraphs (c)(4)(i) through (vii) of this section, as applicable.

(i) Keep records of the vessel dimensions, capacity, and liquid stored, as specified in § 63.1065(a).

(ii) Keep records of each inspection of an internal floating roof, as specified in § 63.1065(b)(1).

(iii) Keep records of each seal gap measurement for external floating roofs, as specified in § 63.1065(b)(2), and keep records of inspections of external floating roofs, as specified in § 63.1065(b)(1).

(iv) If you vent emissions to a control device other than a flare, keep records of the operating plan and measured parameter values, as specified in §§ 63.985(c) and 63.998(d)(2).

(v) If you vent emissions to a flare, keep records of all periods of operation during which the flare pilot flame is absent, as specified in §§ 63.987(c) and 63.998(a)(1), and keep records of closed-vent systems, as specified in § 63.998(d)(1).

(vi) For periods of planned routine maintenance of a control device, keep records of the day and time at which each maintenance period begins and ends, and keep records of the type of maintenance performed, as specified in § 63.11497(b)(3).

(vii) For each pressure vessel subject to the requirements of § 63.11497(f) you must keep records as specified in paragraphs (c)(4)(vii)(A) and (B) of this section.

(A) The date of each performance test conducted according to § 63.11497(f)(2).

(B) The record of each performance test conducted according to § 63.11497(f)(2), including the following:

(*1*) Date each defect was detected and the instrument reading (in ppmv) during the performance test.

(*2*) Date of the next performance test that shows the instrument reading is less than 500 ppmv and the instrument reading (in ppmv) during the performance test.

(*3*) Start and end dates of each period after the date in paragraph (c)(4)(ix)(B)*(1)* of this section when the pressure vessel was completely empty.

(*4*) Estimated emissions from each defect.

(5) For each wastewater stream subject to item 2 in table 6 to this subpart, keep records of the wastewater stream identification and the disposition of the organic phase(s), as specified in item 2 to table 6 to this subpart.

(6) Except as specified in paragraph (c)(11) of this section, for each large heat exchange system subject to table 8 to this subpart, you must keep records of detected leaks; the date the leak was detected; if demonstrated not to be a leak, the basis for that determination; the date of efforts to repair the leak; and the date the leak is repaired, as specified in table 8 to this subpart.

(7) You must keep a record of all transferred liquids that are reactive or resinous materials, as defined in § 63.11502(b), and not included in the NOCS.

(8) For continuous process vents subject to table 3 to this subpart, keep records of the occurrence and duration of each startup and shutdown of operation of process equipment, or of air pollution control and monitoring equipment.

(9) If you are subject to the equipment leak requirements specified in § 63.11495(a)(6), then you must keep records as specified in paragraphs (c)(9)(i) through (vii) of this section instead of the records specified in paragraph (c)(1)(i) of this section.

(i) Keep a list, summary description, or diagram(s) showing the location and identification number of all equipment in organic HAP service at the facility and the information in paragraphs (c)(9)(i)(A) through (D) of this section.

(A) Identification of equipment designated as unsafe to monitor, difficult to monitor, unsafe to inspect, difficult to inspect, or unsafe to repair and the plan for monitoring or inspecting this equipment, as applicable.

(B) Identification of the equipment in batch process units, for which you do not elect to pressure test the batch product process equipment train.

(C) Identification of the equipment in heavy liquid service.

(D) Identification of the equipment in organic HAP service less than 300 hours per calendar year.

(ii) For leak detection monitoring and inspections required by paragraphs § 63.11495(a)(6) (*e.g.,* monitoring using Method 21 of appendix A–7 to part 60 of this chapter; visible, audible, or olfactory monitoring; closed vent system inspections; and batch process unit monitoring), record the date of the monitoring or inspection and include a statement of whether leaks were detected. If no leaks are detected, records of the monitoring and inspection results are not required.

(iii) When each leak is detected as specified in § 63.11495(a)(6), the following information must be recorded:

(A) The instrument and the equipment identification number and the operator name, initials, or identification number.

(B) The date the leak was detected and the date of first attempt to repair the leak.

(C) The date of successful repair of the leak.

(D) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A–7 of this chapter after it is successfully repaired or determined to be nonrepairable.

(E) ''Repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(*1*) You may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(*2*) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(F) Dates of CMPU shutdowns that occur while the equipment is unrepaired.

(iv) For each pressure relief device subject to the provisions in § 63.165(e), you must keep the records specified in paragraphs (c)(9)(iv)(A) through (C) of this section.

(A) Records of the prevention measures implemented as required in § 63.165(e)(3)(ii).

(B) Records of the number of releases during each calendar year.

(C) For each release to the atmosphere, you must keep the records specified in paragraphs (c)(9)(iv)(C)(*1*) through (*4*) of this section.

(*1*) The start and end time and date of each pressure release to the atmosphere.

(*2*) Records of any data, assumptions, and calculations used to estimate of the mass quantity of each organic HAP released during the event.

(*3*) Records of the root cause analysis and corrective action analysis conducted as required in § 63.165(e)(3)(iii), including an identification of the affected facility, a statement noting whether the event resulted from the same root cause(s) identified in a previous analysis and either a description of the recommended corrective action(s) or an explanation of why corrective action is not necessary under § 63.165(e)(7)(i).

(*4*) For any corrective action analysis for which implementation of corrective actions are required in § 63.165(e)(7), a description of the corrective action(s) completed within the first 45 days following the discharge and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

(v) If you own or operate a batch product process and elect to pressure test the batch product process equipment train to demonstrate compliance with § 63.11495(a)(6), you are exempt from the requirements of paragraphs (c)(9)(i) through (iv) of this section. Instead, you must maintain records of the following information:

(A) A list of identification numbers for equipment in a batch product process.

(B) The dates of each pressure test required in § 63.178(b), the test pressure, and the pressure drop observed during the test.

(C) When a batch product process equipment train does not pass two consecutive pressure tests, the following information must be recorded:

(*1*) The date of each pressure test and the date of each leak repair attempt.

(*2*) Repair methods applied in each attempt to repair the leak.

(*3*) The reason for the delay of repair.

(*4*) The expected date for delivery of the replacement equipment and the actual date of delivery of the replacement equipment.

(*5*) The date of successful repair.

(vi) You must maintain records of the information specified in paragraphs (c)(9)(vi)(A) through (C) of this section for closed vent systems and control devices subject to the provisions of § 63.172. The records specified in paragraph (c)(9)(vi)(A) of this section must be retained for the life of the equipment.

(A) The design specifications and performance demonstrations specified in paragraphs (c)(9)(vi)(A)(*1*) through (*4*) of this section.

(*1*) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.

(*2*) The dates and descriptions of any changes in the design specifications.

(*3*) The flare design (*i.e.,* steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by subpart SS of this part.

(*4*) A description of the parameter or parameters monitored, as required in § 63.172(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(B) Records of operation of closed vent systems and control devices, as specified in paragraphs (c)(9)(vi)(B)(*1*) through (*3*) of this section.

(*1*) Dates and durations when the closed vent systems and control devices required in § 63.11495(a)(6) are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.

(*2*) Dates and durations during which the monitoring system or monitoring device is inoperative.

(*3*) Dates and durations of startups and shutdowns of control devices required in § 63.11495(a)(6).

(C) Records of inspections of closed vent systems subject to the provisions of § 63.172, as specified in paragraphs (c)(9)(vi)(C)(*1*) and (*2*) of this section.

(*1*) For each inspection conducted in accordance with the provisions of § 63.172(f)(1) or (2) during which leaks were detected, the information specified in paragraph (c)(9)(iii) of this section must be recorded.

(*2*) For each flow event from a bypass line subject to the requirements in § 63.172(j), you must maintain records sufficient to determine whether or not the detected flow included flow requiring control. For each flow event from a bypass line requiring control that is released either directly to the atmosphere or to a control device not meeting the requirements in § 63.11495(a)(6), you must include an estimate of the volume of gas, the concentration of organic HAP in the gas, and the resulting emissions of organic HAP that bypassed the control device using process knowledge and engineering estimates.

(vii) If you choose to comply with the requirements of § 63.179, you must maintain the following records:

(A) Identification of the CMPU(s) and the organic HAPs they handle.

(B) A schematic of the CMPU, enclosure, and closed vent system.

(C) A description of the system used to create a negative pressure in the enclosure to ensure that all emissions are routed to the control device.

(10) For each flow event from a bypass line subject to the requirements in § 63.11495(e), you must maintain records sufficient to determine whether or not the detected flow included flow requiring control. For each flow event from a bypass line requiring control that is released either directly to the atmosphere or to a control device not meeting the requirements specified in §§ 63.11495 through 63.11499, you must include an estimate of the volume of gas, the concentration of organic HAP in the gas and the resulting emissions of organic HAP that bypassed the control device using process knowledge and engineering estimates.

(11) If you are subject to the requirements specified in item 1.c of table 8 to this subpart (for heat exchange systems with a cooling water flow rate greater than or equal to 8,000 gal/min), then you must keep records as specified in § 63.104(f)(3) instead of the heat exchange system records specified in paragraphs (c)(1)(ii) and (6) of this section.

(d) *Semiannual compliance reports.* You must submit semiannual compliance reports that contain the information specified in paragraphs (d)(1) through (12) of this section, as applicable. All reports must contain the company name and address (including county), as well as the beginning and ending dates of the reporting period. For periods where no events described by paragraphs (d)(1) through (12) of this section occur, a statement must be included in the report pursuant to § 63.10(e)(3)(v). Beginning on April 1, 2029, or once the report template for this subpart has been available on the CEDRI website for one year, whichever date is later, submit all subsequent reports using the appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/cedri*) for this subpart and following the procedure specified in § 63.9(k). The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated State agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.

(1) *Deviations.* Before April 1, 2029 you must clearly identify any deviation from the requirements of this subpart. Beginning on April 1, 2029, for each deviation, you must report the start date, start time, duration in hours, cause, a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, a description of the method used to estimate the emissions, actions taken to minimize emissions, and any corrective action taken to return the affected unit to its normal or usual manner of operation.

(2) *Delay of repair for a large heat exchange system.* Except as specified in paragraph (d)(11) of this section, you must include the information specified in § 63.104(f)(2) each time you invoke the delay of repair provisions for a heat exchange system with a cooling water flow rate equal to or greater than 8,000 gal/min.

(3) *Delay of leak repair.* You must provide the following information for each delay of leak repair beyond 15 days for any process equipment, storage tank, surge control vessel, bottoms receiver, and each delay of leak repair beyond 45 days for any heat exchange system with a cooling water flow rate less than 8,000 gal/min: information on the date the leak was identified, the reason for the delay in repair, and the date the leak was repaired.

(4) *Process change.* You must report each process change that affects a compliance determination and submit a new certification of compliance with the applicable requirements in accordance with the procedures specified in paragraph (b) of this section.

(5) *Data for the alternative standard.* If you comply with the alternative standard, as specified in table 2 or 3 to this subpart, report the information required in § 63.1258(b)(5).

(6) *Overlapping rule requirements.* Report any changes in the overlapping provisions with which you comply.

(7) *Reactive and resinous materials.* Report any transfer of liquids that are reactive or resinous materials, as defined in § 63.11502(b), and not included in the NOCS.

(8) *Malfunctions.* If a malfunction occurred during the reporting period, the report must include the number of instances of malfunctions that caused emissions in excess of a standard. For each malfunction that caused emissions in excess of a standard, the report must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions. The report must also include a description of actions you took during a malfunction of an affected source to minimize emissions in accordance with § 63.11495(d), including actions taken to correct a malfunction. On and after April 1, 2029, malfunctions are reported as deviations under paragraph (d)(1) of this section and this paragraph (d)(8) no longer applies.

(9) *Equipment leaks.* For each CMPU complying with the provisions of § 63.11495(a)(6), report the information listed in paragraphs (d)(9)(i) through (vi) of this section.

(i) The number of components for which leaks were detected, the total number of components monitored, and the number of components for which leaks were not repaired, identifying the number of those that are determined nonrepairable, and totaled by component type.

(ii) The facts that explain any delay of repairs and, where appropriate, why a CMPU shutdown was technically infeasible.

(iii) For pressure relief devices subject to the requirements in § 63.11495(a)(6)(iv) include the information specified in paragraphs (d)(9)(iii)(A) through (C) of this section.

(A) For pressure relief devices in organic HAP gas or vapor service, pursuant to § 63.165(e)(1), report the instrument readings and dates for all readings of 500 ppm or greater.

(B) For pressure relief devices in organic HAP gas or vapor service, pursuant to § 63.165(e)(2), report the

instrument readings and dates of instrument reading conducted.

(C) For pressure relief devices in organic HAP service subject to § 63.165(e)(3), report each pressure release to the atmosphere, including pressure relief device identification name or number, the start date, start time, and duration (in minutes) of the pressure release; an estimate of the mass quantity in pounds of each organic HAP released; the results of any root cause analysis and corrective action analysis completed during the reporting period, including the corrective actions implemented during the reporting period; and, if applicable, the implementation schedule for planned corrective actions to be implemented subsequent to the reporting period.

(iv) For bypass lines subject to the requirements in § 63.172(j) as specified in § 63.11495(a)(6)(ix), include the start date, start time, duration in hours, estimate of the volume of gas in standard cubic feet, the concentration of organic HAP in the gas in parts per million by volume and the resulting mass emissions of organic HAP in pounds that bypass a control device. For periods when the flow indicator is not operating, report the start date, start time, and duration in hours.

(v) If applicable, the compliance option selected under § 63.172(n) as specified in § 63.11495(a)(6)(ix).

(vi) If you elect to meet the requirements in § 63.178(b) as specified in § 63.11495(a)(6)(xi), include the information listed in paragraphs (d)(9)(vi)(A) through (E) of this section.

(A) Batch product process equipment train identification;

(B) The number of pressure tests conducted;

(C) The number of pressure tests where the equipment train failed the pressure test;

(D) The facts that explain any delay of repairs; and

(E) The results of all monitoring to determine compliance with § 63.172(f).

(10) *Bypass lines.* For bypass lines subject to the requirements § 63.11495(e), report the start date, start time, duration in hours, estimate of the volume of gas in standard cubic feet, the concentration of organic HAP in the gas in ppmv and the resulting mass emissions of organic HAP in pounds that bypass a control device. For periods when the flow indicator is not operating, report the start date, start time, and duration in hours.

(11) *Heat exchange systems.* If you are subject to the requirements specified in item 1.c of table 8 to this subpart (for heat exchange systems with a cooling water flow rate greater than or equal to 8,000 gal/min), then you must submit the information specified in § 63.104(f)(2)(vi) instead of the heat exchange system information specified in paragraphs (d)(2) and (3) of this section.

(12) *Pressure vessels.* If you are subject to the requirements specified in § 63.11497(e) and obtain an instrument reading greater than 500 ppmv when monitoring a pressure vessel in accordance with § 63.11497(e)(2), report an identification of the pressure vessel and a copy of the records specified in paragraph (c)(4)(vii)(B) of this section.

■ 11. Amend § 63.11502 by:

■ a. Revising paragraph (a) and paragraph (b) introductory text; and

■ b. In paragraph (b):

■ i. Removing the definition of ''Affirmative defense'';

■ ii. Revising the definitions of ''Continuous process vent'' and ''In organic HAP service'';

■ iii. Adding the definition of ''Inaccessible connector'' in alphabetical order; and

■ iv. Revising the definitions of ''Metal HAP process vent'', ''Point of determination'', ''Process vessel'', ''Storage tank'', and ''Wastewater''.

The revisions and additions read as follows:

§ 63.11502 What definitions apply to this subpart?

(a) The following terms used in this subpart have the meaning given them in the CAA, and in subparts A, F, SS, WW, and FFFF of this part, as specified after each term:

TABLE 1 TO PARAGRAPH (a)

Term	40 CFR
Administrator	63.2
Area Source	63.2
Article	372.3
Batch operation	63.2550
Boiler	63.101
Bottoms receiver	63.2550
CAA	63.2
Closed vent system	63.981
Combustion device	63.101
Commenced	63.2
Compliance date	63.2
Continuous monitoring system	63.2
Continuous operation	63.2550
Control device	63.101
Distillation unit	63.101
Emission standard	63.2
EPA	63.2
Fill or filling	63.101
Floating roof	63.1061
Fuel gas system	63.981
Halogen atoms	63.2550
Halogenated vent stream	63.2550
Hydrogen halide and halogen HAP	63.2550
Hazardous air pollutant	63.2
Heat exchange system	63.101
Incinerator	63.101
In gas/vapor service	63.101
In heavy liquid service	63.101
In light liquid service	63.101
In liquid service	63.101
Isolated intermediate	63.2550
Maintenance wastewater	63.2550
Major source	63.2
Maximum true vapor pressure	63.101
Oil-water separator or organic-water separator	63.101
Operating permit	63.101
Owner or operator	63.2
Performance test	63.2
Pressure release	63.101
Pressure relief device or valve	63.101
Pressure vessel	63.101
Process condenser	63.2550
Process heater	63.101
Process tank	63.2550
Process wastewater	63.101
Reactor	63.101
Responsible official	63.2
State	63.2
Supplemental gases	63.2550
Surge control vessel	63.2550
Test method	63.2
Unit operation	63.101

(b) All other terms used in this subpart shall have the meaning given them in this section. If a term is defined in the CAA, or in subpart A, F, SS, WW, or FFFF of this part, and in this section, the term has the meaning given in this section for purposes of this subpart.

* * * * *

Continuous process vent means a ''process vent'' as defined in § 63.101 except:

(i) The reference in § 63.107(e) to a chemical manufacturing process unit that meets the criteria of § 63.100(b) means a CMPU that meets the criteria of § 63.11494(a) and (b);

(ii) The reference in § 63.107(h)(2) to subpart H means § 63.11495(a)(3) through (6) for the purposes of this subpart;

(iii) The reference in § 63.107(h)(4) to § 63.113 means tables 2 and 3 to this subpart;

(iv) The reference in § 63.107(h)(7) to § 63.119 means Table 5 to this subpart, and the reference to § 63.126 does not apply for the purposes of this subpart;

(v) The second sentence in the definition of ''process vent'' in § 63.101 does not apply for the purposes of this subpart;

(vi) The references to an ''air oxidation reactor, distillation unit, or reactor'' in § 63.107 means any continuous operation for the purposes of this subpart;

(vii) Section § 63.107(h)(8) does not apply for the purposes of this subpart; and

(viii) A separate determination is required for the emissions from each CMPU, even if emission streams from two or more CMPU are combined prior

to discharge to the atmosphere or to a control device.

(ix) On and after April 1, 2029, § 63.107(h)(9) no longer applies.

(1x) On and after April 1, 2028, § 63.107(i) no longer applies. Instead, a process vent is the point of discharge to the atmosphere (or the point of entry into a control device, if any) of a gas stream if the gas stream would meet the characteristics specified in § 63.107(b) through (g), but, for purposes of avoiding applicability, has been deliberately interrupted, temporarily liquefied, routed through any item of equipment for no process purpose, or disposed of in a control device that does not meet the criteria in table 3 of this subpart.

* * * * *

In organic HAP service means, before April 1, 2029, that a process vessel or piece of equipment either contains or contacts a feedstock, byproduct, or product that contains an organic HAP, excluding any organic HAP used in manual cleaning activities. A process vessel is no longer in organic HAP service after the vessel has been emptied to the extent practicable (*i.e.,* a vessel with liquid left on process vessel walls or as bottom clingage, but not in pools, due to floor irregularity, is considered completely empty) and any cleaning has been completed. On and after April 1, 2029, *In organic HAP service,* for a process vessel, means either contains or contacts a feedstock, byproduct, or product that contains an organic HAP, excluding any organic HAP used in manual cleaning activities. A process vessel is no longer in organic HAP service after the vessel has been emptied to the extent practicable (*i.e.,* a vessel with liquid left on process vessel walls or as bottom clingage, but not in pools, due to floor irregularity, is considered completely empty) and any cleaning has been completed. On and after April 1, 2029, *In organic HAP service,* for equipment and heat exchange systems, means that a piece of equipment or heat exchange system either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAPs as determined according to the provisions of § 63.180(d). The provisions of § 63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service. For purposes of the definition of ''heat exchange system'' in § 63.101(b), the term ''equipment'' in § 63.180(d) includes heat exchange systems.

* * * * *

Inaccessible connector means a connector that is:

(i) Buried;

(ii) Insulated in a manner that prevents access to the connector by a monitor probe;

(iii) Obstructed by equipment or piping that prevents access to the connector by a monitor probe;

(iv) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters (25 feet) above the ground;

(v) Inaccessible because it would require elevating the monitoring personnel more than 2 meters above a permanent support surface or would require the erection of scaffold; or

(vi) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.

* * * * *

Metal HAP process vent means, before April 1, 2029, the point of discharge to the atmosphere (or inlet to a control device, if any) of a metal HAP-containing gas stream from any CMPU at an affected source containing at least 50 ppmv metal HAP. The metal HAP concentration may be determined using any of the following: process knowledge, an engineering assessment, or test data. On and after April 1, 2029, *Metal HAP process vent* means the point of discharge to the atmosphere (or inlet to a control device, if any) of a metal HAP-containing gas stream from any CMPU at an affected source containing metal HAP. The metal HAP concentration may be determined using any of the following: process knowledge, an engineering assessment, or test data.

* * * * *

Point of determination means ''point of determination'' as defined in § 63.101, except:

(i) The reference to table 8 or 9 compounds means table 9 to subpart G of this part or table 7 to this subpart compounds;

(ii) The reference to ''as determined in § 63.144'' does not apply for the purposes of this subpart; and

(iii) The point of determination is made at the point where the stream exits the CMPU. If a recovery device is used, the point of determination is after the last recovery device.

Process vessel means each vessel, except hand-held containers, used in the processing of raw materials to chemical products. Examples include, but are not limited to centrifuges, mixing vessels, and process tanks.

* * * * *

Storage tank means a tank or other vessel that is used to store liquids that contain organic HAP and that are part of a CMPU subject to this subpart VVVVVV. The following are not considered storage tanks for the purposes of this subpart:

(i) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;

(ii) [Reserved]

(iii) Process tanks;

(iv) Tanks storing organic liquids containing HAP only as impurities;

(v) Surge control vessels;

(vi) Bottoms receivers; and

(vii) Wastewater storage tanks.

* * * * *

Wastewater means water that is discarded from a CMPU or control device and that contains at least 5 ppmw of any HAP listed in table 9 to subpart G of this part and has an annual average flow rate of 0.02 liters per minute. Wastewater means both process wastewater and maintenance wastewater that is discarded from a CMPU or control device. The following are not considered wastewater for the purposes of this subpart:

(i) Stormwater from segregated sewers;

(ii) Water from fire-fighting and deluge systems, including testing of such systems;

(iii) Spills;

(iv) Water from safety showers;

(v) Samples of a size not greater than reasonably necessary for the method of analysis that is used;

(vi) Equipment leaks;

(vii) Wastewater drips from procedures such as disconnecting hoses after cleaning lines; and

(viii) Noncontact cooling water.

* * * * *

■ 12. Amend § 63.11503 by revising paragraph (b) introductory text and adding paragraph (b)(5) to read as follows:

§ 63.11503 Who implements and enforces this subpart?

* * * * *

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the approval authorities contained in paragraphs (b)(1) through (5) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the state, local, or Tribal agency.

* * * * *

(5) Approval of an alternative to any electronic reporting to the EPA required by this subpart.

■ 13. Amend table 3 to subpart VVVVVV of part 63 by revising entry ''1. Each continuous process vent with a TRE ≤1.0'' to read as follows:

* * * * *

TABLE 3 TO SUBPART VVVVVV OF PART 63—EMISSION LIMITS AND COMPLIANCE REQUIREMENTS FOR CONTINUOUS PROCESS VENTS

* * * * *

For . . .	You must . . .	Except . . .
1. Each continuous process vent with a TRE ≤1.0.	a. Reduce emissions of total organic HAP by ≥95 percent by weight (≥85 percent by weight for periods of startup or shutdown) or to ≤20 ppmv by routing emissions through a closed vent system to any combination of control devices (except a flare) in accordance with the requirements of § 63.982(c) and the requirements referenced therein; or	i. Compliance may be based on either total organic HAP or TOC; and ii. As specified in § 63.11496(g).
	b. Reduce emissions of total organic HAP by routing all emissions through a closed-vent system to a flare (except that a flare may not be used to control halogenated vent streams) in accordance with the requirements of § 63.982(b) and the requirements referenced therein, or	i. Not applicable.
	c. Comply with the alternative standard specified in § 63.2505 and the requirements referenced therein.	i. As specified in § 63.11496(e).
* * * * * * *		

■ 14. Revise table 4 to subpart VVVVVV of part 63 to read as follows:

TABLE 4 TO SUBPART VVVVVV OF PART 63—EMISSION LIMITS AND COMPLIANCE REQUIREMENTS FOR METAL HAP PROCESS VENTS

[As required in § 63.11496(f), you must comply with the requirements for metal HAP process vents as shown in the following table.]

For * * *	You must * * *	Except * * *
Each CMPU with total metal HAP emissions ≥400 lb/yr.	Reduce collective uncontrolled emissions of total metal HAP emissions by ≥95 percent by weight by routing emissions from a sufficient number of the metal HAP process vents through a closed vent system to any combination of control devices, according to the requirements of § 63.11496(f)(3), (4), or (5).	Not applicable.

■ 15. Amend table 5 to subpart VVVVVV of part 63 by:

■ a. Revising the entry ''1. Storage tank with a design capacity ≥40,000 gallons, storing liquid that contains organic HAP listed in table 1 to this subpart, and for which the maximum true vapor pressure (MTVP) of total organic HAP at the storage temperature is ≥5.2 kPa and <76.6 kPa.''; and

■ b. Adding the entry ''5. Pressure vessel with a design capacity greater than or equal to 20,000 gallons'' in numerical order.

The revision and addition read as follows:

* * * * *

TABLE 5 TO SUBPART VVVVVV OF PART 63—EMISSION LIMITS AND COMPLIANCE REQUIREMENTS FOR STORAGE TANKS

* * * * *

For each * * *	You must * * *	Except * * *
1. Storage tank with a design capacity ≥40,000 gallons, storing liquid that contains organic HAP listed in table 1 to this subpart, and for which the maximum true vapor pressure (MTVP) of total organic HAP at the storage temperature is ≥5.2 kPa and <76.6 kPa.	a. Comply with the requirements of subpart WW of this part;	i. All required seals must be installed by the compliance date in § 63.11494.
	b. Reduce total organic HAP emissions by ≥95 percent by weight by operating and maintaining a closed-vent system and control device (other than a flare) in accordance with § 63.982(c); or	i. Compliance may be based on either total organic HAP or TOC; ii. When the term storage vessel is used in subpart SS of this part, the term storage tank, surge control vessel, or bottoms receiver, as defined in § 63.11502 of this subpart, applies; and iii. The requirements do not apply during periods of planned routine maintenance of the control device, as specified in § 63.11497(b).

TABLE 5 TO SUBPART VVVVVV OF PART 63—EMISSION LIMITS AND COMPLIANCE REQUIREMENTS FOR STORAGE TANKS—Continued

* * * * *

For each * * *	You must * * *	Except * * *
	c. Reduce total HAP emissions by operating and maintaining a closed-vent system and a flare in accordance with § 63.982(b); or	i. The requirements do not apply during periods of planned routine maintenance of the flare, as specified in § 63.11497(b); and ii. When the term storage vessel is used in subpart SS of this part, it means storage tank, surge control vessel, or bottoms receiver, as defined in § 63.11502 of this subpart.
	d. Vapor balance in accordance with § 63.2470(e); or	i. To comply with § 63.1253(f)(6)(i), the owner or operator of an offsite cleaning or reloading facility must comply with § 63.11494 through § 63.11502 instead of complying with § 63.1253(f)(7)(ii), except as specified in item 1.d.ii and 1.d.iii of this table. ii. The reporting requirements in § 63.11501 do not apply to the owner or operator of the offsite cleaning or reloading facility. iii. As an alternative to complying with the monitoring, recordkeeping, and reporting provisions in §§ 63.11494 through 63.11502, the owner or operator of an offsite cleaning or reloading facility may comply as specified in § 63.11500 with any other subpart of this part which has monitoring, recordkeeping, and reporting provisions as specified in § 63.11500.
	e. Route emissions to a fuel gas system or process in accordance with the requirements in § 63.982(d) and the requirements referenced therein	i. When the term storage vessel is used in subpart SS of this part, it means storage tank, surge control vessel, or bottoms receiver, as defined in § 63.11502.
* *	* * *	* *
5. Pressure vessel with a design capacity greater than or equal to 20,000 gallons.	a. Beginning no later than the compliance dates specified in § 63.11494(i), comply with the requirements specified in § 63.11497(e).	

■ 16. Revise table 8 to subpart VVVVVV of part 63 to read as follows:

TABLE 8 TO SUBPART VVVVVV OF PART 63—EMISSION LIMITS AND COMPLIANCE REQUIREMENTS FOR HEAT EXCHANGE SYSTEMS

[As required in § 63.11499, you must comply with the requirements for heat exchange systems as shown in the following table.]

For . . .	You must . . .	Except . . .
1. Each heat exchange system with a cooling water flow rate ≥8,000 gal/min and not meeting one or more of the conditions in § 63.104(a)(1) through (4).	a. Except as specified in item 1.c of this table, comply with the monitoring requirements in § 63.104(c), the leak repair requirements in § 63.104(d) and (e), and the recordkeeping and reporting requirements in § 63.104(f); or	i. The reference to monthly monitoring for the first 6 months in § 63.104(b)(1) and (c)(1)(iii) does not apply. Monitoring shall be no less frequent than quarterly; ii. The reference in § 63.104(f)(1) to record retention requirements in § 63.103(c)(1) does not apply. Records must be retained as specified in §§ 63.10(b)(1) and 63.11501(c); and iii. The reference in § 63.104(f)(2) to ''the next semi-annual periodic report required by § 63.152(c)'' means the next semiannual compliance report required by § 63.11501(d).
	b. Except as specified in item 1.c of this table, comply with the heat exchange system requirements in § 63.104(b) and the requirements referenced therein	i. Not applicable.

TABLE 8 TO SUBPART VVVVVV OF PART 63—EMISSION LIMITS AND COMPLIANCE REQUIREMENTS FOR HEAT EXCHANGE SYSTEMS—Continued

[As required in § 63.11499, you must comply with the requirements for heat exchange systems as shown in the following table.]

For . . .	You must . . .	Except . . .
	c. Beginning no later than the compliance dates specified in § 63.11494(i), the exemption conditions specified in § 63.104(a)(3) and (4), and items 1.a and 1.b of this table no longer apply. Instead, comply with the requirements in § 63.104(f) through (j) and (l).	i. As specified in § 63.11499(d).

■ 17. Revise table 9 to subpart VVVVVV of part 63 to read as follows:

TABLE 9 TO SUBPART VVVVVV OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART VVVVVV

[As required in § 63.11501(a), you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in the following table.]

Citation	Subject	Applies to this subpart?	Explanation
63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)–(a)(12) (b)(1), (b)(3), (c)(1), (c)(2), (c)(5), (e).	Applicability	Yes.	
63.1(a)(5), (a)(7)–(a)(9), (b)(2), (c)(3), (c)(4), (d).	Reserved	No.	
63.2	Definitions	Yes.	
63.3	Units and Abbreviations	Yes.	
63.4	Prohibited Activities and Circumvention	Yes.	
63.5	Preconstruction Review and Notification Requirements.	Yes.	
63.6(a), (b)(1)–(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1)(iii), (g), (i), (j).	Compliance with Standards and Maintenance Requirements.	Yes.	
63.6(b)(6), (c)(3), (c)(4), (d), (e)(2)	Reserved	No.	
63.6(e)(1)(i) and (ii), (e)(3), and (f)(1)	SSM Requirements	No	See § 63.11495(d) for general duty requirement. The standards in this subpart apply at all times.
63.6(f)	Compliance with Nonopacity Emission Standards.	Yes.	
63.6(h)	Compliance with Opacity and Visible Emission Standards.	No	This subpart does not include opacity or visible emissions (VE) standards or require a continuous opacity monitoring system (COMS).
63.7(a)(1), (a)(3), (a)(4), (c), (e)(4), and (f)–(h).	Performance Testing Requirements	Yes	Except this subpart specifies how and when the performance test results are reported.
63.7(a)(2), (b), (d), (e)(2)–(e)(3)	Performance Testing Schedule, Notification of Performance Test, Performance Testing Facilities, and Conduct of Performance Tests.	Yes/No	Requirements apply if conducting test for metal HAP control; requirements in §§ 63.997(c)(1), (d), (e), and 63.999(a)(1) apply, as referenced in § 63.11496(g), if conducting test for organic HAP or hydrogen halide and halogen HAP control device.
63.7(e)(1)	Performance Testing	No	See § 63.11496(f)(3)(ii) if conducting a test for metal HAP emissions. See §§ 63.11496(g) and 63.997(e)(1) if conducting a test for continuous process vents or for hydrogen halide and halogen emissions. See §§ 63.11496(g) and 63.2460(c) if conducting a test for batch process vents.
63.8(a)(1), (b), (c)(1)(ii), (c)(2)–(c)(3), (f)(1)–(5).	Monitoring Requirements	Yes.	
63.8(a)(2)	Monitoring Requirements	No.	
63.8(a)(3)	Reserved	No.	
63.8(a)(4)	Monitoring Requirements	Yes.	
63.8(c)(1)(i)	General Duty to Minimize Emissions and CMS Operation.	No.	
63.8(c)(1)(iii)	Requirement to Develop SSM Plan for CMS.	No.	

TABLE 9 TO SUBPART VVVVVV OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART VVVVVV—Continued

[As required in § 63.11501(a), you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in the following table.]

Citation	Subject	Applies to this subpart?	Explanation
63.8(c)(4)		Yes	Only for CEMS. CPMS requirements in subpart SS of this part are referenced from § 63.11496. Requirements for COMS do not apply because this subpart does not require COMS.
63.8(c)(5)		No	This subpart does not require COMS.
63.8(c)(6)–(c)(8), (d)(1)–(d)(2), (e), (f)(6)		Yes	Requirements apply only if you use a continuous emission monitoring system (CEMS) to demonstrate compliance with the alternative standard in § 63.11496(e). Additionally, this subpart specifies how and when the performance evaluation results are reported.
63.8(d)(3)	Written Procedures for CMS	Yes	Requirement applies except for last sentence, which refers to an SSM plan. SSM plans are not required.
63.8(g)(1)–(g)(4)		Yes	Data reduction requirements apply only if you use CEMS to demonstrate compliance with alternative standard in § 63.11496(e). COMS requirements do not apply. Requirement in § 63.8(g)(2) does not apply because data reduction for CEMS are specified in subpart FFFF of this part.
63.8(g)(5)		No	Data reduction requirements for CEMS are specified in § 63.2450(j)(4), as referenced from § 63.11496. CPMS requirements are specified in subpart SS of this part, as referenced from § 63.11496.
63.9(a), (b)(1), (b)(2), (b)(4), (b)(5), (c), (d), (e), (i).	Notification Requirements	Yes.	
63.9(b)(3), (h)(4)	Reserved	No.	
63.9(f)		No	This subpart does not contain opacity or VE limits.
63.9(g)		Yes	Additional notification requirement applies only if you use CEMS to demonstrate compliance with alternative standard in § 63.11496(e).
63.9(h)(1)–(h)(3), (h)(5)–(h)(6)		Yes	Except as specified in § 63.11501(b) and this subpart does not contain opacity or VE limits.
63.9(j)	Change in Information Already Provided	No	Notification of process changes that affect a compliance determination are required in § 63.11501(d)(4).
63.9(k)	Electronic Submission of Notifications or Reports.	Yes	As specified in §§ 63.11496(g)(1)(iv), 63.11497(f)(1)(iv), and 63.11501(b) and (d).
63.10(a)	Recordkeeping Requirements	Yes.	
63.10(b)(1)		Yes.	
63.10(b)(2)(i)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns.	No	See § 63.11501(c)(8) for recordkeeping of occurrence and duration of each startup and shutdown for continuous process vents that are subpart to table 3 to this subpart.
63.10(b)(2)(ii)	Recordkeeping of Malfunctions	No	See § 63.11501(c)(1)(vii) and (viii) for recordkeeping requirements.
63.10(b)(2)(iii)	Maintenance Records	Yes.	
63.10(b)(2)(iv) and (v)	Actions Taken to Minimize Emissions During SSM.	No.	
63.10(b)(2)(vi), (x), (xi), (xiii)		Yes	Apply only if you use CEMS to demonstrate compliance with alternative standard in § 63.11496(e).
63.10(b)(2)(vii)–(b)(2)(ix), (b)(2)(xii), (b)(2)(xiv).		Yes.	
63.10(b)(3)		Yes.	

TABLE 9 TO SUBPART VVVVVV OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART VVVVVV—Continued

[As required in § 63.11501(a), you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in the following table.]

Citation	Subject	Applies to this subpart?	Explanation
63.10(c)(1), (c)(5)–(c)(6), (c)(13)–(c)(14)	.....	Yes	Apply only if you use CEMS to demonstrate compliance with alternative standard in § 63.11496(e).
63.10(c)(7)–(8)	Additional Recordkeeping Requirements for CMS—Identifying Exceedances and Excess Emissions.	Yes.	
63.10(c)(10)	Recordkeeping Nature and Cause of Malfunctions.	No	See § 63.11501(c)(1)(vii) and (viii) for recordkeeping requirements.
63.10(c)(11)	Recording Corrective Actions	No	See § 63.11501(c)(1)(vii) and (viii) for recordkeeping requirements.
63.10(c)(12)	.....	Yes.	
63.10(c)(15)	Use of SSM Plan	No.	
63.10(c)(2)–(c)(4), (c)(9)	Reserved	No.	
63.10(d)(1), (d)(4), (f)	Reporting Requirements	Yes.	
63.10(d)(2)	.....	No	See §§ 63.11496(g)(1)(iv) and 63.11497(f)(1)(iv) for performance test reporting.
63.10(d)(3)	.....	No	This subpart does not include opacity or VE limits.
63.10(d)(5)	SSM Reports	No	See § 63.11501(d)(1) and (8) for reporting requirements.
63.10(e)(1)–(e)(2)	.....	Yes	Apply only if you use CEMS to demonstrate compliance with alternative standard in § 63.11496(e). Additionally, this subpart specifies how and when the performance evaluation results are reported.
63.10(e)(3)	.....	No	Except as provided in § 63.11501(d).
63.10(e)(4)	.....	No	This subpart does not include opacity or VE limits.
63.11	Control Device Requirements	Yes.	
63.12	State Authorities and Delegations	Yes.	
63.13	Addresses	Yes.	
63.14	Incorporations by Reference	Yes.	
63.15	Availability of Information and Confidentiality.	Yes.	
63.16	Performance Track Provisions	Yes.	

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