6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2022-0787; FRL-9846-02-OAR]

RIN 2060–AV80

National Emission Standards for Hazardous Air Pollutants: Ethylene Production, Miscellaneous Organic Chemical Manufacturing, Organic Liquids Distribution (Non-Gasoline), and Petroleum Refineries Reconsideration

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final action; reconsideration of final rule.

SUMMARY: On July 6, 2020, the U.S. Environmental Protection Agency (EPA or the Agency) finalized the residual risk and technology review (RTR) conducted for the Ethylene Production source category, which is part of the Generic Maximum Achievable Control Technology Standards National Emission Standards for Hazardous Air Pollutants (NESHAP); on July 7, 2020, the EPA finalized the RTR conducted for the Organic Liquids Distribution (Non-Gasoline) NESHAP; and on August 12, 2020, the EPA finalized the RTR conducted for the Miscellaneous Organic Chemical Manufacturing NESHAP. Amendments to the Petroleum Refinery Sector NESHAP were most recently finalized on February 4, 2020. Subsequently, the EPA received and granted various petitions for reconsideration on these NESHAP for, among other things, the provisions related to the work practice standards for pressure relief devices (PRDs), emergency flaring, and degassing of floating roof storage vessels. This action finalizes proposed

amendments to remove the *force majeure* exemption for PRDs and emergency flaring, incorporate clarifications for the degassing requirements for floating roof storage vessels, and address other corrections and clarifications.

DATES: This final action is effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The incorporation by reference of certain material listed in this rule was approved by the Director of the Federal Register as of August 12, 2020.

ADDRESSES: The EPA has established a docket for this rulemaking under Docket ID No. EPA-HQ-OAR-2022-0787. All documents in the docket are listed in *https://www.regulations.gov/*. Although listed, some information is not publicly available, *e.g.*, Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. With the exception of such material, publicly available docket materials are available either electronically in *https://www.regulations.gov/* or in hard copy at the EPA Docket Center, WJC West Building, Room Number 3334, 1301 Constitution Avenue NW, Washington, DC. The Public Reading Room hours of operation are from 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), 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 questions about this final action, contact U.S. EPA, Attn: Mr. Michael Cantoni, Sector Policies and Programs Division, Mail Drop: E143-01, 109 T.W. Alexander Drive, P.O. Box 12055, RTP, North Carolina 27711; telephone number: (919) 541-5593; and email address: *cantoni.michael@epa.gov*.

SUPPLEMENTARY INFORMATION: *Preamble acronyms and abbreviations*. 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:

atm-m^3/mol	atmospheres per mole per cubic meter
ACC	American Chemistry Council
AFPM	American Fuel and Petrochemical Manufacturers
AMEL	alternative means of emissions limitation
API	American Petroleum Institute
CAA	Clean Air Act
CBI	Confidential Business Information
CDX	Central Data Exchange
CEDRI	Compliance and Emissions Data Reporting Interface
CEMS	continuous emission monitoring systems
CFR	Code of Federal Regulations
CRA	Congressional Review Act
EMACT	Ethylene Production MACT
EPA	Environmental Protection Agency
GMACT	Generic Maximum Achievable Control Technology
HAP	hazardous air pollutant(s)
ICR	Information Collection Request
LEL	lower explosive limit
MACT	maximum achievable control technology
MCPU	miscellaneous organic chemical manufacturing process unit
MON	Miscellaneous Organic Chemical Manufacturing NESHAP
NAICS	North American Industry Classification System
NESHAP	national emission standards for hazardous air pollutants
NHV	net heating value
NOCS	notification of compliance status
NTTAA	National Technology Transfer and Advancement Act
OLD	Organic Liquids Distribution (Non-Gasoline)
OMB	Office of Management and Budget
ppm	parts per million
ppmv	parts per million by volume
psi	pounds per square inch
PRA	Paperwork Reduction Act
PRD	pressure relief device
RFA	Regulatory Flexibility Act
RTR	risk and technology review
TCEQ	Texas Commission on Environmental Quality
UMRA	Unfunded Mandates Reform Act

Organization of this document. The information in this preamble is organized as follows:

I. General Information

A. What is the source of authority for the reconsideration action?

The statutory authority for this action is provided by sections 112 and 307(d)(7)(B) of the Clean Air Act (CAA) (42 U.S.C. 7412 and 7607(d)(7)(B)).

B. Does this action apply to me?

Table 1 of this preamble lists the NESHAP and associated regulated industrial source categories that are the subject of this action. Table 1 is not intended to be exhaustive, but rather provides a guide for readers regarding the entities that this action is likely to affect. The final standards will be directly applicable to the affected sources. Federal, State, local, and Tribal government entities are not affected by this action. Each of the source categories covered by this action were defined in the *Initial List of Categories of Sources Under Section 112(c)(1) of the Clean Air Act Amendments of 1990* (see 57 FR 31576; July 16, 1992) and *Documentation for Developing the Initial Source Category List, Final Report* (see EPA-450/3-91-030, July 1992), as well as the *National Emission Standards for Hazardous Air Pollutants; Revision of Initial List of Categories of Sources and Schedule for Standards Under Sections 112(c) and (e) of the Clean Air Act Amendments of 1990* (61 FR 28197; June 4, 1996), as presented here.

Table 1. NESHAP and Industrial Source Categories Affected by This Final Action

Source category	**NESHAP**	**NAICS[1] code**
Ethylene Production	40 CFR part 63, subparts XX and YY	325110
Organic Liquids Distribution (Non-Gasoline)	40 CFR part 63, subpart EEEE	3222, 3241, 3251, 3252, 3259, 3261, 3361, 3362, 3399, 4247, 4861. 4869, 4931, 5622

Miscellaneous Organic Chemical Manufacturing	40 CFR part 63, subpart FFFF	3251, 3252, 3253, 3254, 3255, 3256, and 3259, with several exceptions
Petroleum Refineries	40 CFR part 63, subpart CC	324110

[1] North American Industry Classification System (NAICS).

The Ethylene Production source category includes any chemical manufacturing process unit in which ethylene and/or propylene are produced by separation from petroleum refining process streams or by subjecting hydrocarbons to high temperatures in the presence of steam. The ethylene production unit includes the separation of ethylene and/or propylene from associated streams such as a C_4 product,[1] pyrolysis gasoline, and pyrolysis fuel oil. The ethylene production unit does not include the manufacture of Synthetic Organic Chemical Manufacturing Industry (SOCMI) chemicals such as the production of butadiene from the C_4 stream and aromatics from pyrolysis gasoline.

The Organic Liquids Distribution (Non-Gasoline) source category includes, but is not limited to, those activities associated with the storage and distribution of organic liquids other than gasoline, at sites which serve as distribution points from which organic liquids may be obtained for further use and processing. The distribution activities include the storage of organic liquids in storage tanks not subject to other 40 CFR part 63 standards and transfers into or out of the tanks from or to cargo tanks, containers, and pipelines.

Following the initial source category listings, the Agency combined 21 of the 174 originally defined source categories, and other organic chemical processes which were not

[1] The C_4 product stream is a hydrocarbon product stream from an ethylene production unit consisting of compounds with four carbon atoms (*i.e.,* butanes, butenes, butadienes).

included in the original 174 source category list, into one source category called the "Miscellaneous Organic Chemical Processes" source category.[2] The Agency later divided the "Miscellaneous Organic Chemical Processes" source category into two new source categories called the "Miscellaneous Organic Chemical Manufacturing" source category and the "Miscellaneous Coating Manufacturing" source category.[3] The Miscellaneous Organic Chemical Manufacturing source category includes any facility engaged in the production of benzyltrimethylammonium chloride, carbonyl sulfide chelating agents, chlorinated paraffins, ethylidene norbornene, explosives, hydrazine, photographic chemicals, phthalate plasticizers, rubber chemicals, symmetrical tetrachloropyridine, oxybisphenoxarsine/1,3-diisocyanate, alkyd resins, polyester resins, polyvinyl alcohol, polyvinyl acetate emulsions, polyvinyl butyral, polymerized vinylidene chloride, polymethyl methacrylate, maleic anhydride copolymers, or any other organic chemical processes not covered by another maximum available control technology (MACT) standard. Many of these organic chemical processes involve similar process equipment, similar emission points and control equipment, and are in many cases co-located with other source categories.

The Petroleum Refineries sector includes two source categories. The Petroleum Refineries MACT 1 source category includes any facility engaged in producing gasoline, naphthas, kerosene, jet fuels, distillate fuel oils, residual fuel oils, lubricants, or other products from crude oil or unfinished petroleum derivatives. The refinery process units in this source category include, but are not limited to, thermal cracking, vacuum distillation, crude distillation,

[2] 61 FR 57602 (Nov. 7, 1996).
[3] 64 FR 63035 (Nov. 18, 1999).

hydroheating/hydrorefining, isomerization, polymerization, lube oil processing, and hydrogen production. The Petroleum Refineries MACT 2 – Catalytic Cracking (Fluid and Other) Units, Catalytic Reforming Units, and Sulfur Recovery Units source category includes any facility engaged in producing gasoline, naphthas, kerosene, jet fuels, distillate fuel oils, residual fuel oils, lubricants, or other products from crude oil or unfinished petroleum derivates.

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

In addition to being available in the docket, an electronic copy of this final action will also be available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at *https://www.epa.gov/stationary-sources-air-pollution/petroleum-refinery-sector-rule-risk-and-technology-review-and-new, https://www.epa.gov/stationary-sources-air-pollution/acetal-resins-acrylic-modacrylic-fibers-carbon-black-hydrogen, https://www.epa.gov/stationary-sources-air-pollution/miscellaneous-organic-chemical-manufacturing-national-emission,* and *https://www.epa.gov/stationary-sources-air-pollution/organic-liquids-distribution-national-emission-standards-hazardous*. Following publication in the *Federal Register*, the EPA will post the *Federal Register* version and key technical documents at these same websites.

Copies of all comments received on the proposed rulemaking (National Emission Standards for Hazardous Air Pollutants: Ethylene Production, Miscellaneous Organic Chemical Manufacturing, Organic Liquids Distribution (Non-Gasoline), and Petroleum Refineries Reconsideration)[4] are available at the EPA Docket Center Public Reading Room. Comments are

[4] 88 FR 25574 (Apr. 27, 2023).

also available electronically through *https://www.regulations.gov/* by searching Docket ID No. EPA-HQ-OAR-2022-0787.

Redline strikeout versions of each rule showing the edits that incorporate the changes finalized in this action are presented in the documents titled: *Final Regulatory Text Edits for Subpart EEEE, Final Regulatory Text Edits for Subpart FFFF, Final Regulatory Text Edits for Subpart YY,* and *Final Regulatory Text Edits for Subpart CC*, available in the docket for this action (Docket ID No. EPA-HQ-OAR-2022-0787).

II. Background

Following the EPA's finalization of the risk and technology reviews for the Ethylene Production (or EMACT), Organic Liquids Distribution (Non-Gasoline) (OLD), and Miscellaneous Organic Chemical Manufacturing (MON) NESHAP in 2020, the EPA also received petitions for reconsideration of these actions. The EPA also received a petition for reconsideration of the Petroleum Refinery Sector NESHAP raising some of the same issues.

To address selected issues for which we granted reconsideration and to provide other technical corrections, the EPA is finalizing revisions to the EMACT standards, OLD NESHAP, MON, and Petroleum Refineries NESHAP. The EPA is finalizing revisions to the work practice standards for PRDs and emergency flaring related to *force majeure* provisions in the EMACT standards, MON, and Petroleum Refineries NESHAP, and is finalizing standards for the degassing of storage vessels in the EMACT standards, OLD NESHAP, and MON. The EPA is also adding requirements for pressure-assisted flares and mass spectrometers to the Petroleum Refineries NESHAP to align this rule with other more recent chemical sector rules and eliminate the need to request site-specific alternative means of emission limitations (AMELs) for these units. In addition, the EPA is finalizing other technical corrections, clarifications, and correction

of typographical errors in all rules. As explained in the proposed rule, the EPA requested comment only on specific issues identified in the document and explained that it would not address other issues or provisions of these final rules not specifically address in the proposed rule.

A. Ethylene Production

The MACT standards for the Ethylene Production source category (herein called the EMACT standards) are contained in the Generic Maximum Achievable Control Technology (GMACT) NESHAP, which also includes MACT standards for several other source categories. The EMACT standards were promulgated on July 12, 2002,[5] and codified at 40 CFR part 63, subparts XX and YY. As promulgated in 2002, and further amended,[6] the EMACT standards regulate hazardous air pollutant (HAP) emissions from ethylene production units located at major sources. An ethylene production unit is a chemical manufacturing process unit in which ethylene and/or propylene are produced by separation from petroleum refining process streams or by subjecting hydrocarbons to high temperatures in the presence of steam. The EMACT standards define the affected source as all storage vessels, ethylene process vents, transfer racks, equipment, waste streams, heat exchange systems, and ethylene cracking furnaces and associated decoking operations that are associated with each ethylene production unit located at a major source as defined in CAA section 112(a)(1).

Following promulgation of the EMACT standards in July 2020, the EPA received two petitions for reconsideration in September 2020. The EPA received a joint petition from the

[5] 67 FR 46258 (Jul. 12, 2002).
[6] 70 FR 19266 (Apr. 13, 2005); 85 FR 40386 (Jul. 6, 2020).

American Chemistry Council (ACC) and the American Fuel & Petrochemical Manufacturers (AFPM). The EPA also received a petition from Earthjustice (on behalf of RISE St. James, Louisiana Bucket Brigade, Louisiana Environmental Action Network, Texas Environmental Justice Advocacy Services, Air Alliance Houston, Community In-Power & Development Association, Clean Air Council, Center for Biological Diversity, Environmental Integrity Project, and Sierra Club). Copies of the petitions are provided in the docket for this action (see Docket Item No. EPA-HQ-OAR-2022-0787-0005 and EPA-HQ-OAR-2022-0787-0006). ACC/AFPM's petition requested that the EPA reconsider certain aspects of the final action including, among other things, the storage vessel degassing provisions, ethylene cracking furnace burner repair provisions, and ethylene cracking furnace isolation valve inspections. Earthjustice's petition requested that the EPA reconsider certain aspects of the final rule including, among other things, the *force majeure* and exemption allowances in the work practice standards for PRDs and emergency flaring. ACC/AFPM and Earthjustice also raised other issues that are not addressed in this rulemaking.

On April 19, 2022, the EPA informed the petitioners, ACC/AFPM, and Earthjustice that it would grant reconsideration of the provisions addressing the work practice standards for PRDs, emergency flaring, and degassing of floating roof storage vessels, under CAA section 307(d)(7)(B). The EPA also informed the petitioners of the continuing review of all issues raised in their petitions. A copy of the letter to the petitioners is available in the docket for this action (see Docket Item No. EPA-HQ-OAR-2022-0787-0022).

The EPA proposed the reconsideration of the EMACT standards to address these issues along with other technical corrections and clarifications and requested public comment.[7]

With the exception of out-of-scope comments, this final preamble provides summaries and responses to all comments received regarding the proposed reconsideration of the EMACT standards. Comments on the proposed reconsideration of the EMACT standards that we consider out of scope for this reconsideration rulemaking include comments on the standards for PRDs and emergency flaring that discuss topics other than the *force majeure* provisions.

B. Organic Liquids Distribution (Non-Gasoline)

The Organic Liquids Distribution (Non-Gasoline) (herein called OLD) NESHAP is codified at 40 CFR part 63, subpart EEEE.[8] Organic liquids are any crude oils downstream of the first point of custody transfer and any non-crude oil liquid that contains at least 5 percent by weight of any combination of the 98 HAP listed in table 1 of 40 CFR part 63, subpart EEEE. For the purposes of the OLD NESHAP, as promulgated in 2004, and further amended,[9] organic liquids do not include gasoline, kerosene (No. 1 distillate oil), diesel (No. 2 distillate oil), asphalt, and heavier distillate oil and fuel oil, fuel that is consumed or dispensed on the plant site, hazardous waste, wastewater, ballast water, or any non-crude liquid with an annual average true vapor pressure less than 0.7 kilopascals (0.1 pounds per square inch (psi)). Emission sources controlled by the OLD NESHAP are storage tanks, transfer operations, transport vehicles while

[7] 88 FR 25574 (Apr. 27, 2023).
[8] 69 FR 5038 (Feb. 3, 2004).
[9] 71 FR 42898 (Jul. 28, 2006); 73 FR 21825 (Apr. 23, 2008); 73 FR 40977 (Jul. 17, 2008), and 85 FR 40740 (Jul. 7, 2020).

being loaded, and equipment leak components (valves, pumps, and sampling connections) that have the potential to leak at major sources.

The EPA received three petitions for reconsideration for the OLD NESHAP in September 2020. The EPA received petitions from Stoel Rives LLP (on behalf of Alyeska Pipeline Company), the American Petroleum Institute (API) and AFPM, and Earthjustice (on behalf of California Communities Against Toxics, Coalition for a Safe Environment, and Sierra Club). Copies of the petitions are provided in the docket for this rulemaking (see Docket Item No. EPA-HQ-OAR-2022-0787-0015, EPA-HQ-OAR-2022-0787-0023, and EPA-HQ-OAR-2022-0787-0004). API/AFPM and Stoel Rives LLP (on behalf of Alyeska Pipeline Company) requested that the EPA reconsider its final action and specifically raised the issue of storage vessel degassing. In their respective petitions, API/AFPM, Stoel Rives, and Earthjustice also raised other issues that are not being addressed in this rulemaking.

On September 8, 2021, the EPA informed petitioners Stoel Rives, API/AFPM, and Earthjustice that it would grant reconsideration on certain issues, including the work practice standards for storage vessel degassing that apply broadly, under CAA section 307(d)(7)(B). Other issues for which EPA granted voluntary reconsideration in the September 8, 2021, letter (*e.g.,* work practice standards for venting from conservation vents on the Valdez Marine Terminal's crude oil fixed roof tanks and fenceline monitoring) are still being reviewed and are not part of this action. The EPA also stated in the letter to the petitioners that it is continuing to review all issues raised in the petitions. A copy of the letter to petitioners is available in the docket for this action (see Docket Item No. EPA-HQ-OAR-2022-0787-0016).

On April 27, 2023, the EPA proposed to reconsider, and requested comment on, the OLD NESHAP to address storage vessel degassing along with other technical corrections and clarifications.[10]

With the exception of out-of-scope comments, this final preamble provides summaries and responses to all comments received regarding the proposed reconsideration of the OLD NESHAP. Comments on the proposed reconsideration of the OLD NESHAP that we consider out of scope for this reconsideration rulemaking include comments on the standards for PRDs and emergency flaring that discuss topics other than the *force majeure* provisions and comments on requirements for temporary control devices.

C. Miscellaneous Organic Chemical Manufacturing

The NESHAP for the Miscellaneous Organic Chemical Manufacturing source category (herein called MON) is codified at 40 CFR part 63, subpart FFFF.[11] As promulgated in 2003, and further amended,[12] the MON regulates HAP emissions from miscellaneous organic chemical manufacturing process units (MCPUs) located at major sources. A miscellaneous organic chemical manufacturing process unit (MCPU) includes a miscellaneous organic chemical manufacturing process, as defined in 40 CFR 63.2550(i), and must meet the following criteria: it manufactures any material or family of materials described in 40 CFR 63.2435(b)(1); it processes, uses, or generates any of the organic HAP described in 40 CFR 63.2435(b)(2); and, except for certain process vents that are part of a chemical manufacturing process unit, as identified in 40 CFR 63.100(j)(4), the MCPU is not an affected source or part of an affected

[10] 88 FR 25574 (Apr. 27, 2023).
[11] 68 FR 63852 (Nov. 10, 2003).
[12] 70 FR 38562 (July 1, 2005); 71 FR 40316 (Jul. 14, 2006); and 85 FR 49084 (Aug. 12, 2020).

source under another subpart of 40 CFR part 63. An MCPU also includes any assigned storage tanks and transfer racks; equipment in open systems that is used to convey or store water having the same concentration and flow characteristics as wastewater; and components such as pumps, compressors, agitators, PRDs, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used to manufacture any material or family of materials described in 40 CFR 63.2435(b)(1). Sources of HAP emissions regulated by the MON include the following: process vents, storage tanks, transfer racks, equipment leaks, wastewater streams, and heat exchange systems.

Following promulgation of the MON in August 2020, the EPA received five petitions for reconsideration between October and December 2020. The EPA received petitions from the ACC (who submitted two petitions), the Texas Commission on Environmental Quality (TCEQ), Huntsman Petrochemical, LLC, and Earthjustice (on behalf of RISE St. James, Louisiana Bucket Brigade, Louisiana Environmental Action Network, Texas Environmental Justice Advocacy Services, Air Alliance Houston, Ohio Valley Environmental Coalition, Blue Ridge Environmental Defense League, Environmental Justice Health Alliance for Chemical Policy Reform, Sierra Club, Environmental Integrity Project, and Union of Concerned Scientists). Copies of the petitions are provided in the docket for this rulemaking (see Docket Item Nos. EPA-HQ-OAR-2022-0787-0007, EPA-HQ-OAR-2022-0787-0009, EPA-HQ-OAR-2022-0787-0010, EPA-HQ-OAR-2022-0787-0027, and EPA-HQ-OAR-2022-0787-0008). ACC's petitions requested that the EPA reconsider certain aspects of the final rule including, among other things, the storage vessel degassing provisions and requirements for ethylene oxide sources. Earthjustice's petition requested that the EPA reconsider certain aspects of the final rule including, among other things, the *force majeure* and exemption allowances for PRDs and

emergency flaring. TCEQ, ACC, and Huntsman Petrochemical's petitions requested that the EPA reassess the MON risk assessment for issues around ethylene oxide risks. The EPA addressed ACC, TCEQ, and Huntsman Petrochemical's reconsideration petitions in a separate rulemaking.[13] Earthjustice and ACC also raised other issues that are not being addressed in this rulemaking.

On June 17, 2021, the EPA sent a letter to petitioners informing them that it is continuing to review all issues raised in the petitions. A copy of the letter to petitioners is available in the docket for this action (see Docket Item No. EPA-HQ-OAR-2022-0787-0017).

On April 27, 2023, the EPA proposed the reconsideration of the MON to address these issues along with other technical corrections and clarifications and requested public comment.[14]

With the exception of out-of-scope comments, this final preamble provides summaries and responses to all comments received regarding the proposed reconsideration of the MON. Comments on the proposed reconsideration of the MON that we consider out of scope for this reconsideration rulemaking include:

- Comments on the standards for PRDs and emergency flaring that discuss topics other than the *force majeure* provisions, including releases from PRDs in ethylene oxide service and PRD monitoring.
- Comments on surge control vessel or bottoms receiver vents.
- Comments on maintenance vent provisions.
- Comments on conservation vent provisions.

[13] 87 FR 77985 (Dec. 21, 2022).
[14] 88 FR 25574 (Apr. 27, 2023).

D. Petroleum Refineries

The EPA finalized amendments to the petroleum refinery sector rules as the result of an RTR.[15] These amendments included, among other provisions, adding work practice requirements to Petroleum Refinery MACT 1 (40 CFR part 63, subpart CC) for PRDs and flares in 40 CFR 63.648(j) and 63.670(o), respectively. These provisions specifically provide requirements for owners and operators to follow in the event of an atmospheric PRD release or emergency flaring event including performing root cause analysis for each event and implementing corrective action(s) in accordance with the rule requirements.

The EPA received three petitions to reconsider the December 2015 final rule. Two petitions were filed on January 19, 2016, and February 1, 2016, jointly by API and the AFPM. In response to API/AFPM's January 19, 2016, petition for reconsideration, the EPA issued a proposal on February 9, 2016,[16] and a final rule on July 13, 2016.[17] The third petition was filed on February 1, 2016, by Earthjustice on behalf of Air Alliance Houston, California Communities Against Toxics, the Clean Air Council, the Coalition for a Safe Environment, the Community In-Power & Development Association, the Del Amo Action Committee, the Environmental Integrity Project, the Louisiana Bucket Brigade, the Sierra Club, the Texas Environmental Justice Advocacy Services, and Utah Physicians for a Healthy Environment. In their petition, Earthjustice claimed that several aspects of the revisions to the Petroleum Refinery MACT 1 were not proposed; therefore, the public was precluded from commenting on the altered

[15] 80 FR 75178 (Dec. 1, 2015).
[16] 81 FR 6814 (Feb. 9, 2016).
[17] 81 FR 45232 (Jul. 13, 2016).

provisions during the public comment period, including, among other provisions, the work practice standard for PRDs and emergency flaring.

On June 16, 2016, the EPA informed petitioners it would grant reconsideration on issues where petitioners claimed they had not been provided an opportunity to comment. Subsequently, the EPA proposed the reconsideration of the Petroleum Refinery MACT 1 to address issues for which reconsideration was granted in the June 16, 2016, letters.[18] The EPA solicited public comment on five issues in the proposal related to the work practice standard for PRDs, the work practice standard for emergency flaring events, and the assessment of risk as modified based on implementation of these PRD and emergency flaring work practice standards. On February 4, 2020, the EPA issued a final action[19] setting forth its decisions on each of the five issues.

On April 6, 2020, Earthjustice submitted a petition for reconsideration of the February 2020 final action on behalf of Air Alliance Houston, California Communities Against Toxics, Clean Air Council, Coalition For A Safe Environment, Community In-Power & Development Association, Del Amo Action Committee, Environmental Integrity Project, Louisiana Bucket Brigade, Sierra Club, Texas Environmental Justice Advocacy Services, and Utah Physicians for a Healthy Environment (see Docket Item No. EPA-HQ-OAR-2022-0787-0029). The petition for reconsideration requested that the EPA reconsider five issues in the February 4, 2020, final rule: (1) The EPA's rationale that the PRD standards and emergency flaring standards are continuous; (2) the EPA's rationale for the PRD standards under CAA sections 112(d)(2) and (3); (3) the EPA's rationale for separate work practice standards for flares operating above the smokeless

[18] 81 FR 71661 (Oct. 18, 2016).
[19] 85 FR 6064 (Feb. 4, 2020).

capacity; (4) the EPA's rationale for risk acceptability and risk determination; and (5) the EPA's analysis and rationale in its assessment of acute risk. The EPA initially denied the April 6, 2020, petition for reconsideration[20] and provided detailed responses to each of the five issues raised in the April 2020 petition in a September 3, 2020, letter, which is available in the Petroleum Refinery rulemaking docket (see Docket Item No. EPA-HQ-OAR-2010-0682-0999). After further consideration, on April 19, 2022, EPA informed petitioners that it would undertake reconsideration on select provisions related to the work practice standard for PRDs and emergency flaring (see Docket Item No. EPA-HQ-OAR-2022-0787-0003). Specifically, the EPA is reconsidering the inclusion of the *force majeure* allowances in the PRD and emergency flaring work practice standard. As noted in our April 19, 2022, letter, we may reconsider additional issues in the future.

On April 27, 2023, the EPA proposed the reconsideration of Petroleum Refinery MACT 1 to address the PRD and emergency flaring work practice standard along with other technical corrections and clarifications and requested public comment.[21]

With the exception of out-of-scope comments, this final preamble provides summaries and responses to all comments received regarding the proposed reconsideration of the Petroleum Refinery MACT 1. Comments on the proposed reconsideration of the Petroleum Refinery MACT 1 that we consider out of scope for this reconsideration rulemaking include comments on the standards for PRDs and emergency flaring that discuss topics other than the *force majeure* provisions.

---

[20] 85 FR 67665 (April 6, 2020).
[21] 88 FR 25574 (Apr. 27, 2023).

III. Final Action

In this section of the preamble, the EPA sets forth its final decisions on the issues for which reconsideration was granted and on which the EPA solicited comment in the April 27, 2023, proposed rule.[22] We also present the Agency's rationale for the decisions. The EPA is finalizing revisions to the work practice standards for PRDs and emergency flaring related to *force majeure* provisions in the EMACT standards, MON, and Petroleum Refinery MACT 1 and is also finalizing clarifications for the degassing of storage vessels in the EMACT standards, OLD NESHAP, and MON. In addition, the EPA is finalizing requirements for pressure-assisted flares and mass spectrometers in the Petroleum Refinery MACT 1 to align this rule with other more recent chemical sector rules and to eliminate the need to request site specific alternative means of emission limitations (AMELs) for these units. Also, the EPA is finalizing other technical corrections, clarifications, and correction of typographical errors in all rules. The sections below provide a brief summary of each topic as well as summaries and responses to the comments received on each topic.

A. Pressure Relief Devices and Emergency Flaring

Topic summary: Petroleum Refinery MACT 1, EMACT standards, and the MON include work practice standards for PRDs and emergency flaring. These provisions specifically provide requirements for owners and operators to follow in the event of an atmospheric PRD release or emergency flaring event including performing root cause analysis for each event and implementing corrective action(s) in accordance with the rule requirements. The atmospheric PRD release and emergency flaring provisions specify the conditions which result in a violation

[22] 88 FR 25574 (Apr. 27, 2023).

of the work practice standards. The owner or operator is required to track the number of events by emission unit and root cause. An atmospheric PRD release or emergency flaring event for which the root cause is determined to be poor maintenance or operator error is a violation of the WPS. Two atmospheric PRD releases or two emergency flaring events from the same emission unit which are determined to be the result of the same root cause in a 3-year period is a violation of the work practice standard. Finally, three atmospheric PRD releases or three emergency flaring events from the same emission unit regardless of the root cause is a violation of the work practice standard (also referred to as "the 'three strikes' provisions"). Notably, if the root cause is determined to be due to a *force majeure* event, as defined in 40 CFR 63.641, 40 CFR 63.1103(e)(2), and 40 CFR 63.2550, it does not count towards the criteria for a violation of the WPS. However, in reconsidering these provisions, the EPA has recognized that despite the term *force majeure* being carefully defined, the *force majeure* allowance in the work practice standards may present difficulties for determining compliance. It may also represent a provision that some facility owners or operators may seek to use to avoid incurring violations and pursuing potentially disruptive corrective actions. During the root cause analysis and corrective action process, owners or operators maintain discretion when categorizing and reporting the root cause of atmospheric PRD releases and emergency flaring events, thereby placing the onus on the EPA to determine whether the definition of *force majeure* was appropriately applied.

In light of these concerns, we reviewed periodic reports from refineries in Texas and Louisiana obtained through the EPA Regional Office (Docket ID No. EPA-HQ-OAR-2022-0787-0021 and EPA-HQ-OAR-2022-0787-0025). Based on the data available, we concluded that the frequency of these types of releases is lower than originally expected. We also found that by removing the *force majeure* allowance, the rule is strengthened, and compliance becomes easier

to assess as it is determined purely based on the count of events by emission unit and root cause. As such, the EPA proposed to remove the *force majeure* provisions from the PRD and emergency flaring work practice standards. See section III.A. of the preamble to the proposed rule for additional details.[23]

Comments: A commenter supported the proposed decision to remove *force majeure* provisions from the PRD and emergency flaring work practice standards. The commenter stated that the EPA's evaluation of refinery periodic reports appropriately concluded the provisions are not needed and that compliance with the provisions would become easier for facilities and for the EPA to evaluate. The commenter further stated the *force majeure* provisions should be removed because they are unlawful and mean that an emission standard does not apply at all times for PRDs and flaring. The commenter contended that to ensure that standards apply at all times for PRDs, the EPA must specify that any uncontrolled release from a PRD is a violation of the standard. For a standard to apply at all times for flaring, the commenter asserted that the EPA has not shown how a flare will comply with the net heating value of the combustion zone limit and achieve 98 percent destruction while smoking.

Other commenters opposed the proposed decision to remove *force majeure* provisions from the PRD and emergency flaring work practice standards. Some of these commenters argued that the EPA evaluated too narrow of a dataset to identify *force majeure* events. They stated that evaluating data over a longer period is necessary, due to the infrequent nature of *force majeure* events. They also emphasized that the review was not representative of all affected source categories, because only data from petroleum refineries were analyzed. Furthermore, one

[23] 88 FR 25580 (Apr. 27, 2023).

commenter contended that considering the frequency of events was not an adequate basis for removing the provisions.

Some commenters stated it was not appropriate to remove the *force majeure* provisions because these events are beyond the control of a facility and a facility should not be held liable for PRD releases or smoking flares during these events. A commenter argued that considering the difficulty of enforcing the standard is not a rational basis to remove *force majeure* provisions. The commenter also noted the fact that few *force majeure* events were identified indicates that facilities are not abusing the provisions. A commenter stated that removing the *force majeure* provisions could create resource burdens for local authorities if there is an increase in violations.

Response: After consideration of the comments submitted, the EPA is finalizing the revisions as proposed and removing the *force majeure* allowance from the criteria for a violation of the work practice standards for atmospheric PRD releases and emergency flaring events. Commenters indicated that the basis for the EPA's conclusion that the *force majeure* exemption was rarely used was because it only took into consideration three years of data. However, this 3-year period is the period for which the work practice standards were in effect for refineries and thus we believe that this is the best available data from which to draw conclusions on the efficacy and necessity of the elements of the work practice standards (Standards under CAA section 112 are to reflect emissions limitations "for which the Administrator has emissions information."). Although some commenters indicate that there were major weather events that could have caused relief events from PRDs or flare smoking events, they did not provide any detailed information on whether any PRD or flare smoking events actually occurred from these weather events.

In addition, as the EPA has consistently explained, in the event that a source fails to comply with the applicable CAA section 112 standards, the EPA would determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions during the violative periods, including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. Thus, while this action removes the *force majeure* provisions from the PRD and emergency flaring work practice standards, the EPA will continue to evaluate violations on a case-by-case basis and determine whether an enforcement action is appropriate. If the EPA determines in a particular case that enforcement action against a source for violation of a standard is warranted, the source can raise any and all defenses in that enforcement action and the federal district court will determine what, if any, relief is appropriate. The same is true for citizen enforcement actions.

Regarding the comment that the work practice standards do not provide continuous standards, we disagree with this comment. We have previously addressed this issue and the EPA's position that the *force majeure* provisions do not make the standards non-continuous has not changed. We addressed this in the preamble to the proposed rule[24] where we explained that we had previously addressed this in a September 2020 letter to Earthjustice (Docket Item No. EPA-HQ–OAR-2010-0682-0999). Components of both the PRD management provisions and emergency flaring provisions apply at all times; not all components of the standard must apply at all times for the standard to be continuous.

Therefore, in this final action for Petroleum Refinery MACT 1, the EPA is removing the *force majeure* allowance from the criteria for a violation of the work practice standard for

[24] 88 FR 25574, 25580 (Apr. 27, 2023).

atmospheric PRD releases and emergency flaring events in 40 CFR 63.648(j)(3) and 63.670(o)(7). We are also amending the reporting requirements for the event-specific work practice standard data in 40 CFR 63.655(g)(10)(iv) and (11)(iv) to require these data to be reported electronically through the EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI). As further discussed in section III.G. of this preamble, we are finalizing that the removal of the *force majeure* provisions is effective 60 days after the effective date of the final rule.

For flares, the EMACT standards and MON cross reference the petroleum refinery flare provisions at 40 CFR 63.670. Therefore, the revisions to 40 CFR 63.670(o)(7) for emergency flaring events are incorporated into the requirements for these regulations.

The EPA is also revising the EMACT standards and the MON consistent with our proposal. We are removing the *force majeure* allowance from the criteria for a violation of the work practice standard for atmospheric PRD releases in 40 CFR 63.1107(h)(3) and 63.2480(e)(3) going forward. However, we are not removing the term *force majeure* from the list of defined terms in 40 CFR 63.1103(e)(2) and 63.2550. As further discussed in section III.G. of this preamble, we are finalizing that the removal of the *force majeure* provisions is effective 60 days after the effective date of the final rule. Lastly, the EPA is finalizing new reporting requirements for the EMACT standards at 40 CFR 63.1110(a)(10)(iii) to require electronic reporting, through the CDX using CEDRI, of the event-specific work practice standard data in 40 CFR 63.1110(e)(4)(iv) and 63.1110(e)(8)(iii). We note that the MON already has a more general compliance report template for electronic reporting, see 40 CFR 63.2520(e), which will automatically incorporate electronic reporting of the event-specific work practice standard data.

B. Storage Vessel Degassing

Topic summary: The EMACT standards, OLD NESHAP, and MON currently include a work practice standard for storage vessel degassing to control emissions from shutdown operations (see 40 CFR 63.1103(e)(10), 40 CFR 63.2346(a)(6), and 40 CFR 63.2470(f), respectively). An opportunity to comment on the storage vessel degassing provisions was not previously provided because, based on comments received for all three rules, the provisions were included in the final 2020 rules but not in the rules proposed in 2019. Therefore, the EPA re-proposed in 2023 what was finalized for each rule in 2020. The EPA also proposed additional revisions based on petitioners' arguments to address degassing of floating roof storage vessels. The requirements, as finalized in the 2020 rules, allow storage vessels to be vented to the atmosphere once a storage vessel degassing concentration threshold is met (*i.e.,* less than 10 percent of the lower explosive limit (LEL)) and all standing liquid has been removed from the vessel to the extent practicable. The requirements are applicable to all storage vessels (regardless of roof type) that are subject to control requirements in each of the rules. We based the degassing standard on Texas permit conditions, which represented the MACT floor.[25] Specifically, permit condition 6 (applicable to floating roof storage vessels) and permit condition 7 (applicable to fixed roof storage vessels) formed the basis of the storage vessel degassing standard.

The petitioners stated that while they did identify the Texas permit conditions as a reference in their comments to the 2019 proposed rules, certain key information was not incorporated into the final 2020 EMACT standards, OLD NESHAP, and MON for the degassing

[25] Texas Permit Conditions are available at: *https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/mss/chem-mssdraftconditions.pdf*.

of floating roof storage vessels. Additionally, the petitioners argued that they did not request additional work practices for floating roof storage vessels for which owners and operators already elect to comply with the floating roof storage vessels requirements in 40 CFR part 63, subpart WW because, even with the removal of the shutdown exemption, the petitioners contended that it is still possible to comply with the subpart WW provisions.

The EPA disagreed with the petitioners' claims that a separate standard for floating roof storage vessel degassing is not needed due to the removal of the shutdown exemption. Rather, we determined that we must set a storage vessel degassing standard that applies to storage vessels under CAA section 112. We also determined that storage vessel degassing is a unique shutdown activity with operations and emissions that are completely different from normal storage vessel operations, and 40 CFR part 63, subpart WW does not address degassing emissions from floating roof storage vessels.

Because the EPA determined that a standard is necessary for degassing of all storage vessels (regardless of roof type), the EPA reviewed the Texas permit conditions again to determine if revisions to the degassing standard for floating roof storage vessels in the EMACT standards, OLD NESHAP, and MON are appropriate. Based upon this review, we proposed and are now finalizing that a floating roof storage vessel may be opened prior to degassing to set up equipment (*i.e.,* make connections to a temporary control device), but this must be done in a limited manner and operators must not actively purge the storage vessel while connections are made. See section III.B. of the preamble to the proposed rule for additional details on the storage vessel degassing revisions.[26]

---

[26] 88 FR 25581 (Apr. 27, 2023).

Comments: Several commenters supported the storage vessel degassing requirements in the 2023 proposal, including having a separate requirement for floating roof storage vessels. However, some commenters requested clarification on certain aspects of the rule text. A commenter requested clarification on whether the phrase "must not be actively degassed" (from the rule text) and "not actively purge" (from the preamble) have the same meaning for floating roof storage vessels. The commenter also requested confirmation that breathing emissions following a floating roof landing and before commencing degassing operations are not a deviation of the standard. A commenter stated that not providing a timeframe for degassing creates ambiguity and encouraged the EPA to use the same 24-hour window as the Texas permit conditions for consistency. Another commenter recommended the EPA incorporate a requirement based on the maintenance vent standard, which would allow active purging if the pressure in the storage vessel is 2 pounds per square inch gauge or less. A commenter recommended that the EPA incorporate additional recordkeeping and reporting requirements for storage vessel degassing, such as recording and reporting information from the vapor space concentration measurements. A commenter also requested the EPA further define degassing.

Response: After consideration of the comments submitted, we are finalizing the storage vessel degassing requirements as proposed, including the separate requirement for floating roof storage vessels. We do confirm that the phrase "must not be actively degassed" (from the rule text) and "not actively purge" (from the preamble) have the same meaning for purposes of the floating roof storage vessel degassing provisions. We are also aware that the Texas permit condition 6.B provides a 24-hour window to start controlled degassing after the floating roof storage vessel has been drained, and that the storage vessel may be opened during this period only to set up for degassing and cleaning. However, we determined at proposal that the 24-hour

window stipulates how long a floating roof storage vessel can be landed before it needs to be filled again or degassed, but it does not have a direct bearing on the underlying control standard for degassing operations. As such, we are not revising the final rule to incorporate the 24-hour window into the storage vessel degassing standard.

We agree with the commenter that emissions as a result of vapor space expansion (*i.e.*, breathing emissions) following landing of a floating roof and prior to commencing degassing operations do not constitute a bypass or deviation of the standards. We note that this work practice standard for storage vessel degassing applies "during storage vessel shutdown operations (*i.e.*, emptying and degassing of a storage vessel)."

We also do not agree that incorporating a requirement similar to the maintenance vent standard is appropriate for storage vessel degassing. The intent of the standard is to control degassing emissions to the level of the MACT floor, which in this case is the use of controls to minimize emissions until the vapor space concentration reaches 10 percent of the LEL.

We do not believe that additional clarity on the definition of degassing is warranted as this process is well understood. Storage vessel degassing has always been in the rules as part of the definition of "Shutdown" (*i.e.*, Shutdown also applies to emptying and degassing storage vessels). In addition, there have been many commenters on each of the rules over the past four years providing feedback regarding storage vessel degassing; during this time no clarifications regarding the definition of degassing were needed.

We are finalizing clarifications to the storage vessel degassing standards for the EMACT standards at 40 CFR 63.1103(e)(10), the OLD NESHAP at 40 CFR 63.2346(a)(6), and the MON at 40 CFR 63.2470(f).

We also want to clarify that the overlap provisions in the MON and OLD NESHAP for storage vessels do not apply with respect to demonstrating compliance with the storage vessel degassing standards.[27] While these overlap provisions (*e.g.*, 40 CFR part 60, subpart Kb; 40 CFR part 61, subpart Y) do include storage vessel standards that facilities subject to the MON and OLD NESHAP may comply with for storage vessels during normal operation, they do not include an equivalent alternative standard to the storage vessel degassing standards that were finalized in 2020 and that are being clarified in this final action. As such, facilities subject to the MON and OLD NESHAP must always comply with the storage vessel degassing standards included therein even if complying with these overlap provisions.

C. Other EMACT Standards Technical Corrections and Clarifications

The EPA is finalizing additional revisions for the EMACT standards that address other technical corrections and clarifications and correct typographical errors. We received comments on some of the revisions that were proposed for the EMACT standards. In this section, we provide comment summaries and responses for the EMACT standards topics where comments were received. We also include revisions to the EMACT standards that were not proposed but for which commenters provided technical clarifications to the rule and the EPA is finalizing. Table 2 of this preamble shows the revisions to the EMACT standards for which no comments were received, and that the EPA is finalizing as proposed. Although we briefly summarize these items below, refer to section III.C.1. of the preamble to the proposed rule for additional details.[28]

---

[27] The EMACT standards require owners or operators to comply specifically with the EMACT standards where overlap may exist for various storage vessel control requirements (see 40 CFR 63.1100(g)(1)); thus, it is not necessary to clarify that the storage vessel degassing standards always apply in this NESHAP.

[28] 88 FR 25582 (Apr. 27, 2023).

Topic summary, delay of burner repair provisions (40 CFR 63.1103(e)(7)(i)): A petitioner argued that requiring an ethylene cracking furnace to implement the delay of burner repair provisions finalized in the 2020 final rule is impracticable and is inconsistent with what the best performers are doing. The petitioner stated that a significant amount of preparation is needed to shutdown an ethylene cracking furnace and that no source can comply with the delay of burner repair provisions as written. Accordingly, where a burner cannot be repaired without an ethylene cracking furnace shutdown, owners or operators would have to decoke their ethylene cracking furnaces immediately (*i.e.*, within 1 day of identifying flame impingement), leading to more decoking events and subsequently more emissions from the decoking of ethylene cracking furnaces.

An opportunity to comment on the delay of burner repair provisions was not previously provided because the provisions were included in the final 2020 rule but not in the 2019 proposed rule. Therefore, the EPA re-proposed at 40 CFR 63.1103(e)(7)(i) what was finalized along with the following revisions for delay of burner repair.

The EPA proposed to remove the requirement that the owner or operator may only delay burner repair beyond 1 calendar day if a shutdown for repair would cause greater emissions than the potential emissions from delaying repair. We agreed that this requirement if left in place would lead to more decoking events and more emissions from decoking of ethylene cracking furnaces. Instead of evaluating emissions to determine whether delay of repair is allowed, the EPA proposed that delay of repair beyond 1 calendar day is allowed if the repair cannot be completed during normal operations, the burner cannot be shutdown without significantly impacting the furnace heat distribution and firing rate, and action is taken to reduce flame impingement as much as possible during continued operation. We also maintained that if a delay

of repair is required to fully resolve burner flame impingement, repair must be completed following the next planned decoking operation (and before returning the ethylene cracking furnace back to normal operation) or during the next ethylene cracking furnace complete shutdown (when the ethylene cracking furnace firebox is taken completely offline), whichever is earlier.

Comments: A few commenters supported the proposed revision to the ethylene cracking furnace delay of burner repair requirements. They indicated that the proposed language provided needed flexibility. However, some of the commenters recommended additional revisions to the language to add specificity regarding when burner repair is allowed. Specifically, the commenters asked for an allowance to delay repairs until the next planned shutdown if a complete furnace shutdown is required to complete the repair.

Response: We disagree with the commenters that additional allowances for burner repair are warranted and are finalizing the revisions as proposed. We proposed the revisions to the delay of repair language to provide flexibility and acknowledge the industry's general practice for burner inspection and repair. However, allowing facilities to protract burner repair to a further point in time, which may be years in the future for the next ethylene cracking furnace complete shutdown, goes against the purpose of the burner inspection and repair provisions which is to stop flame impingement and minimize decoking emissions. Additionally, the decoking of ethylene cracking furnaces has always been included in the definition of *Shutdown* in the regulatory text of the EMACT standards and has always been considered a shutdown operation. The EPA is finalizing the delay of burner repair provisions as proposed and owners or operators must repair the burner following the next decoking event or complete shutdown, whichever is earlier.

Topic summary, isolation valve inspection and repair (40 CFR 63.1103(e)(8)(i)): A petitioner requested that the EPA revise the requirement to rectify poor isolation prior to continuing decoking operations. The petitioner argued that certain isolation valve repairs must be completed after the ethylene cracking furnace is shutdown, which consequently requires decoking the ethylene cracking furnace. The petitioner said that if a furnace is not decoked prior to shutdown, damage can occur to the furnace tubes and could pose a safety issue. In addition, the petitioner noted that some isolation valves serve gas streams from multiple ethylene cracking furnaces, and there may be instances when all furnaces would need to be decoked and shutdown to properly rectify the isolation valve issue. The petitioner argued that allowing for some flexibility is necessary for facilities to operate properly and to avoid damaging equipment.

We agreed with the petitioner and proposed language at 40 CFR 63.1103(e)(8)(i) to allow facilities to wait and rectify isolation valve issues after a decoking operation, provided that the owner or operator can reasonably demonstrate that damage to the radiant tube(s) or ethylene cracking furnace would occur if the repair was attempted prior to completing a decoking operation and/or prior to the ethylene cracking furnace being shutdown.

Comments: Some commenters supported the proposed revision to the ethylene cracking furnace isolation valve inspection and repair requirements. They indicated that the proposed language was consistent with industry practices. The commenters also recommended additional revisions to emphasize that the company must be able to make the determination regarding whether to delay repair if the radiant tubing or ethylene cracking furnace could be damaged.

Response: The EPA acknowledges the commenters' support and is revising the proposed language in response to the comments. We agree that the owner or operator does not need to directly demonstrate to the regulating authority that damage would occur to the radiant tubes or

ethylene cracking furnace before using the allowance to delay repair. We are clarifying in 40 CFR 63.1103(e)(8)(i) that the owner or operator can make the determination that damage could occur in order to avail themselves of this delay of repair allowance.

Topic summary, *removal of electronic reporting requirements (40 CFR 63.1100(b), 63.1103(e)(4)(iii), and 63.1110(a)(10)(i), (ii), (iii), and (iv))*: Instructions for submitting reports electronically through CEDRI, including instructions for submitting CBI and asserting a claim of EPA system outage or *force majeure*, were recently added to 40 CFR 63.9(k);[29] therefore, text related to these requirements was no longer necessary in the EMACT standards. As such, we removed duplication and pointed directly to 40 CFR 63.9(k) when required to submit certain reports to CEDRI.

Comment: A commenter agreed with the revisions to point to 40 CFR 63.9(k) directly, but also stated that an additional reference to this citation is warranted in 40 CFR 63.1100(b).

Response: We agree with the commenter and are referencing 40 CFR 63.9(k) in the last sentence of 40 CFR 63.1100(b). We are also finalizing the edits at 40 CFR 63.1103(e)(4)(iii) and 63.1110(a)(10)(i), (ii), (iii), and (iv), as proposed.

Topic summary, LEL clarification (40 CFR 63.1103(e)(5), 63.1103(e)(10), 63.1109(f), 63.1110(e)(5)): These provisions reference the term "LEL" for the purposes of determining compliance. We did not propose revisions for this term, but commenters provided feedback stating that it was being misused.

Comments: Commenters stated that we were misusing the term LEL in certain rule provisions for maintenance vents and storage vessel degassing (*e.g.,* 40 CFR 63.1103(e)(5), 40

[29] 85 FR 73885 (Nov. 19, 2020).

CFR 63.1103(e)(10)). Commenters stated the LEL was a fixed physical property of a vapor mixture and thus, is neither changed nor measured. According to commenters, LEL refers to a specific concentration value for a particular mixture. For example, when opening a maintenance vent, commenters elaborated that you measure the concentration of the vapor and then you can compare that concentration to the LEL. The commenter thought the rule text incorrectly implied that you measured the LEL of the vapor. The commenters requested that the EPA clarify that the concentration of the vapors in equipment for maintenance vents (and the vapor space concentration for storage vessel degassing) must be less than 10 percent of the LEL and that facilities are to measure the concentration, not the LEL.

Response: We agree with commenters that the rule text referring to the LEL was used incorrectly for certain maintenance vent and storage vessel degassing provisions and that the LEL cannot be changed for a vapor. We are revising the rule text to make clear that facilities measure the vapor concentration and then compare that concentration value to the LEL of the vapor to determine if the concentration is less than 10 percent of the LEL.

Table 2. Summary of Revisions to 40 CFR Part 63, Subpart YY For Which the EPA Received No Comment

Provision	Issue summary	Final revision
40 CFR 63.1110(e)(4)(iii)	Provision contains a typographical error.	The EPA is replacing "§ 63.1109(e)(7)" with "§ 63.1109(e)(6)" to correct the typographical error.
40 CFR 63.1102(c)(11), (d)(2)(ii), and (e)(2)(iii)	Provisions contain a typographical error.	The EPA is replacing "§ 63.1108(a)(4)(i)" with "§ 63.1108(a)(4)" to correct a typographical error that we made while removing startup, shutdown, and malfunction exemptions.

D. Other OLD NESHAP Technical Corrections and Clarifications

There are additional revisions that we are finalizing for the OLD NESHAP to address other technical corrections and clarifications and to correct typographical errors. We did not receive comments on all of the revisions that were proposed for the OLD NESHAP. Table 3 of this preamble shows the revisions to the OLD NESHAP for which no comments were received and the EPA is finalizing as proposed. Table 4 of this preamble shows revisions to the OLD NESHAP which were not proposed but where commenters provided technical clarifications to the rule, which the EPA is finalizing. Refer to section III.C.2. of the preamble to the proposed rule for additional details.[30]

Table 3. Summary of Revisions to 40 CFR Part 63, Subpart EEEE For Which the EPA Received No Comment

Provision	Issue summary	Final revision
40 CFR 63.2346(a)(6)	Provision contains a typographical error.	The EPA is replacing "items 3 through 6 of table 2 to this subpart" with "items 2 through 6 of table 2 to this subpart" to correct the typographical error.
40 CFR 63.2346(e)	Provision contains a typographical error.	The EPA is replacing "storage vessels" with "storage tanks" to correct the typographical error.
40 CFR 63.2378(e)(3)	Provision needing technical clarifications.	The EPA is adding the word "planned" in front of "routine maintenance" in the last sentence of the provision in order to further clarify the provision only applies to periods of planned routine maintenance. We are also replacing "storage vessel" with "storage tank" in the last sentence of the provision to correct a typographical error.

[30] 88 FR 25584 (Apr. 27, 2023).

40 CFR 63.2378(e)(4)	Provision needing technical clarifications.	To create consistency in the time period during which the bypass provision applies (*i.e.,* the level of material in the storage vessel must not be increased during the same time period that breathing loss emissions bypass the fuel gas system or process), we are deleting "to perform routine maintenance" from the last sentence of 40 CFR 63.2378(e)(4). We are also replacing "storage vessel" with "storage tank" in the last sentence of the provision to correct a typographical error.
40 CFR 63.2382(d)(3); 63.2386(f), (g), (h), (i), and (j); and 63.2406	Provisions needing technical clarifications or removal.	The EPA is removing duplication and pointing directly to 40 CFR 63.9(k) when required to submit certain reports to CEDRI. Specifically, instructions for submitting reports electronically through CEDRI, including instructions for submitting CBI and asserting a claim of EPA system outage or *force majeure*, were recently added to 40 CFR 63.9(k) (85 FR 73885; November 19, 2020); therefore, text related to these requirements was no longer necessary in the OLD NESHAP.

Table 4. Summary of Revisions to 40 CFR Part 63, Subpart EEEE That Were Not Proposed but Are Being Finalized Based on Commenter Input

Provision	Issue summary	Final revision
40 CFR 63.2346(a)(6)	In comments on the EMACT standards, MON, and Petroleum Refinery MACT 1, commenters stated that we were misusing the term LEL in certain rule language provisions for maintenance vents and storage vessel degassing. See the comment summary and response in section III.C. of this preamble for additional details.	While commenters did not specifically point out revisions to the OLD NESHAP, we are finalizing revisions to 40 CFR 63.2346(a)(6) for consistency. Specifically, we are clarifying that the owner or operator must determine the concentration of the vapor space as opposed to determining the LEL of the vapor space.
Table 12 to Subpart EEEE of Part 63	Provisions needing technical clarifications.	40 CFR 63.7(a)(4) is not cited in the general provisions applicability table. We are referencing 40 CFR 63.7(a)(4) in this table and stating it applies to the OLD NESHAP.

E. Other MON Technical Corrections and Clarifications

This section of the preamble presents revisions we are finalizing to the MON heat exchange system requirements along with additional revisions that we are finalizing for the MON to address other technical corrections and clarifications and to correct typographical errors. We did not receive comments on some of the revisions that were proposed for the MON. In this section, we provide comment summaries and responses for the MON topics where comments were received. We also include revisions to the MON which were not proposed but where commenters provided technical clarifications to the rule, which the EPA is finalizing. Following this, table 5 of this preamble shows the revisions to the MON for which no comments were received, and the EPA is finalizing as proposed. We briefly summarize these items below; see section III.C.3. of the preamble to the proposed rule for additional details.[31]

[31] 88 FR 25584 (Apr. 27, 2023).

Topic summary, leak monitoring requirements for heat exchange systems with soluble HAP (40 CFR 63.2490(e)): In May 2021, EPA Region 4 received a request from Eastman Chemical Company to perform alternative monitoring instead of the Modified El Paso Method to monitor for leaks in Eastman's Tennessee Operations heat exchange systems, which primarily have cooling water containing soluble HAP with a high boiling point (see Docket Item No. EPA-HQ-OAR-2022-0787-0028). Eastman requested that the previous water sampling requirements for heat exchange system leaks provided in the MON, which ultimately references 40 CFR 63.104(b) (*i.e.*, use of any EPA-approved method listed in 40 CFR part 136 as long as the method is sensitive to concentrations as low as 10 parts per million (ppm) and the same method is used for both entrance and exit samples), be allowed for cooling water containing certain soluble HAP in lieu of using the Modified El Paso Method. Eastman specifically identified two HAP, 1,4-dioxane and methanol, which do not readily strip out of water using the Modified El Paso Method. Eastman's application for alternative monitoring included experimental data showing that the Modified El Paso Method would likely not identify a leak of these HAP in heat exchange system cooling water. Based upon a review of the information provided by Eastman, we proposed that water sampling of heat exchange systems may be used but only if 99 percent by weight or more of all the organic compounds that could potentially leak in the cooling water have a Henry's Law Constant less than a certain threshold (*i.e.*, 5.0E-6 atmospheres per mole per cubic meter (atm-m^3/mol) at 25° Celsius). See section III.C.3. of the preamble to the proposed rule for additional details.[32]

[32] 88 FR 25584 (Apr. 27, 2023).

Comments: Some commenters supported the proposed revisions to allow for water sampling of heat exchange systems, instead of the Modified El Paso Method, in limited instances. However, each of the commenters also argued that the EPA must revise the proposed language to add specificity regarding the compounds for which the water sampling alternative could be used. The commenters stated that the requirement should only apply to heat exchange systems with 99 percent by weight or more of organic HAP compounds that meet certain thresholds instead of just 99 percent by weight or more of organic compounds that meet certain thresholds. The commenters contended that because the rule serves to identify leaks of HAP, specifying that the threshold applies only to organic HAP is necessary. The commenters were concerned the proposed revisions could lead to expenditures fixing leaks that do not contain HAP. A commenter also requested the EPA clarify whether small heat exchange systems with a cooling water flow rate of 10 gallons per minute or less are required to use the Modified El Paso Method.

Response: After considering the comments submitted, the EPA is finalizing the monitoring revisions as proposed to allow for water sampling of heat exchange systems in limited instances. We disagree with the commenters' request to revise the language to specify "HAP" compounds for the 99 percent by weight requirement. The proposed revisions do not impact what heat exchangers are subject to monitoring; rather they help determine what type of monitoring is allowed (*i.e.*, Modified El Paso Method or water sampling), and the existing language already includes specificity regarding HAP compounds. The definition of heat exchange system states that the heat exchange system must be in organic HAP service (*i.e.*, contain at least 5 percent by weight of total organic HAP) in order to be subject to the heat exchange system monitoring requirements. Additionally, 40 CFR 63.104(b) is clear that owners

and operators must monitor for "the presence of one or more organic hazardous air pollutants or other representative substances whose presence in cooling water indicates a leak." The introductory text of 40 CFR 63.2490(e), which says: "you may monitor the cooling water for leaks according to the requirements in § 63.104(b) in lieu of using the Modified El Paso Method," is also only intended to specify what type of monitoring is required.

Regarding small heat exchange systems with a cooling water flow rate of 10 gallons per minute or less, we believe that further clarification to the rule is not needed. The 10 gallons per minute threshold provided in 40 CFR 63.2490(d) only applies to the Modified El Paso Method monitoring requirements in 40 CFR 63.2490(d). As such, heat exchange systems with a cooling water flow rate of 10 gallons per minute or less are still subject to the requirements of 40 CFR 63.104, as they have been historically, and must continue complying as they always have.

In summary, the EPA is finalizing at 40 CFR 63.2490(e) that the leak monitoring requirements for heat exchange systems at 40 CFR 63.104(b) may be used in limited instances (*i.e.*, if 99 percent by weight or more of all the organic compounds that could potentially leak into the cooling water have a Henry's Law Constant less than 5.0E-6 atmospheres per mole per cubic meter (atm-m^3/mol) at 25° Celsius) instead of using the Modified El Paso Method to monitor for leaks. While we are finalizing that the leak monitoring and leak definition requirements at 40 CFR 63.104(b) may be used in limited instances, we did not propose nor finalize that other provisions of 40 CFR 63.104 apply. Instead, for example, facilities that use water sampling to detect leaks must still comply with the recordkeeping and reporting requirements of 40 CFR 63.2520(e)(16) and 40 CFR 63.2525(r). We are finalizing revisions at 40 CFR 63.2520(e)(16) and 40 CFR 63.2525(r) to specify this.

Topic summary, PRDs with rupture disks (40 CFR 63.2480(e)(2)(ii) and (e)(2)(iii)): For PRDs with rupture disks, a petitioner pointed out that EPA agreed in their response to comment document (see docket item EPA–HQ–OAR–2018–0746–0200 in the MON RTR docket) to delete the second sentence (*i.e.,* the requirement to conduct monitoring if rupture disks are replaced) from 40 CFR 63.2480(e)(2)(ii) and (e)(2)(iii). However, the final rule (85 FR 49084, August 12, 2020) did not reflect these deletions. We agreed that the language diverges from what 40 CFR part 63, subpart UU required for PRDs. Therefore, we proposed to correct this error by deleting the second sentence from 40 CFR 63.2480(e)(2)(ii) and (e)(2)(iii).

Comments: A commenter supported the proposed revision to the monitoring requirements for PRDs with rupture disks and stated the revision provides consistency with other rules.

Response: The EPA acknowledges the commenter's support, and we are finalizing the revisions as proposed.

Topic summary, scrubber testing and monitoring requirements (40 CFR 63.2493(a)(2)(vi) and (b)(4)): A petitioner requested clarification of scrubber monitoring parameters and the types of scrubbers that are applicable to certain requirements at 40 CFR 63.2493(a)(2)(vi) and (b)(4). The petitioner stated that the rule is only applicable to scrubbers that use an acid solution and reactant tank, but that other types of scrubbers are used in instances when ethylene oxide is present in small amounts. The petitioner requested the pH monitoring parameter be revised to account for other types of scrubbers. The petitioner also requested the temperature of the "scrubber liquid" be monitored instead of the temperature of the "water."

Scrubbers that use an acid solution and reactant tank are the primary focus of the scrubber monitoring requirements because this type of scrubber liquid is necessary to specifically control ethylene oxide. As such, we did not propose to revise the monitoring parameters to apply

more broadly, such as to scrubbers that use water as the scrubbing liquid. We proposed clarifying language that the monitoring requirements at 40 CFR 63.2493(a)(2)(vi) and (b)(4) are applicable to scrubbers "with a reactant tank." We agreed with the petitioner regarding temperature monitoring and proposed a correction that the temperature of the "scrubber liquid" must be monitored. We also proposed clarifying language at 40 CFR 63.2493(a)(2)(viii) and (b)(6), that if a facility uses a scrubber without a reactant tank that provides control of ethylene oxide, the facility may establish site-specific operating parameters.

Comments: Commenters supported the proposed revision to the scrubber testing and monitoring requirements for scrubbers controlling ethylene oxide. In addition, a commenter recommended that the EPA only allow scrubbers with reactant tanks and acid solutions to control ethylene oxide. Another commenter also requested that the EPA allow any scrubber to control ethylene oxide by developing site-specific operating parameters, regardless of the amount of control the scrubber provides. This commenter stated they understood the proposal allows for site-specific operating parameters only if the scrubber provides incidental control of ethylene oxide.

Response: We acknowledge the commenters' support and are finalizing the revisions as proposed. The EPA notes that in the proposed regulatory text changes for the MON, we did not use the phrase "incidental control." We are clarifying provisions at 40 CFR 63.2493(a)(2)(viii) and (b)(6), which would allow an owner or operator who uses a scrubber without a reactant tank to request appropriate operating parameters from the Administrator. In the preamble of the proposed rule, we noted that this option would be available to facilities using scrubbers for incidental control, because it is likely that a scrubber needing to control a significant quantity of

ethylene oxide emissions would need to be equipped with a reactant tank. It is unlikely that a water scrubber could provide adequate control of significant ethylene oxide emissions.

Consistent with our long-standing approach of allowing regulated industries to determine how to meet numeric emission limits, the EPA is not requiring the use of acid scrubbers for the control of ethylene oxide. Currently, scrubbers with acid solutions are likely the only scrubber technology that can achieve significant control of ethylene oxide; however, we also acknowledge that there are some facilities with ethylene oxide emissions that are very low and almost meet the outlet concentration limit without control. These owners and operators should be able to use any control device that can allow them to achieve the emission standard. Additionally, there could be a development of new scrubbing technologies for ethylene oxide in the future that use a configuration other than acid solutions and a reactant tank. We do not want to limit the development of these technologies by limiting the control devices that owners and operators must use.

Topic summary, storage tank ethylene oxide concentration (40 CFR 63.2492(b)): A petitioner requested that an alternative to sampling and analysis of storage tank materials should be allowed, to determine if a storage tank is in ethylene oxide service. The petitioner stated that information already exists for some storage tanks to show that the ethylene oxide concentration in the material stored is less than 0.1 percent by weight (sometimes significantly so) and that it is unnecessary to require sampling and analysis. We agreed with the petitioner and proposed to amend 40 CFR 63.2492(b) to allow calculations to be performed to show that the ethylene oxide concentration is less than 0.1 percent by weight of the material stored in the storage tank, provided the calculations rely on information specific to the material stored. This may include using, for example, specific concentration information from safety data sheets.

Comments: Commenters supported the proposed revision to allow calculations to determine the ethylene oxide concentration of the fluid stored in a storage tank. A commenter also recommended that the EPA expand this requirement and allow the use of engineering judgement and process knowledge to determine the concentration, similar to what is allowed to determine the ethylene oxide content for equipment leaks.

Another commenter did not support the proposed revision to allow calculations to determine the ethylene oxide concentration of the fluid stored in a storage tank. The commenter argued that calculations introduce uncertainty and are often underestimated.

A commenter also noted that proposed 40 CFR 63.2492(b)(i) and (b)(ii) should be renumbered to 40 CFR 63.2492(b)(1) and (b)(2).

Response: We are finalizing the revisions to allow calculations to determine the ethylene oxide concentration of the fluid stored in a storage tank as proposed. We disagree with the commenter's request to add more flexibility to the alternative approach in 40 CFR 63.2492(b)(2) for storage tanks to be consistent with the equipment leaks provision at 40 CFR 63.2492(c)(2). The rule is already clear regarding determining whether storage tanks are "in ethylene oxide service." In order to determine the requirements for storage tanks in ethylene oxide service, facilities must look at both the definition of "in ethylene oxide service" and the requirements in 40 CFR 63.2492 together. The definition of "in ethylene oxide service" lets the owner or operator designate a storage tank based on process knowledge; however, if an owner or operator wants to say a storage tank is not in ethylene oxide service, they must use the procedures in 40 CFR 63.2492(b). The rule at 40 CFR 63.2492(b)(2) already explicitly allows for an owner or operator to calculate the concentration of ethylene oxide of the fluid stored in a storage tank if

information specific to the fluid stored is available which includes data based on safety data sheets.

We do agree with the commenter that the proposed numbering was incorrect and are finalizing the revisions at 40 CFR 63.2492(b)(1) and (b)(2).

We are also changing the phrasing of "sampling and analysis is performed as specified in §63.2492" to "the procedures specified in §63.2492 are performed" within the definition of "in ethylene oxide service" for storage tanks. This language more clearly aligns with the revised requirements at 40 CFR 63.2492(b).

Topic summary, delay of repair provisions for equipment in ethylene oxide service (40 CFR 63.2493(d)(1)(iii) and 63.2493(d)(2)(iii)): A petitioner requested the EPA clarify whether delay of repair provisions apply to equipment in ethylene oxide service. The petitioner noted that in the response to comments for the final rule, the EPA stated that delay of repair provisions do not apply. However, the petitioner further noted the final rule language did not reflect this. We proposed to revise 40 CFR 63.2493(e) to specify that the delay of repair provisions of 40 CFR part 63, subparts H and UU and 40 CFR part 65, subpart F do not apply for all equipment in ethylene oxide service.

Comments: Commenters did not support the proposed revision to remove the delay of repair provisions for equipment in ethylene oxide service. The commenters contended that removing the delay of repair provisions would increase emissions, because the emissions due to shutdowns can be higher than the leak emissions due to invoking delay of repair. This is particularly true if few components are leaking. A commenter emphasized that companies consider both worker safety and emissions when evaluating leaks and noted some companies have ambient air monitors for ethylene oxide. The commenters stated the number of components

in ethylene oxide service that leak is low, and that this is supported by data submitted by chemical manufacturing facilities (which are similar to MON facilities) to the EPA which indicated no leaking connectors, valves, or pumps in ethylene oxide service. The commenters also stated the delay of repair provisions provide important flexibility for companies and allow them to operate without disruptions to their operations.

Another commenter supported the proposed revision to remove the delay of repair provisions for equipment in ethylene oxide service.

Response: We partly erred when stating at proposal that the MON included delay of repair provisions for equipment in ethylene oxide service. The final 2020 MON included specific repair requirements for pumps and connectors in ethylene oxide service at 40 CFR 63.2493(d)(1)(iii) and 63.2493(d)(2)(iii), respectively. These requirements stipulated that a leak must be repaired within 15 days after it is detected. No exceptions were provided for the 15-day timeframe, which means there were no exceptions for delay of repair. Other equipment in ethylene oxide service (*e.g.,* valves) do not have ethylene oxide-specific requirements in the MON like connectors and pumps, and it was our intent that delay of repair provisions still apply for this other equipment (*i.e.,* reducing ethylene oxide emissions from connectors and pumps was determined to be necessary for the 2020 rule, and thus delay of repair was not provided for them). As such, we are not revising the MON to exclude delay of repair provisions for equipment other than connectors and pumps in ethylene oxide service and are not finalizing the revision that was proposed at 40 CFR 63.2493(e)(17). We are maintaining the existing requirements at 40 CFR 63.2493(d)(1)(iii) and 63.2493(d)(2)(iii), with one additional revision. We are finalizing a revision that allows for the delay of repair for connectors and pumps in ethylene oxide service if the equipment is isolated from the process and does not remain in ethylene oxide service.

Topic summary, LEL clarification (40 CFR 63.2450(v), 63.2470(f), 63.2520(e)(14), 63.2525(p)): Maintenance vent and storage vessel degassing provisions reference the term LEL to determine compliance. We did not propose revisions to this term, but commenters provided feedback stating it was being misused.

Comments: Commenters stated that we were misusing the term LEL in certain rule language provisions for maintenance vents and storage vessel degassing (*e.g.,* 40 CFR 63.2450(v), 40 CFR 63.2470(f)). Commenters stated the LEL was a fixed physical property of a vapor mixture and thus does not change nor is it measured. It refers to a specific concentration value for a particular mixture. For example, commenters explained that, when opening a maintenance vent, the concentration of the vapor is measured and then compared to the LEL. The rule text incorrectly implied that the LEL of the vapor is measured. The commenters requested that the EPA clarify that the concentration of the vapors in equipment for maintenance vents (and the vapor space concentration for storage vessel degassing) must be less than 10 percent of the LEL and that facilities are to measure the concentration, not the LEL.

Response: We agree with commenters that the rule text referring to the LEL was used incorrectly for certain maintenance vent and storage vessel degassing provisions and that the LEL cannot be changed for a vapor. We are revising the rule text to be clear that facilities measure the vapor concentration and then compare that concentration value to the LEL of the vapor to determine if the concentration is less than 10 percent of the LEL.

Table 5. Summary of Revisions to 40 CFR Part 63, Subpart FFFF For Which the EPA Received No Comment

Provision	Issue summary	Final revision

40 CFR 63.2450(e)(6)(i)	Provision contains a typographical error.	The EPA is replacing the reference to 40 CFR 63.148(h)(3) with a reference to 40 CFR 63.148(i)(3) to correct the typographical error.
40 CFR 63.2450(e)(7)	A petitioner requested that the EPA clarify whether certain adsorber provisions referenced within 40 CFR 63.983 and other related requirements and exceptions (*i.e.,* 40 CFR 63.2470(c)(3), 40 CFR 63.2520(d)(6) and (e)(13), and 40 CFR 63.2525(o)) apply to this paragraph. The petitioner also pointed out that it is not clear whether a supplement to the notification of compliance status (NOCS) report is needed, and if necessary, what information should be provided.	The EPA is clarifying that 40 CFR 63.2470(c)(3), 40 CFR 63.2520(d)(6) and (e)(13), 40 CFR 63.2525(o), and the provisions referenced within 40 CFR 63.983 all apply (in addition to 40 CFR 63.2450(e)(4) and (e)(6)) if facilities reduce organic HAP emissions by venting emissions through a closed-vent system to an adsorber(s) that cannot be regenerated or a regenerative adsorber(s) that is regenerated offsite. We are also clarifying in 40 CFR 63.2450(e)(1) that 40 CFR 63.2450(e)(1) does not apply when complying with 40 CFR 63.2450(e)(7). As part of this clarification, we are also finalizing a new requirement at 40 CFR 63.2520(d)(6) for adsorbers subject to the requirements of 40 CFR 63.2450(e)(7) requiring a supplement to the NOCS report within 150 days after the first applicable compliance date. We are finalizing that the supplement to the NOCS report must describe whether the adsorber cannot be regenerated or is a regenerative adsorber(s) that is regenerated offsite; and specify the breakthrough limit and adsorber bed life that was established during the initial performance test or design evaluation of the adsorber. Finally, we are revising the introduction paragraph of 40 CFR

		63.2520 as well as the requirement in 40 CFR 63.2515(d) to update the reference to 40 CFR 63.2520(d)(6).
40 CFR 63.2460(c)(9)	Provision contains a typographical error.	The EPA is replacing the phrase "in paragraphs (c)(9)(i) through (vi) of this section" with "in paragraphs (c)(9)(i) through (iv) of this section" to correct the typographical error.
40 CFR 63.2480(a)	Provision contains a typographical error.	The EPA is replacing the phrase "For each light liquid pump, valve, and connector in ethylene oxide service" with "For each light liquid pump, pressure relief device, and connector in ethylene oxide service" to correct the typographical error.
40 CFR 63.2480(f)(18)(iii)	Provision contains a typographical error.	The EPA is replacing "§ 63.181(b)(2)(i)" with "§ 63.181(b)(3)(i)" to correct the typographical error.
40 CFR 63.2480(f)(18)(vi)	A petitioner contended that the reference to information required to be reported under 40 CFR 63.182(d)(2)(xiv) is too broad and should be more narrowly described as "information in § 63.165(a) required to be reported under 40 CFR 63.182(d)(2)(xiv)" in order to clarify that the reporting requirement is specific to the recently promulgated PRD requirements.	We agree with the petitioner that the provision should be revised to clarify that the reporting requirement is specific to the recently promulgated PRD requirements. Therefore, we are finalizing language that reads "The information in § 63.165(a) required to be reported under 40 CFR 63.182(d)(2)(xiv) is now required to be reported under § 63.2520(e)(15)(i) through (iii)."
40 CFR 63.2480(f)(18)(x)	Provision contains a typographical error.	The EPA is replacing "§ 63.1022(a)(1)(v)" with "§ 63.1023(a)(1)(v)" to correct the typographical error.
40 CFR 63.2480(f)(18)(xiii)	A petitioner contended that the reference to information required to be reported under 40 CFR 63.1039(b)(4) is too broad and should be more narrowly described as "information in § 63.1030(b)	We agree with the petitioner that the provision should be revised to clarify that the reporting requirement is specific to the recently promulgated PRD requirements. Therefore, we are

	required to be reported under 40 CFR 63.1039(b)(4)" in order to clarify that the reporting requirement is specific to the recently promulgated PRD requirements.	finalizing language that reads "The information in § 63.1030(b) required to be reported under 40 CFR 63.1039(b)(4) is now required to be reported under § 63.2520(e)(15)(i) and (ii)."
40 CFR 63.2493(b)(2)	A petitioner requested that the EPA include introductory language to clarify that the requirements apply only if the facility chooses to route emissions to a non-flare control device and chooses to comply with the 1 parts per million volume (ppmv) standard via continuous emission monitoring systems (CEMS).	We agree with the petitioner that 40 CFR 63.2493(b)(2) only applies if the facility chooses to route emissions to a non-flare control device and chooses to comply with the 1 ppmv standard via CEMS. Therefore, we are adding introductory text at 40 CFR 63.2493(b)(2) that clarifies this.
40 CFR 63.2493(d)(3)	A petitioner contended that the reference to "affected source" should be revised to "MCPU" to be consistent with the second column of Table 6 to Subpart FFFF of Part 63.	We agree with the petitioner to revise the provision for consistency with Table 6 to Subpart FFFF of part 63; therefore, we are replacing "affected source" with "MCPU".
40 CFR 63.2493(d)(4)(v)	Provision contains a typographical error.	The EPA is replacing "§ 63.2445(h)" with "§ 63.2445(i)" to correct the typographical error.
40 CFR 63.2520(d)	A petitioner pointed out that the EPA indicated in the preamble to the final rule (85 FR 49084; August 12, 2020) that electronic reporting is required at 40 CFR 63.2520(d) for the NOCS report; however, the final rule does not contain this requirement. The petitioner requested that the EPA clarify that this was a misstatement in the preamble language and that the NOCS report is not required to be submitted electronically.	We acknowledge there was an inconsistency in what we said in the preamble about electronic reporting NOCS reports versus what we required in the 2020 final rule. However, the inconsistency is irrelevant because in this rulemaking, we are finalizing at 40 CFR 63.2520(d) to require NOCS reports be submitted electronically through the EPA's CDX CEDRI. The requirement to submit NOCS reports electronically will increase the ease and efficiency of data submittal and data accessibility.
40 CFR 63.2525(o)	A petitioner requested that the EPA update the recordkeeping requirements for adsorbers that cannot be regenerated and for	In the 2020 final rule, we inadvertently did not revise the recordkeeping requirements to reflect the associated monitoring

	regenerative adsorbers that are regenerated offsite to reflect the monitoring requirements in the final rule (85 FR 49084; August 12, 2020). Specifically, the petitioner requested that the EPA revise 40 CFR 63.2525(o)(1) to require that you must keep records of the breakthrough limit and bed life for each adsorber established according to 40 CFR 63.2450(e)(7)(i); revise 40 CFR 63.2525(o)(2) to require that you keep records of each outlet HAP or TOC concentration measured according to 40 CFR 63.2450(e)(7)(ii) and (e)(7)(iii); and revise 40 CFR 2525(o)(3) to require records of the date and time each adsorber is replaced. The petitioner also requested the EPA remove the requirement at 40 CFR 63.2525(o)(4) in its entirety.	requirements in 40 CFR 63.2450(e)(7) (for adsorbers that cannot be regenerated and for regenerative adsorbers that are regenerated offsite). We are correcting this by revising 40 CFR 63.2525(o)(1) and (2) and removing the requirement at 40 CFR 63.2525(o)(4) in its entirety, as recommended by the petitioner. However, we are not revising 40 CFR 63.2525(o)(3) as requested by the petitioner. We are keeping the language of 40 CFR 63.2525(o)(3) as-is, which aligns with the language used in 40 CFR 63.2450(e)(7)(iii)(B).
40 CFR 63.2520(e)(2)	Provision contains a typographical error.	The EPA is correcting the spelling of "paragraph."
40 CFR 63.2450(e)(5)(iv), 63.2520(e), (f), (g), (h), and (i)	Provisions needing technical clarifications or removal.	The EPA is removing duplication and pointing directly to 40 CFR 63.9(k) when required to submit certain reports to CEDRI. Specifically, instructions for submitting reports electronically through CEDRI, including instructions for submitting CBI and asserting a claim of EPA system outage or *force majeure*, were recently added to 40 CFR 63.9(k) (85 FR 73885; November 19, 2020), therefore, text related to these requirements is no longer necessary in the MON.

F. Other Petroleum Refinery MACT 1 Technical Corrections and Clarifications

There are additional revisions that we are finalizing for the Petroleum Refinery MACT 1 to address other technical corrections and clarifications and to correct typographical errors. Refer to section III.C.4. of the preamble to the proposed rule for the additional details.[33]

Issue summary, pressure-assisted flares (40 CFR 63.641, 63.655, and 63.670): We proposed amendments to Petroleum Refinery MACT 1 that are consistent with flaring provisions in other recent rules (*i.e.,* EMACT standards) that adopted the Petroleum Refinery MACT 1 flare requirements but addressed additional issues, such as adding provisions for pressure-assisted flares. The proposed amendments include adding pressure-assisted flares to the definition of the term "flare" in 40 CFR 63.641 and adding appropriate requirements for pressure-assisted flares in 40 CFR 63.670. These amendments are consistent with the EPA's intention that all types of flares, including pressure-assisted flares, are covered by the provisions in Petroleum Refinery MACT 1. The proposed amendments for pressure-assisted flares include pilot flame standards and requirements for cross-lighting in 40 CFR 63.670(b), pressure monitoring in 40 CFR 63.670(d)(3), higher combustion zone operating limits in 40 CFR 63.670(e), and requirements to use only the direct calculation methods for determining the flare vent gas net heating value according to 40 CFR 63.670(l)(5)(ii). We also proposed reporting and recordkeeping requirements specific to pressure-assisted flares in 40 CFR 63.655(g)(11)(iii) and (i)(9)(vi), respectively.

Comment: Two commenters supported the proposed revisions for pressure-assisted flare requirements. A commenter stated the proposed revisions would reduce burden on the regulated

[33] 88 FR 25587 (Apr. 27, 2023).

facilities, permitting authorities, and the EPA. Another commenter requested clarification on whether existing AMELs would be affected and whether owners and operators could still request an AMEL in the future.

Response: The EPA acknowledges the commenters' support and we are finalizing the revisions as proposed. We confirm that owners and operators can still request an AMEL to demonstrate appropriate flare combustion efficiency, if so desired by an owner or operator. The proposed revisions did not impact the AMEL requirements of 40 CFR 63.670(r). We also confirm that existing AMELs are unaffected by the proposed revisions to the NESHAP requirements.

Topic summary, flare gas composition monitoring requirements (40 CFR 63.671): To provide additional flexibility to the monitoring requirements for flare gas composition as required by 40 CFR 63.670(j), we proposed to add mass spectrometry as a method in 40 CFR 63.671. The current provisions in 40 CFR 63.671 could be interpreted to suggest that gas chromatographs must be used for flare gas compositional analysis. This was not our intent. We recognize that there are some methods, like mass spectrometry, which can determine flare gas composition without the use of a gas chromatograph. We proposed to add specific requirements for calibration and operation of mass spectrometers that parallel the requirements for gas chromatographs.

Comment: One commenter provided specific rule text edits to multiple provisions within 40 CFR 63.671(e) and (f). The commenter recommended including language specific to "gas chromatograph" in 40 CFR 63.671(e); adding reference to the seven-day calibration error test period in 40 CFR 63.671(e)(4); stipulating that net heating value (NHV) calculations must use individual component properties in Table 12 to 40 CFR part 63, subpart CC in 63.671(e)(4)(ii);

removing “without the use of gas chromatography” in 40 CFR 63.671(f); adding specificity on using low, mid, and high-level calibration gas cylinders in 40 CFR 63.671(f)(2); and revising the calibration requirements for “net heaving value by mass spectrometer” in Table 13 to 40 CFR part 63, subpart CC.

Response: First, we noted that there was no difference between the regulatory language from the commenter and the proposed rule revisions for 40 CFR 63.671(e), therefore no changes were considered for this provision.

Next, we considered the commenter recommended revisions to 40 CFR 63.671(e)(4). It appears this suggested revision is intended to clarify that consistent with Performance Specification 9, an initial calibration error test must occur over a 7-day period followed by daily calibration with mid-level calibration standard for each analyte and quarterly performance audits. We have finalized clarifying language in 40 CFR 63.671(e)(4) consistent with our understanding of the commenter’s intent as follows, “The owner or operator must initially determine the average instrument calibration error the during the 7-Day Calibration Error Test Period and subsequently perform daily calibration and quarterly audits using either the compound-specific calibration error method provided in paragraph (i) of this section or using the NHV method provided in paragraph (ii) of this section.”

The commenter also suggested a clarifying edit to the definition of equation term “NHV measured” to specify that NHV calculations are to be made based on the individual component properties listed in Table 12. We find that the suggested edit improves clarity that the individual components and respective properties are contained in Table 12 to 40 CFR part 63, subpart CC, and have finalized this edit consistent with the commenter’s suggestion.

We are not finalizing any amendments to the proposed new introductory paragraph in 40 CFR 63.671(f) as per the commenter's recommendation to strike "without the use of gas chromatography." This language provides the clarification that the provisions in 40 CFR 63.671(f) are limited in applicability to continuous mass spectrometers that do not use gas chromatography. We are, however, finalizing the commenter's recommended revision to 40 CFR 63.671(f)(2) to add the characterizing language (*i.e.*, low-, mid-, high-) relative to the calibration gas cylinders as this language is consistent with Performance Specification 9 specific in sections 7.1.1-7.1.3.

Finally, we are finalizing the proposed amendments to Table 13 to 40 CFR part 63, subpart CC, as proposed, by cross referencing Performance Specification 9 rather than referring to the requirements in 40 CFR 63.671(e)(4) and (f). Performance Specification 9 includes additional requirements than are listed in 40 CFR 63.671(e)(4) and (f). For example, in section 10.2 of Performance Specification 9, if the instrument average response varies by more than 10 percent of the certified concentration value of the cylinder for an analyte, the owner or operator must immediately inspect the instrument making any necessary adjustments and conduct an initial multi-point calibration in accordance with section 10.1. We intended for affected sources to comply fully with the calibration and quality control requirements in Performance Specification 9 and thus are maintaining the cross reference in Table 13 to 40 CFR part 63, subpart CC.

Topic summary, Alternate Test Method for flare fuel measurements (40 CFR 63.671(e)): The EPA approved an Alternate Test Method to use NHV in place of component heat content (*i.e.*, British thermal units "BTU") for select quality control criteria in 40 CFR part 63, subpart

CC flare fuel measurements (herein referred to as ALT-131) in December 2018. See 84 FR 7363, 7364 (March 4, 2019).

Comment: The commenter requested that the EPA clarify whether the ability to use this approved Alternate Method 131 is affected by this rulemaking.

Response: We confirm that the approval of ALT-131 will be unaffected by this rulemaking and facilities can continue to utilize ALT-131 for compliance with flare measurement requirements in 40 CFR 63.671(e) and by reference, 40 CFR part 60, appendix B, Performance Specification 9 (PS 9) for determining NHV.

Topic summary, LEL clarification (40 CFR 63.643(c), 63.655(g)(13), 63.655(i)(12)): Maintenance vent provisions reference the term LEL to determine compliance. We did not propose revisions to this term but commenters provided feedback stating it was being misused.

Comments: Commenters stated that we were misusing the term LEL in certain rule language provisions for maintenance vents (*e.g.,* 40 CFR 63.643(c)(1)). Commenters stated the LEL was a fixed physical property of a vapor mixture and thus does not change nor is it measured. It refers to a specific concentration value for a particular mixture. For example, when opening a maintenance vent, commenters elaborated that you measure the concentration of the vapor and then you can compare that concentration to the LEL. The rule text incorrectly implied that the LEL of the vapor is measured. The commenters requested that the EPA clarify that the concentration of the vapors in equipment for maintenance vents must be less than 10 percent of the LEL and that facilities are to measure the concentration, not the LEL.

Response: We agree with commenters that the rule text referring to the LEL was used incorrectly for certain maintenance vent and storage vessel degassing provisions and that the LEL cannot be changed for a vapor. We are revising the rule text to be clear that facilities

measure the vapor concentration and then compare that concentration value to the LEL of the vapor to determine if the concentration is less than 10 percent of the LEL.

G. What compliance dates are we finalizing?

We are finalizing new compliance dates for certain revisions to the EMACT standards, OLD NESHAP, MON, and Petroleum Refinery MACT 1. We did not propose new compliance dates for the EMACT standards, OLD NESHAP, and MON because the rules that were promulgated in 2020 had still not come into full effect at the time of proposal in April 2023. The compliance dates were also not stayed as part of this reconsideration action. The compliance dates for the 2020 rules have now passed and owners and operators must have been complying with the EMACT standards by July 6, 2023, the OLD NESHAP by July 7, 2023, and the MON by August 12, 2023. Most of the revisions we are finalizing do not impose substantial new requirements, but rather either provide clarity to the rules for owners and operators or are alternative requirements. As such, we are providing new compliance dates for the EMACT standards, OLD NESHAP, and MON for revisions related to the removal of the *force majeure* provisions only and are not changing the compliance dates for any other revisions to these rules.

For the removal of the *force majeure* provisions from the PRD and emergency flaring work practice standards for each rule and for most actions that we are finalizing for the Petroleum Refinery MACT 1, we are positing that facilities would need some time to successfully accomplish these revisions, including time to read and understand the amended rule requirements; to evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown, as defined in the rule; and to make any necessary adjustments, including adjusting standard operating procedures and converting reporting mechanisms to install necessary hardware and software. The EPA recognizes the confusion that multiple

compliance dates for individual requirements would create and the additional burden such an assortment of dates would impose. From our assessment of the timeframe needed for compliance with the revised requirements, the EPA considers a period of 60 days after the effective date of the final rule to be the most expeditious compliance period practicable. Therefore, for the EMACT Standards, OLD NESHAP, MON, and Petroleum Refinery MACT 1, we are finalizing that the *force majeure* provisions shall be fully removed from the PRD and emergency flaring work practice standards as of 60 days after the effective date of the final rule. For the Petroleum Refinery MACT 1, we are also finalizing that affected sources must be in compliance with most other revisions upon initial startup or within 60 days of the effective date of the final rule, whichever is later.

We are finalizing that petroleum refinery owners or operators may comply with the new operating and monitoring requirements for flares upon initial startup or by the effective date of the final rule, whichever is later. We believe that compliance with the flare requirements immediately upon finalizing the rule is necessary to ensure that pressure-assisted flares are appropriately operated.

IV. Summary of Cost, Environmental and Economic Impacts

A. What are the affected facilities?

In our final RTRs, we estimated the following:

There are 26 facilities subject to the EMACT standards that are currently operating and five additional facilities under construction. A complete list of known facilities in the EMACT standards is available in Appendix A of the memorandum, *Review of the RACT/BACT/LAER Clearinghouse Database for the Ethylene Production Source Category* (see Docket Item No. EPA-HQ-OAR-2017-0357-0008 in the EMACT RTR docket).

There are 173 OLD NESHAP facilities currently operating and four additional OLD NESHAP facilities under construction. A complete list of known OLD NESHAP facilities is available in Appendix A of the memorandum, *National Impacts of the 2020 Risk and Technology Review Final Rule for the Organic Liquids Distribution (Non-Gasoline) Source Category* (see Docket Item No. EPA-HQ-OAR-2018-0746-0069 in the OLD NESHAP RTR docket).

There are 201 MON facilities currently operating. A complete list of known MON facilities is available in Appendix 1 of the memorandum, *Residual Risk Assessment for the Miscellaneous Organic Chemical Manufacturing Source Category in Support of the 2019 Risk and Technology Review Proposed Rul*e (see Docket Item No. EPA-HQ-OAR-2018-0746-0011 in the MON RTR docket).

Additionally, based on the Energy Information Administration's 2021 Refinery Capacity Report, there are 129 operable petroleum refineries in the United States (U.S.) and the U.S. territories, all of which are expected to be major sources of HAP emissions.

B. What are the air quality impacts?

We did not estimate baseline emissions or emissions reductions for the revisions. None of the revisions have a direct and quantifiable impact on emissions because they are minor revisions to existing requirements.

C. What are the cost impacts?

We expect minimal to no cost impacts due to the revisions. There could be minor costs for affected facilities related to reading the rule, making minor updates to operating procedures in some limited cases, and making minor adjustments to reporting systems. A few revisions provide slightly greater flexibility and could yield minor cost savings. Any potential costs or cost savings are expected to be negligible.

D. What are the economic impacts?

No economic impacts are anticipated due to the revisions because any potential cost impacts are expected to be very minor.

E. What are the benefits?

The proposed revisions are not expected to yield air quality benefits because emissions will not be affected. However, the revisions should improve clarity, monitoring, compliance, and implementation of the rules for the affected source categories.

F. What analysis of environmental justice did we conduct?

The revisions are not expected to impact emissions and therefore we did not conduct an environmental justice analysis. However, environmental justice analyses were conducted for the final 2020 rules for the EMACT standards, OLD NESHAP, and MON.[34]

V. Statutory and Executive Order Reviews

Additional information about these statutes and Executive orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders*.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 14094: Modernizing Regulatory Review

This action is not a significant regulatory action as defined in Executive Order 12866, as amended by Executive Order 14094, and was therefore not subject to a requirement for Executive Order 12866 review.

[34] 85 FR 40415 (Jul. 6, 2020); 85 FR 40757 (Jul. 7, 2020); and 85 FR 49129 (Aug. 12, 2020).

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA for the EMACT standards, OLD NESHAP, MON, or the Petroleum Refinery MACT 1. We finalized certain technical revisions, including new electronic reporting provisions for the PRD and emergency flaring work practice standard, but the technical revisions do not result in changes to the information collection burden. The final amendments require facilities to submit the work practice related data using an EPA provided spreadsheet template electronically through CDX using CEDRI. These data would not be expected to also be included in a facility's submission to the delegated State authority and/or EPA Regional Office such that no duplication is expected. The amendments to the mode of reporting of the work practice standard-related data are not expected to change the current burden under the PRA and we did not revise the information collection request (ICR) for the rules. The Office of Management and Budget (OMB) has previously approved the information collection activities contained in the existing regulations at 40 CFR part 63, subpart YY and has assigned OMB control number 2060-0489; 40 CFR part 63, subpart EEEE and has assigned OMB control number 2060-0539; 40 CFR part 63, subpart FFFF and has assigned OMB control number 2060-0533; and 40 CFR part 63, subpart CC and has assigned OMB control number 2060-0340.

C. 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 already identified in the 2020 final rules for the EMACT standards, OLD NESHAP, MON, and the 2015 final rule for Petroleum Refineries. The amendments to 40 CFR part 63, subparts CC, YY, EEEE, and FFFF would only minimally change the existing requirements for

all entities. There could be minor costs for affected facilities related to reading the final rule, making minor updates to operating procedures in some limited cases, and making minor adjustments to reporting systems. A few revisions provide slightly greater flexibility and could yield minor cost savings. Any potential costs or cost savings are negligible.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. While this action creates an enforceable duty on the private sector, the annual cost does not exceed $100 million or more.

E. Executive Order 13132: Federalism

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

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have Tribal implications as specified in Executive Order 13175. It will not have substantial new direct effects on Tribal governments, on the relationship between the Federal Government and Indian Tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.

G. 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.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR part 51

This rulemaking involves technical standards. The EPA has decided to use Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3B, 4, 5, 18, 21, 22, 25, 25A, 27, and 29 of 40 CFR part 60, appendix A; 301, 316, and 320 of 40 CFR part 63, appendix A; and 602 and 624 of 40 CFR part 136, appendix A.

While the EPA identified candidate VCS as being potentially applicable, the Agency decided not to use the VCS identified. The use of voluntary consensus standards for measuring emissions of pollutants or their surrogates subject to emission standards in the rule would not be practical due to lack of equivalency, documentation, validation data and other important technical and policy considerations. Additional information for the VCS search and determinations can be found in the memorandum, *Voluntary Consensus Standard Results for National Emission Standards for Hazardous Air Pollutants: for Ethylene Production, Miscellaneous Organic Chemical Manufacturing, Organic Liquids Distribution (Non-Gasoline), and Petroleum Refineries*, which is available in the docket for this action.

The following standards appear in the amendatory text of this document and were previously approved for the locations in which they appear: SW-846-5031, SW-846-8260D, and SW-846-5030B.J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and Executive Order 14096: Revitalizing our Nation's Commitment to Environmental Justice for All

The EPA believes that this type of action does not concern human health or environmental conditions and therefore cannot be evaluated with respect to potentially disproportionate and adverse effects on communities with environmental justice concerns. As discussed in section IV.F. of this preamble, the revisions are not expected to impact emissions, and thus, no changes to human health or environmental conditions are expected.

Although this action does not concern human health or environmental conditions, the EPA identified and addressed environmental justice concerns when conducting analyses for the final 2020 rules for the EMACT standards, OLD NESHAP, and MON. Further information regarding these environmental justice analyses is available at 85 FR 40415 (July 6, 2020), 85 FR 40757 (July 7, 2020), and 85 FR 49129 (August 12, 2020), respectively.

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, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

Dated:

Michael S. Regan,
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 CC—National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

2. Amend § 63.641 by revising the entry "Flare" to read as follows:

§ 63.641 Definitions.

* * * * *

Flare means a combustion device lacking an enclosed combustion chamber that uses an uncontrolled volume of ambient air to burn gases. For the purposes of this rule, the definition of flare includes, but is not necessarily limited to, pressure-assisted flares, air-assisted flares, steam-assisted flares, and non-assisted flares.

* * * * *

3. Amend § 63.643 by revising paragraphs (c)(1)(i), (c)(1)(ii), (c)(1)(iv), and (c)(2) to read as follows:

§ 63.643 Miscellaneous process vent provisions.

* * * * *

(c) * * *

(1) * * *

(i) The concentration of the vapor in the equipment served by the maintenance vent is less than 10 percent of its lower explosive limit (LEL).

(ii) If there is no ability to measure the concentration of the vapor in the equipment based on the design of the equipment, the pressure in the equipment served by the maintenance vent is reduced to 5 pounds per square inch gauge (psig) or less. Upon opening the maintenance vent, active purging of the equipment cannot be used until the concentration of the vapors in the maintenance vent (or inside the equipment if the maintenance is a hatch or similar type of opening) is less than 10 percent of its LEL.

* * * * *

(iv) If the maintenance vent is associated with equipment containing pyrophoric catalyst (e.g., hydrotreaters and hydrocrackers) and a pure hydrogen supply is not available at the equipment at the time of the startup, shutdown, maintenance, or inspection activity, the concentration of the vapor in the equipment must be less than 20 percent of its LEL, except for one event per year not to exceed 35 percent of its LEL.

* * * * *

(2) Except for maintenance vents complying with the alternative in paragraph (c)(1)(iii) of this section, the owner or operator must determine the concentration of the vapor or, if applicable, equipment pressure using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications.

* * * * *

4. Amend § 63.648 by revising paragraphs (j)(3)(iv), (j)(3)(v)(B), (j)(3)(v)(C), (j)(6) introductory text, and (j)(6)(ii) to read as follows:

§ 63.648 Equipment leak standards.

* * * * *

(j) * * *

(3) * * *

(iv) The owner or operator shall determine the total number of release events that occurred during the calendar year for each affected pressure relief device separately. Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the owner or operator shall also determine the total number of release events for each pressure relief device for which the root cause analysis concluded that the root cause was a force majeure event, as defined in this subpart.

(v) * * *

(B) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a second release event not including force majeure events from a single pressure relief device in a 3 calendar year period for the same root cause for the same equipment. On and after **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a second release event from a single pressure relief device in a 3 calendar year period for the same root cause for the same equipment.

(C) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a third release event not including force majeure events from a single pressure relief device in a 3 calendar year period for any reason. On and after **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a third release event from a single pressure relief device in a 3 calendar year period for any reason.

* * * * *

(6) ***Root cause analysis and corrective action analysis***. A root cause analysis and corrective action analysis must be completed as soon as possible, but no later than 45 days after a release event. Special circumstances affecting the number of root cause analyses and/or corrective action analyses are provided in paragraphs (j)(6)(i) through (iii) of this section.

* * * * *

(ii) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you may conduct a single root cause analysis and corrective action analysis for a single emergency event that causes two or more pressure relief devices to release, regardless of the equipment served, if the root cause is reasonably expected to be a force majeure event, as defined in this subpart.

* * * * *

5. Amend § 63.655 by:

a. Revising paragraphs (g) introductory text, (g)(10) introductory text, (g)(10)(iv), (g)(11) introductory text, (g)(11)(iii), (g)(11)(iv), and (g)(13)(iii);

b. Adding paragraph (i)(9)(vi); and

c. Revising paragraphs (i)(11)(ii), (i)(12)(ii), (i)(12)(iii), (i)(12)(v), and (i)(12)(vi).

The addition and revisions read as follows:

§ 63.655 Reporting and recordkeeping requirements.

* * * * *

(g) The owner or operator of a source subject to this subpart shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the information specified in paragraphs (g)(1) through (7) of this section or paragraphs (g)(9) through (14) of this section is collected. The first 6-month period shall begin on the date the Notification of

Compliance Status report is required to be submitted. A Periodic Report is not required if none of the events identified in paragraphs (g)(1) through (7) of this section or paragraphs (g)(9) through (14) of this section occurred during the 6-month period unless emissions averaging is utilized. Quarterly reports must be submitted for emission points included in emission averages, as provided in paragraph (g)(8) of this section. An owner or operator may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph (g) if the reports contain the information required by paragraphs (g)(1) through (14) of this section. The Periodic Report must contain company identifier information (including the company name and address), the beginning and ending dates of the time period covered by the report, and the information specified in paragraphs (g)(1) through (14) of this section, and it must be submitted in accordance with § 63.10(a) of this part. On or after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, upon initial startup, or once the form has been available on the CEDRI website for six months, whichever date is later, owners or operators must submit all subsequent Periodic Reports in accordance with § 63.10(a) of this part except for the items in paragraphs (g)(10)(iv) and (11)(iv) of this section. The items in paragraphs (g)(10)(iv) and (11)(iv) of this section must be submitted 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), except any medium submitted through mail must be sent to the attention of the Refinery Sector lead. 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.

* * * * *

(10) For pressure relief devices subject to the requirements § 63.648(j), Periodic Reports must include the information specified in paragraphs (g)(10)(i) through (iv) of this section. Owners or operators must submit the Periodic Report in accordance with § 63.10(a) of this part. On or after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** or once the report template for this subpart has been available on the CEDRI website for six months, whichever date is later, owners or operators must submit subsequent Periodic Reports in accordance with § 63.10(a) of this part except for the items in paragraph (iv) of this section. The items in paragraph (iv) of this section must be submitted using the appropriate electronic report template on the CEDRI website for this subpart and following the procedures specified in § 63.9(k), except any medium submitted through mail must be sent to the attention of the Refinery Sector lead. 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.

* * * * *

(iv) For each pressure release to the atmosphere during the reporting period from a pressure relief device in organic HAP service subject to § 63.648(j)(3), report the following information:

(A) Pressure relief device identification name or number.

(B) The start time and date of the pressure release.

(C) The duration of the pressure release (in hours).

(D) An estimate of the mass quantity of each organic HAP released (in pounds).

(E) 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.

(11) For flares subject to § 63.670, Periodic Reports must include the information specified in paragraphs (g)(11)(i) through (iv) of this section. Owners or operators must submit the Periodic Report in accordance with § 63.10(a) of this part. On or after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** or once the report template for this subpart has been available on the CEDRI website for six months, whichever date is later, owners or operators must submit subsequent Periodic Reports in accordance with § 63.10(a) of this part except for the items in paragraph (iv) of this section. The items in paragraph (iv) of this section must be submitted using the appropriate electronic report template on the CEDRI website and following the procedures specified in § 63.9(k), except any medium submitted through mail must be sent to the attention of the Refinery Sector lead. 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.

* * * * *

(iii) The 15-minute block periods for which the applicable operating limits specified in § 63.670(d) through (f) are not met. Indicate the date and time for the period, the type of deviation (e.g., flare tip velocity, valve position for pressure-assisted flares, combustion zone net heating value, or net heating value dilution parameter) and the flare tip velocity, if applicable, and the net

heating value operating parameter(s) determined following the methods in § 63.670(k) through (n) as applicable.

(iv) An indication whether there were any flaring events meeting the criteria in § 63.670(o)(3) that occurred during the reporting period. If there were flaring events meeting the criteria in § 63.670(o)(3), report the following information for each such flaring event:

(A) Flare identification name or number.

(B) The type of flaring event.

(C) The start and stop time and date of the flaring event.

(D) The length of time (in minutes) for which emissions were visible from the flare during the event.

(E) The periods of time that the flare tip velocity exceeds the maximum flare tip velocity determined using the methods in § 63.670(d)(2) and the maximum 15-minute block average flare tip velocity recorded during the event.

(F) Results of the root cause and corrective actions 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.

* * * * *

(13) * * *

(iii) The lower explosive limit, vessel pressure, or mass of VOC in the equipment, as applicable, at the start of atmospheric venting. If the 5 psig vessel pressure option in § 63.643(c)(1)(ii) was used and active purging was initiated while the concentration of the vapors

was 10 percent or greater of its LEL, also include the concentration of the vapors at the time active purging was initiated.

* * * * *

(i) * * *

(9) * * *

(vi) On and after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for pressure-assisted flares, retain records of pressure and valve positions as required in § 63.670(d)(3) for a minimum of 2 years, records of when valve position was not correct for measured pressure for 5 years, and records of a cross-light performance demonstration as specified in § 63.670(b)(2) for 5 years.

* * * * *

(11) * * *

(ii) Records of the number of releases during each calendar year and, prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the number of those releases for which the root cause was determined to be a force majeure event. Keep these records for the current calendar year and the past five calendar years.

* * * * *

(12) * * *

(ii) If complying with the requirements of § 63.643(c)(1)(i) and the concentration of the vapor at the time of the vessel opening exceeds 10 percent of its LEL, identification of the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, and the concentration of the vapor at the time of the vessel opening.

(iii) If complying with the requirements of § 63.643(c)(1)(ii) and either the vessel pressure at the time of the vessel opening exceeds 5 psig or the concentration of the vapor at the time of the active purging was initiated exceeds 10 percent of its LEL, identification of the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, the pressure of the vessel or equipment at the time of discharge to the atmosphere and, if applicable, the concentration of the vapors in the equipment when active purging was initiated.

* * * * *

(v) If complying with the requirements of § 63.643(c)(1)(iv), identification of the maintenance vent, the process units or equipment associated with the maintenance vent, records documenting the lack of a pure hydrogen supply, the date of maintenance vent opening, and the concentration of the vapors in the equipment at the time of discharge to the atmosphere for each applicable maintenance vent opening.

(vi) If complying with the requirements of § 63.643(c)(1)(v), identification of the maintenance vent, the process units or equipment associated with the maintenance vent, records documenting actions taken to comply with other applicable alternatives and why utilization of this alternative was required, the date of maintenance vent opening, the equipment pressure and concentration of the vapors in the equipment at the time of discharge, an indication of whether active purging was performed and the pressure of the equipment during the installation or removal of the blind if active purging was used, the duration the maintenance vent was open during the blind installation or removal process, and records used to estimate the total quantity of VOC in the equipment at the time the maintenance vent was opened to the atmosphere for each applicable maintenance vent opening.

6. Amend § 63.670 by:

a. Revising paragraphs (b) and (d) introductory text;

b. Adding new paragraph (d)(3);

c. Revising paragraphs (e), (l)(5) introductory text, (o)(4)(iv), (o)(6), and (o)(7)(ii) through (o)(7)(v).

The addition and revisions read as follows:

§ 63.670 Requirements for flare control devices.

* * * * *

(b) ***Pilot flame presence***. The owner or operator shall operate each flare with a pilot flame present on an individual burner or stage of burners at all times when regulated material is routed to the flare. Each 15-minute block during which there is at least one minute where no pilot flame on an individual burner or stage of burners is present when regulated material is routed to the flare is a deviation of the standard. Deviations in different 15-minute blocks from the same event are considered separate deviations. The owner or operator shall monitor for the presence of a pilot flame on an individual burner or stage of burners as specified in paragraph (g) of this section. Beginning on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, pressure-assisted flares using stages of burners that cross-light must also comply with (b)(1) and (2) of this section.

(1) Each stage of burners that cross-lights in the pressure-assisted flare must have at least two pilots with at least one continuously lit and capable of igniting all regulated material that is routed to that stage of burners.

(2) Unless the owner or operator of a pressure-assisted flare chooses to conduct a cross-light performance demonstration as specified in this paragraph, the owner or operator must

ensure that if a stage of burners on the flare uses cross-lighting, that the distance between any two burners in series on that stage is no more than 6 feet when measured from the center of one burner to the next burner. A distance greater than 6 feet between any two burners in series may be used provided the owner or operator complies with the requirements in paragraphs (b)(2)(i) through (iii) of this section.

(i) You must conduct a performance demonstration that confirms the pressure-assisted flare will cross-light a minimum of three burners and the spacing between the burners and location of the pilot flame must be representative of the projected installation.

(ii) The compliance demonstration must be approved by the permitting authority and a copy of this approval must be maintained onsite.

(iii) The compliance demonstration report must include the information in paragraphs (b)(2)(iii)(A) through (K) of this section.

(A) A protocol describing the test methodology used, associated test method QA/QC parameters.

(B) The waste gas composition and NHVcz of the gas tested.

(C) The velocity of the waste gas tested.

(D) The pressure-assisted multi-point flare burner tip pressure.

(E) The time, length, and duration of the test.

(F) Records of whether a successful cross-light was observed over all of the burners and the length of time it took for the burners to cross-light.

(G) Records of maintaining a stable flame after a successful cross-light and the duration for which this was observed.

(H) Records of any smoking events during the cross-light.

(I) Waste gas temperature.

(J) Meteorological conditions (*e.g.,* ambient temperature, barometric pressure, wind speed and direction, and relative humidity) during the demonstration.

(K) An indication whether there were any observed flare flameouts and if so, the number and duration of each flare flameout.

* * * * *

(d) ***Flare tip velocity***. Except as provided in paragraph (d)(3) of this section for pressure-assisted flares, for each flare, the owner or operator shall comply with either paragraph (d)(1) or (2) of this section, provided the appropriate monitoring systems are in-place, whenever regulated material is routed to the flare for at least 15-minutes and the flare vent gas flow rate is less than the smokeless design capacity of the flare.

* * * * *

(3) Pressure-assisted flares are not subject to the flare tip velocity limits in either paragraph (d)(1) or (2) of this section. In lieu of the flare tip velocity limits, beginning on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the owner or operator of a pressure-assisted flare must install and operate pressure monitor(s) on the main flare header, as well as a valve position indicator monitoring system for each staging valve to ensure that the flare operates within the proper range of conditions as specified by the manufacturer. The pressure monitor must meet the requirements in Table 13 of this subpart.

(e) ***Combustion zone operating limits.*** The owner or operator shall operate the flare to maintain the net heating value of flare combustion zone gas (NHV_{cz}) at or above the applicable limits in paragraphs (e)(1) and (2) of this section determined on a 15-minute block period basis

when regulated material is routed to the flare for at least 15-minutes. The owner or operator shall monitor and calculate NHV_{cz} as specified in paragraph (m) of this section.

(1) For all flares other than pressure-assisted flares, 270 British thermal units per standard cubic feet (Btu/scf).

(2) Beginning on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for each pressure-assisted flare, 800 Btu/scf.

* * * * *

(l) * * *

(5) When a continuous monitoring system is used as provided in paragraph (j)(1) or (3) of this section and, if applicable, paragraph (j)(4) of this section, the owner or operator of a flare other than a pressure-assisted flare may elect to determine the 15-minute block average NHV_{vg} using either the calculation methods in paragraph (l)(5)(i) of this section or the calculation methods in paragraph (l)(5)(ii) of this section. The owner or operator may choose to comply using the calculation methods in paragraph (l)(5)(i) of this section for some non-pressure-assisted flares at the petroleum refinery and comply using the calculation methods (l)(5)(ii) of this section for other flares. However, for each non-pressure-assisted flare, the owner or operator must elect one calculation method that will apply at all times, and use that method for all continuously monitored flare vent streams associated with that flare. If the owner or operator intends to change the calculation method that applies to a flare, the owner or operator must notify the Administrator 30 days in advance of such a change. For pressure-assisted flares, beginning on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the owner or operator must use the calculation method in paragraph (l)(5)(ii) of this section.

* * * * *

(o) * * *

(4) * * *

(iv) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you may conduct a single root cause analysis and corrective action analysis for a single event that causes two or more flares to have a flow event meeting the criteria in paragraph (o)(3)(i) or (ii) of this section, regardless of the configuration of the flares, if the root cause is reasonably expected to be a force majeure event, as defined in this subpart.

* * * * *

(6) The owner or operator shall determine the total number of events for which a root cause and corrective action analyses was required during the calendar year for each affected flare separately for events meeting the criteria in paragraph (o)(3)(i) of this section and those meeting the criteria in paragraph (o)(3)(ii) of this section. For the purpose of this requirement, a single root cause analysis conducted for an event that met both of the criteria in paragraphs (o)(3)(i) and (ii) of this section would be counted as an event under each of the separate criteria counts for that flare. Additionally, if a single root cause analysis was conducted for an event that caused multiple flares to meet the criteria in paragraph (o)(3)(i) or (ii) of this section, that event would count as an event for each of the flares for each criteria in paragraph (o)(3) of this section that was met during that event. Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the owner or operator shall also determine the total number of events for which a root cause and correct action analyses was required and the analyses concluded that the root cause was a force majeure event, as defined in this subpart.

(7) * * *

(ii) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, two visible emissions exceedance events meeting the criteria in paragraph (o)(3)(i) of this section that were not caused by a force majeure event from a single flare in a 3 calendar year period for the same root cause for the same equipment. On and after **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, two visible emissions exceedance events meeting the criteria in paragraph (o)(3)(i) of this section from a single flare in a 3 calendar year period for the same root cause for the same equipment.

(iii) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, two flare tip velocity exceedance events meeting the criteria in paragraph (o)(3)(ii) of this section that were not caused by a force majeure event from a single flare in a 3 calendar year period for the same root cause for the same equipment. On and after **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, two flare tip velocity exceedance events meeting the criteria in paragraph (o)(3)(ii) of this section from a single flare in a 3 calendar year period for the same root cause for the same equipment.

(iv) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, three visible emissions exceedance events meeting the criteria in paragraph (o)(3)(i) of this section that were not caused by a force majeure event from a single flare in a 3 calendar year period for any reason. On and after **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, three visible emissions exceedance events meeting the criteria in paragraph (o)(3)(i) of this section from a single flare in a 3 calendar year period for any reason.

(v) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, three flare tip velocity exceedance events meeting the criteria in paragraph (o)(3)(ii) of this section that were not caused by a force majeure event from a single flare in a 3 calendar year period for any reason. On and after **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, three flare tip velocity exceedance events meeting the criteria in paragraph (o)(3)(ii) of this section from a single flare in a 3 calendar year period for any reason.

* * * * *

7. Amend § 63.671 by:

a. Revising paragraph (e) introductory text; and

b. Adding paragraphs (e)(4) and (f).

The additions and revision read as follows:

§ 63.671 Requirements for flare monitoring systems.

* * * * *

(e) ***Additional requirements for gas chromatographs.*** For monitors used to determine compositional analysis for net heating value per § 63.670(j)(1) that include a gas chromatograph, the gas chromatograph must also meet the requirements of paragraphs (e)(1) through (4) of this section.

* * * * *

(4) Beginning on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the owner or operator must initially determine the average instrument calibration error during the Seven (7)-Day Calibration Error Test Period and subsequently perform daily calibration and quarterly audits using either the compound-specific calibration error (CE) method

provided in paragraph (i) of this section or using the net heating value (NHV) method provided in paragraph (ii) of this section.

(i) The average instrument CE for each calibration compound at any calibration concentration must not differ by more than 10 percent from the certified cylinder gas value. The CE for each component in the calibration blend must be calculated using the following equation:

Where:

$$CE = \frac{C_m - C_a}{C_a} \times 100$$

Where:

C_m = Average instrument response (ppm).

C_a = Certified cylinder gas value (ppm).

(ii) The CE for NHV at any calibration level must not differ by more than 10 percent from the certified cylinder gas value. The CE for must be calculated using the following equation:

$$CE = \frac{NHV_{measured} - NHV_a}{NHV_a} \times 100$$

Where:

$NHV_{measured}$ = Average instrument response (Btu/scf). NHV calculations must be based on the individual component properties in table 12 of this subpart.

NHV_a = Certified cylinder gas value (Btu/scf).

(f) ***Additional requirements for continuous process mass spectrometers.*** Beginning on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for continuous process mass spectrometers used to determine compositional analysis for net heating value per §

63.670(j)(1) without the use of gas chromatography, the continuous process mass spectrometer must also meet the requirements of paragraphs (f)(1) through (7) of this section.

(1) You must meet the calibration gas requirements in paragraph (e)(2) of this section. You may augment the minimum list of calibration gas components found in paragraph (e)(2) of this section with compounds found during a pre-survey or known to be in the gas through process knowledge.

(2) Calibration gas cylinders (*i.e.*, low-, mid-, and high-levels) must be certified to an accuracy of 2 percent and traceable to National Institute of Standards and Technology (NIST) standards.

(3) For unknown gas components that have similar analytical mass fragments to calibration compounds, you may report the unknowns as an increase in the overlapped calibration gas compound. For unknown compounds that produce mass fragments that do not overlap calibration compounds, you may use the response factor for the nearest molecular weight hydrocarbon in the calibration mix to quantify the unknown component's net heating value of flare vent gas (NHV_{vg}).

(4) You may use the response factor for n-pentane to quantify any unknown components detected with a higher molecular weight than n-pentane.

(5) You must perform an initial calibration to identify mass fragment overlap and response factors for the target compounds.

(6) You must meet applicable requirements in Table 13 of this subpart for Net Heating Value by Mass Spectrometer.

(7) The owner or operator must estimate the instrument calibration error in accordance with paragraph (e)(4) of this section.

8. Amend appendix to subpart CC of part 63 by revising table 13 to read as follows:

Appendix to Subpart CC of Part 63-Tables

* * * * *

Table 13–Calibration and Quality Control Requirements for CPMS

Parameter	**Minimum accuracy requirements**	**Calibration requirements**
Temperature	±1 percent over the normal range of temperature measured, expressed in degrees Celsius (C), or 2.8 degrees C, whichever is greater	Conduct calibration checks at least annually; conduct calibration checks following any period of more than 24 hours throughout which the temperature exceeded the manufacturer's specified maximum rated temperature or install a new temperature sensor.
		At least quarterly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion, unless the CPMS has a redundant temperature sensor.
		Record the results of each calibration check and inspection.
		Locate the temperature sensor in a position that provides a representative temperature; shield the temperature sensor system from electromagnetic interference and chemical contaminants.
Flow Rate for All Flows Other Than Flare Vent Gas	±5 percent over the normal range of flow measured or 1.9 liters per minute (0.5 gallons per minute), whichever is greater, for liquid flow	Conduct a flow sensor calibration check at least biennially (every two years); conduct a calibration check following any period of more than 24 hours throughout which the flow rate exceeded the manufacturer's specified maximum rated flow rate or install a new flow sensor.

Parameter	Minimum accuracy requirements	Calibration requirements
	±5 percent over the normal range of flow measured or 280 liters per minute (10 cubic feet per minute), whichever is greater, for gas flow	At least quarterly, inspect all components for leakage, unless the CPMS has a redundant flow sensor.
	±5 percent over the normal range measured for mass flow	Record the results of each calibration check and inspection.
		Locate the flow sensor(s) and other necessary equipment (such as straightening vanes) in a position that provides representative flow; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.
Flare Vent Gas Flow Rate	±20 percent of flow rate at velocities ranging from 0.03 to 0.3 meters per second (0.1 to 1 feet per second)	Conduct a flow sensor calibration check at least biennially (every two years); conduct a calibration check following any period of more than 24 hours throughout which the flow rate exceeded the manufacturer's specified maximum rated flow rate or install a new flow sensor.
	±5 percent of flow rate at velocities greater than 0.3 meters per second (1 feet per second)	At least quarterly, inspect all components for leakage, unless the CPMS has a redundant flow sensor.
		Record the results of each calibration check and inspection.
		Locate the flow sensor(s) and other necessary equipment (such as straightening vanes) in a position that provides representative flow; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.
Pressure	±5 percent over the normal operating range or 0.12 kilopascals (0.5 inches of water column), whichever is greater	Review pressure sensor readings at least once a week for straightline (unchanging) pressure and perform corrective action to ensure proper pressure sensor operation if blockage is indicated.

Parameter	Minimum accuracy requirements	Calibration requirements
		Using an instrument recommended by the sensor's manufacturer, check gauge calibration and transducer calibration annually; conduct calibration checks following any period of more than 24 hours throughout which the pressure exceeded the manufacturer's specified maximum rated pressure or install a new pressure sensor.
		At least quarterly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage, unless the CPMS has a redundant pressure sensor.
		Record the results of each calibration check and inspection.
		Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure and minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.
Net Heating Value by Calorimeter	±2 percent of span	Specify calibration requirements in your site specific CPMS monitoring plan. Calibration requirements should follow manufacturer's recommendations at a minimum.
		Temperature control (heated and/or cooled as necessary) the sampling system to ensure proper year-round operation.
		Where feasible, select a sampling location at least two equivalent diameters downstream from and 0.5 equivalent diameters upstream from the nearest disturbance. Select the sampling location at least two equivalent duct diameters from the nearest control device, point of pollutant generation, air in-leakages, or other point at which a change in the pollutant concentration or emission rate occurs.

Parameter	Minimum accuracy requirements	Calibration requirements
Net Heating Value by Gas Chromatograph	As specified in Performance Specification 9 of 40 CFR part 60, appendix B	Follow the procedure in Performance Specification 9 of 40 CFR part 60, appendix B, except that a single daily mid-level calibration check can be used (rather than triplicate analysis), the multi-point calibration can be conducted quarterly (rather than monthly), and the sampling line temperature must be maintained at a minimum temperature of 60 °C (rather than 120 °C).
Net Heating Value by Mass Spectrometer	As specified in Performance Specifications 9 of 40 CFR part 60, appendix B	Follow the procedure in Performance Specification 9 of 40 CFR part 60, appendix B, including performing an initial multi-point calibration check at three concentrations following the procedure in section 10.1 of Performance Specification 9, except that the multi-point calibration can be conducted quarterly (rather than monthly), and the sampling line temperature must be maintained at a minimum temperature of 60 °C (rather than 120 °C).
Hydrogen analyzer	±2 percent over the concentration measured or 0.1 volume percent, whichever is greater	Specify calibration requirements in your site specific CPMS monitoring plan. Calibration requirements should follow manufacturer's recommendations at a minimum.
		Where feasible, select the sampling location at least two equivalent duct diameters from the nearest control device, point of pollutant generation, air in-leakages, or other point at which a change in the pollutant concentration occurs.

Subpart YY—National Emission Standards for Hazardous Air Pollutants Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards

9. Amend § 63.1100 by revising paragraphs (b) and (g)(7)(iii) to read as follows:

§ 63.1100 Applicability.

* * * * *

(b) ***Subpart A requirements***. The following provisions of subpart A of this part (General Provisions), §§ 63.1 through 63.5, and §§ 63.12 through 63.15, apply to owners or operators of affected sources subject to this subpart. For sources that reclassify from major source to area source status, the applicable provisions of § 63.9(j) and (k) apply. Beginning no later than the compliance dates specified in § 63.1102(c), for ethylene production affected sources, §§ 63.7(a)(4), (c), (e)(4), and (g)(2), § 63.9(k), and 63.10(b)(2)(vi) also apply.

* * * * *

(g) * * *

(7) * * *

(iii) Beginning no later than the compliance dates specified in § 63.1102(c), flares subject to the requirements in 40 CFR part 63, subpart CC and used as a control device for an emission point subject to the requirements in Table 7 to § 63.1103(e) are only required to comply with the flare requirements in 40 CFR part 63, subpart CC.

10. Amend § 63.1102 by revising paragraphs (c)(11), (d)(2)(ii), and (e)(2)(iii) to read as follows:

§ 63.1102 Compliance schedule.

* * * * *

(c) * * *

(11) The requirements in § 63.1108(a)(4), (b)(1)(ii), (b)(2), and (b)(4)(ii)(B).

* * * * *

(d) * * *

(2) * * *

(ii) The compliance requirements specified in § 63.1108(a)(4), (b)(1)(ii), (b)(2), and (b)(4)(ii)(B).

* * * * *

(e) * * *

(2) * * *

(iii) The compliance requirements specified in § 63.1108(a)(4), (b)(1)(ii), (b)(2), and (b)(4)(ii)(B).

* * * * *

11. Amend § 63.1103 by:

a. Revising paragraphs (e)(4)(iii), (e)(4)(vii)(B), (e)(5)(i)(A), (e)(5)(i)(B), (e)(5)(ii), and (e)(7)(i);

b. Removing paragraphs (e)(7)(i)(A) and (e)(7)(i)(B);

c. Revising paragraphs (e)(8)(i) and (e)(10) introductory text; and

d. Adding paragraph (e)(10)(iv).

The additon and revisions read as follows:

§ 63.1103 Source category-specific applicability, definitions, and requirements.

* * * * *

(e) * * *

(4) * * *

(iii) Instead of complying with § 63.670(o)(2)(iii) of subpart CC, if required to develop a flare management plan and submit it to the Administrator, then the owner or operator must also submit all versions of the plan in portable document format (PDF) to the EPA following the

procedure specified in § 63.9(k), except any medium submitted through U.S. mail must be sent to the attention of the Ethylene Production Sector Lead.

* * * * *

(vii) * * *

(B) The owner or operator must comply with the NHVcz requirements in § 63.670(e)(2) of subpart CC;

* * * * *

(5) * * *

(i) * * *

(A) The concentration of the vapor in the equipment served by the maintenance vent is less than 10 percent of its lower explosive limit (LEL).

(B) If there is no ability to measure the concentration of the vapor in the equipment based on the design of the equipment, the pressure in the equipment served by the maintenance vent is reduced to 5 pounds per square inch gauge (psig) or less. Upon opening the maintenance vent, active purging of the equipment cannot be used until the concentration of the vapors in the maintenance vent (or inside the equipment if the maintenance is a hatch or similar type of opening) is less than 10 percent of its LEL.

* * * * *

(ii) Except for maintenance vents complying with the alternative in paragraph (e)(5)(i)(C) of this section, the owner or operator must determine the concentration of the vapor or, if applicable, equipment pressure using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications.

* * * * *

(7) * * *

(i) During normal operations, conduct daily inspections of the firebox burners and repair all burners that are impinging on the radiant tube(s) as soon as practical, but not later than 1 calendar day after the flame impingement is found. The owner or operator may delay burner repair beyond 1 calendar day provided the repair cannot be completed during normal operations, the burner cannot be shutdown without significantly impacting the furnace heat distribution and firing rate, and action is taken to reduce flame impingement as much as possible during continued operation. If a delay of repair is required to fully resolve burner flame impingement, repair must be completed following the next planned decoking operation (and before returning the ethylene cracking furnace back to normal operations) or during the next ethylene cracking furnace complete shutdown (when the ethylene cracking furnace firebox is taken completely offline), whichever is earlier. An inspection may include, but is not limited to: visual inspection of the radiant tube(s) for localized bright spots (this may be confirmed with a temperature gun), use of luminescent powders injected into the burner to illuminate the flame pattern, or identifying continued localized coke buildup that causes short runtimes between decoking cycles. A repair may include, but is not limited to: Taking the burner out of service, replacing the burner, adjusting the alignment of the burner, adjusting burner configuration, making burner air corrections, repairing a malfunction of the fuel liquid removal equipment, or adding insulation around the radiant tube(s).

* * * * *

(8) * * *

(i) Prior to decoking operation, inspect the applicable ethylene cracking furnace isolation valve(s) to confirm that the radiant tube(s) being decoked is completely isolated from the ethylene production process so that no emissions generated from decoking operations are sent to the ethylene production process. If poor isolation is identified, then the owner or operator must rectify the isolation issue prior to continuing decoking operations to prevent leaks into the ethylene production process, unless the owner or operator determines that damage to the radiant tube(s) or ethylene cracking furnace could occur if the repair was attempted prior to completing a decoking operation and/or prior to the ethylene cracking furnace being shut down.

* * * * *

(10) ***Storage vessel degassing.*** Beginning no later than the compliance dates specified in § 63.1102(c), for each storage vessel subject to paragraph (b) or (c) of Table 7 to § 63.1103(e), the owner or operator must comply with paragraphs (e)(10)(i) through (iv) of this section during storage vessel shutdown operations (*i.e.,* emptying and degassing of a storage vessel) until the vapor space concentration in the storage vessel is less than 10 percent of the LEL. The owner or operator must determine the concentration using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications.

* * * * *

(iv) For floating roof storage vessels, the storage vessel may be opened to set up equipment (*e.g.,* making connections to a temporary control device) for the shutdown operations but must not be actively degassed during this time period.

* * * * *

12. Amend § 63.1107 by revising paragraphs (h)(3)(iv), (h)(3)(v)(B), (h)(3)(v)(C),

(h)(6) introductory text, and (h)(6)(ii) to read as follows:

§ 63.1107 Equipment leaks.

* * * * *

(h) * * *

(3) * * *

(iv) The owner or operator must determine the total number of release events that occurred during the calendar year for each affected pressure relief device separately. Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the owner or operator must also determine the total number of release events for each pressure relief device for which the root cause analysis concluded that the root cause was a force majeure event, as defined in § 63.1103(e)(2).

(v) * * *

(B) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a second release event not including force majeure events from a single pressure relief device in a 3-calendar year period for the same root cause for the same equipment. On and after **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a second release event from a single pressure relief device in a 3-calendar year period for the same root cause for the same equipment.

(C) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a third release event not including force majeure events from a single pressure relief device in a 3-calendar year period for any reason. On and after **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a third release event from a single pressure relief device in a 3-calendar year period for any reason.

* * * * *

(6) ***Root cause analysis and corrective action analysis.*** A root cause analysis and corrective action analysis must be completed as soon as possible, but no later than 45 days after a release event. Special circumstances affecting the number of root cause analyses and/or corrective action analyses are provided in paragraphs (h)(6)(i) through (iii) of this section.

* * * * *

(ii) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you may conduct a single root cause analysis and corrective action analysis for a single emergency event that causes two or more pressure relief devices to release, regardless of the equipment served, if the root cause is reasonably expected to be a *force majeure* event, as defined in § 63.1103(e)(2).

* * * * *

13. Amend § 63.1109 by revising paragraphs (f)(2), (f)(3), (f)(5), and (i)(2) to read as follows:

§ 63.1109 Recordkeeping requirements.

* * * * *

(f) * * *

(2) If complying with the requirements of § 63.1103(e)(5)(i)(A) and the concentration of the vapor at the time of the vessel opening exceeds 10 percent of its LEL, records that identify the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, and the concentration of the vapor at the time of the vessel opening.

(3) If complying with the requirements of § 63.1103(e)(5)(i)(B) and either the vessel pressure at the time of the vessel opening exceeds 5 psig or the concentration of the vapor at the time of the active purging was initiated exceeds 10 percent of its LEL, records that identify the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, the pressure of the vessel or equipment at the time of discharge to the atmosphere and, if applicable, the concentration of the vapors in the equipment when active purging was initiated.

* * * * *

(5) If complying with the requirements of § 63.1103(e)(5)(i)(D), identification of the maintenance vent, the process units or equipment associated with the maintenance vent, records documenting actions taken to comply with other applicable alternatives and why utilization of this alternative was required, the date of maintenance vent opening, the equipment pressure and concentration of the vapors in the equipment at the time of discharge, an indication of whether active purging was performed and the pressure of the equipment during the installation or removal of the blind if active purging was used, the duration the maintenance vent was open during the blind installation or removal process, and records used to estimate the total quantity of VOC in the equipment at the time the maintenance vent was opened to the atmosphere for each applicable maintenance vent opening.

* * * * *

(i) * * *

(2) Records of the number of releases during each calendar year and, prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the

number of those releases for which the root cause was determined to be a force majeure event. Keep these records for the current calendar year and the past five calendar years.

* * * * *

14. Amend § 63.1110 by revising paragraphs (a)(10), (e)(4)(iii), (e)(4)(iv)(A), (e)(4)(iv)(B), (e)(5)(iii), and (e)(8)(iii) to read as follows:

§ 63.1110 Reporting requirements.

(a) * * *

(10)(i) Beginning no later than the compliance dates specified in § 63.1102(c) for ethylene production affected sources, specified in § 63.1102(d) for cyanide chemicals manufacturing affected sources, and specified in § 63.1102(e) for carbon black production affected sources, within 60 days after the date of completing each performance test required by this subpart or applicability assessment required by § 63.1103(f)(3)(iv), the owner or operator must submit the results of the performance test or applicability assessment following the procedures specified in § 63.9(k). Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or alternate electronic file.

(ii) Beginning no later than the compliance dates specified in § 63.1102(c) through (e), the owner or operator must submit all subsequent Notification of Compliance Status reports

required under paragraph (a)(4) of this section in portable document format (PDF) format to the EPA following the procedure specified in § 63.9(k). All subsequent Periodic Reports required under paragraph (a)(5) of this section must be submitted to the EPA via CEDRI 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) beginning no later than the compliance dates specified in § 63.1102(c) through (e) or once the report template has been available on the CEDRI website for 1 year, whichever date is later. 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 under § 63.9(i) and § 63.10(a) of subpart A, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. Any medium submitted through mail under § 63.9(k) for a Notification of Compliance Status report or Periodic Report must be sent to the attention of the Ethylene Production Sector Lead, Cyanide Chemicals Manufacturing Sector Lead, or Carbon Black Production Sector Lead, as appropriate.

(iii) Beginning no later than the compliance date specified in § 63.1102(c) or once the report template for this subpart has been available on the CEDRI website for six months, whichever date is later, the items in § 63.1110(e)(4)(iv) and § 63.1110(e)(8)(iii) must be submitted to the EPA via CEDRI as specified in § 63.9(k) using the appropriate electronic report template on the CEDRI website for reporting that information. The report submitted to CEDRI must also contain company identifier information (including the company name and address) and the beginning and ending dates of the time period covered by the report. Once you begin submitting Periodic Reports to CEDRI in accordance with paragraph (a)(10)(ii) of this section,

the items in § 63.1110(e)(4)(iv) and § 63.1110(e)(8)(iii) must be included in those Periodic Reports instead of submitting the information using the separate template.

* * * * *

(e) * * *

(4) * * *

(iii) The periods specified in § 63.1109(e)(6). Indicate the date and start time for the period, and the net heating value operating parameter(s) determined following the methods in § 63.670(k) through (n) of subpart CC as applicable.

(iv) * * *

(A) Flare identification name or number and the start and stop time and date of the flaring event.

(B) The length of time (in minutes) that emissions were visible from the flare during the event.

* * * * *

(5) * * *

(iii) The LEL, vessel pressure, or mass of VOC in the equipment, as applicable, at the start of atmospheric venting. If the 5 psig vessel pressure option in § 63.1103(e)(5)(i)(B) was used and active purging was initiated while the concentration of the vapor was 10 percent or greater of its LEL, also include the concentration of the vapors at the time active purging was initiated.

* * * * *

(8) * * *

(iii) For pressure relief devices in organic HAP service subject to § 63.1107(h)(3), report each pressure release to the atmosphere, including pressure relief device identification name or number; start date and start time and duration (in hours) of the pressure release; an estimate (in pounds) of the mass quantity 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.

* * * * *

Subpart EEEE—National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)

15. Amend § 63.2346 by:

a. Revising paragraph (a)(6) introductory text;

b. Adding paragraph (a)(6)(iv); and

c. Revising paragraph (e).

The addition and revisions read as follows:

§ 63.2346 What emission limitations, operating limits, and work practice standards must I meet?

(a) * * *

(6) Beginning no later than the compliance dates specified in § 63.2342(e), tank emissions during storage tank shutdown operations (*i.e.,* emptying and degassing of a storage tank) for each storage tank at an affected source storing organic liquids that meets the tank capacity and liquid vapor pressure criteria for control in items 2 through 6 of Table 2 to this subpart, or items 1 through 3 of Table 2b to this subpart, you must comply with paragraphs

(a)(6)(i) through (iv) of this section during tank emptying and degassing until the vapor space concentration in the tank is less than 10 percent of the lower explosive limit (LEL). The owner or operator must determine the concentration using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications.

* * * * *

(iv) For floating roof storage tanks, the storage tank may be opened to set up equipment (*e.g.,* making connections to a temporary control device) for the shutdown operations but must not be actively degassed during this time period.

* * * * *

(e) ***Operating limits.*** For each high throughput transfer rack, you must meet each operating limit in Table 3 to this subpart for each control device used to comply with the provisions of this subpart whenever emissions from the loading of organic liquids are routed to the control device. Except as specified in paragraph (k) of this section, for each storage tank and low throughput transfer rack, you must comply with paragraph (l) of this section and the requirements for monitored parameters as specified in subpart SS of this part, for storage tanks and, during the loading of organic liquids, for low throughput transfer racks, respectively. Alternatively, you may comply with the operating limits in Table 3 to this subpart.

* * * * *

16. Amend § 63.2378 by revising paragraphs (e) introductory text, (e)(1), (e)(3), and (e)(4) to read as follows:

§ 63.2378 How do I demonstrate continuous compliance with the emission limitations, operating limits, and work practice standards?

* * * * *

(e) Beginning no later than the compliance dates specified in § 63.2342(e), paragraphs (b) through (d) of this section no longer apply. Instead, you must be in compliance with each emission limitation, operating limit, and work practice standard specified in paragraph (a) of this section at all times, except during periods of nonoperation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies and must comply with the requirements specified in paragraphs (e)(1) through (4) of this section, as applicable. Equipment subject to the work practice standards for equipment leak components in Table 4 to this subpart, item 4 are not subject to this paragraph (e).

(1) Except as specified in paragraphs (e)(3) and (4) of this section, the use of a bypass line at any time on a closed vent system to divert a vent stream to the atmosphere or to a control device not meeting the requirements specified in paragraph (a) of this section is an emissions standards deviation.

* * * * *

(3) Periods of planned routine maintenance of a control device used to control storage tank breathing loss emissions, during which the control device does not meet the emission limits in Table 2 or 2b to this subpart, must not exceed 240 hours per year. The level of material in the storage tank shall not be increased during periods that the closed-vent system or control device is bypassed to perform planned routine maintenance.

(4) If you elect to route emissions from storage tanks to a fuel gas system or to a process, as allowed by § 63.982(d), to comply with the emission limits in Table 2 or 2b to this subpart,

the total aggregate amount of time during which the breathing loss emissions bypass the fuel gas system or process during the calendar year without being routed to a control device, for all reasons (except product changeovers of flexible operation units and periods when a storage tank has been emptied and degassed), must not exceed 240 hours. The level of material in the storage tank shall not be increased during periods that the fuel gas system or process is bypassed.

* * * * *

17. Amend § 63.2382 by revising paragraph (d)(3) to read as follows:

§ 63.2382 What notifications must I submit and when and what information should be submitted?

* * * * *

(d) * * *

(3) ***Submitting Notification of Compliance Status.*** Beginning no later than the compliance dates specified in § 63.2342(e), you must submit all subsequent Notification of Compliance Status reports in portable document format (PDF) format to the EPA following the procedure specified in § 63.9(k), except any medium submitted through mail must be sent to the attention of the Organic Liquids Distribution Sector Lead.

18. Amend § 63.2386 by:

a. Revising paragraphs (f), (g), and (h); and

b. Removing paragraphs (i) and (j).

The revisions read as follows:

§ 63.2386 What reports must I submit and when and what information is to be submitted in each?

* * * * *

(f) Beginning no later than the compliance dates specified in § 63.2342(e), you must submit all Compliance reports to the EPA following the procedure specified in § 63.9(k), except any medium submitted through U.S. mail must be sent to the attention of the Organic Liquids Distribution Sector Lead. You must use the appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/cedri*) for this subpart. 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 under §§ 63.9(i) and 63.10(a), the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.

(g) Beginning no later than the compliance dates specified in § 63.2342(e), you must start submitting performance test reports in accordance with this paragraph. Unless otherwise specified in this subpart, 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 procedures specified in § 63.9(k). Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or alternate electronic file.

(h) Beginning no later than the compliance dates specified in § 63.2342(e), you must start submitting performance evaluation reports in accordance with this paragraph. Unless otherwise

specified in this subpart, within 60 days after the date of completing each CEMS performance evaluation (as defined in § 63.2) that includes a relative accuracy test audit (RATA), you must submit the results of the performance evaluation following the procedures specified in § 63.9(k). The results of performance evaluations of CEMS measuring RATA pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on the EPA's ERT website. The results of performance evaluations of CEMS measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation must be included as an attachment in the ERT or alternate electronic file.

§ 63.2406 [Amended]

19. Amend § 63.2406 by removing the entry “Force majeure event”.

20. Amend table 12 to subpart EEEE of part 63 by:

a. Adding the entry “63.7(a)(4)” in numerical order; and

b. Revising the entry “63.9(k)”.

The addition and revision read as follows:

Table 12 to Subpart EEEE of Part 63—Applicability of General Provisions to Subpart EEEE

* * * * *

Citation	Subject	Brief description	Applies to subpart EEEE
* * * * * * *			

§ 63.7(a)(4)	Force Majeure – Performance Testing Delay	Requirements to claim a delay in conducting a performance test due to force majeure	Yes.
* * * * * * *			
§ 63.9(k)	Electronic reporting procedures	Procedure to report electronically for notifications and reports	Yes.
* * * * * * *			

Subpart FFFF—National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

21. Amend § 63.2450 by revising paragraphs (e)(1), (e)(5)(iv), (e)(5)(viii)(B), (e)(6)(i), (e)(7) introductory text, (v)(1)(i), (v)(1)(ii), and (v)(2) to read as follows:

§ 63.2450 What are my general requirements for complying with this subpart?

* * * * *

(e) * * *

(1) Except when complying with § 63.2485 or paragraph (e)(7) of this section, if you reduce organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, you must meet the requirements of paragraph (e)(4) of this section, and the requirements of § 63.982(c) and the requirements referenced therein.

* * * * *

(5) * * *

(iv) Instead of complying with paragraph (o)(2)(iii) of § 63.670 of subpart CC, if required to develop a flare management plan and submit it to the Administrator, then you must also submit all versions of the plan in portable document format (PDF) to the EPA following the

procedure specified in §63.9(k), except any medium submitted through mail must be sent to the attention of the Miscellaneous Organic Chemical Manufacturing Sector Lead.

* * * * *

(viii) * * *

(B) You must comply with the NHVcz requirements in paragraph (e)(2) of § 63.670 of subpart CC;

* * * * *

(6) * * *

(i) If you are subject to the bypass monitoring requirements of § 63.148(f) of subpart G, then you must continue to comply with the requirements in § 63.148(f) of subpart G and the recordkeeping and reporting requirements in §§ 63.148(j)(2) and (3) of subpart G, and § 63.148(i)(3) of subpart G, in addition to the applicable requirements specified in § 63.2485(q), the recordkeeping requirements specified in § 63.2525(n), and the reporting requirements specified in § 63.2520(e)(12).

* * * * *

(7) Beginning no later than the compliance dates specified in § 63.2445(g), if you reduce organic HAP emissions by venting emissions through a closed-vent system to an adsorber(s) that cannot be regenerated or a regenerative adsorber(s) that is regenerated offsite, then you must comply with paragraphs (e)(4) and (6) of this section, § 63.2470(c)(3), §§ 63.2520(d)(6) and (e)(13), § 63.2525(o), the requirements in § 63.983 including the requirements referenced therein, and you must install a system of two or more adsorber units in series and comply with the requirements specified in paragraphs (e)(7)(i) through (iii) of this section.

* * * * *

(v) * * *

(1) * * *

(i) The vapor in the equipment served by the maintenance vent has a concentration less than 10 percent of its lower explosive limit (LEL) and has an outlet concentration less than or equal to 20 ppmv hydrogen halide and halogen HAP.

(ii) If there is no ability to measure the concentration of the vapor in the equipment based on the design of the equipment, the pressure in the equipment served by the maintenance vent is reduced to 5 pounds per square inch gauge (psig) or less. Upon opening the maintenance vent, active purging of the equipment cannot be used until the concentration of the vapors in the maintenance vent (or inside the equipment if the maintenance is a hatch or similar type of opening) is less than 10 percent of its LEL.

* * * * *

(2) Except for maintenance vents complying with the alternative in paragraph (v)(1)(iii) of this section, you must determine the concentration of the vapor or, if applicable, equipment pressure using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications.

* * * * *

22. Amend § 63.2460 by revising paragraph (c)(9) introductory text to read as follows:

§ 63.2460 What requirements must I meet for batch process vents?

* * * * *

(c) * * *

(9) ***Requirements for a biofilter.*** If you use a biofilter to meet either the95-percent reduction requirement or outlet concentration requirement specified in Table 2 to this subpart, you must meet the requirements specified in paragraphs (c)(9)(i) through (iv) of this section.

* * * * *

23. Amend § 63.2470 by revising paragraph (f) introductory text and adding paragraph (f)(4) to read as follows:

§ 63.2470 What requirements must I meet for storage tanks?

* * * * *

(f) ***Storage tank degassing.*** Beginning no later than the compliance dates specified in § 63.2445(g), for each storage tank subject to item 1 of Table 4 to this subpart, you must comply with paragraphs (f)(1) through (4) of this section during storage tank shutdown operations (*i.e.,* emptying and degassing of a storage tank) until the vapor space concentration in the storage tank is less than 10 percent of the LEL. You must determine the concentration using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications.

* * * * *

(4) For floating roof storage tanks, the storage tank may be opened to set up equipment (*e.g.,* making connections to a temporary control device) for the shutdown operations but must not be actively degassed during this time period.

24. Amend § 63.2480 by revising paragraphs (a), (e)(2)(ii), (e)(2)(iii), (e)(3)(iv), (e)(3)(v)(B), (e)(3)(v)(C), (e)(6)(ii), (f)(18)(iii), (f)(18)(vi), (f)(18)(x), and (f)(18)(xiii) to read as follows:

§ 63.2480 What requirements must I meet for equipment leaks?

(a) You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (f) of this section. For each light liquid pump, pressure relief device, and connector in ethylene oxide service as defined in § 63.2550(i), you must also meet the applicable requirements specified in §§ 63.2492 and 63.2493(d) and (e).

* * * * *

(e) * * *

(2) * * *

(ii) If the pressure relief device includes a rupture disk, either comply with the requirements in paragraph (e)(2)(i) of this section (and do not replace the rupture disk) or install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the pressure release.

(iii) If the pressure relief device consists only of a rupture disk, install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the pressure release. You must not initiate startup of the equipment served by the rupture disk until the rupture disc is replaced.

(3) * * *

(iv) You must determine the total number of release events that occurred during the calendar year for each affected pressure relief device separately. Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must also determine the total number of release events for each pressure relief device for which the root cause analysis concluded that the root cause was a *force majeure* event, as defined in § 63.2550.

(v) * * *

(B) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a second release event not including force majeure events from a single pressure relief device in a 3 calendar year period for the same root cause for the same equipment. On and after **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a second release event from a single pressure relief device in a 3 calendar year period for the same root cause for the same equipment.

(C) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a third release event not including force majeure events from a single pressure relief device in a 3 calendar year period for any reason. On and after **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a third release event from a single pressure relief device in a 3 calendar year period for any reason.

* * * * *

(6) * * *

(ii) Prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you may conduct a single root cause analysis and corrective action analysis for a single emergency event that causes two or more pressure relief devices to release, regardless of the equipment served, if the root cause is reasonably expected to be a *force majeure* event, as defined in § 63.2550.

* * * * *

(f) * * *

(18) * * *

(iii) In § 63.181(b)(3)(i), replace the reference to § 63.165(a) with § 63.2480(e)(1).

* * * * *

(vi) The information in § 63.165(a) required to be reported under § 63.182(d)(2)(xiv) is now required to be reported under § 63.2520(e)(15)(i) through (iii).

* * * * *

(x) The reference to § 63.1030(c) in § 63.1023(a)(1)(v) no longer applies. Instead comply with the § 63.2480(e)(1) and (2).

* * * * *

(xiii) The information in § 63.1030(b) required to be reported under § 63.1039(b)(4) is now required to be reported under § 63.2520(e)(15)(i) and (ii).

* * * * *

25. Amend § 63.2490 by:

a. Revising paragraphs (a), (d) introductory text, and (d)(4)(iii) introductory text; and

b. Adding paragraph (e).

The addition and revisions read as follows:

§ 63.2490 What requirements must I meet for heat exchange systems?

(a) You must comply with each requirement in Table 10 to this subpart that applies to your heat exchange systems, except as specified in paragraphs (b) through (e) of this section.

* * * * *

(d) Unless one or more of the conditions specified in § 63.104(a)(1), (2), (5), and (6) or paragraph (e) of this section are met, beginning no later than the compliance dates specified in § 63.2445(g), the requirements of § 63.104 as specified in Table 10 to this subpart and paragraphs (b) and (c) of this section no longer apply. Instead, you must monitor the cooling water for the

presence of total strippable hydrocarbons that indicate a leak according to paragraph (d)(1) of this section, and if you detect a leak, then you must repair it according to paragraphs (d)(2) and (3) of this section, unless repair is delayed according to paragraph (d)(4) of this section. At any time before the compliance dates specified in § 63.2445(g), you may choose to comply with the requirements in this paragraph (d) in lieu of the requirements of § 63.104 as specified in Table 10 to this subpart and paragraphs (b) and (c) of this section. The requirements in this paragraph (d) do not apply to heat exchange systems that have a maximum cooling water flow rate of 10 gallons per minute or less.

* * * * *

(4) * * *

(iii) 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. The delay of repair action level is assessed as described in paragraph (d)(4)(iii)(A) or (B) of this section, as applicable.

* * * * *

(e) If 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 at 25 degrees Celsius (atmospheres-cubic meters/mol) and none of the conditions specified in § 63.104(a)(1), (2), (5), and (6) are met, beginning no later than the compliance dates specified in § 63.2445(g), you may monitor the cooling water for leaks according to the requirements in § 63.104(b) in lieu of using the Modified El Paso Method. If you detect a leak according to §

63.104(b), then you must repair it according to paragraph (e)(1) of this section, unless repair is delayed according to paragraph (e)(2) of this section.

(1) If a leak is detected using the methods described in paragraph (e) of this section, you must repair the leak as soon as practicable, but no later than 45 days after identifying the leak, except as specified in paragraph (e)(2) of this section. Repair must include re-monitoring at the monitoring location where the leak was identified to verify that the criteria in § 63.104(b)(6) is no longer met. Actions that can be taken to achieve repair include but are not limited to:

(i) Physical modifications to the leaking heat exchanger, such as welding the leak or replacing a tube;

(ii) Blocking the leaking tube within the heat exchanger;

(iii) Changing the pressure so that water flows into the process fluid;

(iv) Replacing the heat exchanger or heat exchanger bundle; or

(v) Isolating, bypassing, or otherwise removing the leaking heat exchanger from service until it is otherwise repaired.

(2) You may delay repair when the conditions in § 63.104(e) are met.

26. Amend § 63.2492 by revising paragraph (b) to read as follows:

§ 63.2492 How do I determine whether my process vent, storage tank, or equipment is in ethylene oxide service?

* * * * *

(b) For storage tanks, you must determine the concentration of ethylene oxide of the fluid stored in the storage tanks by complying with the requirements in paragraph (b)(1) or (b)(2) of this section.

(1) You must measure the concentration of ethylene oxide of the fluid stored in the storage tanks using Method 624.1 of 40 CFR part 136, appendix A, or preparation by Method 5031 and analysis by Method 8260D (both incorporated by reference, see § 63.14) in the SW-846 Compendium. In lieu of preparation by SW-846 Method 5031, you may use SW-846 Method 5030B (incorporated by reference, see § 63.14), as long as: You do not use a preservative in the collected sample; you store the sample with minimal headspace as cold as possible and at least below 4 degrees C; and you analyze the sample as soon as possible, but in no case longer than 7 days from the time the sample was collected. If you are collecting a sample from a pressure vessel, you must maintain the sample under pressure both during and following sampling.

(2) Unless specified by the Administrator, you may calculate the concentration of ethylene oxide of the fluid stored in the storage tanks if information specific to the fluid stored is available. Information specific to the fluid stored includes concentration data from safety data sheets.

* * * * *

27. Amend § 63.2493 by revising paragraphs (a)(2)(vi) introductory text, (a)(2)(vi)(C), (a)(2)(viii), (b)(2), (b)(4) introductory text, (b)(4)(iv), (b)(6), (d)(1)(iii), (d)(2)(iii), (d)(3), (d)(4)(v), and (e) introductory text to read as follows:

§ 63.2493 What requirements must I meet for process vents, storage tanks, or equipment that are in ethylene oxide service?

* * * * *

(a) * * *

(2) * * *

(vi) If you vent emissions through a closed-vent system to a scrubber with a reactant tank, then you must establish operating parameter limits by monitoring the operating parameters specified in paragraphs (a)(2)(vi)(A) through (C) of this section during the performance test.

* * * * *

(C) Temperature of the scrubber liquid entering the scrubber column. The temperature may be measured at any point after the heat exchanger and prior to entering the top of the scrubber column. Determine the average inlet scrubber liquid temperature as the average of the test run averages.

* * * * *

(viii) If you vent emissions through a closed-vent system to a control device other than a flare, scrubber with a reactant tank, or thermal oxidizer, then you must notify the Administrator of the operating parameters that you plan to monitor during the performance test prior to establishing operating parameter limits for the control device.

* * * * *

(b) * * *

(2) If you choose to reduce emissions of ethylene oxide by venting emissions through a closed-vent system to a non-flare control device that reduces ethylene oxide to less than 1 ppmv as specified in Table 1, 2, or 4 to this subpart, and you choose to comply with paragraph (a)(3)(i) of this section, then continuously monitor the ethylene oxide concentration at the exit of the control device using an FTIR CEMS meeting the requirements of Performance Specification 15 of 40 CFR part 60, appendix B, and § 63.2450(j). If you use an FTIR CEMS, you do not need to conduct the performance testing required in paragraph (b)(3) of this section or the operating parameter monitoring required in paragraphs (b)(4) through (6) of this section.

* * * * *

(4) If you vent emissions through a closed-vent system to a scrubber with a reactant tank, then you must comply with § 63.2450(e)(4) and (6) and the requirements in § 63.983, and you must meet the operating parameter limits specified in paragraphs (b)(4)(i) through (v) of this section.

* * * * *

(iv) Maximum temperature of the scrubber liquid entering the scrubber column, equal to the average temperature measured during the most recent performance test. Compliance with the inlet scrubber liquid temperature operating limit must be determined continuously on a 1-hour block basis. Use a temperature sensor with a minimum accuracy of ±1 percent over the normal range of the temperature measured, expressed in degrees Celsius, or 2.8 degrees Celsius, whichever is greater.

* * * * *

(6) If you vent emissions through a closed-vent system to a control device other than a flare, scrubber with a reactant tank, or thermal oxidizer, then you must comply with § 63.2450(e)(4) and (6) and the requirements in § 63.983, and you must monitor the operating parameters identified in paragraph (a)(2)(viii) of this section and meet the established operating parameter limits to ensure continuous compliance. The frequency of monitoring and averaging time will be determined based upon the information provided to the Administrator.

* * * * *

(d) * * *

(1) * * *

(iii) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected. Delay of repair of pumps for which leaks have been detected is allowed for pumps that are isolated from the process and that do not remain in ethylene oxide service.

(2) * * *

(iii) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected. Delay of repair of connectors for which leaks have been detected is allowed for connectors that are isolated from the process and that do not remain in ethylene oxide service.

(3) For each light liquid pump or connector in ethylene oxide service that is added to an MCPU, and for each light liquid pump or connector in ethylene oxide service that replaces a light liquid pump or connector in ethylene oxide service, you must initially monitor for leaks within 5 days after initial startup of the equipment.

(4) * * *

(v) Replace all references to § 63.2445(g) with § 63.2445(i).

(e) ***Non-applicable referenced provisions.*** The referenced provisions specified in paragraphs (e)(1) through (16) of this section do not apply when demonstrating compliance with this section.

* * * * *

28. Amend § 63.2515 by revising paragraph (d) to read as follows:

§ 63.2515 What notifications must I submit and when?

* * * * *

(d) ***Supplement to Notification of Compliance Status.*** You must also submit supplements to the Notification of Compliance Status as specified in § 63.2520(d)(3) through (6).

29. Amend § 63.2520 by:

a. Revising paragraph (d) introductory text;

b. Adding paragraph (d)(6);

c. Revising paragraphs (e) introductory text, (e)(2), (e)(14)(iii), (e)(16), (f) and (g); and

d. Removing paragraphs (h) and (i).

The addition and revisions read as follows:

§ 63.2520 What reports must I submit and when?

* * * * *

(d) ***Notification of compliance status report***. You must submit a notification of compliance status report according to the schedule in paragraph (d)(1) of this section, and the notification of compliance status report must contain the information specified in paragraphs (d)(2) through (6) of this section.

* * * * *

(6) For adsorbers subject to the requirements of § 63.2450(e)(7), you must also submit the information listed in paragraphs (d)(6)(i) and (ii) of this section in a supplement to the Notification of Compliance Status within 150 days after the first applicable compliance date.

(i) Whether the adsorber cannot be regenerated or is a regenerative adsorber(s) that is regenerated off site.

(ii) The breakthrough limit and adsorber bed life established during the initial performance test or design evaluation of the adsorber.

(e) ***Compliance report***. The compliance report must contain the information specified in paragraphs (e)(1) through (17) of this section. On and after August 12, 2023 or once the reporting template for this subpart has been available on the CEDRI website for 1 year, whichever date is later, you must submit all subsequent reports following the procedure specified in § 63.9(k), except any medium submitted through mail must be sent to the attention of the Miscellaneous Organic Chemical Manufacturing Sector Lead. You must use the appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/cedri*) for this subpart. 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 under §§ 63.9(i) and 63.10(a) of subpart A, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.

* * * * *

(2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report. If your report is submitted via CEDRI, the certifier's electronic signature during the submission process replaces the requirement in this paragraph (e)(2).

* * * * *

(14) * * *

(iii) The lower explosive limit in percent, vessel pressure in psig, or mass in pounds of VOC in the equipment, as applicable, at the start of atmospheric venting. If the 5 psig vessel

pressure option in § 63.2450(v)(1)(ii) was used and active purging was initiated while the concentration of the vapor was 10 percent or greater of its LEL, also include the concentration of the vapors at the time active purging was initiated.

* * * * *

(16) For each heat exchange system subject to § 63.2490(d) or (e), beginning no later than the compliance dates specified in § 63.2445(g), the reporting requirements of § 63.104(f)(2) no longer apply; instead, the compliance report must include the information specified in paragraphs (e)(16)(i) through (v) of this section.

(i) The number of heat exchange systems at the plant site subject to the monitoring requirements in § 63.2490(d) or (e) during the reporting period;

(ii) The number of heat exchange systems subject to the monitoring requirements in § 63.2490(d) or (e) at the plant site found to be leaking during the reporting period;

(iii) For each monitoring location where a leak was identified during the reporting period, identification of the monitoring location (*e.g.,* unique monitoring location or heat exchange system ID number), the measured total strippable hydrocarbon concentration or total hydrocarbon mass emissions rate (if complying with § 63.2490(d)) or the measured concentration of the monitored substance(s) (if complying with § 63.2490(e)), the date the leak was first identified, and, if applicable, the date the source of the leak was identified;

(iv) For leaks that were repaired during the reporting period (including delayed repairs), identification of the monitoring location associated with the repaired leak, the total strippable hydrocarbon concentration or total hydrocarbon mass emissions rate (if complying with § 63.2490(d)) or the measured concentration of the monitored substance(s) (if complying with §

63.2490(e)) measured during re-monitoring to verify repair, and the re-monitoring date (*i.e.,* the effective date of repair); and

(v) For each delayed repair, identification of the monitoring location associated with the leak for which repair is delayed, the date when the delay of repair began, the date the repair is expected to be completed (if the leak is not repaired during the reporting period), the total strippable hydrocarbon concentration or total hydrocarbon mass emissions rate (if complying with § 63.2490(d)) or the measured concentration of the monitored substance(s) (if complying with § 63.2490(e)) and date of each monitoring event conducted on the delayed repair during the reporting period, and an estimate in pounds of the potential total hydrocarbon emissions or monitored substance(s) emissions over the reporting period associated with the delayed repair.

* * * * *

(f) ***Performance test reports.*** Beginning no later than October 13, 2020, you must submit performance test reports in accordance with this paragraph (f). Unless otherwise specified in this subpart, 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 procedures specified in § 63.9(k). Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or alternate electronic file.

(g) ***CEMS relative accuracy test audit (RATA) Performance evaluation reports.***

Beginning no later than October 13, 2020, you must start submitting CEMS RATA performance evaluation reports in accordance with this paragraph (g). Unless otherwise specified in this subpart, within 60 days after the date of completing each continuous monitoring system performance evaluation (as defined in § 63.2) that includes a RATA, you must submit the results of the performance evaluation following the procedures specified in § 63.9(k). The results of performance evaluations of CEMS measuring RATA pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on the EPA's ERT website. The results of performance evaluations of CEMS measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation must be included as an attachment in the ERT or alternate electronic file.

30. Amend § 63.2525 by:

a. Revising paragraphs (o) introductory text, (o)(1) and (o)(2);

b. Removing paragraph (o)(4);

c. Revising paragraphs (p)(2), (p)(3), (p)(5), (q)(2), (r)(1), (r)(4)(iv) introductory text, (r)(4)(iv)(B) and (r)(4)(iv)(C); and

d. Adding paragraph (r)(4)(iv)(D).

The addition and revisions read as follows:

§ 63.2525 What records must I keep?

* * * * *

(o) For each nonregenerative adsorber and regenerative adsorber that is regenerated offsite subject to the requirements in § 63.2450(e)(7), you must keep the applicable records specified in paragraphs (o)(1) through (3) of this section.

(1) Breakthrough limit and bed life established according to § 63.2450(e)(7)(i).

(2) Each outlet HAP or TOC concentration measured according to §§ 63.2450(e)(7)(ii) and (e)(7)(iii).

* * * * *

(p) * * *

(2) If complying with the requirements of § 63.2450(v)(1)(i) and the concentration of the vapor at the time of the vessel opening exceeds 10 percent of its LEL, identification of the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, and the concentration of the vapor at the time of the vessel opening.

(3) If complying with the requirements of § 63.2450(v)(1)(ii) and either the vessel pressure at the time of the vessel opening exceeds 5 psig or the concentration of the vapor at the time of the active purging was initiated exceeds 10 percent of its LEL, identification of the maintenance vent, the process units or equipment associated with the maintenance vent, the date of maintenance vent opening, the pressure of the vessel or equipment at the time of discharge to the atmosphere and, if applicable, the concentration of the vapors in the equipment when active purging was initiated.

* * * * *

(5) If complying with the requirements of § 63.2450(v)(1)(iv), identification of the maintenance vent, the process units or equipment associated with the maintenance vent, records

documenting actions taken to comply with other applicable alternatives and why utilization of this alternative was required, the date of maintenance vent opening, the equipment pressure and concentration of the vapors in the equipment at the time of discharge, an indication of whether active purging was performed and the pressure of the equipment during the installation or removal of the blind if active purging was used, the duration the maintenance vent was open during the blind installation or removal process, and records used to estimate the total quantity of VOC in the equipment at the time the maintenance vent was opened to the atmosphere for each applicable maintenance vent opening.

(q) * * *

(2) Records of the number of releases during each calendar year and, prior to **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the number of those releases for which the root cause was determined to be a *force majeure* event. Keep these records for the current calendar year and the past 5 calendar years.

* * * * *

(r) * * *

(1) Monitoring data required by § 63.2490(d) and (e) that indicate a leak, the date the leak was detected, or, if applicable, the basis for determining there is no leak.

* * * * *

(4) * * *

(iv) An estimate of the potential total hydrocarbon emissions (if you monitor the cooling water for leaks according to § 63.2490(d)(1)) or monitored substance(s) emissions (if you monitor the cooling water for leaks according to § 63.2490(e)) from the leaking heat exchange

system or heat exchanger for each required delay of repair monitoring interval following the procedures in paragraphs (r)(4)(iv)(A) through (D) of this section.

* * * * *

(B) For delay of repair monitoring intervals prior to repair of the leak, calculate the potential total hydrocarbon emissions or monitored substance(s) emissions for the leaking heat exchange system or heat exchanger for the monitoring interval by multiplying the mass emissions rate, determined in § 63.2490(d)(1)(iii)(B) or paragraph (r)(4)(iv)(A) or (D) of this section, by the duration of the delay of repair monitoring interval. The duration of the delay of repair monitoring interval is the time period starting at midnight on the day of the previous monitoring event or at midnight on the day the repair would have had to be completed if the repair had not been delayed, whichever is later, and ending at midnight of the day the of the current monitoring event.

(C) For delay of repair monitoring intervals ending with a repaired leak, calculate the potential total hydrocarbon emissions or monitored substance(s) emissions for the leaking heat exchange system or heat exchanger for the final delay of repair monitoring interval by multiplying the duration of the final delay of repair monitoring interval by the mass emissions rate determined for the last monitoring event prior to the re-monitoring event used to verify the leak was repaired. The duration of the final delay of repair monitoring interval is the time period starting at midnight of the day of the last monitoring event prior to re-monitoring to verify the leak was repaired and ending at the time of the re-monitoring event that verified that the leak was repaired.

(D) If you monitor the cooling water for leaks according to § 63.2490(e), you must calculate the mass emissions rate by determining the mass flow rate of the cooling water at the

monitoring location where the leak was detected. Cooling water mass flow rates may be determined using direct measurement, pump curves, heat balance calculations, or other engineering methods. Once determined, multiply the mass flow rate of the cooling water by the concentration of the measured substance(s).

* * * * *

31. Amend § 63.2550 by revising the entry "In ethylene oxide service" to read as follows:

§ 63.2550 What definitions apply to this subpart?

* * * * *

In ethylene oxide service means the following:

(1) For equipment leaks, any equipment that contains or contacts a fluid (liquid or gas) that is at least 0.1 percent by weight of ethylene oxide. If information exists that suggests ethylene oxide could be present in equipment, the equipment is considered to be "in ethylene oxide service" unless sampling and analysis is performed as specified in § 63.2492 to demonstrate that the equipment does not meet the definition of being "in ethylene oxide service". Examples of information that could suggest ethylene oxide could be present in equipment, include calculations based on safety data sheets, material balances, process stoichiometry, or previous test results provided the results are still relevant to the current operating conditions.

(2) For process vents, each batch and continuous process vent in a process that, when uncontrolled, contains a concentration of greater than or equal to 1 ppmv undiluted ethylene oxide, and when combined, the sum of all these process vents would emit uncontrolled ethylene oxide emissions greater than or equal to 5 lb/yr (2.27 kg/yr). If information exists that suggests ethylene oxide could be present in a batch or continuous process vent, then the batch or

continuous process vent is considered to be “in ethylene oxide service” unless an analysis is performed as specified in § 63.2492 to demonstrate that the batch or continuous process vent does not meet the definition of being “in ethylene oxide service”. Examples of information that could suggest ethylene oxide could be present in a batch or continuous process vent, include calculations based on safety data sheets, material balances, process stoichiometry, or previous test results provided the results are still relevant to the current operating conditions.

(3) For storage tanks, storage tanks of any capacity and vapor pressure storing a liquid that is at least 0.1 percent by weight of ethylene oxide. If knowledge exists that suggests ethylene oxide could be present in a storage tank, then the storage tank is considered to be “in ethylene oxide service” unless the procedures specified in § 63.2492 are performed to demonstrate that the storage tank does not meet the definition of being “in ethylene oxide service”. The exemptions for “vessels storing organic liquids that contain HAP only as impurities” and “pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere” listed in the definition of “storage tank” in this section do not apply for storage tanks that may be in ethylene oxide service. Examples of information that could suggest ethylene oxide could be present in a storage tank, include calculations based on safety data sheets, material balances, process stoichiometry, or previous test results provided the results are still relevant to the current operating conditions.

* * * * *

1. Revise table 10 to subpart FFFF of part 63 to read as follows:

Table 10 to Subpart FFFF of Part 63—Work Practice Standards for Heat Exchange Systems

As required in § 63.2490, you must meet each requirement in the following table that applies to your heat exchange systems:

For each . . .	You must . . .
Heat exchange system, as defined in § 63.101	a. Comply with the requirements of § 63.104 and the requirements referenced therein, except as specified in § 63.2490(b) and (c); or
	b. Comply with the requirements in § 63.2490(d); or
	c. Comply with the requirements in § 63.2490(e).

2. Amend table 12 to subpart FFFF of part 63 by revising entry "63.9(k)" to read as follows:

Table 12 to Subpart FFFF of Part 63—Applicability of General Provisions to Subpart FFFF

* * * * *

Citation	Subject	Explanation
* * *	* * * *	
§ 63.9(k)	Electronic reporting procedures	Yes.
* * *	* * * *	