



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2025-0207; FRL-11626-01-OAR]

RIN 2060-AW22

National Emission Standards for Marine Tank Vessel Loading Operations:

Technology Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) is proposing amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the marine tank vessel loading operations (MTVLO) source category under Clean Air Act (CAA) section 112. The EPA is proposing certain decisions resulting from the Agency's technology review of the MTVLO NESHAP pursuant to CAA section 112(d)(6). Specifically, the EPA is proposing enhanced flare monitoring requirements, requirements to perform periodic performance testing, electronic reporting provisions, and removal of startup, shutdown, and malfunction (SSM) exemptions.

DATES: Comments must be received on or before [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Under the Paperwork Reduction Act (PRA), comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of your comments on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Public hearing: If anyone contacts us requesting a public hearing on or before **March 8, 2026**, we will hold a virtual public hearing. See **SUPPLEMENTARY INFORMATION** for information on requesting and registering for a public hearing.

ADDRESSES: You may send comments, identified by Docket ID No. EPA-HQ-OAR-2025-0207, by any of the following methods:

- Federal eRulemaking Portal: <https://www.regulations.gov> (our preferred method). Follow the online instructions for submitting comments.
- Email: a-and-r-docket@epa.gov. Include Docket ID No. EPA-HQ-OAR-2025-0207 in the subject line of the message.
- Mail: U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA-HQ-OAR-2025-0207, Mail Code 28221T, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.
- Hand/Courier Delivery: EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004. The Docket Center's hours of operation are 8:30 a.m. – 4:30 p.m. Eastern Time (ET), Monday – Friday (except Federal holidays).

Instructions: All submissions received must include the Docket ID No. for this rulemaking. Comments received may be posted without change to <https://www.regulations.gov>, including any personal information provided. For detailed instructions on sending written comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this preamble.

FOR FURTHER INFORMATION CONTACT: For information about this proposed rule, contact U.S. EPA, Attn: Mr. Michael Cantoni III, Mail Drop: Industrial Processing and Power Division (E143-01), 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-5593; and email address: Cantoni.Michael@epa.gov.

SUPPLEMENTARY INFORMATION:

Participation in virtual public hearing. To request a virtual public hearing, contact the public hearing team at (888) 372-8699 or by email at

IPPDpublichearing@epa.gov. If the EPA receives a request for a public hearing, the Agency will hold a hearing via virtual platform on **March 18, 2026**. The EPA may close a session 15 minutes after the last pre-registered speaker has testified if there are no additional speakers. The EPA will announce further details at <https://www.epa.gov/stationary-sources-air-pollution/marine-vessel-loading-operations-national-emission-standards>.

If the EPA receives a request for a public hearing, the Agency will begin pre-registering speakers for the hearing no later than one business day after receiving the request. To register to speak at the virtual hearing, please use the online registration form available at <https://www.epa.gov/stationary-sources-air-pollution/marine-vessel-loading-operations-national-emission-standards> or contact the public hearing team at (888) 372-8699 or by email at *IPPDpublichearing@epa.gov*. The last day to pre-register to speak at the hearing will be **March 15, 2026**. Prior to the hearing, the EPA will post a general agenda that will list pre-registered speakers at: <https://www.epa.gov/stationary-sources-air-pollution/marine-vessel-loading-operations-national-emission-standards>.

The EPA will make every effort to follow the schedule as closely as possible on the day of the hearing; however, please plan for the hearings to run either ahead of schedule or behind schedule.

Each commenter will have four minutes to provide oral testimony. The EPA encourages commenters to submit the text of your oral testimony as written comments to the rulemaking docket.

The EPA may ask clarifying questions during the oral presentations but will not respond to the presentations at that time. The EPA will consider written statements and supporting information submitted during the comment period with the same weight as oral testimony and supporting information presented at the public hearing.

Please note that the EPA will post updates to any aspect of the hearing online at <https://www.epa.gov/stationary-sources-air-pollution/marine-vessel-loading-operations-national-emission-standards>. While the EPA expects the hearing to go forward as set forth above, please monitor our website or contact the public hearing team at (888) 372-8699 or by email at IPPDpublichearing@epa.gov to determine if there are any updates. The EPA does not intend to publish a document in the *Federal Register* announcing updates.

If you require special accommodations such as audio description, please pre-register for the hearing with the public hearing team and describe your needs by **March 10, 2026**. The EPA may not be able to arrange accommodations without advance notice.

Docket. The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2025-0207. All documents in the docket are listed at <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. The EPA does not place certain other material, such as copyrighted material, on the Internet; this material is publicly available only as portable document format (PDF) versions accessible only on EPA computers in the docket office reading room. The public cannot download certain databases and physical items from the docket but may request these items by contacting the docket office at (202) 566-1744. The docket office has 10 business days to respond to such requests. With the exception of such material, publicly available docket materials are available electronically at <https://www.regulations.gov> or on EPA computers in the docket office reading room at the EPA Docket Center, WJC West Building, Room Number 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. ET, Monday through Friday. The telephone number for the Public Reading

Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

Written Comments. Direct your comments to Docket ID No. EPA-HQ-OAR-2025-0207. The EPA's policy is that the public docket will contain all comments received without change and made available online at <https://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be CBI or other information for which a statute restricts disclosure. Do not submit electronically to <https://www.regulations.gov> any information that you consider to be CBI or other information for which a statute restricts disclosure. You should submit this type of information as described in the *Submitting CBI* section of this preamble.

The EPA may publish any comment received to its public docket. A written comment must accompany multimedia submissions (audio, video, *etc.*). The EPA considers the written comment to be the official comment, and it should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the Web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

The <https://www.regulations.gov> website allows you to submit your comment anonymously, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through <https://www.regulations.gov>, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact

information in the body of your comment and with any digital storage media you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should not include special characters or any form of encryption and be free of any defects or viruses. For additional information about the EPA's public docket, visit the EPA Docket Center homepage at <https://www.epa.gov/dockets>.

The EPA is soliciting comment on numerous aspects of this proposed rule. The EPA has indexed each comment solicitation with an identifier (e.g., "C-1, C-2, . . .") to provide a consistent framework for effective and efficient provision of comments. Accordingly, we ask that commenters include the corresponding identifier when providing comments relevant to that comment solicitation. We ask that commenters include the identifier in either a heading or in the text of each comment (e.g., "In response to C-1, . . .") to make clear which comment solicitation you are addressing. We emphasize that we are not limiting comment to these identified areas and encourage you to provide any other comments relevant to this proposal.

Submitting CBI. Do not submit information containing CBI to the EPA through <https://www.regulations.gov>. Clearly mark the part or all the information that you claim to be CBI. For CBI information on any digital storage media that you mail to the EPA, note the docket ID, mark the outside of the digital storage media as CBI, and identify electronically within the digital storage media the specific information that you claim as CBI. In addition to one complete version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI directly to the public docket through the procedures outlined in the *Written Comments* section of this preamble. If you submit any digital storage media that does not contain CBI, mark the outside of the digital storage media clearly that it does not contain CBI and note the docket ID. The public docket and the EPA's

electronic public docket will include information not marked as CBI without prior notice.

The EPA will not disclose information marked as CBI except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2.

Our preferred method to receive CBI is by electronic transmittal, via email attachments, File Transfer Protocol (FTP), or other online file sharing services (*e.g.*, Dropbox, OneDrive, Google Drive). You must send electronic submissions directly to the Office of Clean Air Programs (OCAP) CBI Office at the email address *oaqps_cbi@epa.gov*, and as described earlier in this preamble, you should include clear CBI markings and note the docket ID. If you need assistance with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email *oaqps_cbi@epa.gov* to request a file transfer link. If sending CBI information through the postal service, please send it to the following address: OCAP Document Control Officer (C404-02), OCAP, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA-HQ-OAR-2025-0207. You should double-wrap and clearly mark the mailed CBI material. Any CBI markings should not show through the outer envelope.

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

AVO	audible, visual, or olfactory
BACT	best available control technology
BPT	benefit per ton
CAA	Clean Air Act
CBI	Confidential Business Information
CDX	Central Data Exchange
CEDRI	Compliance and Emissions Data Reporting Interface
CEMS	continuous emissions monitoring systems
CFR	Code of Federal Regulations
EAV	equivalent annualized value

EPA	Environmental Protection Agency
ERT	Electronic Reporting Tool
ET	Eastern Time
FR	<i>Federal Register</i>
GACT	generally available control technology
HAP	hazardous air pollutant(s)
LAER	lowest achievable emission rate
LDAR	leak detection and repair
LEAN	Louisiana Environmental Action Network
LNG	liquified natural gas
MACT	maximum achievable control technology
MMbbl	million barrels
MTVLO	marine tank vessel loading operation(s)
NAAQS	national ambient air quality standards
NAICS	North American Industry Classification System
NESHAP	national emission standards for hazardous air pollutants
NHV	net heating value
NHV _{cz}	combustion zone net heating value
NHV _{dil}	net heating value dilution
NRDC	Natural Resources Defense Council
NSPS	new source performance standard
NTTAA	National Technology Transfer and Advancement Act
OCAP	Office of Clean Air Programs
OMB	Office of Management and Budget
PDF	portable document format
PM	particulate matter
PM _{2.5}	fine particulate matter
PRA	Paperwork Reduction Act
ppmv	parts per million by volume
psia	pounds per square inch absolute
PV	present value
RACT	reasonably available control technology
RATA	relative accuracy test audit
RFA	Regulatory Flexibility Act
RTR	risk and technology review
SSM	startup, shutdown, and malfunction
TAC	total annualized cost
tpy	tons per year
UMRA	Unfunded Mandates Reform Act
USCG	United States Coast Guard
VCS	voluntary consensus standards
VMT	Valdez Marine Terminal
VOC	volatile organic compound(s)

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I. General Information

A. Does this action apply to me?

The source category that is the subject of this proposal is composed of facilities that conduct MTVLO regulated under 40 CFR part 63 subpart Y (also referred to as the MTVLO NESHAP). The MTVLO source category covers any facility engaged in the direct loading of bulk liquids onto marine vessels at marine terminals. The 2022 North American Industry Classification System (NAICS) code for MTVLO is 4883. The EPA has identified this NAICS code to indicate types of entities that this proposed action likely would affect but notes that this proposed action also may affect facilities classified

under other NAICS codes. The proposed standards, if finalized, would directly apply to the affected sources. This proposed action would not have a substantial impact on Federal, State, local, and Tribal entities that own and/or operate MTVLO. The EPA did not include the MTVLO source category in the *Initial List of Categories of Sources Under Section 112(c)(1) of the Clean Air Act Amendments of 1990 and Documentation for Developing the Initial Source Category List, Final Report*,¹ because the Agency originally intended to regulate the emissions of hazardous air pollutants (HAP) as well as volatile organic compounds (VOC) under CAA section 183(f).² After publication of the initial list of source categories, the Agency decided to regulate HAP emissions from major sources of MTVLO facilities under CAA section 112.³

B. What is the statutory authority for this action?

CAA sections 112 and 301(a), as amended (42 U.S.C. 7401 *et seq.*) provide the statutory authority for this action. CAA section 112 establishes a two-stage regulatory process to develop standards for emissions of HAP from stationary sources. Generally, the first stage involves establishing technology-based standards that reflect the maximum achievable control technology (MACT) or an appropriate alternative.⁴ The second stage involves evaluating those standards within eight years to determine whether additional standards are needed to address any remaining risk associated with HAP emissions.⁵ The EPA commonly refers to this second stage as the “residual risk review.” In addition to the residual risk review, CAA section 112 also requires the EPA to review the standards every eight years and “revise as necessary” taking into account “developments in practices, processes, or control technologies.”⁶ This review, commonly referred to as the

¹ See EPA-450/3-91-030, July 1992.

² 57 FR 31576 (July 16, 1992).

³ 58 FR 60021 (Nov. 12, 1993).

⁴ 42 U.S.C. 7412(d)(1)-(4).

⁵ *Id.* 7412(f)(2).

⁶ *Id.* 7412(d)(6).

“technology review,” is the subject of this proposal. The discussion that follows identifies the most relevant statutory sections and briefly explains the contours of the methodology used to implement these statutory requirements.

In the first stage of the CAA section 112 standard setting process, the EPA promulgates technology-based standards under CAA section 112(d) for categories of sources identified as emitting one or more of the HAP listed in CAA section 112(b). Sources of HAP emissions are either major sources or area sources, and CAA section 112 establishes different requirements for major source standards and area source standards. “Major sources” are sources that emit or have the potential to emit 10 tons per year (tpy) or more of a single HAP or 25 tpy or more of any combination of HAP. All other sources are “area sources.” For major sources, CAA section 112(d)(2) provides that the technology-based NESHAP must reflect the maximum degree of emission reductions of HAP that the Administrator determines to be achievable, taking into consideration cost, energy requirements, and non-air quality health and environmental impacts. The EPA commonly refers to these standards as MACT standards. CAA section 112(d)(3) also establishes a minimum control level for MACT standards, known as the MACT “floor,” based on emission limitations achieved in practice by the best performing sources.

In certain instances, as provided in CAA section 112(h), the EPA may set work practice standards in lieu of numerical emission standards. Under CAA section 112(h), the EPA may adopt a work practice standard in lieu of a numerical emission standard if it is “not feasible in the judgment of the Administrator to prescribe or enforce an emission standard for control of a hazardous air pollutant or pollutants.”⁷ CAA section 112(h)(2) defines the phrase “not feasible to prescribe or enforce an emission standard” to mean

⁷ *Id.* 7412(h)(1); *see also Sierra Club v. EPA*, 479 F.3d 875, 883-84 (D.C. Cir. 2007). The EPA may “adopt[] a method to account for measurement imprecision that has a rational basis in the correlation between increased emission values and increased testing precision.” *Nat’l Ass’n of Clean Water Agencies v. EPA*, 734 F.3d 1115, 1154-55 (D.C. Cir. 2013).

any situation where the Administrator either determines that a HAP or HAPs “cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, or that any requirement for, or use of such a conveyance would be inconsistent with any Federal, State or local law”⁸ or determines that “the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.”⁹ The EPA considers a measurement to be not “technologically practicable” within the meaning of CAA section 112(h)(2)(B) if the majority of the measurements are below the detection limit. Such measurements raise issues of questionable reliability, feasibility, and enforceability. Additionally, the application of measurement methodology in such situations could be “not practicable due to . . . economic limitation” within the meaning of CAA section 112(h)(2)(B), because it would result in expenditures that produce analytically suspect measurements.

The EPA must also consider control options that are more stringent than the floor, commonly referred to as beyond-the-floor standards.¹⁰ For area sources, CAA section 112(d)(5) allows the EPA to set standards based on generally available control technologies or management practices (GACT standards) in lieu of MACT standards.

For categories of major sources and any area source categories subject to MACT standards, the second stage focuses on identifying and addressing any remaining (*i.e.*, “residual”) risk within eight years pursuant to CAA section 112(f). The EPA conducts this review concurrently with the initial technology review pursuant to CAA section 112(d)(6); the EPA commonly refers to the combined review as the “risk and technology review” (RTR). For categories of area sources subject to GACT standards, there is no

⁸ 42 U.S.C. 7412(h)(2)(A).

⁹ *Id.* 7412(h)(2)(B).

¹⁰ *Id.* 7412(d)(2).

requirement to address residual risk, but, similar to the major source categories, the technology review is required every eight years.¹¹

CAA section 112(d)(6) requires the EPA to review standards promulgated under CAA section 112 and revise them “as necessary (taking into account developments in practices, processes, and control technologies)” no less often than every eight years. For this review (the “technology review”), the CAA does not require the EPA to recalculate the MACT floors established in earlier rulemakings. The EPA may consider cost in deciding whether to revise the standards pursuant to CAA section 112(d)(6).

The EPA also must specify relevant test methods, best practices, procedures, or protocols and recordkeeping requirements for standards promulgated under CAA section 112.¹² Further, CAA section 301(a) provides that “[t]he Administrator is authorized to prescribe such regulations as are necessary to carry out his functions.”

The EPA first promulgated MACT standards for the MTVLO source category in 1995.¹³ The EPA completed the RTR of the MTVLO NESHAP in 2011.¹⁴ In October 2020, several environmental advocacy organizations filed a citizen suit under CAA section 304, alleging, *inter alia*, that the EPA failed to conduct mandatory CAA section 112(d)(6) technology reviews for multiple source categories and seeking the court to compel the EPA to complete those reviews.¹⁵ To resolve the litigation, the EPA and the plaintiffs entered into a consent decree.¹⁶ This action satisfies the Agency’s obligation to issue a proposed rule pursuant to CAA section 112(d)(6) as a step towards finalizing the results of the technology review.

¹¹ *Id.* 7412(d)(5)-(6).

¹² 42 U.S.C. 7414.

¹³ 60 FR 48399 (Sept. 19, 1995) (codified at 40 CFR part 63 subpart Y).

¹⁴ 76 FR 22595 (Apr. 21, 2011).

¹⁵ *Env’t Integrity Project et al. v. Regan*, No. 1:20-cv-03119-TNM (D.D.C. Oct. 29, 2020; as amended Jan. 8, 2021).

¹⁶ *Id.*, Order Approving Consent Decree (entered Aug. 24, 2022).

CAA section 183(f) requires the Administrator, within two years of November 15, 1990, and in consultation with the Secretary of the Department in which the United States Coast Guard (USCG) is operating, to “promulgate standards applicable to the emission of VOCs and any other air pollutant from loading and unloading of tank vessels” as defined in 46 U.S.C. 2101 “which the Administrator finds causes, or contributes to, air pollution that may be reasonably anticipated to endanger public health or welfare.”¹⁷ CAA section 183(f) further requires that these standards apply “reasonably available control technology [(RACT)], considering costs, any non-air quality benefits, environmental impacts, energy requirements, and safety factors associated with alternative control techniques” and that “[t]o the extent practicable such standards shall apply to loading and unloading facilities and not to tank vessels.” As part of the 1995 rulemaking, the EPA promulgated RACT standards under CAA section 183(f) to limit emissions of VOC from new and existing MTVLO sources.¹⁸ The MTVLO NESHAP includes monitoring, inspection, recordkeeping, and reporting requirements that are applicable both to sources subject to MACT emission standards for organic HAP and sources subject to RACT emission standards for VOC.

While the EPA’s primary rulemaking objective is to complete the technology review required by CAA section 112(d)(6) the Agency recognizes the efficiencies in codifying the MACT and RACT standards from the 1995 final rule in a single regulation (*i.e.*, 40 CFR part 63 subpart Y). Thus, some of the revisions proposed in this action would also apply to RACT sources regulated by CAA section 183(f). For example, as part of the CAA section 112(d)(6) technology review, the EPA is proposing revisions to MTVLO monitoring, inspection, recordkeeping, and reporting requirements in the MTVLO NESHAP to ensure sources are meeting the required standards at all times.

¹⁷ 42 U.S.C. 7511b(f).

¹⁸ 60 FR 48399 (Sept. 19, 1995).

Considering the overlap of regulatory language between the RACT and MACT standards for control device monitoring in the MTVLO NESHAP, and considering that all existing sources subject to RACT standards are major sources of HAP subject to the MACT standards in the MTVLO NESHAP, the EPA is proposing that these revisions apply to sources subject to RACT standards under CAA section 183(f). In developing this proposed rule, the EPA consulted with the USCG, as CAA section 183(f) requires. Meetings between the EPA and the USCG involved discussions on pertinent issues for the MTVLO NESHAP technology review. The EPA met with the USCG on June 4 and September 2, 2025. A memorandum from each consultation meeting is in the docket for this action.¹⁹

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

In addition to the docket, an electronic copy of this action is available on the Internet. In accordance with 5 U.S.C. 553(b)(4), a summary of this rule may be found at <https://www.regulations.gov>, Docket ID No. EPA-HQ-OAR-2025-0207. Following signature by the Administrator, the EPA will post a copy of this proposed action at <https://www.epa.gov/stationary-sources-air-pollution/marine-vessel-loading-operations-national-emission-standards>. Following publication in the *Federal Register*, the EPA will post the *Federal Register* version of the proposal and key technical documents at this same website.

A memorandum showing the rule edits that would be necessary to incorporate the changes to 40 CFR part 63 subpart Y proposed in this action is in the docket.²⁰ Following signature by the EPA Administrator, the EPA also will post a copy of this document to <https://www.epa.gov/stationary-sources-air-pollution/marine-vessel-loading-operations-national-emission-standards>.

¹⁹ Docket ID No. EPA-HQ-OAR-2025-0207.

²⁰ Docket ID No. EPA-HQ-OAR-2025-0207.

II. Background

A. What is this source category, and how does the current NESHAP regulate its HAP emissions?

The subject of this proposal is the MTVLO source category, regulated under 40 CFR part 63 subpart Y. As promulgated in 1995 and further amended, the MTVLO NESHAP regulates HAP emissions from the direct loading of bulk liquids from marine vessels at marine terminals.²¹

The source category includes sources that directly emit HAP generated or displaced from the marine vessel's cargo tank when loading bulk liquids containing HAP onto marine tank vessels, including vapor collection and control systems, but does not include storage tanks and leaking equipment associated with liquid terminal unloading or ballasting operations.²² Nor does this source category regulate emissions from offshore vessel-to-vessel bulk liquid transfer operations (*i.e.*, lightering operations).²³ In the 1995 MTVLO NESHAP final rule, the EPA removed unloading operations and ballasting from the source category in response to public comments.²⁴ The 1995 MTVLO NESHAP rulemaking established specific MACT and RACT standards designed to reduce VOC and HAP emissions (see section III.A.2). Under the MTVLO NESHAP, facilities were required to monitor performance of the control technology installed to achieve the required emission reductions for the appropriate standard. The 1995 final rule also included reporting and recordkeeping requirements to assure compliance with the promulgated standards.²⁵

²¹ 60 FR 48388 (Sept. 19, 1995); 68 FR 37334 (June 23, 2003); 71 FR 20446 (Apr. 20, 2006); 76 FR 22566 (Apr. 21, 2011); 79 FR 11228 (Feb. 27, 2014); 80 FR 75178 (Dec. 1, 2015); 85 FR 73854 (Nov. 19, 2020).

²² 60 FR 48391 (Sept. 19, 1995).

²³ 58 FR 60021 (Nov. 12, 1993).

²⁴ 60 FR 48391 (Sep. 19, 1995).

²⁵ 60 FR 38389 (Sept. 19, 1995).

As part of the April 2011 RTR, the EPA re-adopted the existing MACT standards for MTVLO based on its determination that the 1995 MACT standards reduced risk to an acceptable level, provided an ample margin of safety to protect public health, and prevented adverse environmental effects.²⁶ The EPA also added submerged loading standards for two subcategories of MTVLO as detailed in Table 1: (1) existing MTVLO facilities that are major sources of HAP emissions and that have emissions less than 10 tpy of any individual HAP or 25 tpy of aggregate HAP considering only MTVLO emissions; and (2) existing offshore loading terminals.²⁷ As part of the 2011 RTR, the EPA identified 152 MTVLO facilities in operation and subject to the MTVLO NESHAP, based on the 2005 National Emissions Inventory (NEI).²⁸

As part of the current technology review, the EPA identified approximately 190 facilities in operation and subject to the MTVLO NESHAP. The list of facilities is in the document titled *List of Facilities Subject to the MTVLO NESHAP*, which is in the docket for this action.²⁹

B. What data collection activities did the EPA conduct to support this action?

The EPA used several data sources to identify facilities that are subject to the MTVLO NESHAP. The EPA reviewed the facility list underlying the 2011 RTR and evaluated whether the listed facilities were still operational. Additionally, the EPA evaluated sources from the 2020 Organic Liquids Distribution (Non-Gasoline) RTR rulemaking to identify sources co-located with MTVLO facilities.³⁰ The EPA also reviewed air emissions permits issued by State regulatory agencies and electronic reports

²⁶ 76 FR 22566, 22571 (Apr. 21, 2011); see also *id.* at 22575 (finding lifetime cancer risk to the individual most exposed to emissions from MTVLO was less than 100-in-1 million and that the cancer incidence and number of people with cancer risk over 1-in-1 million were low).

²⁷ 76 FR 22571 (Apr. 21, 2011).

²⁸ 76 FR 22566 (Apr. 21, 2011).

²⁹ Docket ID No. EPA-HQ-OAR-2025-0207.

³⁰ 85 FR 40740 (July 7, 2020).

submitted through the Compliance and Emissions Data Reporting Interface (CEDRI) to develop the final facility list. The EPA excluded facilities subject to the marine vessel loading requirements under the *National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries*, as these sources are part of the petroleum refinery source category.³¹ In developing this action, the EPA reviewed the RACT/Best Available Control Technology (BACT)/Lowest Achievable Emission Rate (LAER) Clearinghouse and regulatory documents addressing similar sources published since the 1995 MVTLO NESHAP. Additionally, the EPA reviewed the Army Corps of Engineers' Waterborne Commerce of the United States Statistics Report and used data from that report in developing this proposal action.³²

C. What other relevant background information and data are available?

This action includes proposed amendments to the current flare requirements in the MVTLO NESHAP. In proposing these amendments, the EPA relied on certain technical reports and memoranda developed for flares used as air pollution control devices in the *Petroleum Refinery Sector Risk and Technology Review and New Source Performance Standards* rulemaking (“2015 Refineries Rule”).³³ For the sake of completeness and for the public’s convenience, the EPA has included the most relevant, flare-related technical support documents from the 2015 Refineries Rule in the docket for this rulemaking.³⁴ Notably, the document titled *Technology Review for National Emission Standards for Marine Tank Vessel Loading Operations* lists all documents the EPA used to inform the flare provisions in the 2015 Refineries Rule, and is in the current action’s docket.

³¹ 40 CFR part 63 subpart CC.

³² United States Department of the Army Corps of Engineers, Institute for Water Resources. (2023). Waterborne Commerce of the United States Parts 1-4 (Report No. IWR-WCUS-23-1 through -4): <https://ndclibrary.sec.usace.army.mil/searchResults?series=Waterborne%20Commerce%20of%20the%20United%20States>.

³³ 80 FR 75178 (Dec. 1, 2015); Docket ID No. EPA-HQ-OAR-2010-0682.

³⁴ Docket ID No. EPA-HQ-OAR-2025-0207.

Additional information related to the promulgation and subsequent amendments of the NESHAP is available in the docket for this rulemaking.

D. How does the EPA perform the technology review?

When conducting a technology review, the EPA primarily focuses on identifying and evaluating developments in practices, processes, and control technologies that have occurred since the Agency last promulgated MACT standards or amendments. Where the EPA identifies such developments, the Agency analyzes technical feasibility, estimated costs, energy implications, and non-air environmental impacts. The EPA also considers the emission reductions associated with the potential application of each development. This analysis informs the Agency's decision whether it is "necessary" to revise the emissions standards. In addition, the EPA considers the appropriateness of applying controls to new sources versus retrofitting existing sources. For this exercise, the EPA considers any of the following to be a "development":³⁵

- Any add-on control technology or other equipment that was not identified and considered during development of the original MACT standards;
- Any improvements in add-on control technology or other equipment (that were identified and considered during development of the original MACT standards) that could result in additional emissions reduction;
- Any work practice or operational procedure that was not identified or considered during development of the original MACT standards;
- Any process change or pollution prevention alternative that could be broadly applied to the industry and that was not identified or considered during development of the original MACT standards; and

³⁵ See *Nat'l Ass'n for Surface Finishing v. EPA*, 795 F.3d 1, 11 (D.C. Cir. 2015) (upholding EPA's interpretation of what is considered "developments" under CAA section 112(d)(6) and deferring to the EPA's methodology and balancing decisions).

- Any significant changes in the cost (including cost effectiveness) of applying controls (including controls the EPA considered during the development of the original MACT standards).

In addition to reviewing the practices, processes, and control technologies that the EPA considered during the original promulgation or in previous updates to the NESHAP, the Agency reviews a variety of data sources in our investigation of potential practices, processes, or controls. Pursuant to the decision of the U.S. Court of Appeals for the D.C. Circuit in *LEAN*, the EPA also reviews the available data to determine if there are any unregulated emissions of HAP within the source category and evaluates this data for use in developing new emission standards. The *LEAN* decision requires the EPA to address regulatory gaps, such as missing MACT standards for listed air toxics with known emissions from the source category.³⁶ See sections II.B and II.C of this preamble for information on the specific data sources that the EPA reviewed as part of the technology review.

III. Analytical Results and Proposed Decisions

A. What are the results and proposed decisions based on our technology review, and what is the rationale for those decisions?

The EPA evaluated developments in practices, processes, and control technologies since promulgation of the original MACT standards and the subsequent RTR consistent with CAA section 112(d)(6) and as noted in section II.D of this preamble. As noted in section I.B of this preamble, the MTVLO NESHAP also contains RACT standards for the control of VOC from gasoline and crude oil MTVLO. Based on available information, all facilities subject to the RACT standards are also subject to the MACT standards. The memorandum titled *Technology Review for National Emission*

³⁶ *LEAN*, 955 F.3d 1088.

Standards for Marine Tank Vessel Loading Operations summarizes the Agency's technology review and is available in the docket for this rulemaking.³⁷

1. Evaluation of Applicability Thresholds and Submerged Loading Standards

The MACT standards apply to major sources of HAP emissions. For “onshore” existing sources, the MTVLO NESHAP requires loading emission controls for facilities that are major sources of HAP emissions and that have emissions above 10 tpy of any individual HAP or 25 tpy of aggregate HAP considering only the MTVLO emissions (*i.e.*, the “10 or 25 ton” emissions threshold).³⁸ As part of the 2011 RTR, the EPA established a submerged fill loading standard for sources below the “10 or 25 ton” emissions threshold, in accordance with the MACT floor level of control,³⁹ and consistent with standards set in place by the USCG.⁴⁰

First, the EPA conducted an analysis of MTVLO sources that would have emissions below the “10 or 25 ton” emissions threshold to determine if applying controls to smaller MTVLO would be cost-effective. Based on our analysis, given the low emissions reductions that could be achieved from these sources and the costs associated with additional controls, we are proposing that it is not necessary to amend the requirements under the technology review. We note that the cost effectiveness of implementing additional controls for smaller facilities exceeds \$15,000 per ton of organic HAP reduced, which is above the range the EPA generally considers cost effective for organic HAP.⁴¹ Based on this analysis, the EPA determined that the current “10 or 25

³⁷ Docket ID No. EPA-HQ-OAR-2025-0207.

³⁸ In this preamble, the term “onshore” refers to terminals that do not meet the definition of “offshore terminal” as defined in 40 CFR 63.561. Thus, the term “onshore” refers to a terminal with all loading berths less than 0.81 km (0.5 miles) from the shore.

³⁹ 77 FR 22571 (Apr. 21, 2011); 40 CFR 63.560(a)(4).

⁴⁰ 46 CFR 153.282.

⁴¹ For example, in the 2020 Ethylene Production NESHAP RTR, the EPA stated, “[g]enerally, for organic HAP, we consider a cost effectiveness of \$10,000/ ton or more to be near the upper end of what the EPA has traditionally considered to be cost effective for control for these particular type of HAP.” 85 FR 40396 (July 6, 2020).

ton” HAP emissions applicability threshold is reasonable, and the Agency proposes that no revision to this applicability provision is necessary under the technology review. The EPA solicits comment on its technical evaluation of the MACT applicability thresholds and proposal to maintain the current “10 or 25 ton” standards for onshore existing sources (C-1).

Second, the current MACT standards do not apply to commodities with a vapor pressure less than 1.5 pounds per square inch absolute (psia) at standard conditions.⁴² As the USCG already requires marine cargo tanks to meet submerged loading control requirements at 46 CFR 153.282, the EPA assessed whether it would be reasonable to lower this vapor pressure threshold for all materials loaded and whether the Agency should require additional controls beyond submerged loading. Although the EPA found that sources generally would not need more control device capacity, sources would incur additional operational costs (*e.g.*, increased fuel for thermal oxidizers) to control these low vapor pressure streams and the result would be limited emission reductions. The incremental cost effectiveness for eliminating the 1.5 psia vapor pressure exemption generally exceeded \$100,000 per ton of additional HAP removed. The EPA concluded that these costs were not reasonable and thus is proposing no revisions to the vapor pressure exemption. The EPA solicits comment on its proposal to maintain the 40 CFR 63.560(d)(1) exemption provision for commodities with vapor pressure less than 1.5 psia (C-2).

While the EPA is not proposing to revise the applicability thresholds, the Agency is proposing to clarify the emission estimation procedures in 40 CFR 63.565(l) to ensure that all controls for reducing HAP emissions from MTVLO facilities have federally enforceable operating limits. The MACT provisions in the MTVLO NESHAP only apply to major sources of HAP emissions. MTVLO facilities that use controls to get below the

⁴² 40 CFR 63.560(d)(1).

major source emission limits can apply for a synthetic minor permit, provided the control provisions are federally enforceable. The current provisions in 40 CFR 63.565(l) are unclear, and a source could interpret the provisions to allow controls to achieve emissions under 10 and 25 tons without any federally enforceable limits on the continuous operation of the controls. The EPA finds that facilities with pre-controlled emissions of 10- or 25-tons HAP should comply with the control provisions in the MTVLO NESHAP or have enforceable, permitted control requirements to ensure emissions remain below 10- and 25-tons HAP at all times. Specifically, the EPA is proposing to add the word “permitted” to the last sentence in 40 CFR 63.565(l) so that the sentence applies to test data or techniques “. . . for *permitted* operating conditions at the source” (emphasis added). The EPA is proposing this revision to ensure that permitted, enforceable control requirements are the sole method for reducing potential emissions when “considering controls.”

The EPA is also proposing to remove the word “actual” in the first sentence of the definitions of “Source(s) with emissions less than 10 and 25 tons” and “Source(s) with emissions of 10 or 25 tons.”⁴³ These definitions reference the calculation methodology in 40 CFR 63.565(l), which the EPA is proposing to limit to permitted operating conditions. Because the word “actual” could be construed to include emission reductions from controls that are not federally enforceable, the Agency is proposing to remove the word “actual” from these definitions, consistent with the proposed revision to 40 CFR 63.565(l).

Finally, the EPA is proposing to revise paragraph 40 CFR 63.567(j)(3), regarding the submission of annual HAP control efficiency reports, to require identification of the monitoring parameter(s) used and ensure the source continuously maintains HAP control efficiency while loading a regulated commodity. This revision provides a means to

⁴³ 40 CFR 63.561.

ensure the source is continuously operating the control device in a manner consistent with the performance test or other emission estimation methods used under 40 CFR 63.565(l). The EPA solicits comments on the number of sources that use controls to achieve emissions less than 10- and 25-tons HAP and whether the rule should require these control requirements to be permitted or otherwise federally enforceable (C-3).

The EPA also requests comment on the proposals to clarify the emission estimation procedures in 40 CFR 63.565(l), the reporting requirement in 40 CFR 63.567(j)(3) to consider only “permitted” controls, and the definitions of “source(s) with emissions less than 10 and 25 tons” and “source(s) with emissions of 10 or 25 tons,” (C-4).

2. Assessment of Control Requirements

The MTVLO NESHAP includes three subcategories: “onshore” terminals, offshore terminals, and the Alyeska Pipeline Service Corporation’s Valdez Marine Terminal (VMT). The MTVLO NESHAP includes “new” and “existing” MACT standards for both onshore and offshore terminals, depending on the quantity of loading emissions. The MACT control requirements in the MTVLO NESHAP for displaced vapors include submerged fill operations and control efficiencies that range from 95 percent for new offshore facilities to 98 percent for new onshore facilities. Table 1 details the MTVLO standards for both MACT and RACT applicable facilities. The table presents RACT applicability thresholds in units of million barrels (MMbbl) and vapor concentrations in units of parts per million by volume (ppmv).

Table 1. Summary of Current MTVLO NESHAP Standards

Standard	Source Type	Location	Applicability Threshold	Applicable Commodities	HAP and/or VOC Control Standard
MACT	New	Onshore	Major source ¹	≥ 1.5 psia	Vapor Collection and (98 percent or Vapor Balancing)
MACT	New	Offshore	Major source ¹	≥ 1.5 psia	Vapor Collection and (95 percent or Vapor Balancing)

MACT	Existing	Onshore	≥ 10 or 25 tons ²	≥ 1.5 psia	Vapor Collection and (97 percent or Vapor Balancing)
MACT	Existing	Onshore	< 10 or 25 tons ²	≥ 1.5 psia	Submerged Loading
MACT	Existing	Offshore	≥ 10 or 25 tons ²	≥ 1.5 psia	Submerged Loading
MACT	Existing	Offshore	< 10 or 25 tons ²	≥ 1.5 psia	Submerged Loading
RACT	--	Onshore	≥ 10 MMbbl or 200 MMbbl ³	≥ 1.5 psia	Vapor Collection and (98 percent using a combustion device or 95 percent vapor recovery or 1,000 ppmv VOC during gasoline loading or Vapor Balancing)
MACT and RACT	VMT ⁴	Onshore	N/A	≥ 1.5 psia	Vapor Collection and 98 percent

¹ Major source of HAP emissions as defined in 40 CFR 63.2.

² Major sources of HAP; however, the “10 or 25 tons” refers to the individual or aggregate HAP emissions threshold considering only the MTVLO emissions at a facility.

³ Source(s) having aggregate MTVLO at all loading berths of 10 MMbbl or more of gasoline annually or 200 MMbbl or more of crude oil annually.

⁴ Standards specific to the VMT source, as defined in 40 CFR 63.561.

As part of conducting the technology review in accordance with CAA section 112(d)(6), the EPA reviewed Federal and State rules, conducted a review of the RACT/BACT/LAER Clearinghouse, and assessed international best practices applicable to MTVLO and MTVLO sources.

The EPA identified no new technologies for emissions control relevant to the MTVLO source category. However, we evaluated whether improved control device performance and/or cost effectiveness would support the conclusion that amendments are “necessary” pursuant to the technology review. Based on the cost estimates for improving control device performance, the EPA has determined that a marginal control efficiency improvement would likely result in the replacement of existing controls is unreasonable for these sources. As such, the EPA proposes it is not necessary to revise the control standards for vapors displaced during MTVLO. The EPA also evaluated more frequent

performance testing related to non-flare controls, as discussed in section III.B.5 of this preamble, and improvements to flare monitoring requirements, as discussed in section III.B.6 of this preamble. The EPA solicits comment on whether there are control technology developments that the EPA should consider in the EPA's technology review of the MTVLO NESHAP (C-5).

3. Evaluation of Equipment Leak Monitoring Requirements

The MTVLO NESHAP has standards for monitoring vapor collection systems and control devices to detect leaks and ensure effective routing of vapors to the control device. Owners or operators must conduct annual monitoring using EPA Method 21 and must repair leaks with emissions above a concentration of 10,000 ppmv. Additionally, if at other times an owner or operator identifies a potential leak by audible, visual, or olfactory (AVO) or other detection method, the owners or operator must monitor the potential leak using EPA Method 21 and repair the leak if the monitored concentration exceeds 10,000 ppmv. The rule has no direct equipment leak "standard" (*i.e.*, no provisions in 40 CFR 63.562) and does not require monitoring for leaks from liquid components (*e.g.*, pumps, valves, or connections associated with liquid loading lines). The USCG regulations require leak observations at the connection to the ship's cargo fill line, essentially a form of AVO requirements for a portion of the liquid components.

The EPA evaluated a variety of leak detection and repair (LDAR) program requirements, which included adding liquid components to the LDAR program, lowering the leak definition from 10,000 ppmv to 500 ppmv, and conducting more frequent monitoring surveys (semiannual or quarterly monitoring). The EPA used a Monte Carlo model to randomly initiate modeled leaks from individual equipment components present at MTVLO facilities and to estimate the emissions that occur under the various monitoring alternatives that the Agency evaluated. The EPA found that the most cost-effective option assessed was the addition of monitoring requirements for liquid

components; however, the incremental cost effectiveness of this option compared to the current provisions exceeds \$18,000 per ton of HAP reduced. Additionally, for the approximately 190 facilities subject to the rule, the EPA expects that revisions to the standards would result in minimal reductions in HAP emissions nationwide (between 4 and 7.4 tpy). Therefore, the EPA concludes that including liquid components or revising the leak definition or frequency of EPA Method 21 monitoring is not necessary pursuant to the technology review. For more information on the Monte Carlo model, modeling assumptions, and cost analysis used to assess alternative equipment LDAR programs, see the memorandum titled *Technology Review for National Emission Standards for Marine Tank Vessel Loading Operations* available in the docket for this rulemaking.⁴⁴ The EPA solicits comment on whether the Agency should revise equipment leak provisions to include liquid components, revise the leak definition, or revise the monitoring frequency (C-6).

While the EPA is not proposing standards for equipment leaks within 40 CFR 63.562, the Agency identified several gaps in the compliance provisions at 40 CFR 63.563(c) that warrant clarification.

First, the annual EPA Method 21 monitoring requirement of the vapor collection systems and control devices does not specify that owners or operators at an MVTLO facility must conduct monitoring when actively loading regulated materials (commodities with vapor pressure above 1.5 psia) into marine vessel cargo tanks. However, for EPA Method 21 to effectively detect leaks from the vapor collection system or from a control device, monitoring must occur when the systems and devices are actively loading. Therefore, the EPA is proposing to clarify that owners or operators must conduct the annual EPA Method 21 monitoring during active loading of materials subject to control requirements in 40 CFR 63.562(b), (c), or (d).

⁴⁴ Docket ID No. EPA-HQ-OAR-2025-0207.

Second, the repair requirements in the MTVLO NESHAP only indicate the timing for a “first effort of repair” and do not specify a timeline for completing the repair if the “first effort of repair” is unsuccessful. Therefore, the EPA is proposing to revise this wording to require leak repair within 15 days of identification or prior to the next loading operation, whichever is later. The EPA is also proposing that the owner or operator must verify the repair by re-monitoring the component using the method by which the leak was identified, consistent with LDAR programs in other NESHAP.⁴⁵ The EPA solicits comment on the proposed clarifications that EPA Method 21 owners or operators must conduct monitoring when actively loading regulated material and must conduct repair and verify the repair by re-monitoring rather than solely attempt repair (C-7).

Finally, at some new offshore loading terminals, ships are moored by anchoring buoys in open water rather than mooring at the facility’s dock. Vapor lines at these offshore loading terminals may be underwater or may float on the water surface. Offshore loading terminals that load ships moored by anchoring buoys have indicated that EPA Method 21 is infeasible on these underwater or floating vapor lines. EPA Method 21 is commonly applied to valves, connectors, flanges, or open-ended lines and not to flexible tubing commonly used for offshore loading. Also, some of the tubing may be underwater. Thus, the use of EPA Method 21 to find leaks in the piping and connectors that are underwater or in the water (with portions of the tubing and connectors in the water) is not technically feasible. Owners or operators can use AVO methods to identify leaks for fully or partially submerged piping or connectors. However, the current rule requires EPA Method 21 monitoring of leaks, identified via AVO methods, to confirm the leak exceeds a 10,000 ppmv concentration. This requirement is technically infeasible for vapor lines in the water. It also adds burden to MTVLO owners and operators since most AVO-detected

⁴⁵ See, e.g., 40 CFR part 63, subparts H and UU (definition of “repaired”).

leaks will need to be fixed and the additional EPA Method 21 monitoring is not needed to find the leak.

Based on our review of the monitoring requirements for vapor collection systems and control devices, the EPA is proposing to exempt certain piping and connections from the annual EPA Method 21 monitoring requirement. Specifically, the EPA is proposing to exempt piping and equipment components that are underwater or floating in the water from EPA Method 21 monitoring and to allow the use of AVO methods for this equipment. Additionally, consistent with other equipment leak provisions, such as those in 40 CFR part 60 subpart VVb, the EPA is proposing to exempt piping and equipment components that require elevating inspecting personnel more than two meters above a support surface (*i.e.*, difficult-to-monitor components) from EPA Method 21 monitoring requirements. Instead, the EPA is proposing that owners or operators must monitor these equipment components, to the extent practicable, using AVO methods. To implement this revision, the EPA is also proposing to revise the definition of “leak” to include liquid or gaseous releases from vapor collection systems and control devices identified by AVO, or any other method, as a leak. Additionally, the EPA is proposing that owners and operators must repair any leaks identified using AVO, thereby eliminating the EPA Method 21 monitoring requirement for AVO-detected leaks. The EPA solicits comment on the proposed revisions to allow AVO monitoring for vapor lines that may be underwater or may float on the water surface, to allow AVO monitoring for difficult-to-monitor equipment components, and to eliminate the EPA Method 21 monitoring requirement for AVO-detected leaks (C-8).

B. What other actions are we proposing, and what is the rationale for those actions?

In addition to the proposed amendments described earlier in this preamble, the EPA is proposing additional revisions to the NESHAP. As part of the 2011 RTR, the EPA revised the SSM provisions of the MTVLO NESHAP to ensure they were consistent

with the D.C. Circuit's interpretation of emission standards provisions in *Sierra Club v. EPA*,⁴⁶ and to include an affirmative defense provision related to the availability of penalties.⁴⁷ The EPA intended the 2011 final rule to remove all exemptions for periods of SSM in the MTVLO NESHAP but has since identified additional provisions addressing SSM periods that provide exemptions from CAA section 112 standards. Consistent with the 2008 *Sierra Club* decision, the EPA is proposing to remove both the maintenance allowance provisions and the penalty-related affirmative defense provisions in the MTVLO NESHAP. The EPA is also proposing to require electronic reporting, improve performance testing and monitoring requirements, improve flare monitoring requirements, update cross-references, and clarify certain applicability provisions. We discuss our proposed changes and related analyses later in this preamble.

1. SSM and Maintenance Provisions

First, the EPA is proposing to clarify the general duty clause at 40 CFR 63.562(e) by revising this paragraph title from "Operation and maintenance requirements for air pollution control equipment and monitoring equipment for affected sources" to "General duty requirements" to confirm that the general duty requirements apply more broadly to the source (MTVLO terminal) and not only to the control device and monitoring equipment. Second, the EPA is proposing that the general duty requirement applies at all times, including when a marine tank vessel is at the terminal and when no active loading operations are occurring. Some facilities vent or purge MTVLO cargo tanks prior to connecting to control for loading. The EPA considers these displaced vapors, which could otherwise be routed to controls, to be inconsistent with the general duty requirement to minimize emissions. The EPA is also proposing revisions to 40 CFR 63.562(e)(1), (2), (3)(ii) and (iii), and (4) to clarify when owners and operators follow the

⁴⁶ 551 F.3d 1019 (D.C. Cir. 2008).

⁴⁷ 76 FR 22566 (Apr. 21, 2011).

procedures in the operation and maintenance plan, “variances” to the operating limits are deviations rather than variances from the emission limitations. The operation and maintenance plan should minimize these deviations and include the implementation of corrective actions to prevent reoccurrence. The current operation and maintenance plan requirements include provisions similar to the SSM exemption language that the D.C. Circuit found inconsistent with the statute in *Sierra Club*. The EPA solicits comment on the proposed revisions to clarify the general duty requirements for MTVLO terminals (C-9).

As part of the 2011 MTVLO NESHAP RTR, the EPA included provisions allowing sources to assert an affirmative defense to civil penalties for violations caused by malfunctions.⁴⁸ Under these provisions, if a source could demonstrate in a judicial or administrative proceeding that the source met the regulatory criteria for raising an affirmative defense, the court or the EPA would not assess civil penalties. However, in 2014, the D.C. Circuit in *NRDC v. EPA* vacated such a penalty-focused affirmative defense provision in another CAA section 112 regulation.⁴⁹ The Court found that the EPA lacked authority to establish such an affirmative defense provision for private civil suits because CAA section 304(a) vests authority over private suits in the Federal courts, not the EPA. Specifically, the Court found that “[a]s the language of the statute makes clear, the courts determine, on a case-by-case basis, whether civil penalties are ‘appropriate,’” and that this determination “is a job for the courts, not EPA.”⁵⁰

Since *NRDC*, the EPA has been removing such penalty-related affirmative defense provisions from CAA section 112 rules.⁵¹ Here, the EPA is proposing to remove

⁴⁸ 76 FR 22574 (Apr. 21, 2011); 40 CFR 63.561, 63.562(e)(7).

⁴⁹ 749 F.3d 1055 (D.C. Cir. 2014) (vacating affirmative defense provisions in the CAA section 112 rule establishing emission standards for Portland cement kilns).

⁵⁰ *Id.* at 1063.

⁵¹ *See, e.g., National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*, 80 FR

the affirmative defense at 40 CFR 63.562(e)(7), the definition of “affirmative defense” in 40 CFR 63.561 and any references to these provisions from the MTVLO NESHAP as of the effective date of the final amendments. If a source is unable to comply with emissions standards because of a malfunction, the EPA may use its case-by-case enforcement discretion to provide flexibility, as appropriate. Further, as the D.C. Circuit recognized, courts have the discretion to consider any defense raised in an EPA or citizen enforcement action and to determine whether penalties are appropriate.⁵² The same is true for the presiding officer in the EPA’s administrative enforcement actions.⁵³

The EPA has long interpreted CAA section 112 as not requiring the Agency to factor emissions that occur during periods of malfunction into the development of CAA section 112 standards. In 2016, the D.C. Circuit upheld this reading in *U.S. Sugar Corp. v. EPA*.⁵⁴ The EPA’s reasoning related to the difficulties in determining an appropriate numerical standard that would reflect the MACT standard required by CAA section 112 and the immense variation that would result if the EPA included conditions during a malfunction in the standard-setting process. The court agreed, finding that any such standard would be too broad and meaningless with respect to the intent of CAA section 112 MACT standards. Thus, during periods of malfunction, the EPA generally requires compliance with the otherwise applicable standard for normal operation.

72789 (Sept. 20, 2015); *National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers*, 81 FR 63112 (Sept. 14, 2016).

⁵² *Cf. NRDC*, 749 F.3d at 1064 (arguments that violation was caused by unavoidable technology failure can be made to the courts in future civil cases when the issue arises).

⁵³ Although *NRDC* does not address the EPA’s authority to establish an affirmative defense to penalties in administrative enforcement actions, we are not including such an affirmative defense in the proposed rule. As explained above, such an affirmative defense is not necessary. Moreover, assessment of penalties for violations caused by malfunctions in administrative proceedings and judicial proceedings should be consistent. *See* CAA section 113(e), 42 U.S.C. 7413(e) (requiring both the Administrator and the court to take specified criteria into account when assessing penalties).

⁵⁴ 830 F.3d 579, 606-10 (D.C. Cir. 2016) (stating that CAA section 112 “permits the EPA to ignore malfunctions in its standard-setting and account for them instead through its regulatory discretion”).

Although no statutory language compels the EPA to set different standards for malfunctions, we have the discretion to do so where certain criteria are met. Under CAA section 112(h), the Administrator may promulgate a “design, equipment, work practice, or operational standard, or combination thereof” to apply in lieu of an emission standard if the Administrator determines (1) that “it is not feasible . . . to prescribe or enforce an emission standard” for the relevant pollutant and (2) that the design, equipment, work practice, or operational standard (or combination thereof) is consistent with the provisions of CAA section 112(d) or (f).⁵⁵ If the Administrator promulgates a design or equipment standard under CAA section 112(h)(1), the standard must include “such requirements as will assure the proper operation and maintenance of any such element of design or equipment.”⁵⁶ Thus, the EPA may consider whether circumstances warrant setting work practice standards for a particular type of malfunction to minimize emissions. The EPA solicits comment on whether circumstances warrant setting work practice standards for periods of malfunction at MTVLO consistent with the requirements of CAA section 112(h) (C-10).

Additionally, on September 5, 2025, the D.C. Circuit held in *SSM Litigation Group v. EPA* that although the EPA has no authority under the CAA to “create a regulatory ‘defense’ that limits the remedial authority granted by Congress to the Federal courts,” a “complete affirmative defense, like the one at issue [in that case], is permissible because it relates to the antecedent question of liability and therefore does not impinge on the judiciary’s authority to award ‘appropriate civil penalties.’”⁵⁷ Although the affirmative defense provision that the EPA is now proposing to remove is not a “complete” affirmative defense (*i.e.*, the affirmative defense provision only pertains to

⁵⁵ 42 U.S.C. 7412(h)(1), 7412(h)(2) (defining the phrase “not feasible to prescribe or enforce an emission standard”).

⁵⁶ *Id.* 7412(h)(1).

⁵⁷ 150 F.4th 593, 599 (D.C. Cir. 2025) (quoting CAA section 304(a), 42 U.S.C. 7604(a)).

civil penalties), the EPA requests comment on whether and how we should address affirmative defense provisions within this and other new source performance standard (NSPS) or NESHAP in response to the *SSM Litigation Group* decision (C-11). Due to the timing of the D.C. Circuit's decision in *SSM Litigation Group* and the Agency's consent decree deadline to issue this proposed action, the EPA may address the impacts of the *SSM Litigation Group* decision on this NESHAP in an appropriate future action but will consider all comments received on this issue in reaching a final decision.

The EPA previously proposed to remove the affirmative defense provisions from the MTVLO NESHAP as part of a proposed rule titled *Removal of Affirmative Defense Provisions from Specified New Source Performance Standards and National Emissions Standards for Hazardous Air Pollutants*.⁵⁸ The EPA now proposes to remove these provisions as part of this action. The EPA will only consider comments submitted to the docket for this action and will not consider comments previously submitted on the prior proposal.⁵⁹ The EPA solicits comment on this proposal to remove the affirmative defense provisions from the MTVLO NESHAP (C-12).

Finally, the EPA is proposing to remove the maintenance allowance provisions provided in 40 CFR 63.562(b)(6), (c)(6), and (d)(2)(ii)(B). As explained in the original 1995 rulemaking, the EPA included maintenance allowances as a variance to the emission standard during repairs, and to allow facilities to have additional time beyond the compliance deadline to meet the applicable standards.⁶⁰ These provisions are inconsistent with the CAA as interpreted by the D.C. Circuit in *Sierra Club*. The EPA is proposing to remove these provisions to ensure the consistent use of controls and

⁵⁸ 89 FR 52425 (June 24, 2024).

⁵⁹ Docket ID No. EPA-HQ-OAR-2025-0078. The EPA intends to take appropriate final action on the remainder of that proposed rule in a separate action at the appropriate time.

⁶⁰ See *Federal Standards for Marine Tank Vessel Loading Operations and National Emission Standards for Hazardous Air Pollutants for Marine Tank Vessel Loading Operations--Technical Support Document for Final Standards: Summary of Public Comments and Responses*, § 2.6.1, available in the docket for this rulemaking.

application of a CAA section 112 standard at all times. Consistent with the removal of the maintenance allowance provisions, the EPA is proposing to remove the definition of “maintenance allowance” in 40 CFR 63.561. The EPA considered the possibility of prescribing specific work practice standards as a potential replacement for the maintenance allowance provisions under 40 CFR 63.562(b)(6), (c)(6), and (d)(2)(ii)(B). CAA section 112(h)(1) states that the Administrator may prescribe a work practice standard or other requirements, consistent with the provisions of CAA section 112(d) or (f), in those cases where, in the judgment of the Administrator, it is not feasible to enforce an emission standard. However, the EPA was unable to identify specific work practice standards that would allow operation to continue consistently with *Sierra Club*. The EPA is soliciting comment on the removal of maintenance allowance provisions for MTVLO (C-13). The EPA also is soliciting comment on potential work practice standards that could be implemented in lieu of the applicable emission standards during periods of maintenance (C-14).

2. Electronic Reporting

The EPA is proposing that owners and operators of facilities subject to the MTVLO NESHAP submit electronic copies of required notifications and reports through the EPA’s Central Data Exchange (CDX) using CEDRI. The memorandum *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*, describes the electronic data submission process and is available in the docket for this rulemaking.

The 2011 MTVLO NESHAP RTR included requirements that affected sources electronically submit performance test results collected using test methods that are compatible with the EPA’s Electronic Reporting Tool (ERT) to the EPA’s CDX by using the ERT or other compatible electronic spreadsheet.⁶¹ In this proposal, the EPA is making

⁶¹ 76 FR 22566 (Apr. 21, 2011).

minor updates to the electronic reporting language for performance tests to reflect the current electronic reporting process (*e.g.*, all methods are now compatible with the ERT). Similar to performance test results, the EPA proposes to add language that would require submitting continuous emissions monitoring systems (CEMS) performance evaluation results in the format generated through the use of the ERT or an electronic file consistent with the xml schema on the ERT website.⁶² Electronic files consistent with the xml schema on the ERT website must accompany all the information required by 40 CFR 63.7(g)(2) in PDF format.

For periodic reports, the proposed rule would require that owners and operators use the appropriate spreadsheet template to submit information to CEDRI. A draft version of the proposed template for this report is in the docket for this action.⁶³ The EPA specifically requests comment on the content, layout, and overall design of the template (C-15). The proposed rule would require that owners and operators submit all other notifications and reports as a PDF upload in CEDRI.

The electronic submittal of the reports addressed in this proposed rulemaking will increase the usefulness of the data contained in those reports, keep with current trends in data availability and transparency, further assist in the protection of public health and the environment, and improve compliance by facilitating the ability of regulated entities to demonstrate compliance with requirements. Further, the electronic submittal of reports facilitates the ability of the EPA and delegated State, local, Tribal, and territorial air agencies to assess and determine compliance and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic reporting also eliminates paper-based, manual processes, thereby saving time and resources, simplifying

⁶² U.S. Environmental Protection Agency. (Last updated September 2, 2025). Electronic Reporting Tool (ERT): <https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>.

⁶³ See *Part 63 Subpart Y 63.567(o) Periodic Report*, available at Docket ID. No. EPA-HQ-OAR-2025-0207.

data entry, eliminating redundancies, minimizing data reporting errors, and providing data quickly and accurately to the affected facilities, air agencies, the EPA, and the public. For more information on the benefits of electronic reporting, see the memorandum *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*, referenced earlier in this section.

To facilitate electronic reporting, the EPA proposes to specify several reporting elements commonly included in periodic reports that are not always directly required in the regulatory text (like facility name, address, contact person information, period covered by the report). Specifying these reporting elements provides a clear and distinct reference for all reporting elements included in the reporting form, which improves transparency and clarity for the requirements in each report. Affected sources can easily copy most of these data elements into subsequent reporting forms or save the form as a template with these data elements populated, thus minimizing burden to reporters.

Additionally, the EPA proposes that periodic reporting occur semiannually. Currently, the MTVLO NESHAP includes provisions to allow facilities to request annual reporting after meeting certain conditions. This is inconsistent with the general provisions codified at 40 CFR part 63 subpart A, which establish a default semiannual reporting frequency and only allow requests for reduced reporting frequency in cases that require quarterly periodic reports. Further, the NESHAP currently exempts owners and operators from reporting exceedances if the exceedances occur for less than five percent of the operating time, which is also inconsistent with the general provisions. Table 1 in 40 CFR 63.650 indicates that 40 CFR 63.10(e)(3)(vi) applies. There is no allowance in the general provisions to forego submittal of the summary report based on the duration of exceedances. In fact, the summary report is always required, and the duration of excess emissions and downtime determines when a facility must submit a full excess emissions

report. Therefore, the EPA proposes to remove this allowance and to require that each periodic report includes a clear indication of whether there were deviations during the reporting period. If deviations occur, the EPA would require facilities provide information to identify the exceeded operating limit, the time and duration of the deviation, the cause of the deviation, and the taken corrective action or adopted preventative measures.

To better transition from the current “excess emission reports” to semiannual electronic reporting, the EPA proposes to sunset the provisions addressing summary reports and excess emissions and monitoring system performance reports in 40 CFR 63.567(e) and the malfunction reporting in 40 CFR 63.567(m) within 180 days of the publication of the final rule in the *Federal Register*. On or after 180 days of the publication of the final rule in the *Federal Register*, the EPA proposes that owners and operators must meet the new reporting requirements in 40 CFR 63.567(o). The reporting requirements in 40 CFR 63.567(o) include information similar to that previously required, as well as reporting elements to improve transparency and clarity for electronic reporting and additional reporting elements based on other proposed revisions, such as reporting elements associated with the enhanced flare monitoring requirements discussed in section III.B.6 of this preamble.

The EPA solicits comment on its proposal to require electronic reporting and the revisions made to the reporting requirements to facilitate electronic reporting and directly report deviations (C-16).

3. Cross-Reference Updates

General Provisions Table. Table 1 to 40 CFR 60.560 provides an applicability crosswalk of the part 63 general provisions (40 CFR part 63 subpart A) to the MTVLO NESHAP. Since the EPA last reviewed table 1 to 40 CFR 60.560, the EPA has reserved or eliminated some sections of the general provisions (if they were at the end of a series

of paragraphs). Therefore, the EPA is proposing to revise numerous table entries that currently indicate “yes” as the applicability to “no” for sections that are now reserved. The EPA is also proposing to remove table entry lines for sections that no longer exist in the general provisions. For numerous entries, the EPA indicates the general provisions section does not apply because the MTVLO NESHAP does not include opacity monitoring standards. The EPA is proposing to add a comment for several similar entries in table 1 to 40 CFR 60.560 to explain in a consistent manner that these sections do not apply because “[n]o opacity monitoring is required under subpart Y.”

In addition to these straightforward updates, the EPA notes that the current table 1 entry for 40 CFR 63.7(g)(2) indicated “no” for the applicability with a comment marking the section as reserved. The provisions in 40 CFR 63.7(g)(2) now include reporting elements necessary for performance test reports. After reviewing these reporting elements, the EPA proposes to revise the “no” for applicability for 40 CFR 63.7(g)(2) to “yes” because the Agency deems these reporting elements to be reasonable and necessary for inclusion in the performance test report to understand the source being tested, the test methods used, and the operating conditions during the performance test.

Other Cross-Reference Revisions. In our review of the MTVLO NESHAP, the EPA also noted that 40 CFR 63.563(a)(3) referenced 33 CFR 154.814 for operating pressure requirements for the marine tank vessel’s vapor collection system. The cross-referenced requirements no longer exist. The EPA reviewed the former requirements and found that these requirements now reside in 33 CFR 154.2103. Therefore, the EPA proposes to replace the outdated cross-reference to 33 CFR 154.814 with reference to 33 CFR 154.2103.

The EPA solicits comment on its proposal to update cross-references in table 1 to 40 CFR 63.560 to account for part 63 general provisions revisions and to update the cross-reference for operating pressure requirements in 40 CFR 63.653(a)(3) (C-17).

4. Clarifications Regarding the Applicability and Designation of Affected Source

In reviewing the exemptions in 40 CFR 63.560(d), the EPA notes that the exclusion in paragraph (d)(6), which involves the applicability of existing offshore loading terminals, is broader than other provisions. Most of the other exclusions include the phrase “pertaining to . . .” that helps focus the exemption, whereas the exclusion in paragraph (d)(6) does not contain that phrase. The EPA notes that the RACT standards do not differentiate between new and existing sources, so the Agency considers this requirement under 40 CFR 63.560(d)(6) to apply specifically to MACT standards. Therefore, the EPA proposes to clarify that the exclusion in 40 CFR 63.560(d)(6) pertains to the MACT standards in 40 CFR 63.562(b). Also, because the VMT source is a standalone affected source with site-specific MACT and RACT standards, the EPA proposes to correct the language in paragraphs 40 CFR 63.560(a) and (b).

The EPA also seeks to clarify the applicability of the RACT provisions to offshore terminals. In the preamble to the 1995 final rule, the EPA explained: “Since most of the other comments noted that the significantly higher costs and poor cost effectiveness shown by these sources . . . would make control requirements unreasonable for these offshore terminals, the Agency determined that the requirements for controls at offshore RACT terminals would not be consistent with the requirements for the technology to be ‘reasonable.’”⁶⁴ Therefore, the EPA proposes to clarify in the regulatory text, consistent with the 1995 final rule preamble, that the RACT provisions do not apply to offshore loading terminals. The EPA solicits comment on this proposed clarification for the applicability of the MACT and RACT standards to offshore loading terminals (C-18).

The EPA has received inquiries about the applicability of the MTVLO NESHAP to liquefied natural gas (LNG) loading terminals. The EPA expects that LNG terminals

⁶⁴ 60 FR 48393 (Sept. 19, 1995).

are exempt under the provision in 40 CFR 63.560(d)(5). The EPA notes that the provision under 40 CFR 63.560(d)(5) is specific to “loading berths that only transfer liquids containing organic HAP as impurities, as that term is defined in 40 CFR 63.561.” The EPA expects that a loading berth used for LNG is specialized for loading LNG and would meet this exemption without revisions to the rule. The EPA requests comment on the need to further clarify the rule applicability related to LNG and whether the exemption in 40 CFR 63.560(d)(5) should refer to the commodity rather than the loading berth (C-19).

5. Performance Testing

As part of the EPA’s review of the requirements of the MTVLO NESHAP, the Agency noted that the rule only requires an initial performance test. It is common for the control efficiency of control devices to degrade over time, and periodic performance testing provides a means to update operating parameters and ensure compliance as the control devices age. Therefore, the EPA evaluated requiring periodic performance tests at a minimum frequency of once every 60 calendar months. The EPA estimates that the average control efficiency of regularly tested control devices is 98 percent and that the average control efficiency of devices not periodically tested is 95 percent. Costs per test are estimated at approximately \$25,200, with annualized costs of \$6,230 considering one performance test over a 5-year period, in 2023 dollars. The EPA assumes the periodic testing would generally lead to higher temperature operating limits. The EPA estimates the annual cost of maintaining the higher temperature operating limits at \$1,640 per combustion device. The Agency expects that complying with revised operating limits would entail minimal additional costs for vapor recovery devices. For control devices that use a VOC CEMS, the EPA proposes to require annual relative accuracy test audits (RATAs) to maintain the accuracy of CEMS. The EPA estimates the annual costs of RATA at approximately \$19,000. The EPA estimates the average cost effectiveness of the periodic performance test and annual RATA requirements at \$7,520 per ton HAP

reduced. Based on the analysis of the costs of conducting the performance test and the expected improvement in control device performance over time, the EPA determined that a periodic testing requirement and annual RATA requirement is reasonable. Therefore, the EPA proposes to require periodic performance tests at least once every 60 calendar months and annual RATAs for VOC CEMS. For more detail regarding this assessment, see the memorandum *Technology Review for National Emission Standards for Marine Tank Vessel Loading Operations* in docket for this rulemaking.⁶⁵ The EPA solicits comment on the proposed requirement to conduct periodic performance tests at least once every 60 calendar months and the proposed requirement to conduct annual RATAs (C-20).

6. Flare Monitoring Provisions

The EPA evaluated monitoring requirements to ensure that flares meet the desired minimum control efficiency at all times. Since the previous technology review of the MTVLO NESHAP, the EPA has promulgated numerous standards that include new operating limits and monitoring requirements to ensure flares achieve the MACT level of control at all times, starting with the amendments in the 2015 Refineries Rule.⁶⁶ The current MTVLO NESHAP requires that an owner or operator using flares demonstrate initial compliance of those devices with the requirements in 40 CFR 63.11(b), but the MTVLO NESHAP does not require ongoing monitoring. The general provisions at 40 CFR 63.11(b)(1) require “[o]wners or operators using flares to comply with the provisions of this part shall monitor these control devices to assure that they are operated and maintained in conformance with their designs” and state that “[a]pplicable subparts will provide provisions stating how owners or operators using flares shall monitor these control devices.” The EPA believes that the lack of ongoing monitoring requirements in

⁶⁵ Docket ID No. EPA-HQ-OAR-2025-0207.

⁶⁶ 40 CFR part 63 subpart CC; 80 FR 75178 (Dec. 1, 2015).

the MTVLO NESHAP conflicts with this general provision requirement. Further, the EPA believes that the general provision requirements are insufficient for ensuring high destruction efficiencies for assisted flares and understands that most flares at MTVLO use assist air or steam.

The 2015 Refineries Rule requires operating limits and monitoring requirements for the following: continuous pilot or flame, visible emissions, maximum flare tip velocity, flare gas flow rate, combustion zone net heating value (NHV_{cz}), and, for perimeter air-assisted flares, net heating value dilution (NHV_{dil}) parameter. Additionally, MTVLO facilities co-located with petroleum refineries already must comply with the improved monitoring requirements.

Consistent with the impact analysis conducted for the 2015 Refineries Rule, the EPA assumed that the average control efficiency of MTVLO flares, which are subject only to pilot flame monitoring, would achieve a baseline control device efficiency of approximately 94 percent. The EPA also assumed that those MTVLO flares meeting the operating limits for flares in the 2015 Refineries Rule would achieve at least 98 percent control. Costs to comply with the 2015 Refineries Rule monitoring provisions can vary widely, depending on whether an owner or operator needs continuous net heating value (NHV) monitoring or can use a sampling demonstration for waste gas streams with consistent composition or a fixed minimum NHV. Because MTVLO facilities often load a consistent slate of products and because the control requirements only apply when loading liquids with a vapor pressure of 1.5 psia or greater, the EPA expects most MTVLO facilities are able to conduct a sampling demonstration and use the fixed, minimum NHV from the demonstration rather than install continuous NHV monitors. Also, the EPA expects liquid loading volumes to provide a reasonable measure of the waste gas flow rate from the MTVLO facilities, so waste gas flow monitors would not generally be required. Across all flares used at MTVLO facilities, the EPA estimates the

average cost effectiveness of applying the 2015 Refineries Rule's enhanced flare monitoring provisions to the MTVLO source category to be \$8,150 per ton of HAP reduced. For more detail regarding this assessment, see the memorandum *Technology Review for National Emission Standards for Marine Tank Vessel Loading Operations* in the docket for this action.⁶⁷ Based on the EPA's analysis of the monitoring costs and the expected improvement in control device performance, the Agency finds the enhanced flare monitoring provisions to be reasonable.

The EPA understands that some flares MTVLO facilities use to control emissions may be subject to a 95 percent (offshore) or 97 percent (existing onshore) control standard. The EPA developed enhanced flare monitoring provisions from the 2015 Refineries Rule to meet a 98 percent control efficiency. Enhanced flare monitoring requirements appear to be necessary because the current provisions in the MTVLO NESHAP do not ensure that these flares consistently meet the required control efficiencies. The EPA notes that flare performance often drops dramatically below the target operating limits, so there is not a significant difference in operating limits to ensure 97 percent control efficiency versus 98 percent control efficiency. The 2015 Refineries Rule applied these enhanced monitoring provisions to all flares at the refinery, including those MTVLO flares at petroleum refineries that cross-reference into the MTVLO NESHAP and are subject to a 95, 97, and 98 percent control efficiency requirements under 40 CFR 63.651(e). Therefore, the EPA proposes to require that flares used to comply with the MTVLO control requirements meet the operating limits in 40 CFR 63.670 and the monitoring requirements in 40 CFR 63.671, with some minor revisions as discussed in the following paragraphs. The EPA also proposes to sunset the flare performance test requirement at 40 CFR 63.565(e) and to add specific flare recordkeeping and reporting requirements in 40 CFR 63.567(o) and (p), consistent with

⁶⁷ Docket ID No. EPA-HQ-OAR-2025-0207.

those in the 2015 Refineries Rule and with the proposed flare monitoring requirements. The EPA solicits comment on the proposed revisions to the flare monitoring and recordkeeping requirements, consistent with those included in the 2015 Refineries Rule (C-21).

The EPA proposes revisions to the 14-day grab sampling provisions in 40 CFR 63.670(j)(6)(i)(D) to allow fewer days for collecting samples but to maintain the 14-grab sample requirement. The intent of the 14 samples is to assess the variability of NHV during the low NHV commodity loading scenario to account for these factors. Although the EPA expects the loaded commodity to drive the lowest NHV, the Agency also expects that the NHV will vary somewhat with temperature and with the fill level of the cargo tank. The time that a MVTLO facility needs to load a marine vessel depends on the size of the vessel and can vary from several hours to a week or more. Considering the typical time needed to load a marine tank vessel, the EPA proposes that MVTLO facility owners and operators collect samples at intervals of no less than 60 minutes apart. This will allow the collection of 14 grab samples over a few days but will cover a range of temperatures during the sampling day(s) and different loading liquid levels in the marine vessel's cargo tank. Thus, the EPA expects this sampling schedule would maintain the same level of variability in the samples as expected over a 14-day period. Therefore, the EPA proposes to include in the MTVLO flare requirements at 40 CFR 63.563(b)(5) a provision to allow the collection of 14 grab samples over fewer days, provided at least 60 minutes run between the collection of each grab sample. This provision will reduce the burden of the sampling demonstration while still accounting for changes in NHV due to temperature and other loading conditions. The EPA solicits comment on its proposal for allowing hourly grab samples rather than daily grab samples to determine the consistent or minimum NHV of the flare gas (C-22).

The EPA also proposes to include in the MTVLO flare requirements at 40 CFR 63.563(b)(5) a provision to allow use of the cumulative liquid loading rate as an alternative to monitoring the waste gas flow rate. The EPA expects the MTVLO vapor collection system to operate at low pressures and the flow rate of displaced vapors by the MTVLO facility to be equal to the liquid filling rate. The EPA finalized a similar provision for gasoline loading racks in the gasoline distribution NSPS.⁶⁸ The Agency considers this a reasonable alternative for MTVLO sources because of similarities in the processes and operating pressures. The EPA solicits comment on its proposal for allowing the MTVLO source to use volumetric liquid loading rate as a proxy for the flare gas flow rate (C-23).

7. Compliance Provisions

As part of this review, the EPA noted several inconsistencies in the compliance provisions that the Agency is proposing to address. First, the EPA believes that the temperature operating limits required for condensers and refrigeration units in 40 CFR 63.653(b)(7)(ii) and (iii) are ineffectual and technically unsound. For carbon adsorption units, the temperature operating limit must be “no more than 10 percent or 5.6 [degrees Celsius] °C (10 [degrees Fahrenheit] °F) above the baseline carbon bed temperature, whichever is less stringent.” For condensers, refrigeration units, and combustion devices (except for flares), the temperature operating limit must be “no more than 28 °C (50 °F) below the baseline temperature.” The EPA suspects that the temperature operating limit provisions for condensers and refrigeration units incorrectly uses the combustion device temperature requirement in the provision rather than the carbon adsorber temperature requirement, which would better represent condensers and refrigeration units and provide stronger compliance assurance with the emissions standard. For example, a condenser/refrigeration unit that operated at 35 °F during the performance test would not

⁶⁸ 40 CFR part 60 subpart XXa.

have comparable emissions reductions to a unit operated at 80 °F, as the amount of VOC that remain uncondensed in the gas stream at 80 °F is much greater than at 35 °F. However, the current provisions in 40 CFR 63.653(b)(7)(ii) and (iii) that allow a 28 °C (50 °F) variance in the condenser/refrigeration unit's operating temperature would allow a condenser/refrigeration unit that operated at 35 °F during the performance test to continuously operate at 80 °F after the performance test. To correct this suspected error, the EPA proposes to revise the temperature requirement for condensers/refrigeration units in 40 CFR 63.653(b)(7)(ii) to be no more than 10 percent or 5.6 °C (10 °F) above the baseline temperature, consistent with the requirement for carbon adsorption units. The EPA solicits comment on the proposed revisions to the temperature operating limit provisions for condensers and refrigeration units (C-24).

Second, the EPA proposes to sunset the provisions that allow owners and operators to use manufacturer's recommendations to set baseline operating temperatures. First, the EPA finds that the MTVLO NESHAP provisions that allow operation at 50 °F below the manufacturer's recommended minimum operating temperature do not ensure that the control device operates at least as high as the manufacturer's recommended minimum temperature. As such, there is no guarantee, even from the manufacturer, that operation at the allowed baseline temperature will meet the required MACT/RACT control efficiencies. Second, as noted in section III.B.5 of this preamble, the EPA proposes periodic performance tests as a means to update operating limits and ensure compliance as the control device ages. Using the manufacturer's recommended minimum operating temperature limit undermines the purpose of using the periodic performance tests to adjust the control device operating limits, as necessary, based on actual performance of the control device as it ages and begins to degrade. Therefore, the EPA proposes that owners and operators can no longer use the provision in 40 CFR 63.565(f)(2), which allows the use of manufacturer's recommended minimum (or

maximum) temperature to set baseline temperature for any performance tests conducted after the effective date of the final rule. The EPA proposes to add “, if applicable” in the definition of “baseline operating parameter” and in paragraphs 40 CFR 63.563(b)(4)(ii), 63.564(e)(3), and (h)(1) when referencing the manufacturer’s recommended minimum temperature, consistent with the proposed sunseting of these provisions. The EPA requests comment on the proposal to sunset the use of manufacturer’s minimum (or maximum) temperatures and to require that the baseline temperature rely on the control device temperature during the performance test (C-25).

Third, the EPA notes that the RACT compliance option of 1,000 ppmv outlet concentration for gasoline loading is a direct standard, not a parameter operating limit, and suspects that its application is inconsistent between control devices. The RACT standards at 40 CFR 60.562(c)(4) state that an “owner or operator of a source with throughput of 10 M barrels or 200 M barrels, except the VMT source, may meet the requirements of paragraph (c)(3) by reducing gasoline loading emissions to, at most, 1,000 ppmv outlet VOC concentration.” The existing MVTLO NESHAP provides this 1,000 ppmv outlet VOC concentration RACT alternative for gasoline loading carbon adsorption systems in 40 CFR 63.563(b)(6)(iii) and, with some additions, for condensers/refrigeration units in 40 CFR 63.563(b)(7)(iii), but the option is not in the provision for combustion devices (other than flares) or for absorbers. The EPA understands that this compliance option is not appropriate for combustion devices because a combustion device will have significant dilution with combustion air. As such, a 1,000 ppmv outlet VOC concentration for a combustion device would be significantly less stringent than for a 1,000 ppmv outlet VOC concentration recovery device. This may be contrary to the RACT provisions, which require MTVLO using a combustion device to achieve a 98 percent reduction, while a recovery device is only required to achieve a 95 percent reduction. Thus, the EPA agrees that the 1,000 ppmv outlet VOC

concentration alternative should not apply to MTVLO using a combustion device.

However, as currently worded, the alternative in 40 CFR 60.562(c)(4) appears to apply to both provisions in 40 CFR 60.562(c)(3). Therefore, the EPA proposes to clarify in 40 CFR 60.562(c)(4) that this 1,000 ppmv outlet VOC concentration limit is only available as an alternative to the requirements in 40 CFR 60.562(c)(3) when using a recovery device.

With that proposed clarification, the EPA finds no reason not to provide this 1,000 ppmv outlet VOC concentration compliance option equally for all recovery devices. Therefore, the EPA proposes to add compliance options at 40 CFR 63.563(b)(8)(iii) to allow owners and operators of absorbers to use this outlet concentration standard, when it applies. The EPA also proposes to revise the compliance provisions in 40 CFR 63.563(b)(7)(iii) for condenser/refrigeration units to parallel the compliance provisions for this alternative provided for other recovery devices. As previously noted, the temperature operating limit provided in 40 CFR 63.563(b)(7)(iii) is inappropriate, and the EPA is proposing to remove this temperature operating limit option for the 1,000 ppmv VOC compliance alternative.

While the MTVLO NESHAP provides some operational flexibility for operating parameters used to ensure the source is operating similarly to when the source conducted the performance test and demonstrated compliance with the applicable standard, the EPA finds no rationale for allowing similar flexibility when complying with a direct emissions limit. The EPA finds the current provisions that allow up to 1,200 ppmv VOC outlet concentrations for this alternative effectively allows exceedances of this direct emissions limitation. Therefore, the EPA proposes to revise the compliance requirements for this optional standard to require compliance with the 1,000 ppmv limit at all times, rather than allowing deviations up to 1,200 ppmv. The EPA solicits comment on the proposed revisions to the 1,000 ppmv VOC outlet concentration RACT alternative, specific for

gasoline loading operations, to clarify this provision is an alternative only for RACT facilities using recovery devices and to treat this limit as a direct emissions limit. The EPA also requests information on the number of sources currently complying with this 1,000 ppmv VOC outlet concentration limit (C-26).

In assessing the 1,000 ppmv VOC outlet concentration RACT alternative in relationship with the MACT requirements, the EPA investigated whether any facilities could use that alternative. The EPA expects that terminals meeting the throughput thresholds for RACT facilities would also be major sources of HAP emissions subject to MACT requirements. Since the MACT standard for existing onshore sources require a minimum of 97 percent reduction independent of the control device, the EPA expects these RACT facilities using a recovery device would have to comply with the MACT requirements and that the RACT provisions allowing 95 percent reduction or 1,000 ppmv VOC outlet concentration would not apply.

The EPA proposes to clarify in 40 CFR 63.560(a)(2) that the MACT emission standards do not apply below the emissions threshold. Similarly, the EPA proposes to clarify in 40 CFR 63.560(b)(2) that the RACT emission standards do not apply below the throughput threshold. Finally, the EPA proposes to add overlap provisions at 40 CFR 63.560(f) that directly address cases where MACT and/or RACT provisions apply. For sources other than the VMT source, the EPA proposes to clarify that sources subject to both the MACT standards in 40 CFR 63.562(b) and the RACT standards in 40 CFR 63.562(c), respectively, must comply only with the most stringent of the applicable requirements. Thus, MTVLO terminals meeting the applicability requirements for both MACT and RACT standards would have to comply with the 98 percent control efficiency requirement when using a combustion device and comply with the 97 percent control efficiency requirement when using a recovery device. The EPA requests comment on the

proposed overlap provisions and associated clarifications to limit the exclusion of the standards as provided in 40 CFR 63.560(a)(2) and (b)(2) (C-27).

8. Other Revisions

The EPA proposes several revisions to clarify and provide consistency in the MTVLO NESHAP requirements:

- The EPA proposes revisions to 40 CFR 63.560(e) to clarify the compliance dates for offshore terminals and remove erroneous references to the VMT source.
- The EPA proposes revisions to the definition of “affected sources” in 40 CFR 63.561 to more clearly delineate that sources subject to the submerged loading standards are affected sources under the MTVLO NESHAP.
- The EPA proposes to revise the definition of “marine tank vessel loading operation” in 40 CFR 63.561 to clarify that loading commodities at an offshore loading terminal qualifies as a MTVLO source.
- The EPA proposes to add a definition of “regulated commodity” to mean any commodity other than those exempted under 40 CFR 63.560(d)(1) or (5) as a term of convenience for some of the proposed recordkeeping and reporting requirements.
- The EPA proposes an editorial revision the definition of “terminal” in 40 CFR 63.561 to replace “land or sea based structure(s)” with “land- or sea-based structure(s).”
- The EPA proposes to add “captured” prior to “HAP emissions” in 40 CFR 63.652(b)(3) and (4), consistent with the phrasing used in 40 CFR 63.652(b)(2).
- The EPA proposes to replace “HAP” with “VOC” in 40 CFR 63.562(c)(5) because these are RACT provisions that regulate VOC rather than HAP.

- The EPA proposes to add “and VOC” following “HAP” because these are both MACT and RACT provisions that regulate both HAP and VOC vapors from MTVLO sources.
- The EPA proposes to correct subparagraph cross-references in 40 CFR 63.562(d)(2)(ii)(B) by replacing references to paragraphs (d)(2)(ii)(B)(a), (b), or (c) with (d)(2)(ii)(B)(1), (2), or (3), respectively.
- The EPA proposes to clarify that the “cycle” is the average duration of the individual performance test runs for the operating limits based on performance test data.

The EPA requests comment on the proposed editorial revisions and requests information on other revisions that would improve the clarity of the rule requirements (C-28).

9. Severability

This proposed action contains several discrete components, which the EPA views as severable as a practical matter—*i.e.*, they are functionally independent and if finalized as proposed would operate in practice independently of the other components. These discrete components are generally delineated by the section headings within section III.B of this document. For example, the proposed electronic reporting provisions, performance testing provisions, and flare monitoring provisions discussed in sections III.B.2, III.B.5, and III.B.6 generally function independently of one another. The EPA invites comment on the severability of this proposed rule, and in particular whether any components are not functionally independent (C-29).

C. What compliance dates are we proposing, and what is the rationale for the proposed compliance dates?

Most of the proposed revisions are clarifications and editorial revisions. The EPA proposes that the compliance date for these clarifications (*i.e.*, those not specifically

addressed below) would be the effective date of the final rule. The EPA is proposing additional compliance time for a limited number of proposed revisions. The following sections provide the proposed compliance dates for revisions that have a compliance date other than the effective date of the final rule and our rationale for the proposed compliance dates. The EPA requests comment on the proposed compliance dates for the proposed revisions to the MTVLO NESHAP (C-30).

1. Compliance Dates for Electronic Reporting

The EPA proposes to provide 180 days after the effective date of the final rule to comply with the proposed electronic reporting requirements. This will generally allow facilities to complete their reporting period under the current provisions and provide sufficient time to transition to the new electronic reporting requirements.

2. Compliance Dates for Performance Tests

The EPA proposes that owners and operators conduct the first periodic performance test within 180 days of the effective date of the final rule. The Agency considers 180 days to be as expedient as realistically practicable for MTVLO terminals. This allows owners and operators time to identify an appropriate testing contractor and to schedule and conduct the performance tests. Additionally, the EPA proposes to allow owners and operators to use tests conducted up to two years prior to the effective date of the final rule as the first periodic performance test. This will reduce the burden on owners and operators who have recently conducted testing by allowing them to use data that is still representative of facility operations and control device performance instead of immediately requiring a new performance test.

3. Compliance Dates for Flare Monitoring Provisions

The EPA proposes to provide three years to comply with the additional monitoring requirements proposed for flares. This is consistent with the timeframe we provided for petroleum refineries when first proposing those requirements. The new

requirements may require owners or operators to upgrade monitoring systems, and three years is as expedient as realistically practicable considering the number of monitoring systems that owners or operators may need to upgrade.

4. Compliance Dates for Other Revisions

The EPA proposes that other proposed revisions would become effective on the effective date of the final rule.

IV. Summary of Cost, Environmental, and Economic Impacts

A. What are the affected sources?

The EPA estimates that approximately 190 facilities are subject to the MTVLO NESHAP MACT standards. The list of facilities is in the document titled *List of Facilities Subject to the MTVLO NESHAP* in the docket for this rulemaking.⁶⁹

B. What are the air quality impacts?

The EPA estimates that the proposed amendments to the NESHAP would reduce overall VOC and HAP emissions from the MTVLO source category by 3,500 tpy and 280 tpy, respectively. These reductions include approximately 118 tons per year of hexane emissions, 62 tons of benzene emissions, and 56 tons of methanol emissions.

Considering secondary impacts (*e.g.*, emission increases associated with supplemental fuel or additional electricity), the EPA estimates that the proposed action would result in additional criteria pollutant emissions of 14.7 tpy of carbon monoxide and 3.2 tpy of nitrogen oxides. For more information about the estimated emission reductions and secondary impacts of this proposed action, see the memorandum *Technology Review for National Emission Standards for Marine Tank Vessel Loading Operations* in the docket.⁷⁰

⁶⁹ Docket ID No. EPA-HQ-OAR-2025-0207.

⁷⁰ *Id.*

C. What are the cost impacts?

The proposed action would cost (in 2023 dollars) approximately \$3,560,000 in first year costs (testing and initial demonstrations); \$3,000,000 in capital costs for monitoring systems; and an estimated \$2,135,000 in total annualized costs (TACs) based on our analysis of the proposed changes to testing and flare monitoring described in section III.B.5 and III.B.6 of this preamble. For more detail regarding this assessment, see the memorandum *Technology Review for National Emission Standards for Marine Tank Vessel Loading Operations* included in the docket for this rulemaking.⁷¹

D. What are the economic impacts?

The EPA conducted an economic impact analysis for this proposal, *Economic Impact Analysis for the Proposed National Emission Standards for Hazardous Air Pollutants (NESHAP) for Marine Tank Vessel Loading Operations*, which is available in the docket for this rulemaking⁷².

The EPA often prepares a partial equilibrium analysis for economic impact analyses of rules that directly affect industries. In this type of economic analysis, the EPA estimates any impacts on a single affected industry or several affected industries. The EPA assumes that all impacts of this rule on industries outside of those affected are zero or so inconsequential that those impacts do not require consideration in the analysis. If the compliance costs, which are key inputs to an economic impact analysis, are quite insignificant, then the impact analysis could consist of a calculation of annual (or annualized) costs as a percentage of sales for affected companies. The EPA applies this latter type of analysis (termed a screening analysis) when the Agency deems a partial equilibrium or more complex economic impact analysis unnecessary given the expected size of the impacts.

⁷¹ *Id.*

⁷² *Id.*

The EPA calculates the economic impacts of the proposal on small entities as the percentage of TACs incurred by affected ultimate parent owners to their revenues. This ratio provides a measure of the direct economic impact to ultimate parent owners of MTVLO terminals while presuming no impact on consumers. The EPA estimates the average small entity impacted by the proposal will incur TACs of 0.50 percent of their revenue, with none exceeding 4.11 percent. The EPA estimates fewer than 20 percent of impacted small entities will incur TACs greater than one percent of their revenue. This is based on a conservative estimate of costs imposed on ultimate parent companies, where TACs are an average across all facilities due to lack of facility specific cost information.

In addition to the screening analysis, the EPA also prepared a present value analysis to capture the stream of costs over time. The EPA selected a 15-year period from 2027 to 2041 as the best measure of the economic impacts of this action. This allows for a reasonable and consistent timeframe over which to examine impacts of this proposed action from a present value (PV) perspective and aligns with several cycles of performance testing and emission monitor procurement. The PV of costs in 2024 dollars is approximately \$19 million using a three percent discount rate and \$15 million using a seven percent discount rate. The equivalent annualized value (EAV) in 2024 dollars is approximately \$1.6 million using a discount rate of three percent and \$1.7 million using a discount rate of seven percent.

Given the results of the analysis, these economic impacts are relatively low for affected industries and entities impacted by this proposed rule, and the EPA does not anticipate substantial impacts on the markets for affected products. The EPA does not expect costs of the proposed rule to result in a significant market impact, regardless of whether the firms pass costs to the purchaser or absorb costs. The EPA expects minimal to no impacts on employment.

E. What are the benefits?

If finalized, this proposed rule would reduce HAP and VOC emissions from MTVLO sources. VOCs form ground-level ozone in conjunction with nitrogen oxides and in the presence of sunlight. Due to methodology and data limitations, the EPA did not attempt to monetize the health benefits of HAP reductions in this analysis. The Economic Impact Analysis for this proposed action includes a qualitative discussion of the health effects associated with HAP emitted from sources subject to control under the proposed action.

The EPA is obligated to present the agency's best scientific understanding and the implications of that science when developing policies and regulations. However, the EPA's analytical practices may not have presented the full range of uncertainties and associated confidence level regarding the potential benefit estimates from reduction in exposure from fine particulate matter (PM_{2.5}) and ozone. In addition, the science regarding the exposure, health effects from exposure and valuation of reduction in health effect are evolving with better data and methods, especially at low concentrations of PM and ozone. The EPA's use of benefit per ton (BPT) monetized values introduces additional uncertainty. Although developed as a screening tool when full-form photochemical modeling was not feasible, the BPT approach reduces complex spatial and atmospheric relationships and may be more suited to model emissions that are geographically more uniform and species better mixing, thereby adding uncertainty associated with those estimates. Some of the sources of uncertainties include the set of assumptions used in projecting the health impact of reducing particulate matter. These projections are based on a series of models that take into account emissions changes, resulting distributions of changes in ambient air quality, the estimated reductions in health effects from changes in exposure, and the composition of the population that will benefit from the reduced exposure. Each component includes assumptions, each with

varying degrees of uncertainty.

In addition, the EPA historically provided point estimates rather than just ranges of emission-related effects or only quantifying emissions when monetizing proved to be too uncertain. Therefore, to address these concerns, the EPA is refraining in providing primary estimates resulting from changes in PM_{2.5} and ozone exposure resulting from changes in VOC emissions but will continue to quantify the emissions until the Agency is confident enough in the modeling to robustly monetize those impacts.

V. Request for Comments

The EPA solicits comments on this proposed action. In addition to general comments on this proposed action, the EPA is also interested in additional data that may improve the analyses (C-31). The EPA is specifically interested in receiving any information regarding developments in practices, processes, and control technologies that reduce HAP emissions.

C-1: Should the EPA maintain the current applicability standards for onshore existing sources?

C-2: Should the EPA maintain the vapor exemption provision established under 40 CFR 63.560(d)(1)?

C-3: Do facilities currently use controls to achieve emissions less than 10- or 25-tons HAP and are these controls federally enforceable?

C-4: Should the emission estimation procedures in 40 CFR 63.565(l) be limited to federally enforceable (“permitted”) controls?

C-5: Are there any control technology developments that the EPA should consider as part of the EPA’s technology review?

C-6: Should the EPA maintain current monitoring requirements for vapor collection system, or should the EPA revise the equipment leak provisions to include liquid components, revise the leak definition, or revise the monitoring frequency?

C-7: Should the EPA require sources to conduct EPA Method 21 monitoring when actively loading regulated material, and should the EPA require repair of leaks within 15 days or prior to the next loading operation?

C-8: Should the EPA allow AVO monitoring for vapor lines that are under water or float on the water surface and for difficult-to-monitor equipment components, and should the EPA eliminate the subsequent EPA Method 21 monitoring requirement for AVO detected leaks?

C-9: Should the EPA broaden and strengthen the general duty provision for MTVLO terminals?

C-10: Do circumstances warrant setting work practice standards for periods of malfunction at MTVLO consistent with the requirements of CAA section 112(h)?

C-11: How should the Agency address affirmative defense provisions in other NSPS or NESHAP rules in response to the D.C. Circuit's *SSM Litigation Group* decision?

C-12: Should the EPA remove the affirmative defense provisions from the MTVLO NESHAP?

C-13: Should the EPA remove maintenance allowance provisions from the MTVLO NESHAP?

C-14: What potential appropriate work practice standards could the EPA require, in light of the proposed removal of the maintenance allowance provision?

C-15: What additional aspects should the EPA consider regarding the content, layout, and overall design of the CEDRI electronic reporting template?

C-16: Should the EPA require electronic reporting?

C-17: Should the EPA update the general provisions cross-references in table 1 and the outdated cross-reference to operating pressure requirements in 40 CFR 63.653(a)(3)?

C-18: How should MACT and RACT standards apply to offshore marine terminals?

C-19: Should the EPA clarify the exemption at 40 CFR 63.560(d)(5) or otherwise amend the rule to clarify the applicability of the rule to loading LNG in marine tank vessels?

C-20: Should the EPA require periodic performance tests at least every five years (60 calendar months), and the proposed requirement to conduct and annual RATA?

C-21: Should the EPA enhance the flare monitoring and recordkeeping provisions in accordance with those provisions in the 2015 Refineries Rule?

C-22: Should the EPA allow hourly grab samples rather than daily grab samples to determine the consistent or minimum NHV of the flare gas?

C-23: Should the EPA allow sources to use the MTVLO liquid loading rate as a proxy for the flare gas flow rate?

C-24: What are appropriate temperature operating limits for condensers and refrigeration units?

C-25: Should the EPA require the baseline temperature operating limit to be based on the control device temperature during the performance test?

C-26: Should the EPA treat the 1,000 ppmv VOC outlet concentration alternative as a direct emission limit only allowed specifically for all recovery devices, and how many facilities would revisions to the 1,000 ppmv VOC outlet concentration standard impact?

C-27: Should the EPA include an overlap provision to clarify applicability of requirements for facilities subject to MACT and RACT standards?

C-28: Should the EPA implement the proposed editorial revisions listed in Section III.B.8 and are there additional editorial revisions needed to improve the clarity of the rule?

C-29: Should the EPA consider any components of this proposed rule not functionally independent or severable?

C-30: Are the compliance dates for the proposed revisions to the MTVLO NESHAP appropriate?

C-31: The EPA solicits comment on whether there is any additional data that may improve the analyses for this technology review, including the number of affected sources.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders is available at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is a significant regulatory action that was submitted to OMB for review. Any changes made in response to E.O. 12866 interagency review recommendations have been documented in the docket for this rulemaking. The EPA prepared an economic analysis of the potential costs and benefits associated with this action. This analysis, *Economic Impact Analysis for the Proposed National Emission Standards for Hazardous Air Pollutants (NESHAP) for Marine Tank Vessel Loading Operations*, is available in the docket for this rulemaking and is briefly summarized in section IV of this preamble.⁷³

B. Executive Order 14192: Unleashing Prosperity Through Deregulation

This action is expected to be an Executive Order 14192 regulatory action. Details on the estimated costs of this proposed rule can be found in the EPA's analysis of the potential costs and benefits associated with this action.

C. Paperwork Reduction Act (PRA)

The information collection activities in this proposed rule have been submitted for approval to OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared is assigned OMB Control Number 2060-0289 (EPA ICR number

⁷³ Docket ID No. EPA-HQ-OAR-2025-0207.

1679.13). You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

In this action, the EPA is proposing enhanced flare monitoring requirements, requirements to perform periodic performance testing, and electronic reporting provisions. The rulemaking also addresses emissions during SSM and includes other minor clarifications and corrections. This information will be collected to ensure compliance with the MTVLO NESHAP.

Respondents/affected entities: Owners or operators of marine tank vessel loading operation terminals.

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

Estimated number of respondents: 190 (assumes no new respondents over the next three years).

Frequency of response: Initially, semiannually, and annually.

Total estimated burden: 1,950 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: \$2,135,128, includes \$1,945,841 annualized capital or operation & maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the EPA using the docket identified at the beginning of this rule. The EPA will respond to any ICR-related comments in the final rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs using the interface at <https://www.reginfo.gov/public/do/PRAMain>. Find this information collection by

selecting “Currently under Review - Open for Public Comments” or by using the search function. OMB must receive comments no later than **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. The small entities subject to the requirements of this action are small businesses and government jurisdictions within the MTVLO source category. The Agency has identified 26 small entities that may be impacted by this proposed rule. The EPA calculated the cost-to-sales ratios for all the affected facilities to determine (i) the magnitude of the costs of the rule, and (ii) whether there would be a significant impact on small entities compared to large entities. On average the small entities are estimated to experience an impact of 0.50 percent cost-to-sales. The results of this small entity screening analysis do not indicate that a substantial share of the small entities affected by this rule would incur potentially high costs relative to their revenues. Details of this analysis are presented in *Economic Impact Analysis for the Proposed National Emission Standards for Hazardous Air Pollutants (NESHAP) for Marine Tank Vessel Loading Operations*, which is available in the docket for this action.

E. 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. The action imposes no enforceable duty on any State, local or Tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the National Government and the

States, or on the distribution of power and responsibilities among the various levels of government.

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

This action does not have Tribal implications as specified in Executive Order 13175. None of the facilities that have been identified as being affected by this action are owned or operated by Tribal governments or located within Tribal lands. Thus, Executive Order 13175 does not apply to this action. However, consistent with the *EPA Policy on Consultation and Coordination with Indian Tribes*, the EPA will offer government-to-government consultation with Tribes upon request.

H. Executive Order 13045: Protection of Children From the Environmental Health Risks and Safety Risks

Executive Order 13045 directs Federal agencies to include an evaluation of the health and safety effects of the planned regulation on children in Federal health and safety standards and explain why the regulation is preferable to potentially effective and reasonably feasible alternatives. This action is not subject to Executive Order 13045 because it is not a significant regulatory action under section 3(f)(1) of Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The proposed revisions reduce HAP and VOC emissions generated from MTVLO and are projected to improve overall health, including that of children.

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

This action is not a “significant energy action” because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. The amendments proposed in this action involve minor improvements to the monitoring, inspection,

recordkeeping, and reporting requirements for MTVLO and would have a minimal impact on the amount of imports or exports of crude oils, condensates, or other organic liquids used in the energy supply industries. Additionally, the EPA expects this proposed action would not reduce crude oil supply, fuel production, coal production, natural gas production, or electricity production. Thus, given the minimal impacts on energy supply, distribution, and use nationally, no significant adverse energy effects are expected to occur. For more information on these estimates of energy effects, please refer to the supporting document, *Economic Impact Analysis for the Proposed National Emission Standards for Hazardous Air Pollutants (NESHAP) for Marine Tank Vessel Loading Operations*, which is available in the docket for this rulemaking.

J. National Technology Transfer and Advancement Act (NTTAA)

The NTTAA requires the EPA to use voluntary consensus standards (VCS) in addition to the EPA methods in regulatory activities unless doing so would be inconsistent with applicable law or otherwise impracticable. VCS are technical documents, such as test methods, that are developed or adopted by VCS bodies using procedures that ensure that the standards development process is open to all interested parties. VCS bodies are generally private sector, not-for-profit entities such as the American Society for Testing and Materials. The EPA searched the Enhanced NSSN Database managed by the American National Standards Institute for VCS that could be used in the MTVLO NESHAP. The EPA also contacted VCS organizations and accessed and searched their databases. While the EPA made a reasonable effort to identify and evaluate potentially practical VCS, our findings do not necessarily represent all potential alternative standards which may exist.

The EPA searched for acceptable alternatives for EPA Methods 1, 1A, 2, 2A, 2C, and 2D of 40 CFR part 60, Appendix A-1; EPA Methods 21, 22, 25, 25A, and 25B of 40 CFR part 60, Appendix A-7; EPA Performance Specification 8 of 40 CFR part 60,

Appendix B; and, EPA Method 301 of 40 CFR part 63, Appendix A. The Agency found no VCS are acceptable alternatives for these EPA methods and performance specification.

According to 40 CFR 63.7(f) and 40 CFR 63.8(f) of subpart A of the general provisions, a source may apply to the EPA to use alternative test methods or alternative monitoring requirements in place of any required testing methods, performance specifications or procedures in the final rule or subsequent amendments.

The EPA welcomes comments on this aspect of the proposed rulemaking and specifically invites the public to identify potentially applicable VCS and to explain why such standards should be used in this regulation.

Lee Zeldin,

Administrator.

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