ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 60 and 63

[EPA–HQ–OAR–2020–0371; FRL–8202–01–OAR]

RIN 2060–AU97

National Emission Standards for Hazardous Air Pollutants: Gasoline Distribution Technology Review and Standards of Performance for Bulk Gasoline Terminals Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) is proposing amendments to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Gasoline Distribution facilities and the Standards of Performance for Bulk Gasoline Terminals. The EPA is proposing to revise NESHAP requirements for storage tanks, loading operations, and equipment leaks to reflect cost-effective developments in practices, process, or controls. The EPA is also proposing New Source Performance Standards to reflect best system of emissions reduction for loading operations and equipment leaks. In addition, the EPA is proposing revisions related to emissions during periods of startup, shutdown, and malfunction; to add requirements for electronic reporting of performance test results, performance evaluation reports, and compliance reports; to revise monitoring and operating requirements for control devices; and to make other minor technical improvements. We estimate that these proposed amendments would reduce emissions of hazardous air pollutants from this source category by 2,220 tons per year (tpy) and would reduce emissions of volatile organic compounds by 45,400 tpy.

DATES: Comments must be received on or before August 9, 2022. 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 August 9, 2022.

Public hearing: If anyone contacts us requesting a public hearing on or before June 15, 2022, 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–2020–0371, 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–2020–0371 in the subject line of the message.
- *Fax:* (202) 566–9744. Attention Docket ID No. EPA–HQ–OAR–2020–0371.
- *Mail:* U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA–HQ–OAR–2020–0371, 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., 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 comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: For questions about this proposed action, contact Mr. Neil Feinberg, Sector Policies and Programs Division (E143–01), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–2214; fax number: (919) 541–0516; and email address: *feinberg.stephen@epa.gov.*

SUPPLEMENTARY INFORMATION:

Participation in virtual public hearing. Please note that because of current Centers for Disease Control and Prevention (CDC) recommendations, as well as state and local orders for social distancing to limit the spread of COVID–19, the EPA cannot hold in-person public meetings at this time.

To request a virtual public hearing, contact the public hearing team at (888) 372–8699 or by email at *SPPDpublichearing@epa.gov.* If requested, the virtual hearing will be held on June 27, 2022. The hearing will convene at 11:00 a.m. Eastern Time (ET) and will conclude at 7:00 p.m. ET. 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/gasoline-distribution-mact-and-gact-national-emission-standards.*

If a public hearing is requested, the EPA will begin pre-registering speakers for the hearing no later than 1 business day after a request has been received. To register to speak at the virtual hearing, please use the online registration form available at *https://www.epa.gov/stationary-sources-air-pollution/gasoline-distribution-mact-and-gact-national-emission-standards* or contact the public hearing team at (888) 372–8699 or by email at *SPPDpublichearing@epa.gov.* The last day to pre-register to speak at the hearing will be June 22, 2022. Prior to the hearing, the EPA will post a general agenda that will list pre-registered speakers in approximate order at: *https://www.epa.gov/stationary-sources-air-pollution/gasoline-distribution-mact-and-gact-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 5 minutes to provide oral testimony. The EPA encourages commenters to provide the EPA with a copy of their oral testimony electronically (via email) by emailing it to *feinberg.stephen@epa.gov.* The EPA also recommends submitting 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. Written statements and supporting information submitted during the comment period will be considered with the same weight as oral testimony and supporting information presented at the public hearing.

Please note that any updates made to any aspect of the hearing will be posted online at *https://www.epa.gov/stationary-sources-air-pollution/gasoline-distribution-mact-and-gact-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 *SPPDpublichearing@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 the services of a translator or a special accommodation

such as audio description, please pre-register for the hearing with the public hearing team and describe your needs by June 17, 2022. The EPA may not be able to arrange accommodations without advanced notice.

Docket. The EPA has established a docket for this rulemaking under Docket ID No. EPA–HQ–OAR–2020–0371. All documents in the docket are listed in *https://www.regulations.gov/.* Although listed, some information is not publicly available, *e.g.,* Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy. With the exception of such material, publicly available docket materials are available electronically in *Regulations.gov* or in hard copy at the EPA Docket Center, Room 3334, WJC West Building, 1301 Constitution Avenue NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. 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.

Instructions. Direct your comments to Docket ID No. EPA–HQ–OAR–2020–0371. The EPA's policy is that all comments received will be included in the public docket without change and may be 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 whose disclosure is restricted by statute. Do not submit electronically to *https://www.regulations.gov* any information that you consider to be CBI or other information whose disclosure is restricted by statute. This type of information should be submitted as discussed below.

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

Submitting CBI. Do not submit information containing CBI to the EPA through *https://www.regulations.gov/.* Clearly mark the part or all of 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 is claimed 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 *Instructions* section of this document. 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. Information not marked as CBI will be included in the public docket and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2.

Our preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol (FTP), or other online file sharing services (*e.g.,* Dropbox, OneDrive, Google Drive). Electronic submissions must be transmitted directly to the Office of Air Quality Planning and Standards (OAQPS) CBI Office at the email address *oaqpscbi@epa.gov,* and as described above, should include clear CBI markings and note the docket ID. If assistance is needed 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 *oaqpscbi@epa.gov* to request a file transfer link. If sending CBI information through the postal service, please send it to the following address: OAQPS Document Control Officer (C404–02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA–HQ–OAR–2020–0371. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope. *Preamble acronyms and abbreviations.* Throughout this notice the use of ''we,'' ''us,'' or ''our'' is intended to refer 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 audio, visual, or olfactory
BSER best system of emissions reduction
CAA Clean Air Act
CBI Confidential Business Information
CEMS continuous emission monitoring system
CFR Code of Federal Regulations
CO carbon monoxide
CO_2 carbon dioxide
DOT U.S. Department of Transportation
EJ environmental justice
EPA Environmental Protection Agency
ERT Electronic Reporting Tool
GACT generally available control technology
HAP hazardous air pollutant(s)
ICR information collection request
km kilometer
LDAR leak detection and repair
LEL lower explosive limit
mg/L milligrams per liter
MACT maximum achievable control technology
NAICS North American Industry Classification System
NESHAP national emission standards for hazardous air pollutants
NO_2 nitrogen oxides
NSPS new source performance standards
OAQPS Office of Air Quality Planning and Standards
OGI optical gas imaging
OMB Office of Management and Budget
ppm parts per million
ppmv parts per million by volume
PRA Paperwork Reduction Act
RFA Regulatory Flexibility Act
RIA Regulatory Impact Analysis
SO_2 sulfur dioxide
SSM startup, shutdown, and malfunction
TOC total organic carbon

tpy tons per year
U.S.C. United States Code
VCU vapor combustion unit
VOC volatile organic compound(s)
VRU vapor recovery unit

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

I. General Information

A. Executive Summary

1. Purpose of the Regulatory Action

The source categories that are the subject of this proposal are Gasoline Distribution regulated under 40 CFR part 63, subparts R and BBBBBB and Petroleum Transportation and Marketing regulated under 40 CFR part 60, subpart XX. The EPA set maximum achievable control technology (MACT) standards for the Gasoline Distribution major source category in 1994 and conducted the residual risk and technology review in 2006. The sources affected by the major source National Emissions Standards for Hazardous Air Pollutants (NESHAP) for the Gasoline Distribution source category (part 63, subpart R) are bulk gasoline terminals and pipeline breakout stations. The EPA set generally available control technology (GACT) standards for the Gasoline Distribution area source category in 2008. The sources affected by the area source NESHAP for the Gasoline Distribution source category (part 63, subpart BBBBBB) are bulk gasoline terminals, bulk gasoline plants, and pipeline facilities. The EPA set New Source Performance Standards (NSPS) for the Petroleum Transportation and Marketing source category in 1983. The sources affected by the current NSPS (part 60, subpart XX) are bulk gasoline terminals that commenced construction or modification after December 17, 1980.

The statutory authority for these proposed rulemakings is sections 111 and 112 of the Clean Air Act (CAA). Section 111(b)(1)(B) of the CAA requires the EPA to ''at least every 8 years review and, if appropriate, revise'' NSPS. Section 111(a)(1) of the CAA provides that performance standards are to ''reflect the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.'' We refer to this level of control as the best system of emission reduction or ''BSER.'' Section 112(d)(6) of the CAA 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 8 years following promulgation of those standards. This is referred to as a ''technology review'' and is required for all standards established under CAA section 112(d).

The proposed Standards of Performance for Bulk Gasoline Terminals and the proposed amendments to the NESHAP for Gasoline Distribution facilities fulfill the Agency's requirement, respectively, to review and, if appropriate, revise the NSPS and to review and revise as necessary the NESHAP at least every 8 years.

2. Summary of the Major Provisions of the Regulatory Action In Question

a. NESHAP Subpart R

We are proposing to require a graduated vapor tightness certification from 0.5 to 1.25 inches of water pressure drop over a 5-minute period, depending on the cargo tank compartment size for gasoline cargo tanks. We are also proposing to require fitting controls for external floating roof tanks consistent with the requirement in NSPS subpart Kb. In addition, we are proposing to require semiannual instrument monitoring for major source gasoline distribution facilities.

b. NESHAP Subpart BBBBBB

We are proposing to lower the area source emission limits for loading racks at large bulk gasoline terminals to 35 milligrams of total organic carbon (TOC) per liter of gasoline loaded (mg/L) and require vapor balancing for loading storage vessels and gasoline cargo tanks at bulk gasoline plants with maximum design capacity throughput of 4,000 gallons per day or more. We are also proposing to require a graduated vapor tightness certification from 0.5 to 1.25 inches of water pressure drop over a 5-minute period, depending on the cargo tank compartment size for gasoline cargo tanks. Additionally, we are proposing to require fitting controls for external floating roof tanks consistent with the requirement in NSPS subpart Kb. Also, we are proposing to require annual instrument monitoring for area source gasoline distribution facilities.

c. NSPS Subpart XXa

We are proposing in a new NSPS subpart XXa that facilities that commence construction after June 10, 2022) must meet a 1 mg/L limit and facilities that commence modification, or reconstruction after June 10, 2022 must meet a 10 mg/L limit. We are also proposing to require a graduated vapor tightness certification from 0.5 to 1.25 inches of water pressure drop over a 5-minute period, depending on the cargo tank compartment size for gasoline cargo tanks. Also, we are proposing to

require quarterly instrument monitoring.

3. Costs and Benefits

To satisfy requirements of E.O. 12866, the EPA projected the emissions reductions, costs, and benefits that may result from these proposed rulemakings. These results are presented in detail in the regulatory impact analysis (RIA) accompanying this proposal developed in response to E.O. 12866. We present these results for each of the three rules included in this proposed action, and also cumulatively. This action is economically significant according to E.O. 12866 primarily due to the proposed amendments to NESHAP subpart BBBBBB. The RIA focuses on the elements of the proposed rulemaking that are likely to result in quantifiable cost or emissions changes compared to a baseline without the proposal that incorporates changes to regulatory requirements. We estimated the cost, emissions, and benefit impacts for the 2026 to 2040 period. We show the present value (PV) and equivalent annual value (EAV) of costs, benefits, and net benefits of this action in 2019 dollars.

The initial analysis year in the RIA is 2026 as we assume the large majority of impacts associated with the proposed rulemakings will be finalized in that year. The NSPS will take effect immediately upon the effective date of the final rule and impact sources constructed after publication of the proposed rule, but these impacts are much lower than those of the other two rulemakings in this action. The other two rules, both under the provisions of section 112 of the Clean Air Act, will take effect three years after their effective date, which will occur in 2026 given promulgation of this rulemaking in 2023. Therefore, their impacts will begin in 2026. The final analysis year is 2040, which allows us to provide 15 years of projected impacts after all of these rules are assumed to take effect.

The cost analysis presented in the RIA reflects a nationwide engineering analysis of compliance cost and emissions reductions, of which there are two main components. The first component is a set of representative or model plants for each regulated facility, segment, and control option. The characteristics of the model plant include typical equipment, operating characteristics, and representative factors including baseline emissions and the costs, emissions reductions, and product recovery resulting from each control option. The second component is a set of projections of data for affected facilities, distinguished by vintage, year, and other necessary attributes (*e.g.,* precise content of material in storage tanks). Impacts are calculated by setting parameters on how and when affected facilities are assumed to respond to a particular regulatory regime, multiplying data by model plant cost and emissions estimates, differencing from the baseline scenario, and then summing to the desired level of aggregation. In addition to emissions reductions, some control options result in gasoline recovery, which can then be sold where possible. Where applicable, we present projected compliance costs with and without the projected revenues from product recovery.

The EPA expects health benefits due to the emissions reductions projected under these proposed rulemakings. We expect that hazardous air pollutants (HAP) emission reductions will improve health and welfare associated with exposure by those affected by these emissions. In addition, the EPA expects that volatile organic compounds (VOC) emission reductions that will occur concurrent with the reductions of HAP emissions will improve air quality and are likely to improve health and welfare associated with exposure to ozone, particulate matter 2.5 ($PM_{2.5}$), and HAP. The EPA also expects disbenefits from secondary increases of carbon dioxide (CO_2), nitrogen oxides (NO_2), sulfur dioxide (SO_2), and carbon monoxide (CO) emissions associated with the control options included in the cost analysis. Discussion of the non-monetized benefits and climate disbenefits can be found in Chapter 4 of the RIA.

Tables 1 through 3 of this document presents the emission changes, and PV and EAV of the projected monetized benefits, compliance costs, and net benefits over the 2026 to 2040 period under the proposed rulemaking for each subpart. Table 4 of this document presents the same results for the cumulative impact of these rulemakings. All discounting of impacts presented uses discount rates of 3 and 7 percent.

TABLE 1—SHORT-TERM AND LONG-TERM MONETIZED BENEFITS, COSTS, NET BENEFITS, AND EMISSIONS REDUCTIONS OF THE PROPOSED NESHAP SUBPART BBBBBB AMENDMENTS, 2026 THROUGH 2040

[Dollar estimates in millions of 2019 dollars] [a]

	3 Percent discount rate		7 Percent discount rate	
	PV	EAV	PV	EAV
Benefits [b]	$180(ST) and $1,500(LT)	$15(ST) and $130(LT)	$110(ST) and $900(LT)	$12(ST) and $99(LT).
Climate Disbenefits (3%) [c]	$28	$2.3	$28	$2.0.
Net Compliance Costs [d]	−$70	−$5.0	−$42	−$5.0.
Compliance Costs	$140	$12	$98	$11.
Value of Product Recovery	$210	$17	$140	$16.
Net Benefits	$230(ST) and $1,500(LT)	$18(ST) and $130(LT)	$130(ST) and $910(LT)	$15(ST) and $100(LT).
Emissions Reductions (short tons)	2026–2040 Total.			
VOC	605,000.			
HAP	31,000.			
Secondary Emissions Increases (short tons)	2026–2040 Total.			
CO_2	490,000.			
NO_2	290.			
SO_2	3.5.			
CO	1,300.			
Non-monetized Impacts in this Table	HAP benefits from reducing 31,000 short tons of HAP from 2026–2040, VOC benefits from reductions outside of the ozone season (October–April). Health and climate disbenefits from increasing nitrogen oxides (NO_2) emissions by 290 short tons, sulfur dioxide (SO_2) by 3.5 short tons, and carbon monoxide (CO) by 1,300 short tons from 2026–2040. Visibility benefits. Reduced vegetation effects.			

[a] Values rounded to two significant figures. Totals may not appear to add correctly due to rounding. Short tons are standard English tons (2,000 pounds).

[b] Monetized benefits include ozone related health benefits associated with reductions in VOC emissions. The health benefits are associated with several point estimates and are presented at real discount rates of 3 and 7 percent for both short-(ST) and long-term (LT) benefits. The two benefits estimates are separated by the word ''and'' to signify that they are two separate estimates. The estimates do not represent lower- and upper-bound estimates. Benefits from HAP reductions and VOC reductions outside of the ozone season remain unmonetized and are thus not reflected in the table. Disbenefits from additional CO_2 emissions resulting from application of control options are monetized and included in the table as climate disbenefits. Climate disbenefits are monetized at a real discount rate of 3 percent. The unmonetized effects also include disbenefits resulting from the secondary impact of an increase in NO_2, SO_2, and CO emissions. Please see Section 4.6 of the RIA for more discussion of the climate disbenefits.

[c] Climate disbenefits are based on changes (increases) in CO_2 emissions and are calculated using four different estimates of the social cost of carbon ($SC–CO_2$) (model average at 2.5 percent, 3 percent, and 5 percent discount rates; 95th percentile at 3 percent discount rate). For the presentational purposes of this table, we show the disbenefits associated with the average $SC–CO_2$ at a 3 percent discount rate, but the Agency does not have a single central $SC–CO_2$ point estimate. We emphasize the importance and value of considering the disbenefits calculated using all four $SC–CO_2$ estimates; the additional disbenefit estimates range from PV (EAV) $5.4 million ($0.5 million) to $84 million ($7.0 million) from 2026–2040 for the proposed amendments. Please see Table 4–7 in the RIA for the full range of $SC–CO_2$ estimates. As discussed in Chapter 4 of the RIA, a consideration of climate disbenefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.

[d] Net compliance costs are the rulemaking costs minus the value of recovered product. A negative net compliance costs occurs when the value of the recovered product exceeds the compliance costs.

TABLE 2—SHORT-TERM AND LONG-TERM MONETIZED BENEFITS, COMPLIANCE COSTS, NET BENEFITS, AND EMISSIONS REDUCTIONS OF THE PROPOSED NESHAP SUBPART R AMENDMENTS, 2026 THROUGH 2040

[Dollar estimates in millions of 2019 dollars] [a]

	3 Percent discount rate		7 Percent discount rate	
	PV	EAV	PV	EAV
Benefits [b]	$9.9(ST) and $81(LT)	$0.83(ST) and $6.8(LT)	$5.6(ST) and $48(LT)	$0.65(ST) and $5.3(LT).
Net Compliance Costs [c]	$23	$2.0	$15	$1.8.
Compliance Costs	$34	$2.9	$23	$2.6.
Value of Product Recovery	$11	$1.0	$8	$0.90.
Net Benefits	−$13(ST) and $58(LT)	−$1.2(ST) and $4.8(LT)	−$9.4(ST) and $33(LT)	−$1.2(ST) and $3.5(LT).
Emissions Reductions (short tons)	2026–2040 Total.			
VOC	32,000.			
HAP	2,010.			
Non-monetized Impacts in this Table	HAP benefits from reducing 2,010 short tons of HAP from 2026–2040, VOC benefits from reductions outside of the ozone season (October–April).			
	Visibility benefits.			
	Reduced vegetation effects.			

[a] Values rounded to two significant figures. Totals may not appear to add correctly due to rounding. Short tons are standard English tons (2,000 pounds).

[b] Monetized benefits include ozone related health benefits associated with reductions in VOC emissions. The health benefits are associated with several point estimates and are presented at real discount rates of 3 and 7 percent for both short-(ST) and long-term (LT) benefits. The two benefits estimates are separated by the word ''and'' to signify that they are two separate estimates. The estimates do not represent lower- and upper-bound estimates and should not be summed. Benefits from HAP reductions and VOC reductions outside of the ozone season remain unmonetized and are thus not reflected in the table.

[c] Net compliance costs are the rulemaking costs minus the value of recovered product. A negative net compliance costs occurs when the value of the recovered product exceeds the compliance costs.

TABLE 3—SHORT-TERM AND LONG-TERM MONETIZED BENEFITS, COSTS, NET BENEFITS, AND EMISSIONS REDUCTIONS OF PROPOSED NSPS SUBPART XXa, 2026 THROUGH 2040

[Dollar estimates in millions of 2019 dollars] [a]

	3 Percent discount rate		7 Percent discount rate	
	PV	EAV	PV	EAV
Benefits [b]	$29(ST) and $240(LT)	$2.4(ST) and $20(LT)	$16(ST) and $130(LT)	$1.7(ST) and $15(LT).
Climate Disbenefits (3%) [c]	$4.4	$0.37	$4.4	$0.37.
Net Compliance Costs [d]	$9.0	$0.70	$5.0	$0.60.
Compliance Costs	$41	$3.4	$26	$2.9.
Value of Product Recovery	$32	$2.7	$21	$2.3.
Net Benefits	$16(ST) and $230(LT)	$1.3(ST) and $19(LT)	$6.6(ST) and $130(LT)	$0.73(ST) and $14(LT).
Emissions Reductions (short tons)	2026–2040 Total.			
VOC	97,000.			
HAP	4,020.			
Secondary Emissions Increases (short tons)	2026–2040 Total.			
CO_2	74,000.			
NO_2	50.			
SO_2	42.			
CO	0.			
Non-monetized Impacts in this Table	HAP benefits from reducing 4,020 short tons of HAP from 2026–2040, VOC benefits from reductions outside of the ozone season (October–April).			
	Health and climate disbenefits from increasing NO_2 emissions by 50 short tons, and SO_2 by 42 short tons from 2026–2040.			
	Visibility benefits.			
	Reduced vegetation effects.			

[a] Values rounded to two significant figures. Totals may not appear to add correctly due to rounding. Short tons are standard English tons (2,000 pounds).

[b] Monetized benefits include ozone related health benefits associated with reductions in VOC emissions. The health benefits are associated with several point estimates and are presented at real discount rates of 3 and 7 percent for both short-(ST) and long-term (LT) benefits. The two benefits estimates are separated by the word ''and'' to signify that they are two separate estimates. The estimates do not represent lower- and upper-bound estimates. Benefits from HAP reductions and VOC reductions outside of the ozone season remain unmonetized and are thus not reflected in the table. Climate disbenefits are estimated at a real discount rate of 3 percent. The unmonetized effects also include disbenefits resulting from the secondary impact of an increase in NO_2, SO_2 and CO emissions. Please see Section 4.6 of the RIA for more discussion of the climate disbenefits.

[c] Climate disbenefits are based on changes (increases) in CO_2 emissions and are calculated using four different estimates of the social cost of carbon ($SC–CO_2$) (model average at 2.5 percent, 3 percent, and 5 percent discount rates; 95th percentile at 3 percent discount rate). For the presentational purposes of this table, we show the disbenefits associated with the average $SC–CO_2$ at a 3 percent discount rate, but the Agency does not have a single central $SC–CO_2$ point estimate. We emphasize the importance and value of considering the disbenefits calculated using all four $SC–CO_2$ estimates; the additional disbenefit estimates range from PV (EAV) $0.78 million ($0.08 million) to $13 million ($1.1 million) from 2026–2040 for the proposed amendments. Please see Table 4–7 for the full range of $SC–CO_2$ estimates. As discussed in Chapter 4 of the RIA, a consideration of climate disbenefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.

[d] Net compliance costs are the rulemaking costs minus the value of recovered product. A negative net compliance costs occurs when the value of the recovered product exceeds the compliance costs.

TABLE 4—SHORT-TERM AND LONG-TERM CUMULATIVE MONETIZED BENEFITS, COSTS, NET BENEFITS, AND EMISSIONS REDUCTIONS OF THE PROPOSED RULEMAKINGS, 2026 THROUGH 2040

[Dollar estimates in millions of 2019 dollars] [a]

	3 Percent discount rate		7 Percent discount rate	
	PV	EAV	PV	EAV
Benefits [b]	$220(ST) and $1,800(LT)	$19(ST) and $150(LT)	$130(ST) and $1,100(LT)	$15(ST) and $120(LT).
Climate Disbenefits (3%) [c]	$32	$2.7	$32	$2.7.
Net Compliance Costs [d]	−$38	−$2.4	−$22	−$2.7.
Compliance Costs	$220	$18	$150	$17.
Value of Product Recovery	$250	$20	$170	$19.
Net Benefits	$230(ST) and $1,800(LT)	$19(ST) and $150(LT)	$120(ST) and $1,090(LT)	$15(ST) and $120(LT).
Emissions Reductions (short tons)	2026–2040 Total.			
VOC	730,000.			
HAP	37,000.			
Secondary Emissions Increases (short tons)	2026–2040 Total.			
CO_2	560,000.			
NO_2	340.			
SO_2	46.			
CO	1,300.			
Non-monetized Impacts in this Table	HAP benefits from reducing 37,000 short tons of HAP from 2026–2040, VOC benefits from reductions outside of the ozone season (October–April). Health and climate disbenefits from increasing NO_2 emissions by 340 short tons, SO_2 by 42 short tons, and CO by 1,300 short tons from 2026–2040. Visibility benefits. Reduced vegetation effects.			

[a] Values rounded to two significant figures. Totals may not appear to add correctly due to rounding. Short tons are standard English tons (2,000 pounds).

[b] Monetized benefits include ozone related health benefits associated with reductions in VOC emissions. The health benefits are associated with several point estimates and are presented at real discount rates of 3 and 7 percent for both short-(ST) and long-term (LT) benefits. The two benefits estimates are separated by the word ''and'' to signify that they are two separate estimates. The estimates do not represent lower- and upper-bound estimates and should not be summed. Benefits from HAP reductions and VOC reductions outside of the ozone season remain unmonetized and are thus not reflected in the table. Climate disbenefits are estimated at a real discount rate of 3 percent. The unmonetized effects also include disbenefits resulting from the secondary impact of an increase in NO_2, SO_2 and CO emissions. Please see Section 4.6 of the RIA for more discussion of the climate disbenefits.

[c] Climate disbenefits are based on changes (increases) in CO_2 emissions and are calculated using four different estimates of the social cost of carbon ($SC–CO_2$) (model average at 2.5 percent, 3 percent, and 5 percent discount rates; 95th percentile at 3 percent discount rate). For the presentational purposes of this table, we show the disbenefits associated with the average $SC–CO_2$ at a 3 percent discount rate, but the Agency does not have a single central $SC–CO_2$ point estimate. We emphasize the importance and value of considering the disbenefits calculated using all four $SC–CO_2$ estimates; the additional disbenefit estimates range from PV (EAV) $6.2 million ($0.6 million) to $97 million ($8.1 million) from 2026–2040 for the proposed amendments. Please see Table 4–7 of the RIA for the full range of $SC–CO_2$ estimates. As discussed in Chapter 4 of the RIA, a consideration of climate disbenefits calculated using discount rates below 3 percent, including 2 percent and lower, is also warranted when discounting intergenerational impacts.

[d] Net compliance costs are the rulemaking costs minus the value of recovered product. A negative net compliance costs occurs when the value of the recovered product exceeds the compliance costs.

B. Does this action apply to me?

The source categories that are the subject of this proposal are Gasoline Distribution regulated under 40 CFR part 63, subparts R and BBBBBB and Petroleum Transportation and Marketing regulated under 40 CFR part 60, subpart XX. The North American Industry Classification System (NAICS) codes for the Gasoline Distribution industry are 324110, 493190, 486910, and 424710. This list of NAICS codes is not intended to be exhaustive, but rather provides a guide for readers regarding the entities that this proposed action is likely to affect. The proposed standards, once promulgated, will be directly applicable to the affected sources. Federal, state, local, and tribal government entities would not be affected by this proposed action.

As defined in the *Initial List of Categories of Sources Under Section 112(c)(1) of the Clean Air Act Amendments of 1990* (see 57 FR 31576, July 16, 1992) and *Documentation for Developing the Initial Source Category List, Final Report* (see EPA–450/3–91–030, July 1992), the Gasoline Distribution (Stage 1) source category is any facility engaged in ''the storage and transfer facilities associated with the movement of gasoline. This category includes, but is not limited to, the gasoline vapor emissions associated with the loading of transport trucks or rail cars, storage tank emissions, and equipment leaks from leaking pumps, valves, and connections at bulk terminals, bulk plants, and pipeline facilities.'' Subsequently, on July 19, 1999, we added this category to the list of area source categories for regulation under a **Federal Register** publication for the Integrated Urban Air Toxics Strategy (64 FR 38706). The Gasoline Distribution (Stage 1) source category also includes storage tank filling operations that occur at public and private gasoline dispensing facilities (*e.g.,* service stations and convenience stores). Gasoline dispensing facilities are regulated under 40 CFR part 63, subpart CCCCCC. The EPA did not review the standards for gasoline dispensing facilities.

The EPA Priority List (40 CFR 60.16, 44 FR 49222, August 21, 1979) included Petroleum Transportation and Marketing as a source category for which standards of performance were to be promulgated under CAA section 111. The New Source Performance Standards for this source category applies to the total of all the loading racks at a bulk gasoline terminal that deliver liquid product into gasoline tank trucks. A bulk gasoline terminal is defined as any gasoline facility which receives gasoline

by pipeline, ship or barge, and has a gasoline throughput greater than 75,700 liters per day.

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

In addition to being available in the docket, an electronic copy of this action is available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this proposed action at *https://www.epa.gov/gasoline-distribution-mact-and-gact-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 redline strikeout version of each standard showing the edits that would be necessary to incorporate the changes to 40 CFR part 60, subparts XX and XXa and Part 63, subparts R and BBBBBB proposed in this action is available in the docket (Docket ID No. EPA–HQ–OAR–2020–0371). Following signature by the EPA Administrator, the EPA will also post a copy of these documents to *https://www.epa.gov/stationary-sources-air-pollution/gasoline-distribution-mact-and-gact-national-emission-standards.*

II. Background

A. What is the statutory authority for this action?

1. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The statutory authority for this action is provided by sections 112 and 301 of the CAA, as amended (42 U.S.C. 7401 *et seq.*). Section 112 of the CAA establishes a two-stage regulatory process to develop standards for emissions of hazardous air pollutants (HAP) from stationary sources. Generally, the first stage involves establishing technology-based standards and the second stage involves evaluating those standards that are based on MACT to determine whether additional standards are needed to address any remaining risk associated with HAP emissions. This second stage is commonly referred to as the ''residual risk review.'' In addition to the residual risk review, the CAA also requires the EPA to review standards set under CAA section 112 every 8 years and revise the standards as necessary taking into account any ''developments in practices, processes, or control technologies.'' This review is commonly referred to as the ''technology review,'' and 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 those 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 achievable (after considering cost, energy requirements, and nonair quality health and environmental impacts). These standards are commonly referred to as MACT standards. CAA section 112(d)(3) also establishes a minimum control level for MACT standards, known as the MACT ''floor.'' In certain instances, as provided in CAA section 112(h), the EPA may set work practice standards in lieu of numerical emission standards. The EPA must also consider control options that are more stringent than the floor. Standards more stringent than the floor are commonly referred to as beyond-the-floor standards. For categories of major sources and any area source categories subject to MACT standards, the second stage in standard-setting focuses on identifying and addressing any remaining (*i.e.,* ''residual'') risk pursuant to CAA section 112(f) and concurrently conducting a technology review pursuant to CAA section 112(d)(6). The EPA set MACT standards for the Gasoline Distribution major source category in 1994 and conducted the residual risk and technology review in 2006.

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 8 years following promulgation of those standards. This is referred to as a ''technology review'' and is required for all standards established under CAA section 112(d) including GACT standards that apply to area sources.[1] In conducting this review, the EPA is not required to recalculate the MACT floors that were established in earlier rulemakings. *Natural Resources Defense Council (NRDC)* v. *EPA,* 529 F.3d 1077, 1084 (D.C. Cir. 2008). *Association of Battery Recyclers, Inc.* v. *EPA,* 716 F.3d 667 (D.C. Cir. 2013). The EPA may consider cost in deciding whether to revise the standards pursuant to CAA section 112(d)(6). The EPA is required to address regulatory gaps, such as missing MACT standards for listed air toxics known to be emitted from major source categories, and any new MACT standards must be established under CAA sections 112(d)(2) and (3), or, in specific circumstances, CAA sections 112(d)(4) or (h). *Louisiana Environmental Action Network (LEAN)* v. *EPA,* 955 F.3d 1088 (D.C. Cir. 2020). This action constitutes the 112(d)(6) technology review for the Gasoline Distribution major source and area source NESHAP.

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

Section 112(k)(3)(B) of the CAA requires the EPA to identify at least 30 HAP that pose the greatest potential health threat in urban areas with a primary goal of achieving a 75-percent reduction in cancer incidence attributable to HAP emitted from stationary sources. As discussed in the Integrated Urban Air Toxics Strategy (64 FR 38706, 38715, July 19, 1999), the EPA identified 30 HAP emitted from area sources that pose the greatest potential health threat in urban areas, and these HAP are commonly referred to as the ''30 urban HAP.''

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

CAA section 112(d)(5) provides that for area source categories, in lieu of setting MACT standards (which are

[1] For categories of area sources subject to GACT standards, CAA sections 112(d)(5) and (f)(5) provide that the CAA section 112(f)(2) residual risk review is not required. However, the CAA section 112(d)(6) technology review is required for such categories.

generally required for major source categories), the EPA may elect to promulgate standards or requirements for area sources ''which provide for the use of generally available control technology or management practices [GACT] by such sources to reduce emissions of hazardous air pollutants.'' In developing such standards, the EPA evaluates the control technologies and management practices that reduce HAP emissions that are generally available for each area source category. Consistent with the legislative history, we can consider costs and economic impacts in determining what constitutes GACT.

GACT standards were set for the Gasoline Distribution area source category in 2008. As noted above, this proposed action presents the required CAA 112(d)(6) technology review for that source category.

2. NSPS

The statutory authority for this action is provided by section 111 of the CAA, which governs the establishment of standards of performance for stationary sources. Section 111(b)(1)(A) of the CAA requires the EPA Administrator to list categories of stationary sources that in the Administrator's judgement cause or contribute significantly to air pollution that may reasonably be anticipated to endanger public health or welfare. The EPA must then issue performance standards for new (and modified or reconstructed) sources in each source category pursuant to CAA section 111(b)(1)(B). These standards are referred to as new source performance standards, or NSPS. The EPA has the authority under CAA section 111(b) to define the scope of the source categories, determine the pollutants for which standards should be developed, set the emission level of the standards, and distinguish among classes, type and sizes within categories in establishing the standards.

Section 111(b)(1)(B) of the CAA requires the EPA to ''at least every 8 years review and, if appropriate, revise'' new source performance standards. Section 111(a)(1) of the CAA provides that performance standards are to ''reflect the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.'' We refer to this level of control as the best system of emission reduction or ''BSER.'' The term ''standard of performance'' in CAA 111(a)(1) makes clear that the EPA is to determine both the BSER for the regulated sources in the source category and the degree of emission limitation achievable through application of the BSER. The EPA must then, under CAA section 111(b)(1)(B), promulgate standards of performance for new sources that reflect that level of stringency. Section 111(b)(5) of the CAA precludes the EPA from prescribing a particular technological system that must be used to comply with a standard of performance. Rather, sources can select any measure or combination of measures that will achieve the standard. Pursuant to the definition of new source in CAA 111(a), standards of performance apply to facilities that begin construction, reconstruction, or modification after the date of publication of such proposed standards in the **Federal Register**.

The EPA Priority List (44 FR 49222, August 21, 1979) included Petroleum Transportation and Marketing as a source category for which standards of performance were to be promulgated under CAA section 111. The NSPS for this source category was promulgated on August 18, 1983 (48 FR 37578) and applies to the total of all the loading racks at a bulk gasoline terminal that deliver liquid product into gasoline tank trucks. This proposed action presents the required CAA 111(b)(1)(B) review for the bulk gasoline terminals NSPS.

B. What are the source categories and how do the current standards regulate emissions?

1. NESHAP Subpart R

The sources affected by the current major source NESHAP for the Gasoline Distribution source category subpart R are bulk gasoline terminals and pipeline breakout stations. A bulk gasoline terminal is defined at 40 CFR 63.421 as ''any gasoline facility which receives gasoline by pipeline, ship, or barge, and has a gasoline throughput greater than 75,700 liters per day.'' [2] A pipeline breakout station is defined as ''a facility along a pipeline containing storage vessels used to relieve surges or receive and store gasoline from the pipeline for reinjection and continued transportation by pipeline or to other facilities.'' The HAP emitted by Gasoline Distribution sources are benzene, hexane, toluene, xylene, ethylbenzene, 2,2,4-trimethylpentane, cumene, and napthalene. The emission standards are the same for new sources and existing sources. Emissions from loading racks are controlled by vapor collection and processing systems meeting 10 milligrams (mg) total organic carbon (TOC) per liter (L) of gasoline loaded and the cargo tanks being loaded must be certified to be vapor tight. Emissions from storage vessels with a design capacity greater than or equal to 75 cubic meters are controlled by equipment designed to capture and control emissions. Equipment leaks are required to be repaired upon detection using audio, visual, or olfactory (AVO) methods.

2. NESHAP Subpart BBBBBB

The sources affected by the current area source NESHAP for the Gasoline Distribution source category subpart BBBBBB are bulk gasoline terminals, bulk gasoline plants, and pipeline facilities. A bulk gasoline terminal is defined at 40 CFR 63.11100 as ''any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank and has a gasoline throughput of 20,000 gallons per day or greater.'' A bulk gasoline plant is defined as ''any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank, and subsequently loads the gasoline into gasoline cargo tanks for transport to gasoline dispensing facilities, and has a gasoline throughput of less than 20,000 gallons per day.'' A pipeline breakout station is defined as ''a facility along a pipeline containing storage vessels used to relieve surges or receive and store gasoline from the pipeline for re-injection and continued transportation by pipeline or to other facilities.'' A pipeline pumping station is defined as ''a facility along a pipeline containing pumps to maintain the desired pressure and flow of product through the pipeline, and not containing gasoline storage tanks other than surge control tanks.'' The HAP emitted by Gasoline Distribution sources are benzene, hexane, toluene, xylene, ethylbenzene, 2,24-trimethylpentane, cumene, and napthalene. The emission standards are the same for new sources and existing sources. Emissions from loading racks at large bulk gasoline terminals (those with gasoline throughput of 250,000 gallons per day or greater) are controlled by vapor collection and processing systems meeting 80 mg TOC per L of gasoline loaded (mg/L) and the cargo tanks being loaded must be certified to be vapor tight. Small bulk gasoline terminals and bulk gasoline plants must use submerged filling when loading gasoline. Emissions from storage vessels with a design capacity greater than or equal to 75 cubic meters are required to

[2] 75,700 liters per day is equal to 20,000 gallons per day.

be controlled by equipment designed to capture and control emissions. Equipment leaks are required to be repaired upon detection using AVO methods.

3. NSPS Subpart XX

The sources affected by the current NSPS for the Bulk Gasoline Terminals source category subpart XX are bulk gasoline terminals that commenced construction or modification after December 17, 1980. NSPS subpart XX at 40 CFR 60.501 defines bulk gasoline terminals as ''any gasoline facility which receives gasoline by pipeline, ship or barge, and has a gasoline throughput greater than 75,700 liters per day.'' Emissions from loading racks at bulk gasoline terminals are controlled by vapor collection and processing systems meeting 35 mg/L and the cargo tanks being loaded must be certified to be vapor tight.[3] Equipment leaks are required to be repaired upon detection using AVO methods. Emissions from storage vessels are regulated under a separate NSPS (40 CFR part 60, subpart K, Ka, or Kb).

C. What data collection activities were conducted to support this action?

The EPA used several data sources to determine the facilities that are subject to the Gasoline Distribution NESHAP and the Bulk Gasoline Terminals NSPS. We identified facilities in the 2017 National Emissions Inventory (NEI) and the Toxics Release Inventory system having a primary facility NAICS code beginning with 4247, Petroleum and Petroleum Products Merchant Wholesalers. We also used information from the original Gasoline Distribution NESHAP, Bulk Terminal list of petrochemical storage facilities from the Internal Revenue Service, the Office of Enforcement and Compliance Assurance's Enforcement and Compliance History Online tool (*https://echo.epa.gov*), and the Energy Information Administration. To inform our reviews for these emission sources, we reviewed the EPA's Reasonably Available Control Technology (RACT)/Best Available Control Technology (BACT)/Lowest Achievable Emission Rate (LAER) Clearinghouse (RBLC) and regulatory development efforts for similar sources published after the Gasoline Distribution NESHAP and Bulk Terminals NSPS were developed. The EPA also reviewed air permits to determine facilities subject to the Gasoline Distribution NESHAP and Bulk Gasoline Terminals NSPS.

We met with industry representatives from Marathon, the American Petroleum Institute, the International Liquid Terminals Association, and the International Fuel Terminal Operators Association to collect data and discuss industry practices. We also met with control device suppliers to obtain information on the cost and design of control devices. We met with representatives of the U.S. Department of Transportation (DOT) to discuss cargo tank requirements.

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

We relied on certain technical reports and memoranda that the EPA developed for flares used as air pollution control devices in the Petroleum Refinery Sector residual risk and technology review and NSPS rulemaking (80 FR 75178, December 1, 2015). The Petroleum Refinery sector docket is at Docket ID No. EPA–HQ–OAR–2010–0682. For completeness of the rulemaking record for this action and for ease of reference in finding these items in the publicly available petroleum refinery sector rulemaking docket, we are including the most relevant technical support documents in the docket for this proposed action (Docket ID No. EPA–HQ–OAR–2020–0371) and including a list of the of all documents used to inform the original flare provision in the Petroleum Refinery Sector residual risk and technology review and NSPS rulemaking in Attachment 2 of the memorandum titled *Monitoring Options and Costs for Gasoline Distribution Facilities,* which is available in the docket for this rulemaking.

Additional information related to the promulgation and subsequent amendments of the NSPS and NESHAPs is available in Docket ID Nos. A–79–52, A–92–38, EPA–HQ–OAR–2002–0029, EPA–HQ–OAR–2004–0019, EPA–HQ–OAR–2004–0164, and EPA–HQ–OAR–2006–0406.

E. How does the EPA perform the NESHAP technology review and NSPS review?

1. NESHAP Technology Review

Our technology review primarily focuses on the identification and evaluation of developments in practices, processes, and control technologies that have occurred since the NESHAPs were promulgated. Where we identify such developments, we analyze their technical feasibility, estimated costs, energy implications, and nonair environmental impacts. We also consider the emission reductions associated with applying each development. This analysis informs our decision of whether it is ''necessary'' to revise the CAA section 112 emissions standards. In addition, we consider the appropriateness of applying controls to new sources versus retrofitting existing sources. For this exercise, we consider any of the following to be a ''development:''

- Any add-on control technology or other equipment that was not identified and considered during development of the original MACT and GACT standards;
- Any improvements in add-on control technology or other equipment (that were identified and considered during development of the original MACT and GACT 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 and GACT 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 and GACT standards; and
- Any significant changes in the cost (including cost effectiveness) of applying controls (including controls the EPA considered during the development of the original MACT and GACT standards).

In addition to reviewing the practices, processes, and control technologies that were considered at the time we originally developed each NESHAP, we review a variety of data sources in our investigation of potential practices, processes, or controls to consider. We also review each NESHAP and the available data to determine if there are any unregulated emissions of HAP within the source categories, and evaluate these data for use in developing new emission standards. When reviewing MACT standards, we also address regulatory gaps, such as missing standards for listed air toxics known to be emitted from the source category. See sections II.C and II.D of this preamble for information on the specific data sources that were reviewed as part of the technology review.

2. NSPS Review

As noted in the section II.A.2 of this document, CAA section 111 requires the EPA, at least every 8 years to review and, if appropriate revise the standards of performance applicable to new, modified, and reconstructed sources. If the EPA revises the standards of

[3] Allowance is provided to meet 80 mg/L for affected facilities with an ''existing vapor processing system.''

performance, they must reflect the degree of emission limitation achievable through the application of the BSER taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements. CAA section 111(a)(1).

In reviewing an NSPS to determine whether it is ''appropriate'' to revise the standards of performance, the EPA evaluates the statutory factors including the following information:

- Expected growth for the source category, including how many new facilities, reconstructions, and modifications may trigger NSPS in the future.
- Pollution control measures, including advances in control technologies, process operations, design or efficiency improvements, or other systems of emission reduction, that are ''adequately demonstrated'' in the regulated industry.
- Available information from the implementation and enforcement of current requirements indicating that emission limitations and percent reductions beyond those required by the current standards are achieved in practice.
- Costs (including capital and annual costs) associated with implementation of the available pollution control measures.
- The amount of emission reductions achievable through application of such pollution control measures.
- Any nonair quality health and environmental impact and energy requirements associated with those control measures.

In evaluating whether the cost of a particular system of emission reduction is reasonable, the EPA considers various costs associated with the particular air pollution control measure or a level of control, including capital costs and operating costs, and the emission reductions that the control measure or particular level of control can achieve. The agency considers these costs in the context of the industry's overall capital expenditures and revenues. The agency also considers cost-effectiveness analysis as a useful metric, and a means of evaluating whether a given control achieves emission reduction at a reasonable cost. A cost-effectiveness analysis allows comparisons of relative costs and outcomes (effects) of two or more options. In general, cost-effectiveness is a measure of the outcomes produced by resources spent. In the context of air pollution control options, cost-effectiveness typically refers to the annualized cost of implementing an air pollution control option divided by the amount of pollutant reductions realized annually.

After the EPA evaluates the factors described above, the EPA then compares the various systems of emission reductions and determines which system is ''best''. The EPA then establishes a standard of performance that reflects the degree of emission limitation achievable through the implementation of the BSER. In doing this analysis, the EPA can determine whether subcategorization is appropriate based on classes, types, and sizes of sources, and may identify a different BSER and establish different performance standards for each subcategory. The result of the analysis and BSER determination leads to standards of performance that apply to facilities that begin construction, reconstruction, or modification after the date of publication of the proposed standards in the **Federal Register**. Because the new source performance standards reflect the best system of emission reduction under conditions of proper operation and maintenance, in doing its review, the EPA also evaluates and determines the proper testing, monitoring, recordkeeping and reporting requirements needed to ensure compliance with the emission standards.

See section II.C of this preamble for information on the specific data sources that were reviewed as part of this action.

III. Proposed Rule Summary and Rationale

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

We evaluated developments in practices, processes, and control technologies for loading operations, storage vessels, and equipment leaks for NESHAP subpart R and NESHAP subpart BBBBBB. For the NSPS XX, we evaluated BSER for loading operations and equipment leaks. We analyzed costs and impacts for each emission source (*e.g.,* loading operations) by each subpart. We also included product recovery in the cost calculation, where appropriate. We based the product recovery on the average pre-tax retail price of regular conventional gasoline in 2019 at a value of gasoline recovered of $1.50 per gallon.[4] This yielded a product recovery of $480 per ton of VOC. For NSPS, we determined cost-effectiveness, cost per ton of emissions reduced, on a VOC basis. For NESHAP, we determined cost-effectiveness on a HAP basis from the VOC emissions. In general, gasoline (liquid) is approximately 20 weight percent HAP, but gasoline vapors are only 3 to 4 weight percent HAP. We estimated that loading operation VOC emissions were 4 weight percent HAP, storage vessel VOC emissions were 5 weight percent HAP, and equipment leak VOC emissions were 10 weight percent HAP. Although we considered the options cumulatively, we also calculated the incremental cost effectiveness, which allowed us to assess the impacts of the incremental change between the options under consideration.

1. Standards for Loading Racks

We evaluated the control efficiency and costs of common control systems used for loading racks, including thermal/vapor combustion units (VCUs), carbon adsorption vapor recovery units (VRUs), flares, and refrigerated condensers. We assessed the loading rates to the control systems based on both splash loading and submerged loading for 5 different ''model plant'' gasoline throughputs. We also assessed cost for vapor balancing controls. Our assessment of control systems is summarized in the memorandum ''Control Options for Loading Operations at Gasoline Distribution Facilities'' included in EPA Docket No. EPA–HQ–OAR–2020–0371.

We did not identify any new control technologies, but we did identify some state and local permits that required emission limits as low as 1 mg/L (less than the most stringent federal limit of 10 mg/L). We therefore considered the costs for upgrades needed to retrofit a current control system to achieve more stringent emission limits for each of the current rules. The emission limits assessed included 80 mg/L, 35 mg/L, 10 mg/L, and 1 mg/L, depending on the emission limits for each subpart, which are discussed in detail in sections III.A.1.a–c. We also assessed alternative means of expressing the loading rack emissions limit. The emissions limit expressed in terms of mg TOC/L of gasoline loaded is difficult to directly monitor continuously as discussed below. As such, the emission limit is generally assessed via an initial

[4] The VOC recovery credit was calculated based on the average retail price of regular conventional gasoline in 2019, which was $2.50/gallon, and that 60 to 70 percent of retail price is for taxes and distribution/marketing costs (*https://www.eia.gov/petroleum/gasdiesel/*; EIA, 2021). Therefore, we estimated the value of gasoline recovered to be $1.50/gallon ($2.50 × 0.60). Using a density of gasoline of 6.25 lb/gallon, this yields a VOC credit of $480/ton [($1.50/6.25) × 2000]. The average refiner's wholesale spot price for all gasoline types in 2019 was $1.85/gallon (*https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMA_EPM0_PBR_NUS_DPG&f=M;* EIA, 2021).

performance test, with operating limits established as means to ensure continuous compliance. Alternative means to express the emission limit may make the emission limit more amenable to direct monitoring.

a. NESHAP Subpart R

We identified one development for loading racks which is an emission limit of 1 mg/L using the same types of control that we expect are used to meet the current major source emission limit of 10 mg/L of gasoline loaded. Therefore, we assessed maintaining the 10 mg/L emission limit or reducing it to 1 mg/L. For the major source NESHAP subpart R impacts analysis, we estimated that most facilities used VRUs and that approximately 75 percent of the facilities could comply with the 1 mg/L emission limit by modifying their operating characteristics (cycle times) and 25 percent would need to upgrade their control system.

Table 5 of this document summarizes the resulting impacts for the control option considered for 210 major source (NESHAP subpart R) facilities. Based on the costs associated with further HAP emission reductions, we determined it is not cost-effective to lower the 10 mg/L standard, since the cost effectiveness of the option is over $100,000 per ton of HAP reduced—a level that is over an order of magnitude higher than we have considered cost-effective in previous rulemakings to limit organic HAP. Accordingly, we are not proposing any changes to the current emission limit for loading operations for the NESHAP subpart R. Our assessment of control options is summarized in the memorandum ''Major Source Technology Review for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) NESHAP'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

As noted in section V of this preamble, the EPA requests public comment on all aspects of this proposed rule, including our evaluation of the costs and efficacy of control options for loading operations under NESHAP subpart R. Among other issues, EPA requests comment on whether we have accurately assessed the costs, pollution reduction benefits, and cost-effectiveness of applying a 1 mg/L emission limit to major sources subject to this NESHAP; experience from implementing state regulations or local ordinances for these sources that could inform this technology review; and whether there are other factors that EPA should consider that would support a revision of the current NESHAP subpart R. For example, we note that there are at least 5.9 million people located within 5 km of these sources (see Table 18 of this document), and the EPA is concerned that these communities may already be overburdened by air pollution from multiple sources. Information on the contributions that HAPs from these sources make to overall pollution burdens in neighboring communities may be useful in determining whether a more stringent standard is warranted.

TABLE 5—CONTROL OPTION IMPACTS FOR LOADING OPERATIONS FOR NESHAP SUBPART R

Emission limit	VOC emission reduction [a] (tpy)	TCI [b] ($)	AOC [c] ($/yr)	TAC [d] w/o product recovery ($/yr)	TAC [d] w/product recovery ($/yr)	CE [e] ($/ton VOC)	CE [e] ($/ton HAP) [f]
1 mg/L	1,686	34,160,000	5,764,000	8,677,000	7,868,000	4,667	116,700

[a] Compared to baseline (10 mg/L) emissions of 1,873 tpy.
[b] Total capital investment (TCI).
[c] Annualized operating costs (AOC).
[d] Total annualized cost (TAC) considering annual operating costs and annualized cost of capital.
[e] Cost effectiveness (CE) as compared to baseline (10 mg/L).
[f] HAP content of gasoline vapors assumed to be 4% of VOC.

In our review of the developments in practices, processes, or control technologies, we noted that there were inconsistencies regarding continuous parameter monitoring requirements associated with complying with the loading standard as expressed in terms of 10 mg/L of gasoline loaded. For example, most VRUs have a continuous TOC concentration monitor, but do not have flow meters needed to convert the concentration limit to a mass emission rate that can be used to calculate the emissions in terms of mg/L. State and local permitting agencies set continuous concentration limits based on performance tests, but also factor in more variability to account for different loading rates and operational characteristics of the VRU. While we noted some variability in exhaust flow rates with product loading rates, the exhaust flow rate is well correlated with the product loading rates, such that a direct concentration limit can be established that is equivalent to the 10 mg/L standard. We determined that the concentration limit for VRU has several advantages to the 10 mg/L emission limit. First, a concentration limit could be directly and continuously monitored. In this case, the TOC monitor would be used as a continuous emission monitoring system (CEMS) and exceedances of the concentration limit would be a violation of the emission limit. When the emission limit is expressed in mg/L, the TOC monitor is used as a continuous parameter monitoring system (CPMS) and exceedance of the concentration limit is a deviation of the operating limit. Thus, the concentration-based standard provides improved enforceability of the emission limit. Second, providing a concentration limit directly in the rule reduces the variability in the way the operating limits are established in different states and localities. Thus, it provides consistent implementation of the federal standard when considering continuous compliance requirements. The potential disadvantage of a concentration limit is the ability to draw in ambient air to dilute the exhaust gas concentration.

Upon careful consideration of the potential options to improve continuous compliance monitoring requirements, we are proposing to express the emission limit for VRUs in terms of a concentration limit of 5,500 parts per million by volume (ppmv) TOC as propane on a three-hour rolling average. As noted previously, this provides a more enforceable and consistent continuous compliance requirement that is directly related to the emissions limit. To prevent dilution, we are proposing that only vacuum breaker valves can be used to introduce ambient air into the VRU control system.

Because of the need for combustion air and products of combustion, this concentration limit is not directly applicable for VCUs. We considered developing an equivalent concentration limit for VCUs, but this would require

both a TOC monitor and an oxygen monitor, to correct the concentration limit to 0 percent excess oxygen. This standard becomes problematic at low TOC loading rates, where the oxygen concentration may approach that of the ambient air. We consider that periodic performance test along with continuous monitoring of combustion zone temperature provides adequate assurance that the VCU is operating in a manner consistent with the TOC emissions limit. NESHAP subpart R already includes requirements for using a temperature operating limit to demonstrate continuous compliance with the 10 mg/L emission limit; however, these requirements do not provide adequate instructions on how to establish the operating limit, particularly with respect to the averaging time. For example, the performance test requires readings be taken every 5 minutes over a 6-hour test period, but there are no instructions on how to develop the temperature operating limit from these readings. At times, the 5-minute temperature readings can fluctuate significantly, particularly during periods of low loading rates. Establishing the operating limit based on the lowest 5-minute reading during a time of little or no loading of product into gasoline cargo tanks can lead to erroneously low temperature operating limits that do not ensure adequate combustion efficiencies. We considered establishing a minimum operating temperature, such as 1,400 °F or 1,500 °F as required for VCU in general standards for closed vent system and control devices [see 40 CFR 63.985(b)(1)(i)(B) or 40 CFR 60.482–10a(c)]. However, we recognized that there is a wide variety of VCU designs and that a single set temperature operating limit may not be appropriate for all applications. Therefore, we elected to maintain that the temperature operating limit be set during the performance test, but we are proposing additional instructions on how to develop and assess the temperature operating limit. First, we are proposing the temperature operating limit be established and evaluated on a 3-hour rolling average basis. We are proposing that, for each 5-minute block of the performance test, the combustion (flame) zone must be determined, either via a single temperature reading or an average temperature of all readings during the 5-minute block), and a record of the volume of liquid product loading into gasoline cargo tanks must be kept. We are proposing that hourly average combustion zone temperatures be developed from the 5-minute measurements using only those 5-minute periods when product is loaded into gasoline cargo tanks. From those hourly averages, 3-hour rolling averages are to be determined. During the 6-hour performance test, 4 different 3-hour rolling averages will be determined. We are proposing that the temperature operating limit be established as the lowest of the 3-hour averages. We consider that this approach will establish a temperature operating limit that is indicative of VCU performance while accounting for variability in loading operations. We are proposing that compliance with the operating limit will be determined on a 3-hour rolling average basis following the same procedures used during the performance tests (5-minute measurements used to calculate 1-hour average values considering only 5-minute periods when product was loaded into gasoline cargo tanks).

We also determined that periodic emission testing should be required to help ensure continuous compliance. Currently, facilities conduct a one-time performance test and then monitor operating limits. We are proposing to require on-going performance tests at a minimum frequency of once every 5 years to supplement the parameter monitoring and ensure emission controls continue to operate as demonstrated during the initial performance test. Our assessment of monitoring options is summarized in the memorandum ''Monitoring Options and Costs for Gasoline Distribution Facilities'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

Finally, we expect all or nearly all facilities use submerged loading as they fill product into cargo tanks. However, the NESHAP subpart R does not require submerged filling. The lack of a direct requirement for submerged loading may cause problems for several reasons. First, organic loading rates to the control system when using splash loading are expected to be more than double that of the organic loading rates when using submerged loading. With the preponderance of use of submerged loading, performance tests would almost certainly be conducted when the cargo tanks are loaded via submerged fill. The periodic performance test and operating limits may not be adequate to ensure compliance while splash loading is used. We also note that the 10 mg/L emission limit is essentially equivalent to 98 percent TOC control efficiency when using submerged fill, but requires over 99 percent control efficiency when splash loading is used. Because the flare requirements were specifically developed to ensure a 98 percent flare destruction efficiency, the flare operating limits are not considered adequate to ensure compliance with the 10 mg/L emissions limit when splash loading is used. Therefore, we are proposing to expressly include submerged fill requirements as an integral part of the loading rack standards.

b. NESHAP Subpart BBBBBB

The requirements for loading racks at area source gasoline distribution facilities are dependent on the total throughput capacity of all racks. Large gasoline bulk terminals have loading racks with a combined throughput of 250,000 gallons per day or greater and are required to reduce emissions of TOC to less than or equal to 80 mg/L of gasoline loaded. Small gasoline bulk terminals, which have loading racks with a combined throughput between 20,000 and 250,000 gallons per day, are required to use submerged filling with a submerged fill pipe that is no more than 6 inches from the bottom of the cargo tank. Bulk gasoline plants are facilities with gasoline throughput of 20,000 gallons per day or less and are required to use submerged filling in all gasoline storage tanks with a capacity of greater than 250 gallons and in all cargo tanks.

For large bulk gasoline terminals at area sources (*i.e.,* combined throughput of 250,000 gallons per day or greater), we evaluated control options of either maintaining the current 80 mg/L control option or lowering that limit to either 35 mg/L, 10 mg/L, or 1 mg/L. Table 6 of this document presents the estimated nationwide impacts of these alternative emission limits for 232 large bulk gasoline terminals at area sources. The cost-effectiveness and incremental cost-effectiveness of reducing the area source emission limit for large bulk gasoline terminals to 35 mg/L are $9,700 per ton of HAP emissions reduced, which we determined is cost-effective. The cost-effectiveness and incremental cost effectiveness of reducing the area source emission limit for large bulk gasoline terminals to 10 mg/L are approximately $12,000 and $13,000 per ton of HAP emissions reduced, respectively, which we determined is not cost-effective. Therefore, we are proposing to lower the area source emission limits for loading racks at large bulk gasoline terminals to 35 mg/L.

We note, however, that there are at least 35.7 million people located within 5 km of these sources (see Table 19 of this document), and EPA is concerned that this population has the potential to be overburdened from air pollution from multiple sources. In this case, we have

identified a more stringent standard (*i.e.,* 10 mg/L) that could further reduce HAP emissions exposure in communities near these large bulk terminals. We project that this more stringent standard would impose slightly higher, but not unreasonable, capital and annualized costs on these terminals. EPA seeks comment on whether this more protective standard, although it is less cost effective for these type of HAP emissions controls than we would typically find acceptable, is nevertheless appropriate given the reductions in HAPs that would occur in potentially over-burdened communities surrounding these large bulk terminals. EPA also requests information on the costs, efficacy, and feasibility of control options for loading racks at area source gasoline distribution facilities, and the contributions of these sources to overall pollution burdens in surrounding communities, to inform our consideration of whether a more protective area source standard is warranted. Our assessment of control options is summarized in the memorandum ''Area Source Technology Review for the Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities NESHAP'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

As in the major source rule, we are proposing to replace the current mass-based limits with a direct concentration limit for facilities operating VRUs because it provides consistent implementation of the federal standard when considering continuous compliance requirements. The corresponding concentration limit equivalent to a 35 mg/L emission limit is 19,200 ppmv as propane. Therefore, we are proposing to express the emission limit for VRUs in terms of a concentration limit of 19,200 ppmv TOC as propane on a three-hour rolling average. As noted previously, a concentration limit provides a more enforceable and consistent continuous compliance requirement that is directly related to the emissions limit. To prevent dilution, we are proposing that only vacuum breaker valves can be used to introduce ambient air into the VRU control system. Our assessment of monitoring options is summarized in the memorandum ''Monitoring Options and Costs for Gasoline Distribution Facilities'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

Because of the need for combustion air, this concentration limit is not directly applicable for VCUs. We considered developing an equivalent concentration limit for VCUs, but this would require both a TOC monitor and an oxygen monitor, to correct the concentration limit to 0 percent excess oxygen. This standard becomes problematic at low TOC loading rates, where the oxygen concentration may approach that of the ambient air.[5] Because most VCUs used at area source gasoline distribution facilities are enclosed, air-assisted flares, we determined that operating limits, either temperature operating limits (as described for the major sources NESHAP subpart R) or flare operating limits (net combustion zone heating value and air-assist dilution parameter values, as provided in the Petroleum Refinery MACT rule: 40 CFR part 63, subpart CC) are the most appropriate. We anticipate that facilities electing to meet the flare operating limits for their VCU would conduct two-week sampling to assess the variability of heat content while loading gasoline and develop minimum natural gas assist rates as a means of demonstrating continuous compliance. Alternatively, facilities may elect to install a calorimeter to monitor heat content and only add natural gas as needed if the vent gas stream falls below the minimum required heat content. We are proposing to require VCUs at area source facilities to monitor temperature or meet the flare operating limits in 40 CFR part 63, subpart CC.

TABLE 6—CONTROL OPTION IMPACTS FOR LOADING OPERATIONS AT LARGE AREA SOURCE BULK GASOLINE TERMINALS

Emission limit	VOC emission reduction [a] (tpy)	TCI [b] ($1,000)	AOC [c] ($/yr)	TAC [d] w/o product recovery ($/yr)	TAC [d] w/product recovery ($/yr)	CE [e] ($/ton HAP) [f]	ICE [g] ($/ton HAP) [f]
35 mg/L	820	0	385,000	385,000	319,000	9,742	9,742
10 mg/L	2,619	1,878	1,371,000	1,531,000	1,275,000	12,170	13,270
1 mg/L	3,945	68,400	15,560,000	21,400,000	20,990,000	133,000	371,900

[a] Compared to baseline (80 mg/L) emissions of 4,097 tpy.
[b] Total capital investment (TCI).
[c] Annual operating costs (AOC).
[d] Total annualized costs (TAC) considering annual operating costs and annualized cost of capital.
[e] Cost effectiveness (CE) compared to baseline (80 mg/L).
[f] HAP content assumed to be 4% of VOC.
[g] Incremental cost effectiveness (ICE) compared to previous option in table.

Similarly, for small bulk gasoline terminals at area sources (*i.e.,* combined throughput between 20,000 and 250,000 gallons per day), we evaluated control options of maintaining the current submerged loading requirements and potentially adding loading rack emission limits of either 80 mg/L, 35 mg/L, 10 mg/L, or 1 mg/L. Table 7 of this document presents the estimated nationwide impacts of these alternative emission limits for 858 small bulk gasoline terminals at area sources. We evaluated the 80 mg/L emission limit for loading racks, but the cost-effectiveness of this option exceeds $24,000 per ton of HAP emissions reduced. The other options are less cost-effective. Based on this analysis, we are not proposing any changes to the current area source provisions for small bulk gasoline terminals subject to NESHAP subpart BBBBBB.

However, as noted above in the context of large bulk gasoline terminals at area sources, EPA is concerned about the large number of people living within 5 km of these facilities and the potential for these affected populations to be located in communities that already face a significant burden of air pollution from multiple sources. Although we estimate that a standard of 80 mg/L or less would have a cost per ton that is higher than we have traditionally

[5] Some VCU are essentially enclosed flares that do not have a means to reduce air inlet draft at low TOC loading rates.

considered to be acceptable for organic HAP, it is also possible that other cost metrics we have discretion to consider—such as total capital and operating costs—could support the reasonableness of such an emissions limit. EPA therefore seeks comment on whether an emissions limit of 80 mg/L or less would be appropriate in light of these alternative cost metrics and the reductions in HAPs that would occur in potentially over-burdened communities surrounding these small bulk terminals. EPA also requests information on the costs, efficacy, and feasibility of control options for these sources, and the contributions of these sources to overall pollution burdens in surrounding communities, to inform our consideration of whether it is appropriate to establish an emissions limit for loading operations at small area source bulk gasoline terminals. Our assessment of control options is summarized in the memorandum ''Area Source Technology Review for the Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities NESHAP'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

TABLE 7—CONTROL OPTION IMPACTS FOR LOADING OPERATIONS AT SMALL AREA SOURCE BULK GASOLINE TERMINALS

Emission limit	VOC emission reduction [a] (tpy)	TCI [b] ($1,000)	AOC [c] ($/yr)	TAC [d] w/o product recovery ($/yr)	TAC [d] w/product recovery ($/yr)	CE [e] ($/ton HAP) [f]	ICE [g] ($/ton HAP) [f]
80 mg/L	2,015	11,870	1,909,000	2,922,000	1,954,000	24,250	24,250
35 mg/L	2,974	12,370	3,758,000	4,813,000	4,457,000	37,460	65,240
10 mg/L	5,056	38,470	9,579,000	12,860,000	12,260,000	60,600	93,650
1 mg/L	5,789	326,400	43,310,000	71,140,000	70,450,000	304,200	1,984,000

[a] Compared to baseline (submerged loading) emissions of 5,870 tpy.
[b] Total capital investment (TCI).
[c] Annual operating costs (AOC).
[d] Total annualized costs (TAC) considering annual operating costs and annualized cost of capital.
[e] Cost effectiveness (CE) compared to baseline (submerged loading).
[f] HAP content assumed to be 4% of VOC.
[g] Incremental cost effectiveness (ICE) compared to previous option in table.

We expect that storage tanks at bulk gasoline plants typically have fixed roofs. As such, vapor balancing is a potential control option for bulk gasoline plants. In reviewing state and local requirements, we found that a number of state requirements include requirements for vapor balancing at bulk gasoline plants but have a minimum applicability threshold of 4,000 gallons per day. Therefore, we evaluated the costs of requiring vapor balancing for a variety of differently-sized bulk gasoline plants. Vapor balancing is projected to result in a net cost savings relative to submerged loading (when considering the value of gasoline vapors not emitted) for bulk gasoline plants with throughput of about 8,000 to 10,000 gallons per day or more. The cost effectiveness of vapor balancing begins to diminish at smaller bulk gasoline plants, exceeding $10,000 per ton of HAP reduced at bulk plants with throughputs less than 4,000 gallon per day. Considering the state rules and diminishing cost effectiveness for small bulk gasoline plants, we are proposing to require vapor balancing both for loading storage vessels and for loading cargo tanks, for bulk gasoline plants with maximum design capacity throughput of 4,000 gallons per day or more. Bulk gasoline plants with capacities below 4,000 gallons per day would retain the requirement to use submerge fill.

We also considered including loading rack emission limits of either 80 mg/L, 35 mg/L, 10 mg/L, or 1 mg/L. Table 8 of this document presents the estimated nationwide impacts of the alternative emission limits considered for 5,913 bulk gasoline plants. Note that vapor balancing is projected to achieve emission reductions similar to that achieved by an emission limit of 35 mg/L, but at much lower costs. Each loading rack emission limit option at bulk gasoline plants had a cost-effectiveness exceeding $275,000 per ton of HAP emissions reduced. Based on this analysis, we are not proposing to add an emission limit for bulk gasoline plants subject to NESHAP subpart BBBBBB. Our assessment of control options is summarized in the memorandum ''Area Source Technology Review for the Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities NESHAP'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

TABLE 8—CONTROL OPTION IMPACTS FOR LOADING OPERATIONS AT AREA SOURCE BULK PLANTS

Emission limit	VOC emission reduction [a] (tpy)	TCI [b] ($1,000)	AOC [c] ($1,000/yr)	TAC [d] w/o product recovery ($/yr)	TAC [d] w/product recovery ($/yr)	CE [e] ($/ton HAP) [f]	ICE [g] ($/ton HAP) [f]
Vapor Balancing	23,739	42,310	2,116	7,140	-4,255	-4,481	-4,481
80 mg/L	20,215	455,800	247,900	286,800	277,100	342,600	[h] 342,600
35 mg/L	23,100	455,800	247,900	286,800	275,700	298,400	-12,000
10 mg/L	24,969	455,800	247,900	286,800	274,800	275,100	-12,000
1 mg/L	25,627	1,367,000	297,500	414,100	401,800	392,000	4,824,000

[a] Compared to baseline (uncontrolled) emissions of 25,700 tpy.
[b] Total capital investment (TCI).
[c] Annual operating costs (AOC).
[d] Total annualized costs (TAC) considering annual operating costs and annualized cost of capital.
[e] Cost effectiveness (CE) compared to baseline (uncontrolled).
[f] HAP content assumed to be 4% of VOC.
[g] Incremental cost effectiveness (ICE) compared to previous option in table.
[h] ICE compared to submerged fill rather than previous option of vapor balancing.

c. NSPS Subpart XXa

The current NSPS (40 CFR part 60, subpart XX [6]) that applies to bulk gasoline terminals (gasoline throughput exceeding 20,000 gallons per day) has a loading rack emission limit of 35 mg/L of gasoline loaded.[7] We are proposing to add a new subpart at part 60, subpart XXa that would be applicable to bulk gasoline terminals that commenced construction, modification or reconstruction after June 10, 2022.

In 40 CFR 60.501''gasoline tank'' is defined as ''. . . a delivery tank truck. . . .'' The major and area source NESHAP definition of ''gasoline cargo tank'' includes loading of tank trucks and railcars. In NSPS subpart XXa, we are proposing nomenclature revisions to generalize the loading requirements similar to the NESHAP definitions which apply to a ''gasoline cargo tank'' rather than just a ''gasoline tank'' to expressly include railcar loading operations. The control techniques and costs of control for loading operations apply equally to tank truck and rail car loading racks and we therefore find no basis for excluding rail car loading operations at bulk gasoline terminals from the NSPS requirements.

Additionally, we assessed either maintaining the current NSPS 35 mg/L emission limit for loading operations or reducing it to either 10 mg/L or 1 mg/L. We assessed costs differently between facilities that are new versus modified or reconstructed, because the incremental cost of designing a system to meet 1 mg/L versus 10 mg/L for a new system is small, but the costs for upgrading an existing control system that currently meets a 10 mg/L or 35 mg/L emissions limit to meet 1 mg/L can be high and may require complete replacement of the existing controls.

We projected nationwide impacts for different control options in the fifth year of the NSPS considering separately 5 newly constructed bulk gasoline terminals and 15 modified or reconstructed facilities that currently meet a 35 or 80 mg/L emission limit. These costs are summarized in Table 9 of this document. Considering the expected range of throughputs for newly constructed bulk gasoline terminals, the incremental cost to meet a 1 mg/L limit rather than a 10 mg/L limit is about $1,300 per ton of VOC reduced, which we determined is cost-effective. As shown in Table 9 of this document, the incremental cost for modified or reconstructed facilities to meet a 1 mg/L limit rather than a 10 mg/L limit exceeds $8,300 per ton of VOC reduced, which we determined is not cost-effective. The incremental cost for modified or reconstructed facilities to meet a 10 mg/L limit, on the other hand, rather than a 35 mg/L limit is about $350 per ton of VOC reduced, which we determined is cost-effective. Therefore, we are proposing in the proposed subpart XXa that facilities that commence construction after June 10, 2022) must meet a 1 mg/L limit and facilities that commence modification, or reconstruction after June 10, 2022 must meet a 10 mg/L limit. Our assessment of control options is summarized in the memorandum ''New Source Performance Standards Review for Bulk Gasoline Terminals'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

TABLE 9—CONTROL OPTION IMPACTS FOR LOADING OPERATIONS AT NSPS BULK GASOLINE TERMINALS

Emission limit	VOC emissions (tpy)	VOC emission reduction (tpy)	TCI [a] ($1,000)	AOC [b] ($/yr)	TAC [c] w/o product recovery ($/yr)	TAC [c] w/product recovery ($/yr)	CE [d] ($/ton VOC)	ICE [e] ($/ton VOC)
New:								
Submerged Loading	2,402							
35 mg/L	171	2,231	5,900	671,000	1,170,000	103,000	46	46
10 mg/L	48	2,354	6,210	706,000	1,240,000	106,000	45	23
1 mg/L	5	2,397	6,830	730,000	1,310,000	162,000	67	1,290
Modified/Reconstructed:								
Submerged Loading	332							
35 mg/L	286	46	0	19,500	19,500	−2,330	−51	−51
10 mg/L	144	188	351	107,000	137,000	46,900	250	346
1 mg/L	14	317	6,530	725,000	1,280,000	1,130,000	3,560	8,350

[a] Total capital investment (TCI).
[b] Annual operating costs (AOC).
[c] Total annualized costs (TAC) considering annual operating costs and annualized cost of capital.
[d] Cost effectiveness (CE) compared to the first option listed.
[e] Incremental cost effectiveness (ICE) compared to previous option in table.

2. Standards for Cargo Tank Vapor Tightness

The area source NESHAP subpart BBBBBB and the NSPS subpart XX both have vapor tightness requirements for cargo tanks that allow up to 3 inches of water pressure drop over a 5-minute period. The major source NESHAP subpart R has a graduated vapor tightness certification that allows from 1 to 2.5 inches (″) of water pressure drop over a 5-minute period, depending on the compartment size in the cargo tank. Further, DOT requirements that were last amended in 2003 (see 68 FR 19285, April 18, 2003) indicate ''A cargo tank used to transport a petroleum distillate fuel that is equipped with vapor recovery equipment may be leakage tested in accordance with 40 CFR 63.425(e)'' [49 CFR 178.346–5]. As such, it appears that most cargo tanks (those less than 18 years of age) are minimally required to comply with the major source NESHAP vapor tightness requirements pursuant to the DOT requirements. In discussion with industry representatives, facility operators indicated there generally is a single vapor-tightness certification and cargo tanks are not certified for NSPS subpart XX or the area source NESHAP separate from cargo tanks certified for the major source NESHAP. Since cargo tanks can be used across gasoline distribution facilities subject to different standards, we considered cargo tank vapor-tightness requirements consistently across all rules.

Another development we identified is state requirements for vapor tightness that have allowable pressure drops that

[6] Part 60, subpart XX applies to bulk gasoline terminals that commenced construction, modification or construction after December 17, 1980. This proposal would modify subpart XX so that it applies to bulk gasoline terminals that commenced construction, modification or reconstruction after December 17, 1980 and on or before the publication date of the proposed part 60, subpart XXa.

[7] Allowance is provided to meet 80 mg/L for affected facilities with an ''existing vapor processing system.''

are half those allowed under the major source NESHAP subpart R. As such, we assessed options ranging from maintaining current requirements (which has different requirements for facilities subject to NESHAP subpart BBBBBB and NSPS subpart XX than for NESHAP subpart R); requiring NESHAP subpart R limits for all gasoline distribution facilities (including facilities subject to NESHAP subpart BBBBBB and NSPS subpart XX); and requiring more stringent vapor tightness requirements based on state requirements (half those in NESHAP subpart R) for all gasoline distribution facilities (across all three rules). Table 10 of this document summarizes the results of these analyses. Based on these results, we concluded that the state rule requirements (one-half the current NESHAP subpart R requirements) are cost-effective developments that would further harmonize certification requirements across all gasoline distribution facilities and cargo tank operators. We also considered requiring even more stringent vapor tightness requirements, at about one-quarter of those in NESHAP subpart R, but these required allowable pressure drop limits that were less than the allowable precision of EPA Method 27. As such, we determined that further reductions of the vapor tightness requirements beyond those identified in state requirements have not been demonstrated in practice. Therefore, we are proposing to require a graduated vapor tightness certification from 0.5 to 1.25 inches of water pressure drop over a 5-minute period, depending on the cargo tank compartment size for gasoline cargo tanks subject to NSPS subpart XXa, NESHAP subpart R and NESHAP subpart BBBBBB. Our assessment of control options is summarized in the memorandum ''Control Options for Loading Operation at Gasoline Distribution Facilities'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

TABLE 10—IMPACTS FOR 10,000 CARGO TANKS UNDER DIFFERENT CONTROL OPTIONS

Option	VOC emissions (tpy)	VOC emission reduction (tpy)	TAC [a] w/o product recovery ($/year)	TAC [a] w/product recovery ($/year)	CE [b] ($/ton VOC)	CE [b] ($/ton HAP) [c]	ICE [d] ($/ton VOC)	ICE [d] ($/ton HAP) [c]
3″ water	33,602	0	250,000	250,000				
NESHAP Subpart R (1″–2.5″ water)	28,047	5,555	997,375	−1,669,14	−300	−7,512	−345	−8,637
State Rule (0.5″–1.25″ water)	25,718	7,883	1,766,000	−2,017,984	−256	−6,400	−150	−3,746

[a] Total annualized costs (TAC) considering annualized operating costs.
[b] Cost effectiveness (CE) compared to baseline (3″ water).
[c] HAP content assumed to be 4% of VOC.
[d] Incremental cost effectiveness (ICE) compared to previous option in table.

3. Standards for Gasoline Storage Vessels

The area source and major source NESHAP (subparts R and BBBBBB) have standards for storage vessels that are largely based on the requirements for volatile organic liquid storage vessels in 40 CFR part 60, subpart Kb (NSPS subpart Kb), but include some exceptions to the NSPS subpart Kb requirements, primarily related to floating roof deck fitting controls. Because VOC emissions from storage vessels are regulated under NSPS subpart Kb, storage vessels are not part of affected facilities under NSPS subpart XX.

We reviewed Federal, state, and local requirements for gasoline storage vessels. We identified potential improvements in the requirements for primary seals, secondary seals (for internal floating roofs), and improved fitting controls (particularly for guidepoles) as developments in practices and processes. Additionally, we identified a new practice for monitoring internal floating roof storage vessels using a lower explosive limit (LEL) monitor to identify floating roofs with poorly functioning seals or fitting controls. We assessed the cost and impacts of moving from the current standards to full compliance with NSPS subpart Kb requirements and for including LEL monitoring. Our assessments for each subpart are detailed in the following subsections. For more information on the storage vessel assessments, see memorandum ''Control Options for Storage Tanks at Gasoline Distribution Facilities'' available in Docket No. EPA–HQ–OAR–2020–0371.

a. NESHAP Subpart R

The major source rule contains standards for gasoline storage vessels at bulk gasoline terminals and pipeline breakout stations. The standards cross-reference NSPS subpart Kb requirements but exclude fitting control requirements in NSPS subpart Kb provided the storage vessel was already equipped with a floating roof meeting the seal requirements in NSPS subpart Kb. We estimated that about 95 percent of storage vessels in the gasoline distribution industry are equipped with internal floating roofs based on review of NEI data. We assessed costs and impacts of requiring fitting controls separately for internal and external floating roofs. Specifically, we evaluated the control options of (1) requiring upgrades of fitting requirements for external floating roofs and (2) requiring upgrades of fitting requirements for both external and internal floating roofs. Table 11 of this document summarizes the national impacts projected for major source gasoline distribution facilities. Based on our analysis, we determined installing/upgrading fitting controls for external floating roof tanks is cost effective. On the other hand, the projected cost-effectiveness of installing/upgrading fitting controls for internal floating roof tanks is approximately $350,000 per ton of HAP emissions reduced (incremental costs between Option 1 and 2), and therefore, we determined these controls are not cost effective. Accordingly, we are proposing to require fitting controls for external floating roof tanks consistent with the requirements in NSPS subpart Kb and are not proposing to require fitting controls for internal floating roof tanks. Our assessment of control options is summarized in the memorandum ''Major Source Technology Review for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) NESHAP'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

TABLE 11—CONTROL OPTION IMPACTS FOR STORAGE VESSELS AT MAJOR SOURCE GASOLINE DISTRIBUTION FACILITIES
[Bulk terminals and pipeline breakout stations]

Control option	VOC emission reduction [a] (tpy)	TCI [b] ($1,000)	TAC [c] w/o product recovery ($1,000/yr)	TAC [c] w/product recovery ($1,000/yr)	CE [d] ($/ton VOC)	CE [d] ($/ton HAP) [e]	ICE [f] ($/ton VOC)	ICE [f] ($/ton HAP) [e]
Upgrade EFRT fittings [g]	546	1,857	173	−89	−164	−3,272	−164	−3,272
Upgrade IFRT and EFRT fittings [g]	772	45,240	4,205	3,835	4,966	99,320	17,330	346,500

[a] Compared to baseline emissions of 4,977 tpy.
[b] Total capital investment (TCI).
[c] Total annualized costs (TAC) considering annual operating costs and annualized cost of capital.
[d] Cost effectiveness (CE) compared to baseline.
[e] HAP content assumed to be 5% of VOC.
[f] Incremental cost effectiveness (ICE) compared to previous option in table.
[g] EFRT = external floating roof tank; IFRT = internal floating roof tank.

While we are not directly proposing additional fitting controls for internal floating roof tanks, we identified the use of LEL monitoring within the headspace of an internal floating roof tank as a means to enhance the annual inspections and more readily identify malfunctioning internal floating roofs. We estimated the cost of the LEL monitoring requirement based on the additional time needed to monitor LEL during the annual inspections. We estimated the impacts of annual LEL monitoring based on the number of internal floating roof tanks at major source gasoline distribution facilities and assuming LEL monitoring identifies defects in about 2 percent of internal floating roofs resulting in a 2 percent reduction in baseline emissions of internal floating roofs. Based on our review of available LEL monitoring data, we expect that this is a conservative estimate of the emission reductions that would be achieved. Table 12 of this document summarizes the projected impact of requiring annual LEL monitoring for internal floating roof tanks as part of the annual roof-top inspections.

The added cost for conducting LEL monitoring is under $70 per year per tank and LEL monitoring is expected to result in cost-effective emission reductions for major source gasoline distribution facilities (costs of $4,200 per ton of HAP reduced). Therefore, we are proposing to require LEL monitoring as part of the annual visual inspections conducted for internal floating roof tanks at major source gasoline distribution facilities. Our assessment of LEL monitoring at major sources is summarized in the memorandum ''Major Source Technology Review for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) NESHAP'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

TABLE 12—LEL MONITORING IMPACTS AT NATIONWIDE MAJOR SOURCE FACILITIES

Facility type	VOC emission reduction (tpy)	TAC [a] w/o product recovery ($/yr)	TAC [a] w/product recovery ($/yr)	CE [b] ($/ton VOC)	CE [b] ($/ton HAP) [c]
Total Major Source Facilities	82	56,290	17,130	210	4,200

[a] Total annualized cost (TAC) considering annual operating costs; there are no annualized cost of capital for this option.
[b] Cost effectiveness (CE).
[c] HAP content assumed to be 5% of VOC.

b. NESHAP Subpart BBBBBB

The area source rule contains standards for gasoline storage tanks at bulk gasoline plants, bulk gasoline terminals, and pipeline breakout stations. The current requirements for bulk gasoline plants require the use of submerged filling for all gasoline storage tanks with a capacity of greater than 250 gallons. As noted in section III.A.1.b of this preamble, we are proposing to require vapor balancing at bulk plants, both when filling cargo tanks and when unloading cargo tanks (*i.e.,* filling storage tanks). The use of vapor balancing when unloading cargo tanks into the storage tanks will reduce the working losses from the storage tanks. Several state and local agencies already require the use of vapor balancing when filling storage tanks at bulk plants with a maximum design capacity throughput of 4,000 gallons per day or more. Bulk plants with capacities below 4,000 gallons per day would retain the requirement to use submerge fill.

The storage tank standards for area source bulk gasoline terminals and pipeline breakout stations cross-reference NSPS subpart Kb requirements or the National Emission Standards for Storage Vessels at 40 CFR part 63, subpart WW, but exclude the floating roof fitting control requirements for both internal and external floating roofs and secondary seal requirements for internal floating roofs with a vapor-mounted primary seal. We assessed costs and impacts of requiring fitting controls separately for internal and external floating roofs. Specifically, we evaluated the control options of (1) requiring upgrades of fitting requirements for external floating roofs consistent with NSPS subpart Kb requirements and (2) requiring upgrades of fitting requirements for external floating roof tanks plus requiring upgrades of fitting and seal requirements for internal floating roofs tanks consistent with NSPS subpart Kb requirements. Table 13 of this document summarizes the national impacts projected for area source gasoline distribution facilities. Again, based on our analysis, we consider adding fitting controls for external floating roof tanks at area source gasoline distribution facilities to be cost effective. Alternatively, the projected cost effectiveness of installing secondary seals and fitting controls for internal floating roof tanks is approximately $45,000 per ton of HAP emissions reduced (incremental costs between Option 1 and 2) and therefore, we determined these controls are not cost effective. Accordingly, we are proposing to require fitting controls for external

floating roof tanks consistent with the requirements in NSPS subpart Kb and are not proposing to revise the secondary seal and fitting control requirements for internal floating roof tanks. Our assessment of control options is summarized in the memorandum ''Area Source Technology Review for the Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities NESHAP'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

TABLE 13—CONTROL OPTION IMPACTS FOR STORAGE VESSELS AT AREA SOURCE GASOLINE DISTRIBUTION FACILITIES

[Bulk terminals and pipeline breakout stations]

Control option	VOC emission reduction [a] (tpy)	TCI [b] ($1,000)	TAC [c] w/o product recovery ($1,000/yr)	TAC [c] w/product recovery ($1,000/yr)	CE [d] ($/ton VOC)	CE [d] ($/ton HAP) [e]	ICE [f] ($/ton VOC)	ICE [f] ($/ton HAP) [e]
(1) Upgrade EFRT fittings [g]	3,338	9,488	882	−720	−216	−4,315	−216	−4,315
(2) Upgrade IFRT and EFRT fittings [g]	10,143	211,100	19,630	14,760	1,455	29,100	2,275	45,500

[a] Compared to baseline emissions of 26,510 tpy.
[b] Total capital investment (TCI).
[c] Total annualized costs (TAC) considering annual operating costs and annualized cost of capital.
[d] Cost effectiveness (CE) compared to baseline.
[e] HAP content assumed to be 5% of VOC.
[f] Incremental cost effectiveness (ICE) compared to previous option in table.
[g] EFRT = external floating roof tank; IFRT = internal floating roof tank.

As noted for major source gasoline distribution facilities, we identified the use of LEL monitoring within the headspace of an internal floating roof tank as a means to enhance the annual inspections and more readily identify malfunctioning internal floating roofs. We estimated the cost of the LEL monitoring requirement based on the additional time needed to monitor LEL during the annual inspections. We estimated the impact of annual LEL monitoring based on the number of internal floating roof tanks at area source gasoline distribution facilities and assuming LEL monitoring identifies defects in 2 percent of internal floating roofs resulting in a 2 percent reduction in the baseline emissions for internal floating roof tanks. Based on our review of available LEL monitoring data, we expect that this is a conservative estimate of the emission reductions that would be achieved. Table 14 of this document summarizes the projected impact of requiring annual LEL monitoring for internal floating roof tanks as part of the annual roof-top inspections for different types of area source gasoline distribution facilities. Our assessment of LEL monitoring at area sources is summarized in the memorandum ''Area Source Technology Review for the Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities NESHAP'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

TABLE 14—NATIONWIDE LEL MONITORING IMPACTS FOR AREA SOURCE FACILITIES

Facility type	VOC emission reduction (tpy)	TAC [a] w/o product recovery ($/yr)	TAC [a] w/product recovery ($/yr)	CE [b] ($/ton VOC)	CE [b] ($/ton HAP) [c]
Total Area Source Facilities	430	353,200	146,700	341	6,820

[a] Total annualized costs (TAC) considering annual operating costs; there are no annualized cost of capital for this option.
[b] Cost effectiveness (CE).
[c] HAP content assumed to be 5% of VOC.

Because area source gasoline distribution facilities are expected to have smaller storage tanks on average than major source facilities, LEL monitoring is expected to be somewhat less cost-effective for area source facilities than major source facilities. Nonetheless, LEL monitoring is projected to have costs of $6,800 per ton of HAP reduced when applied to internal floating roof tanks at area source gasoline distribution facilities. We consider these costs to be reasonable. Therefore, we are proposing to require LEL monitoring as part of the annual visual inspections conducted for internal floating roof tanks at area source bulk gasoline terminals and pipeline breakout stations.

4. Standards for Equipment Leaks

All gasoline distribution rules (40 CFR part 60, subpart XX; 40 CFR part 63, subparts R and BBBBBB) have standards for equipment leaks from equipment components in gasoline or gasoline vapor service. The current leak detection and repair (LDAR) program requirements rely on identifying leaks using AVO methods. We reviewed Federal, state, and local requirements for identifying and repairing equipment leaks. Although the option to use optical gas imaging (OGI) for monitoring equipment leaks has been available since 2008 in the General Provisions to 40 CFR parts 60 and 63 as part of an alternative work practice to EPA Method 21 monitoring, the EPA has only recently proposed the use of OGI in leak detection surveys (40 CFR part 60, Appendix K; see 86 FR 63110, November 15, 2021). Therefore, we considered OGI monitoring as a potential development in equipment leak monitoring. For each subpart, we assessed LDAR programs based on AVO, EPA Method 21, and OGI. We developed a Monte Carlo model to randomly initiate leaks from individual equipment components present at gasoline distribution facilities. We assumed no leaks were present initially and randomly generated leaks at the facility on a monthly basis for a period of 5 years. We assessed the emissions that occurred in the 5th year of the simulation to assess the relative performance of different LDAR programs. For more information on the Monte Carlo model and modeling assumptions used to assess alternative

equipment LDAR programs, see memorandum entitled ''Control Options for Equipment Leaks at Gasoline Distribution Facilities'' available in Docket No. EPA–HQ–OAR–2020–0371.

Based on our Monte Carlo simulations, we found that periodic monitoring using EPA Method 21 with a leak definition of 10,000 ppmv achieved similar emission reductions as OGI monitoring at the same frequency. We evaluated options of (1) maintaining the monthly AVO inspections, (2) using instrument monitoring (EPA Method 21 or OGI following Appendix K) on an annual basis, (3) using instrument monitoring on a semiannual basis, and (4) using instrument monitoring on a quarterly basis. The periodic instrument requirement also includes a requirement to fix any readily identified leaks observed using AVO methods during the normal duties. The results of our assessment of alternative LDAR programs by rule are detailed in the following subsections.

Costs for EPA Method 21 monitoring and OGI monitoring were developed based on information collected from equipment leak monitoring contractors. OGI monitoring contractors commonly include a daily instrument rental charge, but they can monitor many more components per day than EPA Method 21 monitoring contractors. For facilities with a large number of equipment components to be monitored, OGI monitoring costs less than EPA Method 21 monitoring (the savings in time to conduct OGI monitoring more than makes up for the equipment rental charge). However, for facilities with a small number of equipment components to be monitored, EPA Method 21 monitoring costs less than OGI monitoring because the time saving to conduct OGI monitoring is not significant enough to cover the added equipment rental charge. When evaluating ''instrument monitoring'' costs for different types of gasoline distribution facilities, we assumed facilities would elect to use the lowest cost instrument monitoring option between EPA Method 21 and OGI. For more information on the cost assumptions used to assess alternative equipment LDAR programs, see memorandum ''Control Options for Equipment Leaks at Gasoline Distribution Facilities'' available in Docket No. EPA–HQ–OAR–2020–0371.

a. NESHAP Subpart R

The major source rule contains equipment leak standards for bulk gasoline terminals and pipeline breakout stations. Prior to the initial performance test, the major source rule requires equipment leak monitoring to be conducted using EPA Method 21 using a leak definition of 500 parts per million (ppm). The major source rule also requires subsequent monitoring monthly and allows the use of any leak identification method, including AVO techniques. We evaluated the current monthly AVO inspection requirements with LDAR programs based on periodic instrument monitoring.

Table 15 of this document summarizes the projected impacts of requiring periodic instrument monitoring combined with a general requirement to fix any leaks identified (via AVO methods) during normal duties. For the major source gasoline distribution facilities (bulk gasoline terminals and pipeline breakout stations), OGI is the least costly of the instrument monitoring alternatives. Annual OGI instrument monitoring was projected to result in cost savings compared to monthly AVO inspections and semi-annual instrument monitoring was projected to be about the same cost as monthly AVO inspections. Even with uncertainty in the relative performance of monthly AVO monitoring, we conclude that periodic instrument monitoring along with a general requirement to fix any readily identified leaks during the normal course of activities yields similar to better reductions at a net cost savings. Our assessment of control options is summarized in the memorandum ''Major Source Technology Review for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) NESHAP'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

TABLE 15—ESTIMATED EMISSIONS AND COST IMPACTS OF EQUIPMENT LEAK CONTROL OPTIONS FOR MAJOR SOURCE GASOLINE DISTRIBUTION FACILITIES

Option	VOC emissions (tpy)	VOC emission reduction (tpy)	TCI [a] ($1000)	TAC [b] w/o product recovery ($1000/yr)	TAC [b] w/product recovery ($1000/yr)	CE [c] ($/ton VOC)	CE [c] ($/ton HAP) [d]	ICE [e] ($/ton VOC)	ICE [e] ($/ton HAP) [d]
AVO (monthly inspection)	1,124								
Annual instrument [f]	664	461	217.5	−380	−602	−1,310	−13,100	−1,310	−13,100
Semiannual instrument [f]	439	686	217.5	−47.8	−377	−550	−5,550	999	9,990
Quarterly instrument [f]	309	816	217.5	557	166	203	2,030	4,170	41,700

[a] Total capital investment (TCI).
[b] Total annualized costs (TAC) considering annual operating costs and annualized cost of capital.
[c] Cost effectiveness (CE) compared to baseline (AVO).
[d] HAP content assumed to be 10% of VOC.
[e] Incremental cost effectiveness (ICE) compared to previous option in table.
[f] Facilities would be allowed to select EPA Method 21 or OGI monitoring. If EPA Method 21 is selected, valves and pumps would be required to be monitored at the frequency specified, however, connectors are only monitored annually. If OGI is selected, all applicable valves, pumps, and connectors would be required to be monitored at the frequency specified.

The semiannual instrument monitoring is projected to yield a net cost savings compared to monthly AVO inspections. The incremental cost-effectiveness from going from annual to semiannual instrument monitoring is just under $10,000 per ton of HAP emissions reduced. Taken together, we determined that semiannual instrument monitoring is cost effective. The incremental cost-effectiveness of going to quarterly instrument monitoring is over $40,000 per ton of HAP emissions reduced; therefore, we determined this option is not cost-effective. Considering the developments in equipment leak monitoring practices, we are proposing to require semiannual instrument monitoring for major source gasoline distribution facilities.

b. NESHAP Subpart BBBBBB

The area source rule contains equipment leak standards for bulk gasoline terminals, pipeline breakout stations, bulk gasoline plants, and pipeline pumping stations. Prior to the initial performance test, the area source

rule requires equipment leak monitoring to be conducted using EPA Method 21 using a leak definition of 500 ppm. The area source rule requires subsequent monitoring monthly and allows the use of any leak identification method, including AVO techniques. We evaluated the current monthly AVO inspection requirements with LDAR programs based on periodic instrument monitoring.

Table 16 of this document shows the estimated impacts of applying instrument monitoring for equipment leaks at area source gasoline distribution facilities. For the smaller area source facilities, EPA Method 21 was generally less costly than OGI as an instrument monitoring method. For the larger area sources, we expect facilities to use OGI. The annual instrument monitoring requirement combined with a general requirement to fix any leaks identified (via AVO methods) during the normal course of activities is projected to be less costly than monthly AVO and yield additional emission reductions. Thus, we determined that annual instrument monitoring is cost effective. The relative cost of moving from annual monitoring to semi-annual monitoring is approximately $18,000 per ton of HAP removed which we determined is not cost-effective. Therefore, semi-annual instrument monitoring was rejected because of the high incremental cost-effectiveness compared to annual instrument monitoring and we are proposing to require annual instrument monitoring combined with a requirement to repair any leaks identified (*i.e.,* observed using AVO methods) during the course of regular business activities. Again, EPA is seeking comment on adopting more protective standards at costs above levels that we generally consider to be cost effective for these type of HAP given that many of these sources are located in highly populated areas where the communities surrounding these facilities already have the potential to be overburdened from multiple sources of air pollution. Our assessment of control options is summarized in the memorandum ''Area Source Technology Review for the Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities NESHAP'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

TABLE 16—ESTIMATED EMISSIONS AND COST IMPACTS OF EQUIPMENT LEAK CONTROL OPTIONS FOR AREA SOURCE GASOLINE DISTRIBUTION FACILITIES

Option	VOC emissions (tpy)	VOC emission reduction (tpy)	TCI [a] ($1000)	TAC [b] w/o product recovery ($1000/yr)	TAC [b] w/product recovery ($1000/yr)	CE [c] ($/ton VOC)	CE [c] ($/ton HAP) [d]	ICE [e] ($/ton VOC)	ICE [e] ($/ton HAP) [d]
AVO	17,080								
Annual instrument [f]	9,800	7,280	5,750	−4,180	−7,670	−1,050	−10,500	−1,050	−10,500
Semiannual instrument [f]	6,950	10,100	5,750	2,290	−2,570	−254	−2,540	1,790	17,900
Quarterly instrument [f]	5,320	11,800	5,750	14,600	8,980	764	7,640	7,100	71,000

[a] Total capital investment (TCI).
[b] Total annualized costs (TAC) considering annual operating costs and annualized cost of capital.
[c] Cost effectiveness (CE) compared to baseline (AVO).
[d] HAP content assumed to be 10% of VOC.
[e] Incremental cost effectiveness (ICE) compared to previous option in table.
[f] Facilities would be allowed to select EPA Method 21 or OGI monitoring. If EPA Method 21 is selected, valves and pumps would be required to be monitored at the frequency specified, however, connectors are only monitored annually. If OGI is selected, all applicable valves, pumps, and connectors would be required to be monitored at the frequency specified.

c. NSPS Subpart XXa

The NSPS subpart XX contains equipment leak standards for bulk gasoline terminals. Prior to the initial performance test, the NSPS requires monitoring to be conducted of the vapor collection system using EPA Method 21 using a leak definition of 10,000 ppm. The NSPS also requires subsequent monitoring of the loading racks, vapor collection system and vapor processing system monthly using any leak identification method, including AVO techniques.

Regarding monitoring requirements prior to performance tests, we determined that these requirements are effective requirements for the closed vent system used to transfer vapors from the loading racks to the control system. Generally, the EPA requires these closed vent systems to operate with no detectable emissions (which is defined as less than 500 ppmv above background using EPA Method 21). Both major and area source NESHAP subparts R and BBBBBB require the monitoring of the vapor collection system prior to a performance test using this no detectable emissions threshold (500 ppmv using EPA Method 21). Consistent with current practices for closed vent systems, we are proposing in subpart XXa to require that monitoring of the vapor collection system prior to a performance test be conducted using EPA Method 21 and that the vapor collection system be operated with no detectable emissions (no leaks greater than 500 ppmv).

For the ongoing leak monitoring requirements, we evaluated the current monthly AVO inspection requirements compared to LDAR programs based on periodic instrument monitoring along with a general requirement to fix any leaks identified (via AVO methods) during the normal course of activities. Table 17 of this document provides estimated costs for newly affected bulk gasoline terminals. When considering VOC emission impacts, the overall cost effectiveness of the quarterly monitoring option is $259 per ton VOC reduced and the incremental cost effectiveness of quarterly monitoring compared to semi-annual monitoring is $4,020 per ton of VOC reduced. Taken together, we determined that quarterly instrument monitoring is cost effective for reducing VOC emissions. Therefore, we are proposing to require quarterly monitoring for bulk gasoline terminals in NSPS subpart XXa along with a general requirement to fix any leaks identified (via AVO methods) during normal duties. Our assessment of control options is summarized in the memorandum ''New Source Performance Standards Review for Bulk Gasoline Terminals'' in EPA Docket No. EPA–HQ–OAR–2020–0371.

TABLE 17—ESTIMATED EMISSIONS AND COST IMPACTS OF EQUIPMENT LEAK CONTROL OPTIONS PER NEWLY AFFECTED BULK GASOLINE TERMINAL

Option	VOC emissions (tpy)	VOC emission reduction (tpy)	TCI [a] ($)	TAC [b] w/o product recovery ($/yr)	TAC [b] w/product recovery ($/yr)	CE [c] ($/ton VOC)	ICE [d] ($/ton VOC)
AVO (monthly inspection)	4.47						
Annual instrument [e]	2.64	1.83	1,000	−1,240	−2,120	−1,160	−1,160
Semiannual instrument [e]	1.74	2.73	1,000	60	−1,250	−458	962
Quarterly instrument [e]	1.22	3.25	1,000	2,405	843	259	4,020

[a] Total capital investment (TCI).
[b] Total annualized costs (TAC) considering annual operating costs and annualized cost of capital.
[c] Cost effectiveness (CE) compared to baseline (AVO).
[d] Incremental cost effectiveness (ICE) compared to previous option in table.
[e] Facilities would be allowed to select EPA Method 21 or OGI monitoring. If EPA Method 21 is selected, valves and pumps would be required to be monitored at the frequency specified, however, connectors are only monitored annually. If OGI is selected, all applicable valves, pumps, and connectors would be required to be monitored at the frequency specified.

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

In addition to the proposed actions described above, we are proposing to remove exemptions from the requirement to comply during periods of startup, shutdown, and malfunction (SSM). We also are proposing changes to the recordkeeping and reporting requirements to require the use of electronic reporting of performance test reports and semiannual reports. We also are proposing to correct section reference errors and make other minor editorial revisions. Our rationale and proposed changes related to these issues are discussed below.

1. SSM

In its 2008 decision in *Sierra Club* v. *EPA,* 551 F.3d 1019 (DC Cir. 2008), the United States Court of Appeals for the District of Columbia Circuit (the court) vacated portions of two provisions in the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM. Specifically, the court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and (h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some section 112 standards apply continuously. With the issuance of the mandate in *Sierra Club* v *EPA,* the exemption language in 63.6(f)(1) and (h)(1) are null and void and any cross reference to those provisions have no effect.

In March 2021, the EPA issued a rule [8] to reflect the court vacatur that revised the 40 CFR part 63 General Provisions to remove the SSM exemptions at 40 CFR 63.6(f)(1) and (h)(1). In this action, we are proposing to eliminate references to these SSM exemptions that are null and void, remove any additional SSM exemptions or references to SSM exemptions, and remove any cross-references to provisions in 40 CFR part 63 (General Provisions) that are unnecessary, inappropriate or redundant in the absence of the SSM exemption. The EPA determined the reasoning in the court's decision in *Sierra Club* applies equally to CAA section 111. Consistent with *Sierra Club* v. *EPA,* the standards that we are proposing in NSPS subpart XXa would apply at all times.

a. Proposed Elimination of the SSM Exemption in NESHAP Subpart R

We are proposing the elimination of the vacated exemption provision and several revisions to Table 1 of this document, (the General Provisions Applicability Table to subpart R of part 63, hereafter referred to as the ''General Provisions table to subpart R'') as is explained in more detail below. For example, we are proposing to eliminate the incorporation of the General Provisions' requirement that the source develop an SSM plan. We also are proposing to eliminate and revise certain recordkeeping and reporting requirements related to the SSM exemption. The EPA has attempted to ensure that the provisions we are proposing to eliminate are inappropriate, unnecessary, or redundant in the absence of the SSM exemption.

The EPA considers that processes at Gasoline Distribution facilities are not continuous and that there will be variation in emission stream characteristics over time. The standards consider this variation and provide sources the ability to meet the standards at all times. Therefore, we have not proposed alternate standards for startup and shutdown.

Periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. Malfunctions, in contrast, are neither predictable nor routine. Instead, they are, by definition, sudden, infrequent, and not reasonably preventable failures of emissions control, process, or monitoring equipment. (40 CFR 60.2 and 63.2) (definition of malfunction). The EPA interprets CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards and this reading has been upheld as reasonable by the D.C. Circuit in *U.S. Sugar Corp.* v. *EPA,* 830 F.3d 579, 606–610 (2016). Therefore, the standards that apply during normal operation apply during periods of malfunction.

We are also proposing the following revisions to the General Provisions table to subpart R as detailed below.

1. General Duty

We are proposing to revise the General Provisions table to subpart R entry for 40 CFR 63.6(e) by changing the ''yes'' in column 2 to ''no.'' Section 63.6(e) describes the general duty to minimize emissions and requirements for an SSM plan. Some of the language in that section is no longer necessary or appropriate in light of the elimination of the SSM exemption. We are proposing instead to add general duty regulatory text at 40 CFR 63.420(k) that reflects the general duty to minimize emissions while eliminating the reference to periods covered by an SSM exemption. The current language in 40 CFR 63.6(e)(1)(i) characterizes what the

[8] U.S. EPA, *Court Vacatur of Exemption From Emission Standards During Periods of Startup, Shutdown, and Malfunction.* (86 FR 13819, March 11, 2021).

general duty entails during periods of SSM. With the elimination of the SSM exemption, there is no need to differentiate between normal operations, startup and shutdown, and malfunction events in describing the general duty. Section 63.6(e)(1)(ii) imposes requirements that are not necessary with the elimination of the SSM exemption or are redundant with the general duty requirement being added at 40 CFR 63.420(k). Therefore, in addition to changing the applicability of 63.6(e) from ''yes'' to ''no'' in the table, the language the EPA is proposing for 40 CFR 63.420(k) does not include the language from 40 CFR 63.6(e)

2. SSM Plan

As noted in the previous paragraph, the proposed revisions to the General Provisions table to subpart R for 40 CFR 63.6(e) will also remove provisions to that require an SSM plan. Generally, the paragraphs under 40 CFR 63.6(e)(3) require development of an SSM plan and specify SSM recordkeeping and reporting requirements related to the SSM plan. As noted, the EPA is proposing to remove the SSM exemptions. Therefore, affected units are subject to an emission standard during such events. The applicability of a standard during such events will ensure that sources have ample incentive to plan for and achieve compliance and thus the SSM plan requirements are no longer necessary.

3. Compliance With Standards

We are proposing to revise the General Provisions table to subpart R entry for 40 CFR 63.6(f)(1) from ''yes'' in column 2 to ''no.'' As noted above, with the issuance of the mandate in *Sierra Club* v *EPA,* the exemption language in 63.6(f)(1) and (h)(1) are null and void and any cross reference to those provisions have no effect. The EPA amended 40 CFR 63.6(f)(1) and (h)(1) on March 11, 2021, to reflect the court order and revise the CFR to remove the SSM exemption. However, the second sentence of 40 CFR 63.6(f)(1) contains language that is premised on the existence of an exemption and is inappropriate in the absence of the exemption. Thus, rather than cross-referencing 63.6(f)(1), we are adding the language of 63.6(f)(1) that requires compliance with standards at all times to the regulatory text at 40 CFR 63.420(k). The court in *Sierra Club* vacated the exemptions contained in this provision and held that the CAA requires that some CAA section 112 standards apply continuously.

As noted in the General Provisions table to subpart R entry for 40 CFR 63.6(h), there are no opacity standards in NESHAP subpart R, so the General Provisions at 40 CFR 63.6(h) were marked as ''no'' in column 2. There are visible emissions observations for flares, so we are proposing to revise the comment in column 3 to note that NESHAP subpart R specifies the requirements for visible emissions observations for flares.

4. Performance Testing

We are proposing to revise the General Provisions table to subpart R of Part 63 entry for 40 CFR 63.7(e)(1) by changing the ''yes'' in column 2 to a ''no.'' Section 63.7(e)(1) describes performance testing requirements. The EPA is instead proposing to add a performance testing requirement at 40 CFR 63.425(a). The performance testing requirements we are proposing to add differ from the General Provisions performance testing provisions in several respects. The regulatory text does not include the language in 40 CFR 63.7(e)(1) that restated the SSM exemption and language that precluded startup and shutdown periods from being considered ''representative'' for purposes of performance testing. The proposed performance testing provisions specifically note the batch operation of gasoline loading operations and include periods when cargo tanks are being changed out when a full cargo tank is disconnected, and a new cargo tank is moved into position for loading. As in 40 CFR 63.7(e)(1), performance tests conducted under this subpart should not be conducted during malfunctions because conditions during malfunctions are often not representative of normal operating conditions. The EPA is proposing to add language that requires the owner or operator to record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Section 63.7(e)(1) requires that the owner or operator make such records ''as may be necessary to determine the condition of the performance test'' available to the Administrator upon request but does not specifically require the information to be recorded. The regulatory text the EPA is proposing to add to this provision builds on that requirement and makes explicit the requirement to record the information.

5. Monitoring

We are proposing to revise the General Provisions table to subpart R of Part 63 by adding separate entries for 40 CFR 63.8(c)(1)(i) and (iii) and including a ''no'' in column 2. The cross-references to the general duty and SSM plan requirements in those subparagraphs are not necessary in light of other requirements of 40 CFR 63.8 that require good air pollution control practices (40 CFR 63.8(c)(1)) and that set out the requirements of a quality control program for monitoring equipment (40 CFR 63.8(d)).

We are proposing to revise the major source General Provisions table to subpart R of Part 63 by splitting the entry for 40 CFR 63.8(d) into two separate entries, one for 40 CFR 63.8(d)(1) and (2) and retaining the ''yes'' in column 2 and one for 40 CFR 63.8(d)(3) and including a ''no'' in column 2. The final sentence in 40 CFR 63.8(d)(3) refers to the General Provisions' SSM plan requirement which is no longer applicable. The EPA is proposing to add provisions to subpart R at 40 CFR 63.428(d)(4) that is identical to 40 CFR 63.8(d)(3) except that the final sentence is replaced with the following sentence: ''The program of corrective action should be included in the plan as required under § 63.8(d)(2).''

6. Recordkeeping

We are proposing to revise the General Provisions table to subpart R of Part 63 by adding a separate entry for 40 CFR 63.10(b)(2)(i), (ii), (iv) and (v) and including a ''no'' in column 2.

- Section 63.10(b)(2)(i) describes the recordkeeping requirements for startup and shutdown periods when the source exceeds any applicable emission limitation in a relevant standard and section 63.10(b)(2)(ii) describes the recordkeeping requirements for malfunctions. We are instead proposing to add recordkeeping and reporting requirements of for all exceedances.

The EPA is proposing to add such requirements to 40 CFR 63.428(g). The regulatory text we are proposing to add differs from the General Provisions it is replacing in that the General Provisions requires the creation and retention of a record of the occurrence and duration of each malfunction of process, air pollution control, and monitoring equipment. The EPA is proposing that this requirement apply to any failure to meet an applicable standard and is requiring that the source record the date, time, and duration of the failure rather than the ''occurrence.'' The EPA is also proposing to add requirements to 40 CFR 63.428(g) that sources keep records that include a list of the affected source or equipment and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over the standard for which the source failed to meet the standard, and

a description of the method used to estimate the emissions. Examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The EPA is proposing to require that sources keep records of this information to ensure that there is adequate information to allow the EPA to determine the severity of any failure to meet a standard, and to provide data that may document how the source met the general duty to minimize emissions when the source has failed to meet an applicable standard.

- We are proposing to revise the General Provisions table to subpart R of Part 63 entry for 40 CFR 63.10(b)(2)(iv) by changing the ''yes'' in column 2 to a ''no.'' Section 63.10(b)(2)(iv), when applicable, requires sources to record actions taken during SSM events when actions were inconsistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required. The requirement previously applicable under 40 CFR 63.10(b)(2)(iv)(B) to record actions to minimize emissions and record corrective actions is now applicable by the proposed requirements in 40 CFR 63.428(g).
- We are proposing to revise the General Provisions table to subpart R of Part 63 entry for 40 CFR 63.10(b)(2)(v) by changing the ''yes'' in column 2 to a ''no.'' Section 63.10(b)(2)(v), when applicable, requires sources to record actions taken during SSM events to show that actions taken were consistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required.
- We are proposing to revise the General Provisions table to subpart R of Part 63 by adding a separate entry for 40 CFR 63.10(c)(15) and including a ''no'' in column 2. The EPA is proposing that 40 CFR 63.10(c)(15) no longer apply. When applicable, the provision allows an owner or operator to use the affected source's SSM plan or records kept to satisfy the recordkeeping requirements of the SSM plan, specified in 40 CFR 63.6(e), to also satisfy the requirements of 40 CFR 63.10(c)(10) through (12). The EPA is proposing to eliminate this requirement because SSM plans would no longer be required, and, therefore, 40 CFR 63.10(c)(15) no longer serves any useful purpose for affected units.

7. Reporting

We are proposing to revise the General Provisions table to subpart R of Part 63 entry for 40 CFR 63.10(d)(5) by changing the ''yes'' in column 2 to a ''no.'' Section 63.10(d)(5) describes the reporting requirements for SSM. To replace the General Provisions reporting requirement, the EPA is proposing to add reporting requirements to 40 CFR 63.428(m). The replacement language differs from the General Provisions requirement in that it eliminates periodic SSM reports as a stand-alone report. We are proposing language that requires sources that fail to meet an applicable standard at any time to report the information concerning such events in the semiannual report already required under this rule. We are proposing that the report must contain the number, date, time, duration, and the cause of such events (including unknown cause, if applicable), a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

Examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The EPA is proposing this requirement to ensure that there is adequate information to determine compliance, to allow the EPA to determine the severity of the failure to meet an applicable standard, and to provide data that may document how the source met the general duty to minimize emissions during a failure to meet an applicable standard.

We will no longer require owners or operators to determine whether actions taken to correct a malfunction are consistent with an SSM plan, because plans would no longer be required. The proposed amendments at 63.10(d)(5), therefore, eliminate the cross-reference to 40 CFR 63.10(d)(5)(i) that contains the description of the previously required SSM report format and submittal schedule from this section. These specifications are no longer necessary because the events will be reported in otherwise required reports with similar format and submittal requirements.

The proposed amendments at 63.10(d)(5) will also eliminate the cross-reference to 40 CFR 63.10(d)(5)(ii). Section 63.10(d)(5)(ii) describes an immediate report for startups, shutdown, and malfunctions when a source failed to meet an applicable standard but did not follow the SSM plan. We will no longer require owners or operators to report when actions taken during a startup, shutdown, or malfunction were not consistent with an SSM plan, because plans would no longer be required.

b. Proposed Revisions To Address SSM Provisions in NESHAP Subpart BBBBBB

We are proposing to remove references to malfunction throughout NESHAP subpart BBBBBB. Specifically, we are removing the requirements at 40 CFR 63.11092(b)(1)(i)(B)(*2*)(*iv*), 63.11092(b)(1)(iii)(B)(*2*)(*iv*), 63.11092(d)(4), 63.11095(b)(4), and 63.11095(d) and revising the requirements at 40 CFR 63.11092(b)(1)(i)(B)(*2*)(*v*), 63.11092(b)(1)(iii)(B)(*2*)(*v*), 63.11092(d), 63.11092(d)(3), 63.11094(f)(4), and 63.11094(g). We are also proposing limited revisions to Table 4 of this document (as proposed, formerly Table 3), the General Provisions Applicability Table to subpart BBBBBB of part 63, hereafter referred to as the ''General Provisions table to subpart BBBBBB'' to address selected SSM provisions. NESHAP subpart BBBBBB was amended on January 24, 2011 (76 FR 4156) to address SSM provisions. We are proposing one additional SSM revision. Specifically, we are proposing to revise the area source General Provisions table to subpart BBBBBB by splitting the entry for 40 CFR 63.8(d) into two separate entries, one for 40 CFR 63.8(d)(1)–(2) and retaining the ''yes'' in column 2 and one for 40 CFR 63.8(d)(3) and including a ''no'' in column 2. The final sentence in 40 CFR 63.8(d)(3) refers to the General Provisions' SSM plan requirement which is no longer applicable. The EPA is proposing to add provisions to subpart BBBBBB at 40 CFR 63.11094(h) that is identical to 40 CFR 63.8(d)(3) except that the final sentence is replaced with the following sentence: ''The program of corrective action should be included in the plan as required under § 63.8(d)(2).''

c. Proposal of NSPS Subpart XXa Without SSM Exemptions

We are proposing standards in the NSPS subpart XXa that apply at all times. We are proposing that emission limits will apply at all times, including during SSM. The NSPS general provisions in 40 CFR 60.8(c) contains an exemption from non-opacity standards. We are proposing in NSPS subpart XXa specific requirements at 40 CFR 60.500a(c) that override the general provisions for SSM. We are proposing that all standards in NSPS subpart XXa apply at all times.

In proposing the standards in this rule, the EPA has taken into account startup and shutdown periods and, for the reasons explained below, has not proposed alternate standards for those periods. Startups and shutdowns are part of normal operations at Bulk

Gasoline Terminals. The proposed emission standards adequately control emissions during these startup and shutdown periods.

Periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. Malfunctions, in contrast, are neither predictable nor routine. Instead they are, by definition, sudden, infrequent, and not reasonably preventable failures of emissions control, process, or monitoring equipment. (40 CFR 60.2). The EPA interprets CAA section 111 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 111 standards. Nothing in CAA section 111 or in case law requires that the EPA consider malfunctions when determining what standards of performance reflect the degree of emission limitation achievable through ''the application of the best system of emission reduction'' that the EPA determines is adequately demonstrated. While the EPA accounts for variability in setting emissions standards, the EPA is not required to treat a malfunction in the same manner as the type of variation in performance that occurs during routine operations of a source. A malfunction is a failure of the source to perform in a ''normal or usual manner'' and no statutory language compels EPA to consider such events in setting section 111 standards of performance. The EPA's approach to malfunctions in the analogous circumstances (setting ''achievable'' standards under section 112) has been upheld as reasonable by the D.C. Circuit in *U.S. Sugar Corp.* v. *EPA,* 830 F.3d 579, 606–610 (D.C. Cir. 2016).

2. Electronic Reporting

The EPA is proposing that owners and operators of gasoline distribution facilities submit electronic copies of required performance test reports, performance evaluation reports, and semi-annual reports through the EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI). A description of the electronic data submission process is provided in the memorandum *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules,* available in the docket for this action.

The proposed rules require that performance test results collected using test methods that are supported by the EPA's Electronic Reporting Tool (ERT) as listed on the ERT website [9] at the time of the test be submitted in the format generated through the use of the ERT or an electronic file consistent with the xml schema on the ERT website, and other performance test results be submitted in portable document format (PDF) using the attachment module of the ERT. Similarly, performance evaluation results of CEMS measuring relative accuracy test audit pollutants that are supported by the ERT at the time of the test must be submitted in the format generated through the use of the ERT or an electronic file consistent with the xml schema on the ERT website, and other performance evaluation results be submitted in PDF using the attachment module of the ERT.

For semi-annual reports, the proposed rules require that owner and operators use the appropriate spreadsheet template to submit information to CEDRI. A draft version of the proposed templates for these reports are included in the docket for this action.[10] The EPA specifically requests comment on the content, layout, and overall design of the templates.

Additionally, the EPA has identified two broad circumstances in which electronic reporting extensions may be provided. These circumstances are (1) outages of the EPA's CDX or CEDRI which preclude an owner or operator from accessing the system and submitting required reports and (2) *force majeure* events, which are defined as events that will be or have been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevent an owner or operator from complying with the requirement to submit a report electronically. Examples of *force majeure* events are acts of nature, acts of war or terrorism, or equipment failure or safety hazards beyond the control of the facility. The EPA is providing these potential extensions in NSPS subpart XXa to protect owners and operators from noncompliance in cases where they cannot successfully submit a report by the reporting deadline for reasons outside of their control. In both circumstances, the decision to accept the claim of needing additional time to report is within the discretion of the Administrator, and reporting should occur as soon as possible. These potential extensions are not necessary to add to NESHAP subpart R and NESHAP subpart BBBBBB, because they were recently added to the part 63, subpart A, General Provisions at 40 CFR 63.9(k).

The electronic submittal of the reports addressed in these proposed rulemakings will increase the usefulness of the data contained in those reports, is in keeping with current trends in data availability and transparency, will further assist in the protection of public health and the environment, will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA 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 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. Moreover, electronic reporting is consistent with the EPA's plan [11] to implement Executive Order 13563 and is in keeping with the EPA's Agency-wide policy [12] developed in response to the White House's Digital Government Strategy.[13] 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.

3. Technical and Editorial Changes

We are proposing several technical amendments and definition revisions to improve the clarity and enforceability of the provision of the gasoline distribution facility standards. These additional proposed revisions and our rationale for the proposed revisions are described in this section.

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

[10] See Gasoline Distribution Semiannual Reporting Template, available at Docket ID. No. EPA–HQ–OAR–2020–0371.

[11] EPA's Final Plan for Periodic Retrospective Reviews, August 2011. Available at: *https://www.regulations.gov/document?D=EPA-HQ-OA-2011-0156-0154.*

[12] E-Reporting Policy Statement for EPA Regulations, September 2013. Available at: *https://www.epa.gov/sites/production/files/2016-03/documents/epa-ereporting-policy-statement-2013-09-30.pdf.*

[13] Digital Government: Building a 21st Century Platform to Better Serve the American People, May 2012. Available at: *https://obamawhitehouse.archives.gov/sites/default/files/omb/egov/digital-government/digital-government.html.*

a. Applicability Equations in NESHAP Subpart R

The current major source rule includes applicability equations that can be used to exempt facilities from the major source requirements. The equations exclude all bulk gasoline terminals or pipeline breakout stations with an emissions screening factor (E_t or E_p, respectively) of less than one. Upon reviewing the applicability equations, we determined the equations can potentially exempt facilities that are major sources of HAP emissions. Specifically, it is possible for gasoline storage tanks to be larger and have higher emissions than the model tanks used to derive the applicability equation. Additionally, the terms used in the different equations, particularly the fixed roof tank term, are different. A combination of tanks that exceeds 1 (indicating major source facility) using the equation in paragraph 40 CFR 63.420(b) for pipeline breakout stations can be below 1 (suggesting an area source facility) using the equation in paragraph 40 CFR 63.420(a) for bulk gasoline terminals. Thus, it appears some true major source facilities may only need to comply with major equipment counts associated with these applicability equations and not have ongoing requirements to ensure, for example, their floating roof seals are intact. Additionally, facilities that used these equations to become exempt from the major source rule are not covered by the area source rule if they are truly major sources of HAP emissions. In meeting with industry representatives, none of the industry representatives indicated that they used these equations to determine applicability with the rule. Therefore, we are proposing to remove the applicability equations in the major source rule to ensure that all major sources are subject to the emission limitations in NESHAP subpart R.

b. Definitions of Bulk Gasoline Terminal, Pipeline Breakout Station, and Pipeline Pumping Station

The major source rule applies to bulk gasoline terminals and to pipeline breakout stations. These terms are defined, but there appears to be significant potential overlap in these definitions. Based on the applicability equations and the fact that the loading rack requirements apply only to bulk gasoline terminals, the key difference between a bulk gasoline terminal and a pipeline breakout station is the presence (or absence) of gasoline loading racks. Application of subpart R requirements to ''pipeline breakout station'' facilities that have loading racks is inconsistent. We identified a title V permit that considers these separate affected facilities, with one portion of the facility regulated as a pipeline breakout station and the loading racks (and perhaps associated tanks and equipment) regulated as a bulk gasoline terminal. We also identified a title V permit where the loading racks at a pipeline breakout station were listed as having no applicable Federal requirements. To ensure consistent application of the rule and to clarify that all loading racks at major source facilities are to comply with the loading rack requirements in 40 CFR 63.422, we are proposing to clarify the definitions of ''bulk gasoline terminal'' to clearly delineate that these facilities load gasoline into cargo tanks (*i.e.,* have gasoline loading racks). Similarly, we are proposing to clarify the definitions of ''pipeline breakout stations'' to clearly delineate that these facilities do not have gasoline loading racks and that if a facility loads gasoline into cargo tanks, that facility is a bulk gasoline terminal. Since the requirements for storage vessels and equipment leak are the same for these facility types, the only difference the proposed revisions make is to clarify that loading racks at facilities that primarily transport gasoline via pipeline are still required to be meet the emission limitations for gasoline loading racks.

We are also proposing similar definitions for area source standards (NESHAP subpart BBBBBB) and for NSPS subpart XXa. At 40 CFR 63.11088 of the area source NESHAP, the header includes bulk gasoline terminals, pipeline breakout stations and pipeline pumping stations. However, Table 2 to subpart BBBBBB only specifies loading rack control requirements for ''bulk gasoline terminal loading rack(s).'' The proposed revisions to bulk gasoline terminals, pipeline breakout stations and pipeline pumping stations clarify that pipeline breakout stations and pipeline pumping stations do not contain loading racks. We are also proposing to revise the header of 40 CFR 63.11088 to delete reference to pipeline breakout stations or pipeline pumping stations. For the NSPS subpart XXa, we are simply proposing the definition of bulk gasoline terminals consistent with the definitions being proposed in the major and area source NESHAP.

c. Definition of Gasoline

We are also proposing to add a definition of gasoline to NESHAP subpart R to clarify the definition of gasoline that applies to this subpart. The proposed definition is based on the definition in NSPS subpart XX and is consistent with the definition of gasoline in both NSPS subpart XXa and NESHAP subpart BBBBBB.

d. Definition of Submerged Filling

Because we are proposing in NSPS subpart XXa and NESHAP subpart R to require submerged filling when loading cargo tanks, we are also proposing to add a definition of ''submerged filling'' similar to the definition include in NESHAP subpart BBBBBB to clearly define this term for use in complying with the proposed requirements for submerged filling. Specifically, submerged filling is either the use of a pipe whose discharge is no more than the 6 inches from the bottom of the tank or the use of bottom filling. The proposed definitions of ''submerged filling'' in NSPS subpart XXa and NESHAP subpart R do not include references to stationary storage tanks that are included in the NESHAP subpart BBBBBB definition of ''submerged filling'' because NSPS subpart XXa and NESHAP subpart R do not require submerged filling of storage tanks (although the floating roof requirements essentially demand use of submerged filling).

e. Definition of Flare and Thermal Oxidation System

We are proposing to further clarify the distinction between a flare and a thermal oxidation system. For the gasoline distribution rules, the term flare refers to thermal combustion system using an open flame (without enclosure), whereas a thermal oxidation system has an enclosed combustion chamber. Some flares may have shrouds or other ''partial'' enclosures, which make it difficult to classify these devices based on the current definitions. We are proposing to clarify the definition of a flare to include shrouded flares or flares with partial enclosures that are insufficient to capture the emitted pollutants and convey them to the atmosphere in a conveyance that can be used to conduct a performance test to determine the emissions. Thus, a performance test cannot be performed on a flare. We are also proposing to clarify that thermal oxidation systems are enclosed to the point that the pollutants are emitted through a conveyance that affords quantification of emissions through application of performance tests. This clarification is consistent with the current requirements to conduct initial performance tests for thermal oxidation systems but not for flares.

f. Additional Part 63 General Provision Revisions

We are proposing to correct a typographical error in the General Provisions table to subpart R entry for 40 CFR ''63.1(a)(6)(8)'' to delete ''(8)''. We expect that this was meant to reference paragraphs ''(a)(6)–(8)'' but paragraphs (a)(7) and (8) are reserved. Therefore, we are proposing to delete the ''(8)'' from this entry and add reference to paragraphs (a)(7) and (8) with the existing reference to 40 CFR 63.1(a)(9) so the entry reads ''63.1(a)(7)–(a)(9). We are proposing to revise the comment in column 3 to note these sections (plural) are reserved.

We are proposing to correct a typographical error in the General Provisions table to subpart R entry for 40 CFR ''63.1(a)(12))–(14)'' to delete '')–(14)''. Paragraph (a)(12) is the last paragraph in 40 CFR 63.1(a) and the added '')'' is a typographical error.

We are proposing to revise the General Provisions table to subpart R entry for 40 CFR 63.1(b)(3) to change the ''no'' in column 2 to ''yes'' and revise the comment in column 3. Paragraph (b)(3) requires records be kept for stationary sources within the source category, but not subject to the relevant standard. The comment explaining the ''no'' indicated that ''Subpart R specifies reporting and recordkeeping for some large area sources in § 63.428.'' As noted in section III.B.3.a, we are proposing to remove the applicability equations and related recordkeeping and reporting requirements. Therefore, we are proposing that the General Provisions requirements in 40 CFR 63.1(b)(3) apply and revising the comment to note ''Except that subpart R specifies additional reporting and recordkeeping for some large area sources in § 63.428. These additional requirements only apply prior to the date the applicability equations are no longer applicable.''

We are proposing to revise the General Provisions table to subpart R and General Provisions table to subpart BBBBBB to add a row for 40 CFR 63.7(a)(4) and indicating a ''yes'' in the appropriate column. This is a recently added paragraph in the NESHAP General Provisions that describes procedures for requesting an extension in the case a *force majeure* event delays required performance testing. This paragraph did not exist in the NESHAP General Provisions when the major source and area source standards were developed, so no reference to this paragraph was included. We consider these provisions reasonable and should be available for Gasoline Distribution facilities in the unlikely event performance testing is delayed due to a force majeure event.

We are proposing to revise the General Provisions table to subpart R and General Provisions table to subpart BBBBBB entries for 40 CFR 63.7(g) and 63.8(e) to add that subparts R and BBBBBB specify how and when the performance test and performance evaluation results are reported. We are revising these comments to note that there are specific performance test and performance evaluation results reporting requirements in the major source and area source rules.

We are proposing to revise the General Provisions table to subpart R rows for 40 CFR 63.1(c)(4), 63.5(b)(5), and 63.9(b)(3) from ''yes'' in column 2 to ''no'' because these paragraphs are reserved. We are proposing to indicate these paragraphs are reserved in column 3. We are also proposing to revise the General Provisions table to subpart R row for 40 CFR ''63.4(a)(1)–(a)(3)'' to ''63.4(a)(1)–(a)(2)'' because 40 CFR 63.4(a)(3) is reserved and no longer applies. We are also proposing to revise the General Provisions table to subpart R row for 40 CFR ''63.4(a)(4)'' to ''63.4(a)(3)–(a)(5)'' to add reference to paragraph (a)(3) which we are proposing to remove from the previous table entry and to add reference to paragraph (a)(5) and delete the entry for 40 CFR 63.4(a)(5). Paragraph (a)(5) is also reserved and no longer applies. We are proposing to revise the comment in column 3 for ''63.4(a)(3)–(a)(5)'' to note these sections (plural) are reserved.

We are proposing to revise the General Provisions table to subpart R entry for 40 CFR 63.9(b)(2) from ''no'' in column 2 to ''yes'' and revising the comment to, ''Except subpart R allows additional time for existing sources to submit initial notification. Sec. 63.428(a) specifies submittal by 1 year after being subject to the rule or December 16, 1996, whichever is later.''

We are proposing to revise the General Provisions table to subpart BBBBBB to add a row for 40 CFR 63.9(b)(3) and indicating that this paragraph is reserved. This follows the manner in which reserved sections are included elsewhere in the General Provisions table to subpart R and General Provisions table to subpart BBBBBB (rather than being omitted).

We are proposing to revise the General Provisions table to subpart R entry for 40 CFR 63.9(h)(1) through (3) to add that subpart R specifies how to submit the Notification of Compliance Status. We are revising this comment to note that there are specific submittal requirements in the major source rule.

We are proposing to revise the General Provisions table to subpart BBBBBB entry for 40 CFR 63.9(h)(1)–(6) to provide separate entry ''63.9(h)(4)'' from ''63.9(h)(1)–(3), (5)–(6)'' and including ''[Reserved]'' in column 2 of the new 40 CFR 63.9(h)(4) entry because this General Provision paragraph is reserved. We are also proposing to revise the note for the revised entry 40 CFR 63.9(h)(1)–(3), (5)–(6) to read ''Yes, except as specified in § 63.11095(c)'' rather than ''Yes, except as specified in § 63.11095(a)(4); also, there are no opacity standards'' because we proposed revisions to reporting requirements in 40 CFR 63.11095 and proposed visible emission requirements for flares.

We are proposing to revise the General Provisions table to subpart R and the General Provisions table to subpart BBBBBB entries for 40 CFR 63.9(k) to delete, ''only as specified in § 63.9(j).''

We are also proposing to clarify the General Provisions table to subpart BBBBBB entry for 40 CFR 63.10(c) to include ''Subpart BBBBBB specifies CMS records.'' As described in section III.B.1 of this preamble, we are also proposing revisions to NESHAP subpart BBBBBB recordkeeping requirements that detail the CMS records that must be kept, and we are proposing to include this additional note to clarify that these recordkeeping requirements apply rather than those outlined in the General Provisions.

We are proposing to revise the General Provisions table to subpart R and General Provisions table to subpart BBBBBB entries for 40 CFR 63.10(d)(2) from ''yes'' to ''no'' because the subparts specify how and when the performance test results are reported. We are revising these comments to note that there are specific performance test and performance evaluation results reporting requirements in the major source and area source rules.

We are proposing to revise the General Provisions table to subpart R entry for 40 CFR 63.10(d)(3) from ''yes'' to ''no'' because subpart R specifies reporting requirements for visible emissions observations for flares.

We are proposing to revise the General Provisions table to subpart R to provide separate entries for 40 CFR 63.10(e)(1) and (e)(2) through (4) and by changing the entries for 40 CFR 63.10(e)(2) through (4) from ''yes'' in column 2 to a ''no.'' We are also proposing to revise the General Provisions table to subpart BBBBBB to revise the entries for 40 CFR 63.10(e)(3)(i)–(iii), (iv)–(v), (vi)–(viii), and (e)(4) from ''yes'' in column 4 to a

''no.'' Given the transition to electronic reporting as described in section III.B.2 of this preamble, we are also proposing to include electronic reporting for CEMS performance evaluations in the major and area source rules so the reporting requirements in 40 CFR 63.10(e)(2) are no longer applicable. Also, as described in section III.B.1 of this preamble, we are proposing all relevant CEMS deviation reporting requirements directly in 40 CFR 63.428(l) and similar reporting requirements in 40 CFR 63.11095(e), rather than relying on cross-reference to 40 CFR 63.10(e)(3). These edits are not expected to alter the reporting burden; however, the direct inclusion of the 40 CFR 63.10(e)(3) reporting requirements into 40 CFR 63.428(l) and 40 CFR 63.11095(e) will provide clarity of the reporting requirements to gasoline distribution owners and operators.

We are proposing to revise the General Provisions table to subpart R entry for 40 CFR 63.11(a)–(b) to add the comment, ''Except these provisions no longer apply upon compliance with the provisions in § 63.425(a)(2) for flares to meet the requirements specified in §§ 60.502a(c)(3) and 60.504a(c) of this chapter.''

We are proposing to revise the General Provisions table to subpart BBBBBB to include missing entries for 40 CFR 63.11(a) and 63.11(c)–(e). 40 CFR 63.11(a) specifies the applicability of § 63.11 and we are proposing to include ''yes'' in column 4 to clarify that this paragraph applies. 40 CFR 63.11(c)–(e) describe alternative work practice standards for using optical gas imaging as an alternative to EPA Method 21 for monitoring equipment for leaks. We are proposing to include ''no'' in column 4 because the proposed leak monitoring provisions specifically allow the use of optical gas imaging for leak detection.

We are also proposing for revise the comment in column 4 of the entry for 40 CFR 63.11(b) to read, ''Yes, until compliance with the flare provisions in Item 2.b of Table 3 to Subpart BBBBBB.'' As described in Section III.A.1 of this preamble, we are proposing more detailed provisions for operating and monitoring flares to ensure the performance of flares used as control devices. After compliance with these flare provisions in Item 2.b of Table 3 to Subpart BBBBBB, the provisions in NESHAP subpart BBBBBB apply rather than those specified in for 40 CFR 63.11(b).

We are proposing to revise the General Provisions table to subpart R to revise the entries for 40 CFR 63.12(a)–(c) from ''63.12(a)–(c)'' to ''63.12'', for 40 CFR 63.13(a)–(c) from ''63.13(a)–(c)'' to ''63.13'', for 40 CFR 63.14(a)–(b) from ''63.14(a)–(b)'' to ''63.14'', and for 40 CFR 63.15(a)–(b) from ''63.15(a)–(b)'' to ''63.15''.

We are proposing to revise the General Provisions table to subpart R and the General Provisions table to subpart BBBBBB to add a row for 40 CFR 63.16 and indicating a ''yes'' in the appropriate column. This paragraph in the NESHAP General Provisions, which describes special reporting provision for Performance Track member facilities procedures, was missing from the major source and area source General Provisions tables and adding it provides clarity regarding the applicability of these special provisions.

g. Editorial Corrections

The EPA is proposing an additional change that addresses technical and editorial corrections for 40 CFR part 63, subpart BBBBBB as follows.

- Revise 40 CFR 63.11100, definition of ''vapor-tight gasoline cargo tank'' to update cross-reference to annual certification test requirements from in § 63.11092(f) to § 63.11092(g) based on location of this provision in the proposed amendments.

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

1. NESHAP Subpart R

The EPA is not proposing to revise the primary loading rack emission limits for the major source NESHAP subpart R; however, we are proposing to revise the format of the standard and certain testing and monitoring provisions. We are proposing to maintain the current compliance options until the time that a new performance test or performance evaluation is conducted. We are proposing that performance tests for loading racks with thermal oxidation systems be required at least once every 60 months. We are proposing that owners or operators must conduct a performance test within three years of the promulgation of the proposed standards if the thermal oxidation system has not been tested by that time in the past 60 months. Because we are proposing to revise the ongoing performance requirements in some cases, we consider three years is as expedient as can be required for facilities that may have to purchase and install new monitoring systems. For vapor recovery systems, we are proposing to revise the format of the standard and require a CEMS to demonstrate continuous compliance. While we expect most vapor recovery systems have continuous TOC monitors, some owners or operators may need to upgrade their monitoring system to comply with the proposed CEMS requirements. We consider 3 years is as expedient as can be required considering the potential need to upgrade or replace TOC monitoring systems. For facilities using flares, we are proposing to require the more detailed requirements in the Refinery MACT Rule (40 CFR part 63, subpart CC). For these provisions, we allow up to 3 years to meet the new operating and monitoring requirements, consistent with the timeframe we provided for petroleum refineries when first proposing those requirements. The new requirements may require substantial upgrades to monitoring systems and 3 years is as expedient as can be required considering the number of monitoring systems to be upgraded.

We are proposing revisions to the cargo tank vapor tightness requirements apply no later than 3 years after the promulgation date of the proposed standards. Facilities that conduct the cargo tank certifications will need time to review and implement the new vapor tightness requirements and it will take at least one year after they implement the new vapor tightness requirements before the fleet of cargo tanks can be certified at the new vapor tightness levels.

We are proposing revisions to the storage vessel requirements for both internal and external floating roofs. For external floating roofs, we are proposing to require fitting controls, which will require the degassing of the storage vessel. We are proposing that these controls be installed at the first degassing of the storage vessel after 3 years from the promulgation date of the proposed standards, but in no case more than 10 years from the promulgation date of the proposed standards. We are allowing 3 years to identify storage vessels that need to be upgraded and identify appropriate fitting control systems that need to be installed. We are allowing up to 10 years in order to align the installation of the controls with a planned degassing event, to the extent practicable, to minimize the offsetting emissions that occur due to a degassing event solely to install the fitting controls. For internal floating roofs, we are proposing to add LEL monitoring requirements. Compliance with this requirement may require significant upgrades of the internal floating roof. For example, internal floating roofs are typically installed in pieces, with the pieces either welded or riveted together. Welded roofs do not have ''seam'' emissions whereas riveted roofs have emission losses from these seams. While

the current rule requirements do not prohibit the use of riveted seams for the internal floating roof, poor rivet closures along the seams could result in excess emissions wherein the LEL limit may be exceeded. In these cases, it is likely a new roof would need to be installed, or at minimum, the seams repaired or welded. Because the LEL emissions limitation may require full replacement of existing internal floating roofs, we are proposing to provide up to 3 years to comply with these new requirements.

We are proposing new requirements to conduct instrument monitoring to identify equipment leaks. This requirement will require owners or operators to identify all affected equipment components, implement training on the new requirements, and identify contractors to conduct the instrument monitoring. Therefore, we are proposing to provide up to 3 years to comply with these new requirements.

We are proposing to phase out the applicability equations. While we expect very few facilities may be using these equations while otherwise being a major source, facilities that may be using these equations could require significant upgrades to their existing control systems. As such, we determined that three years be provided for the phase out of these applicability equations.

We are proposing to revise the General Provisions applicability table to remove references to vacated provisions. As these provisions have been vacated for several years, we are proposing that these revisions be applicable upon promulgation. We do not expect any of the proposed revisions will increase burden to any facility and can be implemented without delay.

We are proposing to require electronic reporting. We are providing up to 3 years to comply with these new provisions. Because we are proposing to allow owners or operators to comply with existing requirements and electronic reporting forms will not be available for the existing reporting requirements, it is expedient to harmonize the timing of the proposed revisions to the electronic reporting requirements with the revisions to the requirements.

2. NESHAP Subpart BBBBBB

The EPA is proposing to revise the primary loading rack emission limits for the large bulk gasoline terminals and bulk plants at area source gasoline distribution facilities subject to NESHAP subpart BBBBBB. We are also proposing to revise the format of the standard and certain testing and monitoring provisions. We are proposing up to 3 years to meet the new emission limits and operating and monitoring requirements. These revisions may require significant control system upgrades and monitoring system installations. We determined that 3 years is as expedient as can be required considering the number of control systems and monitoring systems to be upgraded.

We are proposing revisions to the cargo tank vapor tightness requirements apply no later than 3 years after the promulgation date of the proposed standards. Facilities that conduct the cargo tank certifications will need time to review and implement the new vapor tightness requirements and it will take at least one year after they implement the new vapor tightness requirements before the fleet of cargo tanks can be certified at the new vapor tightness levels.

We are proposing revisions to the storage vessel requirements for both internal and external floating roofs. For external floating roofs, we are proposing to require fitting controls, which will require the degassing of the storage vessel. We are proposing that these controls be installed at the first degassing of the storage vessel after 3 years from the promulgation date of the proposed standards, but in no case more than 10 years from the promulgation date of the proposed standards. We are allowing 3 years to identify storage vessels that need to be upgraded and identify appropriate fitting control systems that need to be installed. We are allowing up to 10 years in order to align the installation of the controls with a planned degassing event, to the extent practicable, to minimize the offsetting emissions that occur due to a degassing event solely to install the fitting controls. For internal floating roofs, we are proposing to add LEL monitoring requirements. Compliance with these requirements may require significant upgrades of the internal floating roof. Therefore, we are proposing to provide up to 3 years to comply with these new requirements.

We are proposing new requirements to conduct instrument monitoring to identify equipment leaks. This requirement will require owners/operators to identify all affected equipment components, implement training on the new requirements, and identify contractors to conduct the instrument monitoring. Therefore, we are proposing to provide up to 3 years to comply with these new requirements.

We are proposing to revise the General Provisions applicability table to remove references to vacated provisions. As these provisions have been vacated for several years, we are proposing that these revisions be applicable upon promulgation. We do not expect any of the proposed revisions will increase burden to any facility and can be implemented without delay.

We are proposing to require electronic reporting. We are providing up to 3 years to comply with these new provisions. Because we are proposing to allow owners or operators to comply with existing requirements and electronic reporting forms will not be available for the existing reporting requirements, it is expedient to harmonize the timing of the proposed revisions to the electronic reporting requirements with the revisions to the requirements.

3. NSPS Subpart XXa

We are proposing that all bulk gasoline terminal sources that commenced construction, reconstruction, or modification on or after June 10, 2022, would need to meet the requirements of 40 CFR part 60, subpart XXa upon startup of the new, reconstructed or modified facility or the effective date of the final rule, whichever is later. This proposed compliance schedule is consistent with the requirements in Section 111(e) of the CAA.

IV. Summary of Cost, Environmental, and Economic Impacts

A. What are the affected sources?

There are approximately 9,500 facilities subject to the Gasoline Distribution NESHAP and the Bulk Gasoline Terminals NSPS. An estimated 210 facilities are classified as major sources and more than 9,250 are area sources. We estimated there would be 5 new facilities and 15 modified/reconstructed subject to the NSPS in the next 5 years.

B. What are the air quality impacts?

This proposed action would reduce HAP and VOC emissions from the Gasoline Distribution NESHAP and the Bulk Gasoline Terminals NSPS sources. In comparison to baseline emissions of 6,110 tpy HAP and 121,000 tpy VOC, the EPA estimates HAP and VOC emission reductions of approximately 2,220 and 45,400 tpy, respectively, based on our analysis of the proposed action described in sections III.A and B in this preamble. Emission reductions and secondary impacts (*e.g.,* emission increases associated with supplemental fuel or additional electricity) by subpart are listed below.

1. NESHAP Subpart R

For the major source rule, the EPA estimates HAP and VOC emission reductions of approximately 134 and 2,160 tpy, respectively, compared to baseline HAP and VOC emissions of 845 and 18,200 tpy. The EPA estimates that the proposed action would not have any secondary pollutant impacts. More information about the estimated emission reductions and secondary impacts of this proposed action for the major source rule can be found in the document, ''Major Source Technology Review for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) NESHAP.''

2. NESHAP Subpart BBBBBB

For the area source rule, the EPA estimates HAP and VOC emission reductions of approximately 2,090 and 40,300 tpy, respectively, compared to baseline HAP and VOC emissions of 5,260 and 99,400 tpy. The EPA estimates that the proposed action would result in additional emissions of 32,400 tpy of carbon dioxide, 19 tpy of nitrogen oxides, and 86 tpy of carbon monoxide. More information about the estimated emission reductions and secondary impacts of this proposed action for the area source rule can be found in the document, ''Area Source Technology Review for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities NESHAP.''

3. NSPS Subpart XXa

For the NSPS, the EPA estimates VOC emission reductions of approximately 2,950 tpy compared to baseline emissions of 3,890 tpy. The EPA estimates that the proposed action would result in additional emissions of 2,229 tpy of carbon dioxide, 2 tpy of nitrogen oxides, and 1 tpy of sulfur dioxide. More information about the estimated emission reductions and secondary impacts of this proposed action for the NSPS can be found in the document, ''New Source Performance Standards Review for Bulk Gasoline Terminals.''

C. What are the cost impacts?

This proposed action would cost (in 2019 dollars) approximately $66.8 million in total capital costs and total annualized cost savings of $3.42 million per year (including product recovery), based on our analysis of the proposed action described in sections III.A and B of this preamble. Costs by rule are listed below.

1. NESHAP Subpart R

For the major source rule, the EPA estimates this proposed action would cost approximately $2.07 million in total capital costs and $2.11 million per year in total annualized costs (including product recovery). More information about the estimated cost of this proposed action for the major source rule can be found in the document, ''Major Source Technology Review for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) NESHAP.''

2. NESHAP Subpart BBBBBB

For the area source rule, the EPA estimates this proposed action would cost approximately $57.6 million in total capital costs and have cost savings of $5.91 million per year in total annualized costs (including product recovery). More information about the estimated cost of this proposed action for the area source rule can be found in the document, ''Area Source Technology Review for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities NESHAP.''

3. NSPS Subpart XXa

For the NSPS, the EPA estimates this proposed action would cost approximately $7.20 million in total capital costs and $387,000 per year in total annualized costs (including product recovery). More information about the estimated cost of this proposed action for the NSPS can be found in the document, ''New Source Performance Standards Review for Bulk Gasoline Terminals.''

D. What are the economic impacts?

The EPA conducted economic impact analyses for this proposal, Regulatory Impact Analysis, which is available in the docket for this action. The economic impact analyses contain two parts. The economic impacts of the proposal on small entities are calculated as the percentage of total annualized costs incurred by affected ultimate parent owners to their revenues. This ratio provides a measure of the direct economic impact to ultimate parent owners of Gasoline Distribution facilities while presuming no impact on consumers. We estimate the average small entity impacted by the proposal will incur total annualized costs of 0.42 percent of their revenue, with none exceeding 6.75 percent. We estimate fewer than 10 percent of impacted small entities will incur total annualized costs greater than 1 percent of their revenue, and fewer than 5 percent will incur total annualized costs greater than 3 percent of their revenue. This is based on a conservative estimate of costs imposed on ultimate parent companies, where total annualized costs are imposed on a facility are at the upper bound of what is possible under the rule and do not include product recovery as a credit. More explanation of these economic impacts can be found in the Regulatory Flexibility Act (RFA) later in this preamble and in the Regulatory Impact Analysis (RIA) for this proposed rulemaking.

The EPA also prepared a model of the U.S. gasoline market in order to project changes caused by the rulemaking to the price and quantity of gasoline sold from 2026 to 2040. Using this model, the price of gasoline is projected to rise by less than .003 percent in all years from 2026 to 2040, whereas the quantity of gasoline consumed is projected to fall by less than .001 percent in all years from 2026 to 2040. These projections consider the costs imposed by amendments to NESHAP subpart BBBBBB, NESHAP subpart R, and amendments to NSPS subpart XX (as proposed in subpart XXa).

Thus, these economic impacts are low for affected companies and the industries impacted by this proposed rulemaking, and there will not be substantial impacts on the markets for affected products. The costs of the proposal are not expected to result in a significant market impact, regardless of whether they are passed on to the purchaser or absorbed by the firms. The RIA for this proposed rulemaking includes more details and discussion of these projected impacts.

E. What are the benefits?

The emission controls installed to comply with these proposed rules are expected to reduce VOC emissions which, in conjunction with nitrogen oxides and in the presence of sunlight, form ground-level ozone (O_3). This section reports the estimated ozone-related benefits of reducing VOC emissions in terms of the number and value of avoided ozone-attributable deaths and illnesses.

As a first step in quantifying O_3-related human health impacts, the EPA consults the *Integrated Science Assessment for Ozone* (Ozone ISA) [14] as summarized in the Technical Support Document for the Final Revised Cross

[14] U.S. EPA (2020). Integrated Science Assessment for Ozone and Related Photochemical Oxidants. U.S. Environmental Protection Agency. Washington, DC. Office of Research and Development. EPA/600/R–20/012. Available at: *https://www.epa.gov/isa/integrated-science-assessment-isa-ozone-and-related-photochemical-oxidants.*

State Air Pollution Rule Update.[15] This document synthesizes the toxicological, clinical, and epidemiological evidence to determine whether each pollutant is causally related to an array of adverse human health outcomes associated with either acute (*i.e.,* hours or days-long) or chronic (*i.e.,* years-long) exposure. For each outcome, the Ozone ISA reports this relationship to be causal, likely to be causal, suggestive of a causal relationship, inadequate to infer a causal relationship, or not likely to be a causal relationship.

In brief, the Ozone ISA found short-term (less than one month) exposures to ozone to be causally related to respiratory effects, a ''likely to be causal'' relationship with metabolic effects and a ''suggestive of, but not sufficient to infer, a causal relationship'' for central nervous system effects, cardiovascular effects, and total mortality. The Ozone ISA reported that long-term exposures (one month or longer) to ozone are ''likely to be causal'' for respiratory effects including respiratory mortality, and a ''suggestive of, but not sufficient to infer, a causal relationship'' for cardiovascular effects, reproductive effects, central nervous system effects, metabolic effects, and total mortality.

For all estimates, we summarized the monetized ozone-related health benefits using discount rates of 3 percent and 7 percent for both short-term and long-term effects for the 15-year analysis period of these rules discounted back to 2022 rounded to 2 significant figures. For the full set of underlying calculations see the Gasoline Distribution Benefits workbook (docket number EPA–HQ–OAR–2020–0371). In addition, we include the monetized disbenefits from additional CO2 emissions using a 3 percent rate, which occur with NESHAP subpart BBBBBB and NSPS XXa, but not NESHAP subpart R since there are no additional CO2 emissions as a result of this proposed rule. Monetization of the benefits of reductions in cancer incidences requires several important inputs, including central estimates of cancer risks, estimates of exposure to carcinogenic HAP, and estimates of the value of an avoided case of cancer (fatal and non-fatal). Due to methodology and data limitations, we did not attempt to monetize the health benefits of reductions in HAP in this analysis. A qualitative discussion of the health effects associated with HAP emitted from sources subject to control under the proposed action is included in the Regulatory Impact Analysis for the proposed action.

1. NESHAP Subpart R

The PV of the benefits for the proposed amendments for NESHAP subpart R are $9.9 million at the 3 percent discount rate to $5.6 million at the 7 percent discount rate for short-term effects and $81 million at the 3 percent discount rate to $48 million at the 7 percent discount rate for long-term effects. The EAV of the benefits for the proposed amendments for NESHAP subpart R are $0.83 million at the 3 percent discount rate to $0.65 million at the 7 percent discount rate for short-term effects and $6.8 million at the 3 percent discount rate to $5.3 million at the 7 percent discount rate for long-term effects.

2. NESHAP Subpart BBBBBB

The PV of the net benefits (monetized health benefits minus monetized climate disbenefits) for the proposed amendments for NESHAP BBBBBB are $160 million at the 3 percent discount rate to $83 million at the 7 percent discount rate for short-term effects and $1,500 million at the 3 percent discount rate to $870 million at the 7 percent discount rate for long-term. The EAV of the benefits for the proposed amendments for NESHAP BBBBBB are $13 million at the 3 percent discount rate to $9.7 million at the 7 percent discount rate for short-term effects and $120 million at the 3 percent discount rate to $97 million at the 7 percent discount rate for long-term effects.

3. NSPS Subpart XXa

Because the estimated emissions reductions due to this rule are small and because we cannot be confident of the location of new facilities under the NSPS, the EPA elected to use the benefit per-ton (BPT) approach. BPT estimates provide the total monetized human health benefits (the sum of premature mortality and premature morbidity) of reducing one ton of the VOC precursor for ozone from a specified source. Specifically, in this analysis, we multiplied the estimates from the ''Gasoline Distribution'' sector by the corresponding emission reductions.

The PV of the net benefits (monetized health benefits minus monetized climate disbenefits) for the proposed NSPS subpart XXa are $25 million at the 3 percent discount rate to $12 million at the 7 percent discount rate for short-term effects and $240 million at the 3 percent discount rate to $130 million at the 7 percent discount rate for long-term effects. The EAV of the benefits for the proposed NSPS subpart XXa are $2.0 million at the 3 percent discount rate to $1.4 million at the 7 percent discount rate for short-term effects and $20 million at the 3 percent discount rate to $15 million at the 7 percent discount rate for long-term effects.

F. What analysis of environmental justice did we conduct?

Consistent with EPA's commitment to integrating environmental justice (EJ) in the Agency's actions, and following the directives set forth in multiple Executive Orders, the Agency has carefully considered the impacts of this action on communities with EJ concerns.

Executive Order 12898 directs EPA to identify the populations of concern who are most likely to experience unequal burdens from environmental harms; specifically, minority populations, low-income populations, and indigenous peoples (59 FR 7629, February 16, 1994). Additionally, Executive Order 13985 is intended to advance racial equity and support underserved communities through federal government actions (86 FR 7009, January 20, 2021). The EPA defines EJ as ''the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.'' [16] The EPA further defines fair treatment to mean that ''no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies''. In recognizing that minority and low-income populations often bear an unequal burden of environmental harms and risks, the EPA continues to consider ways of protecting them from adverse public health and environmental effects of air pollution.

For this proposal, the EPA examined the potential for Gasoline Distribution facilities to pose potential concerns to EJ communities by analyzing the distribution of demographic groups living in close proximity to these facilities in the baseline. Specifically, the EPA conducted a demographic screening analysis that shows that the proportion of the population of people of color living in proximity to these facilities is significantly higher than the

[15] U.S. EPA. 2021. Technical Support Document (TSD) for the Final Revised Cross-State Air Pollution Rule Update for the 2008 Ozone Season NAAQS Estimating $PM_{2.5}$- and Ozone-Attributable Health Benefits. *https://www.epa.gov/sites/default/files/2021-03/documents/estimating_pm2.5-_and_ozone-attributable_health_benefits_tsd.pdf.*

[16] *https://www.epa.gov/environmentaljustice.*

national average. The EPA expects that the National Emission Standards for Hazardous Air Pollutants: Gasoline Distribution Technology Review and Standards of Performance for Bulk Gasoline Terminals Review will reduce VOC and HAP emissions by 45,400 and 2,200 tpy, respectively. The EPA is proposing to require stricter cargo tank vapor tightness standards, improved storage vessel fittings, equipment leak instrument monitoring, lower emission limits for loading operations at large area source bulk gasoline terminals and NSPS subpart XXa affected facilities, and vapor balancing at bulk gasoline plants. These proposed changes to control requirements for affected facilities are anticipated to improve human health exposures for most populations, including for surrounding communities with EJ concerns.

Based on these analyses of potentially exposed populations and actions taken to reduce adverse human health impacts, the EPA anticipates that this action is not likely to result in disproportionate impacts on minority populations and/or low-income populations, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994) and referenced in Executive Order 13985 (86 FR 7009, January 20, 2021). EPA remains committed to engaging with communities and stakeholders throughout the development of air pollution regulations. Following is a more detailed description of how the agency considers EJ in the context of regulatory development, and specific actions taken to address EJ concerns for this action.

1. NESHAP Subpart R

As a starting point, to examine the potential for any EJ issues that might be associated with Gasoline Distribution facilities, we performed a baseline demographic analysis, which is an assessment of individual demographic groups of the populations living within 5 kilometers (km) and 50 km of the facilities. The EPA then compared the data from this analysis to the national average for each of the demographic groups.

The results of the demographic analysis (see Table 18 of this document) indicate that, for populations within 5 km of the 117 major source Gasoline Distribution facilities,[17] the percent minority population (being the total population minus the white population) is larger than the national average (59 percent versus 40 percent). This difference is largely driven by the percent Hispanic or Latino population that is significantly higher than the national average (33 percent versus 19 percent). The percent of the population that is African American (15 percent) and Other and Multiracial (10 percent) are slightly above the national averages (12 percent and 8 percent, respectively). The percent of people living below the poverty level (17 percent) and those over 25 without a high school diploma (18 percent) are higher than the national averages (13 percent and 12 percent, respectively). The percent of people living in linguistic isolation was higher than the national average (9 percent versus 5 percent).

The results of the analysis of populations within 50 km of the 117 major source Gasoline Distribution facilities was similar to the 5 km analysis for minorities, with higher total minorities being driven by a larger Hispanic or Latino population. However, the percent of the population living below the poverty level and the percent of the population over 25 without a high school diploma were similar to the national averages. The percent of people living in linguistic isolation was still higher than the national average (8 percent versus 5 percent).

A summary of the proximity demographic assessment performed for the major source Gasoline Distribution Facilities is included as Table 18. The methodology and the results of the demographic analysis are presented in a technical report, *Analysis of Demographic Factors for Populations Living Near Gasoline Distribution Facilities,* available in this docket for this action (Document ID EPA–HQ–OAR–2020–0371).

TABLE 18—PROXIMITY DEMOGRAPHIC ASSESSMENT RESULTS FOR MAJOR SOURCE GASOLINE DISTRIBUTION FACILITIES

Demographic group	Nationwide	Population within 50 km of 117 facilities	Population within 5 km of 117 facilities
Total Population	328,016,242	114,588,509	5,884,976
White and Minority by Percent			
White	60%	50%	41%
Minority	40%	50%	59%
Minority by Percent			
African American	12%	15%	15%
Native American	0.7%	0.3%	0.4%
Hispanic or Latino (includes white and nonwhite)	19%	24%	33%
Other and Multiracial	8%	11%	10%
Income by Percent			
Below Poverty Level	13%	13%	17%
Above Poverty Level	87%	87%	83%
Education by Percent			
Over 25 and without a High School Diploma	12%	13%	18%
Over 25 and with a High School Diploma	88%	87%	82%
Linguistically Isolated by Percent			
Linguistically Isolated	5%	8%	9%

Notes:

[17] The EPA estimates there are approximately 210 major source Gasoline Distribution facilities; however, we had location information for only 117 of the facilities.

• The nationwide population count and all demographic percentages are based on the Census' 2015–2019 American Community Survey five-year block group averages and include Puerto Rico. Demographic percentages based on different averages may differ. The total population counts within 5 km and 50 km of all facilities are based on the 2010 Decennial Census block populations.
• Minority population is the total population minus the white population.
• To avoid double counting, the ''Hispanic or Latino'' category is treated as a distinct demographic category for these analyses. A person is identified as one of five racial/ethnic categories above: White, African American, Native American, Other and Multiracial, or Hispanic/Latino. A person who identifies as Hispanic or Latino is counted as Hispanic/Latino for this analysis, regardless of what race this person may have also identified as in the Census.

As noted above, the EPA determined that the standards should be revised to reflect cost-effective developments in practices, process, or controls. Typically, the EPA would seek to estimate the impact of the proposed changes by either estimating the emissions changes likely to result from the adoption of new controls by specific sources or groups of sources, or (where data is more limited, as is typically the case) by analyzing a model plant scenario. In this case, we evaluated the impact of these standards by applying the revised standards to a set of model plants. Because we based the analysis of the impacts and emission reductions on model plants, we are not able to ascertain specifically how the potential benefits will be distributed across the population. Thus, we are limited in our ability to estimate the potential EJ impacts of this proposed rule. However, we anticipate the proposed changes to NESHAP subpart R will generally improve human health exposures for populations in surrounding communities, including those communities with higher percentages of people of color. The proposed changes will have beneficial effects on air quality and public health for populations exposed to emissions from Gasoline Distribution facilities and will provide additional health protection for most populations, including communities already overburdened by pollution, which are often minority, low-income, and indigenous communities.

2. NESHAP Subpart BBBBBB

As a starting point, to examine the potential for any EJ issues that might be associated with Gasoline Distribution facilities, we performed a baseline demographic analysis, which is an assessment of individual demographic groups of the populations living within 5 km and 50 km of the facilities. The EPA then compared the data from this analysis to the national average for each of the demographic groups.

The results of the demographic analysis (see Table 19 of this document) indicate that, for populations within 5 km of 1,229 area source Gasoline Distribution facilities,[18] the percent minority population (being the total population minus the white population) is larger than the national average (54 percent versus 40 percent). This difference is largely driven by the Hispanic or Latino (26 percent) and African American (18 percent) populations that are significantly larger than the national averages (19 percent and 12 percent, respectively). The percent of the population that is Other and Multiracial (10 percent) is slightly above the national average (8 percent). The percent of people living below the poverty level (18 percent) and those over 25 without a high school diploma (16 percent) were higher than the national averages (13 percent and 12 percent, respectively). The percent of people living in linguistic isolation was higher than the national average (9 percent versus 5 percent).

The results of the analysis of populations within 50 km of the 1,229 area source Gasoline Distribution facilities were similar to the national averages for all demographics. This is due to the fact that the large number of facilities (1,229) and larger study area (50 km) captured approximately 75% of the national population.

A summary of the proximity demographic assessment performed for the area source Gasoline Distribution facilities is included as Table 19. The methodology and the results of the demographic analysis are presented in a technical report, *Analysis of Demographic Factors for Populations Living Near Gasoline Distribution Facilities,* available in this docket for this action (Document ID EPA–HQ–OAR–2020–0371).

TABLE 19—PROXIMITY DEMOGRAPHIC ASSESSMENT RESULTS FOR AREA SOURCE GASOLINE DISTRIBUTION FACILITIES

Demographic group	Nationwide	Population within 50 km of 1,229 facilities	Population within 5 km of 1,229 facilities
Total Population	328,016,242	252,008,837	35,679,430
White and Minority by Percent			
White	60%	58%	46%
Minority	40%	42%	54%
Minority by Percent			
African American	12%	13%	18%
Native American	0.7%	0.5%	0.5%
Hispanic or Latino (includes white and nonwhite)	19%	20%	26%
Other and Multiracial	8%	9%	10%
Income by Percent			
Below Poverty Level	13%	13%	18%
Above Poverty Level	87%	87%	82%
Education by Percent			
Over 25 and without a High School Diploma	12%	12%	16%
Over 25 and with a High School Diploma	88%	88%	84%

[18] The EPA estimates there are approximately 9,260 area source Gasoline Distribution facilities; however, we had location information for only 1,229 of the facilities.

TABLE 19—PROXIMITY DEMOGRAPHIC ASSESSMENT RESULTS FOR AREA SOURCE GASOLINE DISTRIBUTION FACILITIES—Continued

Demographic group	Nationwide	Population within 50 km of 1,229 facilities	Population within 5 km of 1,229 facilities
Linguistically Isolated by Percent			
Linguistically Isolated	5%	6%	9%

Notes:
• The nationwide population count and all demographic percentages are based on the Census' 2015–2019 American Community Survey five-year block group averages and include Puerto Rico. Demographic percentages based on different averages may differ. The total population counts within 5 km and 50 km of all facilities are based on the 2010 Decennial Census block populations.
• Minority population is the total population minus the white population.
• To avoid double counting, the ''Hispanic or Latino'' category is treated as a distinct demographic category for these analyses. A person is identified as one of five racial/ethnic categories above: White, African American, Native American, Other and Multiracial, or Hispanic/Latino. A person who identifies as Hispanic or Latino is counted as Hispanic/Latino for this analysis, regardless of what race this person may have also identified as in the Census.

As noted above, the EPA determined that the standards should be revised to reflect cost-effective developments in practices, process, or controls. Typically, the EPA would seek to estimate the impact of the proposed changes by either estimating the emissions changes likely to result from the adoption of new controls by specific sources or groups of sources, or (where data is more limited, as is typically the case) by analyzing a model plant scenario. In this case, we evaluated the impact of these standards by applying the revised standards to a set of model plants. Because we based the analysis of the impacts and emission reductions on model plants, we are not able to ascertain specifically how the potential benefits will be distributed across the population. Thus, we are limited in our ability to estimate the potential EJ impacts of this proposed rule. However, we anticipate the proposed changes to NESHAP subpart BBBBBB will generally improve human health exposures for populations in surrounding communities, including those communities with higher percentages of people of color. The proposed changes will provide additional health protection for all populations, including communities already overburdened by pollution, which are often minority, low-income, and indigenous communities. The proposed changes will have beneficial effects on air quality and public health for populations exposed to emissions from Gasoline Distribution facilities that are area sources and will provide additional health protection for most populations, including communities already overburdened by pollution, which are often minority, low-income, and indigenous communities.

3. NSPS Subpart XXa

The locations of any new Bulk Gasoline Terminals that would be subject to NSPS subpart XXa are not known. In addition, it is not known which existing Bulk Gasoline Terminals may be modified or reconstructed and subject to NSPS subpart XXa. Thus, we are limited in our ability to estimate the potential EJ impacts of this proposed rule. However, we anticipate the proposed changes to NSPS XXa will generally improve human health exposures for populations in surrounding communities, including those communities with higher percentages of people of color. See Subsections 2 and 3 of this section for a summary of the demographic analysis results for major and area sources.

The proposed changes to NSPS subpart XXa will improve human health exposures for populations in these demographic groups. The EPA determined that the standards should be revised to reflect BSER. The proposed changes will have beneficial effects on air quality and public health for populations exposed to emissions from Gasoline Distribution facilities with new, modified or reconstructed sources and will provide additional health protection for most populations, including communities already overburdened by pollution, which are often minority, low-income, and indigenous communities.

V. Request for Comments

We solicit comments on this proposed action. In this proposal, EPA has noted multiple times where we are concerned that this source category impacts large populations of people that have the potential to be overburdened by air pollution from multiple sources. In reviewing standards for this source category, we have identified more stringent standards that could further reduce HAP emissions exposure in communities but impose higher capital and annualized costs. The cost per ton of HAP of these options is greater than what we have considered cost-effective for these type of HAP in previous rulemakings. EPA seeks comment on whether these more protective standards, although less cost effective for these type of HAP emissions controls than we would typically find acceptable, are nevertheless appropriate given the reductions in HAPs that would occur in potentially over-burdened communities surrounding these sources. EPA also requests information on the costs, efficacy, and feasibility of control options for major and area source gasoline distribution facilities, and the contributions of these sources to overall pollution burdens in surrounding communities, to inform our consideration of whether more protective standards are warranted.

In addition to general comments on this proposed action, we are also interested in additional data that may improve the analyses. We are specifically interested in receiving any information regarding developments in practices, processes, and control technologies that reduce emissions. We are also interested in receiving information on costs, emissions, and product recovery. Finally, the EPA attempted to ensure that the SSM provisions we are proposing to eliminate are inappropriate, unnecessary, or redundant in the absence of the SSM exemption and are specifically seeking comment on whether we have successfully done so.

VI. Statutory and Executive Order Reviews

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

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

This action is a significant regulatory action that was submitted to OMB for review. This action is a significant regulatory action because it likely to

have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities. Any changes made in response to OMB recommendations have been documented in the docket for this action. The EPA has prepared an economic analysis that is included in the Regulatory Impact Analysis which is available in the docket for these proposed rules.

B. Paperwork Reduction Act (PRA)

1. NESHAP Subpart R

The information collection activities in this proposed rule have been submitted for approval to the OMB under the PRA. You can find a copy of the Information Collection Request (ICR) in the docket for this rule, and it is briefly summarized here.

The EPA is proposing amendments that revise provisions pertaining to emissions during periods of SSM, add requirements for electronic reporting of periodic reports, and performance test results, and make other minor clarifications and corrections. This information will be collected to assure compliance with the Gasoline Distribution NESHAP subpart R.

- *Respondents/affected entities:* Owners or operators of gasoline distribution facilities. *Respondent's obligation to respond:* Mandatory (40 CFR part 63, subpart R).
- *Estimated number of respondents:* 210 (assumes no new respondents over the next 3 years). *Frequency of response:* Initially, semiannually, and annually.
- *Total estimated burden:* 16,300 (per year) to comply with the proposed amendments in the NESHAP. Burden is defined at 5 CFR 1320.3(b).
- *Total estimated cost:* $1,263,464 (per year), including no annualized capital or operation and maintenance costs, to comply with the proposed amendments in the NESHAP.

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. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to *OIRA_submission@omb.eop.gov,* Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than August 9, 2022. The EPA will respond to any ICR-related comments in the final rule.

2. NESHAP Subpart BBBBBB

The information collection activities in this proposed rule have been submitted for approval to the OMB under the PRA. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

The EPA is proposing amendments that revise provisions to add requirements for electronic reporting of periodic reports, and performance test results, and make other minor clarifications and corrections. This information will be collected to assure compliance with the Gasoline Distribution NESHAP subpart BBBBBB.

- *Respondents/affected entities:* Owners or operators of gasoline distribution facilities. *Respondent's obligation to respond:* Mandatory (40 CFR part 63, subpart BBBBBB).
- *Estimated number of respondents:* 9,263 (assumes no new respondents over the next 3 years). *Frequency of response:* Initially, semiannually, and annually.
- *Total estimated burden:* 83,882 hours (per year) to comply with the proposed amendments in the NESHAP. Burden is defined at 5 CFR 1320.3(b).
- *Total estimated cost:* $6,501,788 (per year), including no annualized capital or operation and maintenance costs, to comply with the proposed amendments in the NESHAP.

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. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to *OIRA_submission@omb.eop.gov,* Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than August 9, 2022. The EPA will respond to any ICR-related comments in the final rule.

3. NSPS Subpart XXa

The information collection activities in this proposed rule have been submitted for approval to the OMB under the PRA. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

The EPA is proposing provisions to require electronic reporting of periodic reports, and performance test results, and make other minor clarifications and corrections. This information will be collected to assure compliance with the Gasoline Distribution NSPS subpart XXa.

- *Respondents/affected entities:* Owners or operators of bulk gasoline terminals. Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart XXa).
- *Estimated number of respondents:* 12 (assumes four new respondents each year over the next 3 years). Frequency of response: Initially, semiannually, and annually.
- *Total estimated burden:* 1,132 hours (per year) to comply with all of the requirements in the NSPS. Burden is defined at 5 CFR 1320.3(b).
- *Total estimated cost:* $86,899 (per year), including no annualized capital or operation and maintenance costs, to comply with all of the requirements in the NSPS.

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. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to *OIRA_submission@omb.eop.gov,* Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than August 9, 2022. The EPA will respond to any ICR-related comments in the final rule.

C. Regulatory Flexibility Act (RFA)

I certify that each of the rules included in this proposed 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 proposed rulemaking are all small businesses. For NESHAP subpart R, EPA certifies that this rule will not have a significant economic impact on a substantial number of small entities under the RFA. The Agency has determined that two small entities are affected by these proposed amendments, which is 4.9 percent of all affected ultimate parent companies. Neither of these small entities is projected to incur costs from this rule greater than 1 percent of their sales. For NESHAP subpart BBBBBB, EPA certifies that this rule will not have a significant economic impact on a substantial number of small entities under the RFA. The Agency has determined that 111 small entities are affected by these proposed amendments, which is 42 percent of all affected ultimate parent businesses. Less than 10 percent of these small entities (10 total) are projected to incur costs from the proposed rules of greater than 1 percent of their annual sales, and less than 4 percent (4 total) are projected to incur costs greater than 3 percent of their annual sales (with a maximum of 6.75 percent). Finally, for NSPS subpart XXa, EPA certifies that this rule will not have a significant economic impact on a substantial number of small entities under the RFA. The Agency has not identified any small entities that are affected by this proposed NSPS and does not project that any entities affected by the proposed NSPS will incur costs greater than 1 percent of their annual sales. Details of the analyses for each proposed rule are presented in the Regulatory Impact Analysis for these proposed rulemakings.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments or the private sector.

E. Executive Order 13132: Federalism

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

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

This action does not have tribal implications as specified in Executive Order 13175. 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 as requested.

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

This action is not subject to Executive Order 13045 because the EPA does not believe that the environmental health risks or safety risks addressed by this action present a disproportionate risk to children. The proposed rules lower the emissions of gasoline and gasoline vapors and are projected to improve overall health including children.

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

This action is not a ''significant energy action'' because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The EPA expects this proposed action would not reduce crude oil supply, fuel production, coal production, natural gas production, or electricity production. We estimate that this proposed action would have minimal impact on the amount of imports or exports of crude oils, condensates, or other organic liquids used in the energy supply industries. Given the minimal impacts on energy supply, distribution, and use as a whole nationally, no significant adverse energy effects are expected to occur. For more information on these estimates of energy effects, please refer to the Regulatory Impact Analysis for this proposed rulemaking.

I. National Technology Transfer and Advancement Act (NTTAA)

This action involves technical standards. The EPA proposes to use EPA Method 18. While the EPA identified ASTM 6420–18 as being potentially applicable, the Agency does not propose to use it. The use of this voluntary consensus standard would be impractical because it has a limited list of analytes and is not suitable for analyzing many compounds that are expected to occur in gasoline vapor.

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

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in sections III, IV.E, and IV.F of this preamble. All relevant documents are available in the docket for this action (Docket ID No. EPA–HQ–OAR–2020–0371).

The assessment of populations in close proximity of gasoline distribution facilities shows some demographic groups that are higher than the national average, however, we determined that the human health impacts are not disproportionate for these groups because this action proposes changes to the standards that will increase protection for communities. The EPA determined that the standards should be revised to reflect cost-effective developments in practices, process, or controls and BSER. The proposed changes will provide additional health protection for all populations, including communities already overburdened by pollution, which are often minority, low-income, and indigenous communities. The proposed changes will have beneficial effects on air quality and public health for populations exposed to emissions from facilities in the source category. Further, this rulemaking complements other actions already taken by the EPA to reduce emissions and improve health outcomes for overburdened and underserved communities.

Michael S. Regan,

Administrator.

[FR Doc. 2022–12223 Filed 6–9–22; 8:45 am]

BILLING CODE 6560–50–P