



**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 63**

**[EPA-HQ-OAR-2010-0682; FRL-9954-25-OAR]**

**RIN 2060-AT18**

**National Emission Standards for Hazardous Air Pollutant Emissions: Petroleum Refinery Sector**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** On December 1, 2015, the Environmental Protection Agency (EPA) finalized amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Refinery Maximum Achievable Control Technology (MACT) 1 and Refinery MACT 2 regulations and the New Source Performance Standards (NSPS) for petroleum refineries. Subsequently, the EPA received three petitions for reconsideration of the final rules. The EPA is announcing reconsideration and request for public comment on five issues raised in the petitions for reconsideration where petitioners claim that the public was not afforded an opportunity to comment. Additionally, the EPA is proposing amendments to the final rule to clarify a compliance issue raised by stakeholders subject to the final rule and to correct a referencing error. The EPA is seeking comment only on the five identified petition issues and on the proposed compliance issue

clarification and referencing error amendments. The EPA will not respond to comments addressing any other issues or any other provisions of the final rule.

**DATES:** Comments must be received on or before **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2010-0682, at <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. 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 is seeking comment only on the issues specifically identified in this notice. The EPA will not respond to any comments addressing other aspects of the final rules or any other related rulemakings. 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 <http://www2.epa.gov/dockets/commenting-epa-dockets>.

Instructions. Direct your comments to Docket ID No. EPA-HQ-OAR-2010-0682. The EPA's policy is that all comments received will be included in the public docket without change, and will be made available online at <http://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 information that you consider to be CBI or otherwise protected through <http://www.regulations.gov> or email. Send or deliver information identified as CBI only to the following address: OAQPS Document Control Officer (C404-02), Office of Air Quality Planning and Standards, U.S. EPA, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA-HQ-OAR-2010-0682. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on a disk or CD-ROM that you mail to the EPA, mark the outside of the disk or CD-ROM as CBI and then identify electronically within the disk or CD-ROM the specific information you claim as CBI. In addition to one complete version of the comment that includes information claimed as CBI, you must submit a copy of the comment that does not contain the information claimed as CBI for inclusion in the public docket. Information so marked will not be disclosed

except in accordance with procedures set forth in 40 CFR part 2.

The <http://www.regulations.gov> Web site is an "anonymous access" system, 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 <http://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 disk or CD-ROM 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.

Docket. All documents in the docket are listed in the [regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, e.g., 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. Publicly available docket materials are available either electronically in [regulations.gov](http://www.regulations.gov) or in hard copy at the EPA

Docket Center, EPA WJC West Building, Room 3334, 1301 Constitution Ave., 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. Visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm> for additional information about the EPA's public docket.

Public hearing. A public hearing will be held if requested by **[INSERT DATE 5 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** to accept oral comments on this proposed action. The hearing will be held, if requested, on **[INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** at the EPA's North Carolina Campus located at 109 T.W. Alexander Drive, Research Triangle Park, NC 27711. The hearing, if requested, will begin at 9:00 a.m. (local time) and will conclude at 1:00 p.m. (local time). To request a hearing, to register to speak at a hearing, or to inquire if a hearing will be held, please contact Ms. Virginia Hunt at (919) 541-0832 or by email at [hunt.virginia@epa.gov](mailto:hunt.virginia@epa.gov). The last day to pre-register to speak at a hearing, if one is held, will be **[INSERT DATE 12 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Additionally, requests to speak will be taken the day of the hearing at the hearing registration desk, although preferences on speaking

times may not be able to be fulfilled. Please note that registration requests received before the hearing will be confirmed by the EPA via email.

Please note that any updates made to any aspect of the hearing, including whether or not a hearing will be held, will be posted online at <https://www.epa.gov/stationary-sources-air-pollution/petroleum-refinery-sector-risk-and-technology-review-and-new-source>. We ask that you contact Ms. Virginia Hunt at (919) 541-0832 or by email at [hunt.virginia@epa.gov](mailto:hunt.virginia@epa.gov) or monitor our Web site to determine if a hearing will be held. The EPA does not intend to publish a notice in the **Federal Register** announcing any such updates.

**FOR FURTHER INFORMATION CONTACT:** For questions about this proposed action, contact Ms. Brenda Shine, Sector Policies and Programs Division, Refining and Chemicals Group (E143-01), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, 27711; telephone number: (919) 541-3608; fax number: (919) 541-0246; and email address: [shine.brenda@epa.gov](mailto:shine.brenda@epa.gov). For information about the applicability of the NESHAP to a particular entity, contact Ms. Maria Malave, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, EPA WJC South Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460; telephone number: (202) 564-7027; fax number: (202) 564-0050;

and email address: [malave.maria@epa.gov](mailto:malave.maria@epa.gov).

**SUPPLEMENTARY INFORMATION:**

Preamble Acronyms and Abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

CAA	Clean Air Act
CBI	confidential business information
CFR	Code of Federal Regulations
DCU	delayed coking unit
EPA	Environmental Protection Agency
FCCU	fluid catalytic cracking unit
HAP	hazardous air pollutants
lbs/day	pounds per day
LEL	lower explosive limit
MACT	Maximum Achievable Control Technology
MIR	maximum individual risk
MPV	miscellaneous process vent
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NTTAA	National Technology Transfer and Advancement Act
OAQPS	Office of Air Quality Planning and Standards
OECA	Office of Enforcement and Compliance Assurance
OMB	Office of Management and Budget
OSHA	Occupational Safety and Health Administration
PRA	Paperwork Reduction Act
PRD	Pressure Relief Devices
psig	pounds per square inch gauge
PSM	Process Safety Management
PTE	potential to emit
RC/CA	root cause analysis and corrective action
RFA	Regulatory Flexibility Act
RMP	Risk Management Plan
RTR	residual risk and technology review

SRU	sulfur recovery unit
SSM	startup, shutdown and malfunction
STP	standard temperature and pressure
TTN	Technology Transfer Network
UMRA	Unfunded Mandates Reform Act
VOC	volatile organic compounds
°F	degrees Fahrenheit

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

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- G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
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- I. National Technology Transfer and Advancement Act (NTTAA)

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

**I. General Information**

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

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

B. Does this action apply to me?

Regulated Entities. Categories and entities potentially regulated by this action are shown in Table 1 of this preamble.

**Table 1. Industrial Source Categories Affected By This Final Action**

NESHAP and Source Category	NAICS <sup>a</sup> Code
Petroleum Refining Industry	324110

<sup>a</sup> North American Industry Classification System.

Table 1 of this preamble is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be affected by this action for the source categories listed. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of these NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

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 proposal will also be available on the Internet through the Technology Transfer Network (TTN) Web site, a forum for information and technology exchange in various areas of air pollution control. Following signature by the EPA Administrator, the EPA will post a copy of this proposed action at:

<https://www.epa.gov/stationary-sources-air-pollution/petroleum-refinery-sector-risk-and-technology-review-and-new-source>.

Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this Web site.

## **II. Background**

On June 30, 2014, the EPA published a proposed rule in the **Federal Register** addressing the risk and technology review (RTR) for the Petroleum Refinery NESHAP, 40 CFR part 63, subparts CC (Refinery MACT 1) and UUU (Refinery MACT 2). On December 1, 2015 (80 FR 75178), after receiving and addressing public comments, the EPA finalized determinations pursuant to CAA section 112(d)(6) and (f)(2) for the Petroleum Refinery source categories and amended Refinery MACT 1 and 2 based on those determinations. The final December 2015 action included a determination that the remaining risk after promulgation of the

revised NESHAP are acceptable and provide an ample margin of safety. The December 2015 action also finalized changes to Refinery MACT 1 and 2 pursuant to CAA section 112 (d) (2) and (3), notably revising the requirements for flares and pressure relief devices (PRD). The December 2015 action also finalized technical corrections and clarifications to Refinery NSPS subparts J and Ja to address issues raised by the American Petroleum Institute (API) in their 2008 petition for reconsideration of the final NSPS Ja rule that had not been previously addressed. These include corrections and clarifications to provisions for sulfur recovery plants, performance testing, and control device operating parameters.

Following promulgation, the EPA received three separate petitions for reconsideration: two jointly from API and the American Fuel and Petrochemical Manufacturers (AFPM) and one from Earthjustice (submitted on behalf of Air Alliance Houston, California Communities Against Toxics, Clean Air Council, Coalition for a Safe Environment, Del Amo Action Committee, Environmental Integrity Project, Sierra Club, Texas Environmental Justice Advocacy Services and Utah Physicians for a Healthy Environment). The petitions are available for review in the rulemaking docket (see Docket ID No. EPA-HQ-OAR-2010-0682).

On January 19, 2016, API and AFPM requested an administrative reconsideration under section 307(d)(7)(B) of the CAA of certain provisions of Refinery MACT 1 and 2, as promulgated in the December 2015 final rule. Specifically, API and AFPM requested that the EPA reconsider the maintenance vent provisions in Refinery MACT 1 for sources constructed on or before June 30, 2014; the alternate startup, shutdown, or hot standby standards for fluid catalytic cracking units (FCCU) constructed on or before June 30, 2014, in Refinery MACT 2; the alternate startup and shutdown for sulfur recovery units (SRU) constructed on or before June 30, 2014, in Refinery MACT 2; and the new catalytic reforming units (CRU) purging limitations in Refinery MACT 2. The request pertained to providing and/or clarifying the compliance time for these sources. In response to this request and additional information received relative to providing additional compliance time for these provisions, the EPA issued a proposal on February 9, 2016 (81 FR 6814). A final rule was published on July 13, 2016 (81 FR 45232, July 13, 2016), fully responding to the January 19, 2016, initial petition for reconsideration submitted by API and AFPM.

On February 1, 2016, Earthjustice filed a petition for reconsideration of several aspects of the December 1, 2015, final rule, and on that same day API and AFPM submitted a supplemental petition for reconsideration, identifying

additional issues on which they sought reconsideration. In these petitions, both Earthjustice and API/AFPM requested that the EPA reconsider certain aspects of the December 2015 revisions to Refinery MACT 1 and 2, noting that CAA section 307(d)(7)(B) authorizes the EPA to reconsider a rule where it is impracticable to raise an objection during the period for public comment (but within the time specified for judicial review) or if the grounds for such an objection arose after the close of the public comment period. In particular, Earthjustice claimed that several aspects of the revisions to Refinery MACT 1 were not proposed, and, thus they were precluded from commenting on them during the public comment period: (1) work practice standards for PRDs and flares; (2) alternative water overflow provisions for delayed coking units (DCU); (3) reduced monitoring provisions for fence line monitoring; and (4) adjustments to the risk assessment to account for these new work practice standards. The API/AFPM petition outlined a number of specific issues related to the work practice standards for PRDs and flares, and the alternative water overflow provisions for DCUs, as well as a number of other specific issues on other aspects of the rule. On June 16, 2016, the EPA granted the petitions for reconsideration from Earthjustice and API/AFPM on the petitioners' claims as they relate to the following aspects of the December 2015 revisions to the final rule to provide an

opportunity for public notice and comment: (1) the work practice standards for PRDs; (2) the work practice standards for emergency flaring events; (3) the assessment of risk as modified based on implementation of these PRD and emergency flaring work practice standards; (4) the alternative work practice standards for DCUs employing the water overflow design; and (5) the provision allowing refineries to reduce the frequency of fence-line monitoring at sampling stations that consistently record benzene concentrations below 0.9 micrograms per cubic meter.

### **III. Reconsideration Issues and Request for Public Comment**

After reviewing the two February 1, 2016, petitions for reconsideration as described above, we granted reconsideration to provide the public an opportunity to comment on selected provisions of the December 2015 amendments and the assessment of risk as modified to account for the implementation of the PRD and emergency flaring work practice standards included in the December 2015 final rule. To ensure public participation in its final decisions, the Agency is requesting public comment on these issues as described below. The EPA is seeking comment only on these five specific issues. The EPA will not respond to any comments addressing any other provisions of the December 1, 2015, final Refinery Sector Rule or any other rule or issues.

#### **A. Work Practice Standard for PRDs**

In the proposed rule (79 FR 36970, June 30, 2014), EPA proposed to revise Refinery MACT 1 to establish operating and pressure release requirements that apply to all PRDs and to prohibit atmospheric releases of hazardous air pollutants (HAP) from PRDs. To ensure compliance, we proposed to require that sources monitor PRDs using a system that is capable of recording the time and duration of each pressure release and notifying operators that a pressure release has occurred. Many commenters suggested that a prohibition on atmospheric PRD releases was not indicative of the best performing facilities, was unachievable and/or very costly, and would have negative environmental impacts due to additional flares that would need to be installed and operated in standby mode to accept the PRD releases. Some commenters suggested that we should instead consider the rules on PRDs that apply to refineries in the South Coast Air Quality Management District (SCAQMD) and the Bay Area Air Quality Management District (BAAQMD).

Based on these comments, we evaluated the two California district rules and determined that 8 percent (or 12 refineries) are subject to these requirements, which was a sufficient number of subject refineries to establish work practice standards that represent the emissions limitation achieved in practice by the best performers. The two rules are similar in that they both establish comprehensive regulatory programs to address the group

or system of PRDs at refineries by requiring monitoring, root cause analysis, and corrective action, and by focusing on PRDs with the greatest emissions potential through a combination of applicability thresholds (albeit with differing thresholds between the two rules). In addition, both rules exclude emissions from certain types of PRDs - typically lower-release potential PRDs, liquid-type PRDs, or in the case of SCAAMD PRDs resulting from events outside of the refinery's control. We considered the two rules as the basis for determining the best performers for establishing the work practice standard that is included in the December 2015 final Refinery Sector Rule (see 40 CFR 63.648(j)(3)). In doing so, similar to these two rules, we established a work practice standard that is a comprehensive set of requirements that apply to the group of PRDs at refineries, and that focuses on reducing the size and frequency of atmospheric releases of HAP from PRDs, with an emphasis on prevention, monitoring, correction, and limitations on the frequency of release events. For further details on our analysis of the SCAQMD and BAAQMD rules and our use of those rules to establish a comprehensive work practice standard for PRDs that are representative of the best performing refineries, refer to the December 1, 2015, notice at 80 FR 75216 and the memorandum in the docket titled, "Pressure Relief Device Control Option

Impacts for Final Refinery Sector Rule, July 30, 2015 (Docket ID No. EPA-HQ-OAR-2010-0682-0750).

In the final rule, we established a four-part work practice standard in place of the prohibition on release to the atmosphere based on what was achieved by the best performers, as represented by the two California rules. Consistent with the proposed rule, the first component of the work practice standard requires that owners or operators monitor PRDs using a system that is capable of recording the time and duration of each pressure release and notifying operators that a pressure release has occurred. Second, the work practice standard requires refinery owners or operators to establish preventative measures for each affected PRD to prevent direct release of HAP to the atmosphere as a result of pressure release events. Third, in the event of an atmospheric release, the work practice standard requires refinery owners or operators to conduct a root cause analysis to determine the cause of a PRD release event. If the root cause was due to operator error or negligence, then the release would be a violation of the work practice standard. A second release due to the same root cause for the same equipment in a 3-year period would be a violation of the work practice standard. A third release in a 3-year period would be a violation of the work practice standard, regardless of the root cause. Force majeure events, as defined in the final rule, would

not count in determining whether there has been a second or third event. The fourth component of the work practice standard is a requirement for corrective action. For any event other than a force majeure event, the owner or operator would be required to conduct a corrective action analysis and implement the results of the corrective action analysis. Refiners have 45 days to complete the root cause analysis and implement corrective action after the release event. The results of the root cause analysis and corrective action are due with the periodic reports on a semi-annual basis.

We excluded the following PRDs that have very low potential to emit (PTE) based on their type of service, size and pressure from the work practice standard: PRDs that only release material that is liquid at standard temperature and pressure (STP) and that are hard-piped to a controlled drain system, PRDs that do not have a PTE of 72 pounds per day (lbs/day) or more of volatile organic compounds (VOC), PRDs with design release pressure of less than 2.5 pounds per square inch gauge (psig), PRDs on mobile equipment, PRDs in heavy liquid service, and PRDs that are designed solely to release due to liquid thermal expansion. Although these PRDs are excluded from the work practice standard, they are subject to the operating and pressure relief requirements in 40 CFR 63.648(j)(1) and (2), which apply to all PRDs.

We request public comments on the work practice standard for PRDs as provided in 40 CFR 63.648(j)(3) and (5) through (7), including the number and type of release/event allowances; the type of PRDs covered by the work practice standard; and the definition of "force majeure event" in 40 CFR 63.641. We also request public comments on the recordkeeping and reporting requirements associated with the work practice standard in 40 CFR 63.655(g)(10)(iii) and (i)(11).

B. Work Practice Standard for Emergency Flaring

In the June 2014 proposed rule, the EPA proposed to amend the operating and monitoring requirements for petroleum refinery flares. As discussed in the proposal at 79 FR 36904, we determined that the requirements for flares in the General Provisions at 40 CFR 63.18 were not adequate to ensure compliance with the Refinery MACT standards. In general, flares used as air pollution control devices are expected to achieve a 98-percent HAP destruction efficiency. However, because flows of waste gases to the flares had diminished based on reductions achieved by the increased use of flare gas recovery systems, there were times when the waste gas to the flare contained insufficient heat content to adequately combust and, thus, a 98-percent HAP destruction efficiency was not being achieved. In addition, the practice of applying assist media to the flare

(particularly steam to prevent smoking of the flare tip) had led to a decrease in the combustion efficiency of flares.

To ensure that a 98-percent HAP destruction efficiency was being met, as contemplated at the time the MACT standard was promulgated, we proposed revisions to Refinery MACT 1 that required flares to operate with a continuously-lit pilot flame at all times when gases are sent to the flare, with no visible emissions except for periods not to exceed 5 minutes during any 2 consecutive hours, and to meet flare tip velocity limits and combustion zone operating limits at all times when gases are flared.

During the comment period on the proposed rule, we received comments that the concern over insufficient heat content of the waste gas or over-assisting are less problematic in attaining a high level of destruction efficiency at the flare in emergency situations, where the flow in the flare exceeds the smokeless capacity of the flare. Thus, commenters suggested that better combustion was assured closer to the incipient smoke point of the flare and that flow velocity limits and limits on visible emissions should not apply during flaring events.

In the final rule, we determined that it was appropriate to set different standards for when a flare is operating below its smokeless capacity and when it is operating above its smokeless capacity. We finalized the proposed requirements (with minor

revisions) to apply when a flare is operating below its smokeless capacity.

We established a separate work practice standard that applies when a flare exceeds its smokeless capacity. As with flares operating below the smokeless capacity, the work practice standard requires the refinery to have a continuously-lit pilot flame and meet combustion zone operating limits (e.g., heat content in the combustion zone) at all times and meet the monitoring, recordkeeping, and reporting requirements. These requirements are the most critical in ensuring that a 98-percent destruction efficiency is being met. The work practice standard also requires owners or operators to develop flare management plans to identify the flare system smokeless capacity and flare components, waste gas streams that are flared, monitoring systems and their locations, procedures that will be followed to limit discharges to the flare that cause the flare to exceed its smokeless capacity, and prevention measures implemented for PRDs that discharge to the flare header. The work practice standard requires refinery owners or operators to conduct a specific root cause analysis and take corrective action for any flaring event that exceeds the flare's smokeless capacity and that also exceeds the flare tip velocity and/or visible emissions limit. Refiners have 45 days to complete the root cause analysis and implement corrective action after an event. The results of the

root cause and corrective action are due with the periodic reports on a semi-annual basis.

If the root cause analysis indicates that the exceedance of the flare tip velocity and/or the visible emissions limit is caused by operator error or poor maintenance, the exceedance is a violation of the work practice standard. A second event causing an exceedance of either the flare tip velocity or the visible emissions limit within a rolling 3-year period from the same root cause on the same equipment is a violation of the standard. A third exceedance of the velocity or visible emissions limit occurring from the same flare in a rolling 3-year period is a violation of the work practice standard, regardless of the cause. However, force majeure events are excluded from the event count. The requirements for a continuously-lit pilot flame, combustion-zone operating limits and the monitoring, recordkeeping and reporting requirements apply at all times (whether the flare is operating below, at, or above its smokeless capacity), including during a force majeure event.

In reviewing the regulatory text for this proposed action, we determined that 40 CFR 63.670(o)(1)(ii)(B) contains an incorrect reference to pressure relief devices for which preventative measures must be implemented. The correct reference

is paragraph 40 CFR 63.648(j)(3)(ii) not 40 CFR 63.648(j)(5). We are proposing to correct this referencing error.

We request public comments on the above smokeless capacity work practice standard in 40 CFR 63.670(o), including the requirements to maintain records of prevention measures in 40 CFR 63.670(o)(1)(ii)(B) and (o)(1)(vi); the requirement to establish a single smokeless design capacity in 40 CFR 63.670(o)(1)(iii)(B); the number and type of releases/events that constitute a violation; the phrase "...and the flare vent gas flow rate is less than the smokeless design capacity of the flare" in 40 CFR 63.670(c) and (d)"; the proposed correction to paragraph 40 CFR 63.670(o)(1)(ii)(B); and other provisions in 40 CFR 63.670(o)(3) through (7). We also request public comments on the recordkeeping and reporting requirements associated with these work practice standards in 40 CFR 63.655(g)(11)(iv) and (i)(9)(x) through (xii).

C. Assessment of Risk from the Refinery Source Categories After Implementation of the PRD and Emergency Flaring Work Practice Standards

The results of our residual risk review for the Petroleum Refinery source categories were published in the June 30, 2014, proposal (79 FR 36934 through 36942), and included assessment of chronic and acute inhalation risk, as well as multipathway and environmental risk, to inform our decisions regarding acceptability and ample margin of safety. The results indicated

that the cancer risk to the individual most exposed (maximum individual risk or "MIR") based on allowable HAP emissions is no greater than approximately 100-in-1 million, which is the presumptive limit of acceptability, and that the MIR based on actual HAP emissions is no greater than approximately 60-in-1 million but may be closer to 40-in-1 million. In addition, the maximum chronic non-cancer target organ-specific hazard index (TOSHI) due to inhalation exposures was less than 1. The evaluation of acute non-cancer risks, which was conservative, showed acute risks below a level of concern. Based on the results of a refined site-specific multipathway analysis portion of the risk review, we also concluded that the cancer risk to the individual most exposed through ingestion is considerably less than 100-in-1 million.

In the final Refinery MACT 1 rule, we established work practice standards for PRD releases and emergency flaring events, which under the proposed rule would not have been allowed. Thus, because we did not consider such non-routine emissions under our risk assessment for the proposed rule, we performed a screening assessment of risk associated with these emissions for the final rule as discussed in detail in "Final Residual Risk Assessment for the Petroleum Refining Source Sector" in Docket ID No. EPA-HQ-OAR-2010-0682. Our analysis showed that these HAP emissions could increase the MIR based on

actual emissions by as much as 2-in-1 million, which results in essentially the same level of risk as was estimated at proposal. We also estimated that chronic non-cancer TOSHIs attributable to the additional exposures from non-routine flaring and PRD HAP emissions are well below 1. When adding the additional chronic noncancer TOSHI risks from the screening analysis with the analysis in the proposal, chronic noncancer TOSHI risks still remain below 1. Further, our screening analysis also projected that maximum acute exposure to non-routine PRD and flare emissions would result in a maximum hazard quotient (HQ) of 14 from benzene emissions based on a reference exposure level (REL). Based on risk analysis performed for the proposed rule and the screening assessment to consider how conclusions from that analysis would be affected by the additional non-routine flare and PRD emissions allowed under the final rule, we determined that the risk posed after implementation of the revisions to the MACT standards is acceptable.

We request public comments on the screening analysis and the conclusions reached based on that analysis in conjunction with the risk analysis performed for the proposed rule.

#### D. Alternative Work Practice Standards for DCUs Employing the Water Overflow Design

In Refinery MACT 1, we finalized MACT standards for DCU decoking operations. Existing DCU-affected sources must comply

with a 2 psig or 220 degrees Fahrenheit (°F) limit in the drum overhead line determined on a rolling 60-event basis prior to venting to the atmosphere, draining, or deheading the coke drum. New DCU affected sources must comply with a 2.0 psig or 218 °F limit in the drum overhead line on a per-event, not-to-exceed basis. In the final rule, we also finalized an alternative requirement to address DCU with water overflow design that we did not propose, where pressure monitoring would not be appropriate. As part of these provisions, we also included a new requirement in the final rule for DCU with water overflow design to hard-pipe the overflow drain water to the receiving tank via a submerged fill pipe (pipe below the existing liquid level) whenever the overflow water exceeds 220 °F.

We request public comments on the alternative work practice standard for delayed coking units employing a water overflow design provided in 40 CFR 63.657(e).

#### E. Reduced Frequency of Fenceline Monitoring

In the December 2015 final rule, we revised Refinery MACT 1 to establish a work practice standard requiring refinery owners to monitor benzene concentrations around the fenceline or perimeter of the refinery. We promulgated new EPA Methods 325A and B which specify monitor siting and quantitative sample analysis procedures. The work practice is designed to improve the management of fugitive emissions at petroleum refineries through

the use of passive monitors by requiring sources to implement corrective measures if the benzene concentration in air attributable to emissions from the refinery exceeds a fenceline benzene concentration action level. The work practice requires refinery owners to reduce fenceline levels that exceed the concentration action level to at or below that level. In the final rule, we included provisions that were not proposed that would allow for reduced monitoring frequency (after 2 years of continual monitoring) at monitoring locations with consistently low fenceline concentrations.

We request public comments on the provision allowing refineries to reduce the frequency of fenceline monitoring at monitoring sites that consistently record benzene concentrations below 0.9 micrograms per cubic meter, as provided in 40 CFR 63.658(e)(3).

#### **IV. Proposed Technical Clarifications**

In this action, the EPA is proposing to amend provisions related to how to address overlapping requirements for equipment leaks that are contained in Refinery MACT 1 and in the Refinery Equipment Leak NSPS (40 CFR part 60, subpart GGGa). The Refinery MACT 1 provision at 40 CFR 63.640(p)(2) currently states that equipment leaks that are subject to the provisions in the Refinery Equipment Leak NSPS (40 CFR part 60 subpart GGGa) are only required to comply with the provisions in the Refinery

Equipment Leak NSPS. However, the Refinery Equipment Leak NSPS does not include the new work practice standards finalized in the final Refinery MACT 1 at 40 CFR 63.648(j) which apply to releases from PRD. Certain provisions of 40 CFR 63.648(j) detail a work practice standard for the management of releases from PRD. We intended that these new work practice standards would be applicable to all PRD at refineries, including those PRD subject to the requirements in the Refinery Equipment Leaks NSPS. In order to provide clarity and assure that stakeholders subject to these provisions fully understand their compliance obligations, we are proposing that equipment components that are also subject to the provisions of the Refinery Equipment Leak NSPS, are required to comply with the provisions specified in the Refinery Equipment Leaks NSPS, except for PRDs in organic HAP service, which must only comply with the requirements in Refinery MACT 1 at 40 CFR 63.648(j) for PRDs. We are also amending the introductory text in 40 CFR 63.648(j) to reference Refinery Equipment Leaks NSPS at 40 CFR 60.482-4a and amending paragraphs (j)(2)(i) through (iii) of Refinery MACT 1 to correct the existing reference to 40 CFR 60.485(b), which should refer to 40 CFR 60.485(c) and 40 CFR 60.485a(c).

#### **V. Statutory and Executive Order Reviews**

Additional information about these statutes and Executive Orders can be found at <http://www2.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 not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations at 40 CFR part 63, subpart CC and has assigned OMB control number 2060-0340. The proposed amendments are the result of a clarification that does not affect the estimated burden of the existing rule. Specifically, we are proposing amendments clarifying that facilities using the equipment leak overlap provisions must also comply with the PRD work practice standard in 40 CFR part 63, subpart CC. In our burden estimates for the December 1, 2015, final rule, we assumed that all major source refineries would have to comply with the PRD work practice standards. Consequently, the burden estimates provided with the December 1, 2015, final rule are consistent with the proposed clarifying amendment. Therefore, we have not revised the information collection request for the existing rule.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. The proposed rule consists of a clarification which does not change the expected economic impact analysis performed for the existing rule. We have, therefore, concluded that this action will have no net regulatory burden for all directly regulated small entities.

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. It will not have substantial direct effect on tribal governments, on the relationship between the federal government and Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.

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

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action requests comment on a risk assessment that is described in section III. C. of this preamble.

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

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

I. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

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 proposed amendments serve to clarify one aspect of the rule. They do not relax the control measures on regulated sources, and, therefore, do not change the level of environmental protection.

**List of Subjects in 40 CFR Part 63**

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

Dated: October 6, 2016.

Gina McCarthy,  
Administrator.

For the reasons stated in the preamble, title 40, chapter I, of the Code of Federal Regulations is proposed to be amended as follows:

**PART 63--NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR  
POLLUTANTS FOR SOURCE CATEGORIES**

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

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

**Subpart CC--National Emission Standards for Hazardous Air  
Pollutants From Petroleum Refineries**

2. Section 63.640 is amended by revising paragraph (p)(2) to read as follows:

**§ 63.640 Applicability and designation of affected source.**

\* \* \* \* \*

(p) \* \* \*

(2) Equipment leaks that are also subject to the provisions of 40 CFR part 60, subpart GGGa, are required to comply only with the provisions specified in 40 CFR part 60, subpart GGGa, except that pressure relief devices in organic HAP service must only comply with the requirements in § 63.648(j).

\* \* \* \* \*

3. Section 63.648 is amended by revising paragraphs (j) introductory text and (j)(2)(i) through (iii) to read as follows:

**§ 63.648 Equipment leak standards.**

\* \* \* \* \*

(j) Except as specified in paragraph (j)(4) of this section, the owner or operator must comply with the requirements specified in paragraphs (j)(1) and (2) of this section for pressure relief devices, such as relief valves or rupture disks, in organic HAP gas or vapor service instead of the pressure relief device requirements of § 60.482-4 of this chapter, § 60.482-4a of this chapter, or § 63.165, as applicable. Except as specified in paragraphs (j)(4) and (5) of this section, the owner or operator must also comply with the requirements specified in paragraph (j)(3) of this section for all pressure relief devices.

\* \* \* \* \*

(2) \* \* \*

(i) If the pressure relief device does not consist of or include a rupture disk, conduct instrument monitoring, as specified in § 60.485(c) of this chapter, § 60.485a(c) of this chapter, or § 63.180(c), as applicable, no later than 5 calendar days after the pressure relief device returns to organic HAP gas or vapor service following a pressure release to verify that the pressure relief device is operating with an instrument reading of less than 500 ppm.

(ii) If the pressure relief device includes a rupture disk, either comply with the requirements in paragraph (j)(2)(i) of this section (not replacing the rupture disk) or install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the pressure release. The owner or operator must conduct instrument monitoring, as specified in § 60.485(c) of this chapter, § 60.485a(c) of this chapter, or § 63.180(c), as applicable, no later than 5 calendar days after the pressure relief device returns to organic HAP gas or vapor service following a pressure release to verify that the pressure relief device is operating with an instrument reading of less than 500 ppm.

(iii) If the pressure relief device consists only of a rupture disk, install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the pressure release. The owner or operator may not initiate startup of the equipment served by the rupture disk until the rupture disc is replaced. The owner or operator must conduct instrument monitoring, as specified in § 60.485(c) of this chapter, § 60.485a(c) of this chapter, or § 63.180(c), as applicable, no later than 5 calendar days after the pressure relief device returns to organic HAP gas or vapor service following a pressure release to verify that the pressure relief

device is operating with an instrument reading of less than 500 ppm.

\* \* \* \* \*

4. Section 63.670 is amended by revising paragraph

(o) (1) (ii) (B) to read as follows:

**§ 63.670 Requirements for flare control devices.**

\* \* \* \* \*

(o) \* \* \*

(1) \* \* \*

(ii) \* \* \*

(B) Implementation of prevention measures listed for pressure relief devices in § 63.648(j) (3) (ii) for each pressure relief valve that can discharge to the flare.

\* \* \* \* \*