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ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2003-0146, by one of the following methods:

- www.regulations.gov. Follow the on-line instructions for submitting comments.
- E-mail: Comments may be sent by electronic mail (e-mail) to a-and-r-Docket@epa.gov, Attention Docket ID No. EPA-HQ-OAR-2003-0146.
- Fax: Fax your comments to: (202) 566-9744, Attention Docket ID No. EPA-HQ-OAR-2003-0146.
- Mail: Send your comments to: Air and Radiation Docket and Information Center, Environmental Protection Agency, Mailcode: 2822T, 1200 Pennsylvania Ave., NW, Washington, DC 20460, Attention Docket ID No. EPA-HQ-OAR-2003-0146. Please include a total of two copies. We request that a separate copy also be sent to the contact person identified below (see FOR FURTHER INFORMATION CONTACT). In addition, please mail a copy of your comments on the information

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through www.regulations.gov, your e-mail 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, 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 EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

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number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: Mr. Robert Lucas, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, Coatings and Chemicals Group (E143-01), Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541-0884; fax number (919) 541-0246; e-mail address: lucas.bob@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

The regulated category and entities affected by this proposed action include:

Category	NAICS¹ Code	Examples of Regulated Entities
Industry . . .	32411	Petroleum refineries located at a major source that are subject to 40 CFR part 63, subpart CC.

¹ North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by the proposed rule. To determine whether your facility would be regulated by the proposed amendments, you should carefully examine the applicability criteria in 40 CFR

63.100 of subpart CC (National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries). If you have any questions regarding the applicability of this action to a particular entity, contact either the air permit authority for the entity or your EPA regional representative as listed in 40 CFR 63.13 of subpart A (General Provisions).

B. What should I consider as I prepare my comments for EPA?

Do not submit information containing CBI to EPA through www.regulations.gov or e-mail. Send or deliver information as CBI only to the following address: Roberto Morales, OAQPS Document Control Officer (C404-02), Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, NC 27711, Attention Docket ID No. EPA-HQ-OAR-2003-0146 (for petroleum refineries). Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to 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 that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted 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.

C. Where can I get a copy of this document?

In addition to being available in the docket, an electronic copy of this proposed action will also be available on the Worldwide Web through the Technology Transfer Network (TTN). Following signature, a copy of this proposed action will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at the following address:

<http://www.epa.gov/ttn/oarpg/>. The TTN provides information and technology exchange in various areas of air pollution control.

D. When would a public hearing occur?

If anyone contacts EPA requesting to speak at a public hearing concerning the supplemental proposal by [INSERT DATE 10 DAYS FROM DATE OF PUBLICATION], we will hold a public hearing on [INSERT DATE 15 DAYS FROM DATE OF PUBLICATION]. If you are interested in attending the public hearing, contact Janet Eck at (919) 541-7946 to verify that a hearing will be held. If a public hearing is held, it will be held at 10 a.m. at the EPA's Environmental Research Center Auditorium, Research Triangle Park, NC, or an alternate site nearby.

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II. Background Information

On September 4, 2007 (72 FR 50716), EPA proposed several actions under section 112 of the Clean Air Act (CAA) with respect to petroleum refineries subject to the 1995 Refinery MACT 1 Rule (40 CFR part 63, subpart CC). Please refer to the 2007 proposal for additional background material. See 72 FR 50717-18. In response to comments received on the 2007 proposed rule, EPA further evaluated that proposal and is now supplementing its proposal with respect to cooling towers and

storage vessels. In addition, as part of this notice, we are providing proposed revisions to the regulatory text to clarify and correct definitions, tables, and regulatory citations.

III. Summary of Supplemental Proposal

A. What are the proposed requirements to meet CAA sections 112(f)(2) and (d)(6) for Group 1 storage vessels?

In the September 2007 proposed rule, EPA initially proposed two regulatory options for storage vessels under CAA sections 112(f)(2) and (d)(6): Option 1 would require no revisions to the Refinery MACT 1 rule and Option 2 would add the requirements in 40 CFR 63.119(c)(2)(ix) and (x) for slotted guide poles on existing external floating roof (EFR) storage vessels (Refinery MACT 1 currently provides an exemption from these requirements for existing storage vessels). For more detail on the proposed options, please see 72 FR 50726-27.

Many commenters agreed that, of EPA's proposed options, Option 2, controls for slotted guide poles, is an appropriate and cost-effective level of control. However, several commenters supporting Option 2 requested that EPA revise the regulatory text associated with Option 2 to use clear terminology consistent with the most recent rules and technologies for storage vessels, i.e., the rules at 40 CFR part 63, subpart WW and the Storage Tank Emission Reduction

Partnership Program (STERPP) (described at 65 FR 19891).

Specifically, commenters noted that subpart WW and STERPP include clearer descriptions and definitions of control options and provide clear and specific criteria for requirements such as the required height of a pole float and the position of a gasket.

Based on our review of public comments and subsequent analysis, we are proposing an additional option under CAA sections 112(f)(2) and (d)(6) for storage vessels. Specifically, we are proposing to remove the exemptions for existing EFR storage vessels and amend the requirements for all Group 1 storage vessels to be consistent with, and refer directly to, the requirements of 40 CFR part 63, subpart WW. The subpart WW requirements include the requirements for fitting controls on slotted guide poles, which were originally proposed under Option 2, as well as additional requirements for fittings for unslotted guide poles and other openings on EFR storage vessels. The proposed amendments also include the inspection, recordkeeping, and reporting requirements in subpart WW to account for the additional requirements for fitting controls for EFR storage vessels. It should be noted that, while subpart WW was preferred by the commenters and its stringency is equivalent to the HON, the existing 40 CFR part 63, subpart CC does not

require all the specific tank fitting control requirements in the HON. While proposed Option 2 in the September 2007 proposal included some tank fitting control requirements not currently included in subpart CC, Option 2 did not include all of the tank fitting control requirements in the HON and subpart WW. Consequently, by proposing to require compliance with subpart WW, we are proposing full tank fitting controls for Group 1 storage vessels, and, therefore, today's proposed amendments are more stringent than the existing subpart CC rules and the subpart CC amendments proposed in September 2007.

The subpart WW requirements are being proposed because, in addition to providing clearer language for fitting controls, they provide an ample margin of safety to protect public health. This option reduces hazardous air pollutants (HAP) emissions and risks beyond the current maximum achievable control technology (MACT) standard using controls that are technically and economically feasible and that pose no adverse environmental impacts. We estimate that these changes would reduce the number of people at cancer risk greater than 1-in-1 million by 20,000 individuals and the cancer incidence by 0.002 - 0.003 cases per year (i.e., prevent one cancer cases every 400 years). This option would reduce emissions of volatile organic compounds (VOC) by 14,800 tons per year (tpy). Reducing VOC provides the

added benefit of reducing ambient concentrations of ozone and may reduce fine particulate matter. The annualized cost impacts of this option are estimated to be a cost savings of \$6.8 million. Our economic analysis (summarized later in this preamble) indicates that this cost will have little impact on the price and output of petroleum products.

Under this option, we are proposing that the owner or operator of an existing Group 1 storage vessel comply with the requirements in subpart WW of this part no later than 90 days after promulgation of these amendments. As provided in 40 CFR part 63, subpart WW, and for the reasons provided in Section IV, we are proposing that retrofitting floating roof tanks with the guide pole controls and certain other requirements is not required until the next time the vessel is emptied and degassed, or 10 years from the promulgation date of the final standards, whichever is sooner.

B. What are the proposed requirements for cooling towers under CAA sections 112(d)(2) and (f)(2)?

Under CAA sections 112(d)(2) and (d)(3), we proposed work practice standards for cooling towers that would require the owner or operator of a new or existing source to monitor for leaks in the cooling tower return lines from heat exchangers in organic HAP service (i.e., lines that contain or contact fluids

with 5 weight percent or greater of total organic HAP listed in Table 1 of the rule) and, where leaks are detected, to repair such leaks within a specified period of time. We proposed two options for new and existing sources, one based on the MACT floor analysis that accompanied the proposal, i.e., the average emissions limitations achieved by the top 12 percent of the affected sources, and the other based on an analysis of beyond-the-floor techniques. For more detail on those options, please see 72 FR 50722-24.

In response to public comments that the terms used in the proposed cooling tower requirements needed to be defined and should focus on heat exchange systems, we are proposing to add several definitions to clarify the cooling tower monitoring requirements. We are proposing that the cooling tower requirements would apply to each "heat exchange system." A "heat exchange system" means a device or series of devices used to transfer heat from process fluids to water without intentional direct contact of the process fluid with the water (i.e., non-contact heat exchangers) and to transport and/or cool the water in a closed loop recirculation system (cooling tower system) or a once through system (e.g., river or pond water). A "heat exchange system" can include one or more heat exchangers, all water lines to and from the heat exchanger(s), and, for

recirculating systems, the cooling tower or towers that receive water from the heat exchanger(s).

In response to public comments that our floor analysis did not include existing State standards, we collected new information on existing State and local cooling towers provisions and revised our MACT floor analysis. More detail regarding the development of the revised MACT floor for existing and new sources based on review of these existing State requirements is provided in Section IV.B. of this preamble and in the docket memorandum entitled "Cooling Towers: Control Alternatives and Impact Estimates" (EPA-HQ-OAR-2003-0146). The revised proposed requirements are described below and are based on the revised MACT floor determination. Control techniques considered as beyond-the-floor options are described in Section IV.B of this preamble; we are not proposing any of these options because they were determined not to be cost-effective.

We are proposing that owners and operators of heat exchange systems that are in organic HAP service at new and existing sources would be required to conduct monthly sampling and analyses using the Texas Commission on Environmental Quality's (TCEQ) Modified El Paso method, Revision Number One, dated

January 2003.¹ For existing sources, monthly cooling tower monitoring would begin within 18 months of promulgation of the final amendments. For new sources, monthly cooling tower monitoring would begin upon start-up or on the date of promulgation of these amendments, whichever is later. For existing sources, a leak would be defined as 6.2 parts per million by volume (ppmv) total strippable VOC in the stripping gas collected via the Modified El Paso method. For new sources, a leak would be defined as 3.1 ppmv total strippable VOC collected via the Modified El Paso method. The proposed amendments would require the repair of leaks in heat exchangers in organic HAP service within 45 days of the sampling event in which the leak was detected, unless a delay in repair is allowed. Delay in repair of the leak would be allowed until the next shutdown if the repair of the leak would require the process unit served by the leaking heat exchanger to be shut down and the total strippable VOC concentration is less than 62 ppmv. Delay in repair of the leak would also be allowed for up to 120 days if the total strippable VOC concentration is less

¹ "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources," Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see §63.14).

than 62 ppmv and if critical parts or personnel are not available. The owner or operator would be required to continue monthly monitoring and repair the heat exchanger within 45 days if sampling results show that the leak exceeds 62 ppmv total strippable VOC. Within the first 3 years after promulgation of these amendments, delay in repair of a leak would also be allowed if the leak exceeds 62 ppmv total strippable VOC and the repair of the leak would require the process unit served by the leaking heat exchanger to be shut down and a shutdown is planned within 60 days or if critical parts or personnel are not available. Starting 3 years after promulgation of these amendments, delay of repair beyond 45 days would not be allowed if the leak exceeds 62 ppmv total strippable VOC.

Sampling for leaks would be conducted either at individual heat exchanger return lines (i.e., water lines returning the water from the heat exchanger to the cooling tower) or the combined cooling tower inlet water location. That is, if the cooling tower services multiple heat exchangers, the owner or operator may elect to monitor only the heat exchangers "in organic HAP service" or monitor at the combined cooling tower inlet. If a leak is detected at the combined cooling tower inlet, the owner or operator may elect to fix the leak regardless of its location or begin monitoring at each heat

exchanger "in organic HAP service" to document that the leak is not originating from a heat exchanger "in organic HAP service."

All new or existing refineries with a heat exchange system "in organic HAP service" would be required to maintain records of the heat exchangers in organic HAP service, the cooling towers associated with heat exchangers in organic HAP service, monthly monitoring results, and information for any delays in repair of a leak.

C. What other revisions and clarifications are we proposing?

In the September 2007 proposal, we proposed to amend Table 6 to 40 CFR part 63, subpart CC (General Provisions Applicability to Subpart CC) to bring the table up-to-date with current requirements of the General Provisions and clarify certain requirements. In conjunction with the publication of Table 6 in the proposal, we erroneously included a Table 11. We are clarifying that we are not proposing to include Table 11 and, thus, do not plan to include it as part of the final rule.

We received public comments that methyl ethyl ketone (also known as 2-butanone) has been delisted as a HAP. We are, therefore, proposing to revise Table 1 to delete methyl ethyl ketone from the HAP listed in Table 1.

We also received several public comments noting that cross-references to other subparts should be updated. Therefore, we

are also proposing amendments to correct cross-references to subparts R and Y of part 63 in the rule text, as well as to correct the recordkeeping and reporting requirement cross-references in Tables 4 and 5 of subpart CC to part 63. We are also proposing to clarify applicability sections by specifying the promulgation date of the original subpart CC. Finally, we are proposing amendments to clarify how owners and operators should comply with overlapping standards for equipment leaks. These proposed amendments are included to clarify the requirements of subpart CC.

IV. Rationale for Supplemental Proposed Amendments

A. Storage Vessels

In response to public comments on the original proposal, we revised and updated the analysis of the options we proposed in September 2007. We also evaluated a wider range of control options, such as the requirements included in the Generic Storage Vessel MACT (40 CFR part 63, subpart WW) and STERPP, as well as other specific controls suggested by the commenters. A detailed explanation of our impacts analysis for each of the options described in this section is provided in "Storage Vessels: Revised Control Options and Impact Estimates" in Docket ID No. EPA-HQ-OAR-2003-0146.

The storage vessel controls in 40 CFR part 63, subpart WW and for STERPP include several compliance options for controlling slotted guide poles as well as requirements for additional fitting controls on other EFR deck openings. We determined that, based on emission modeling runs using a model gasoline storage vessel, the STERPP and subpart WW requirements for slotted guide poles achieve the same or better emission reduction efficiencies as the originally proposed Option 2 for Group 1 storage vessels. And, while additional deck fitting controls on EFR storage vessels contained in the STERPP and subpart WW provide only a tenth of the emission reductions as the guide pole controls, these controls (primarily use of gaskets) are inexpensive. As seen in Table 1 of this preamble, our cost analysis indicates that these fitting controls are cost-effective. Therefore, we are proposing an additional option that would require these additional fitting controls for existing Group 1 storage vessels covered by Refinery MACT 1.

Based on our evaluation of the STERPP and 40 CFR part 63, subpart WW control requirements, we determined that those standards require solid, or unslotted, guide poles to be gasketed and have a wiper system, and we evaluated the impacts of also adding these requirements to Refinery MACT 1. We determined that, provided the retrofits could be performed

without additional emissions and cost associated with an unplanned emptying and degassing of the storage vessel (i.e., during a turnaround or when the vessel is taken out of service for maintenance/repair), the control requirements for solid guide poles were cost-effective. That is, over a 10-year cycle using a 7-percent annual interest rate, these controls yield a net cost savings (from reduced product losses). The combination of additional deck fitting controls and full guide pole controls is presented in Table 1 as "full deck and guide pole controls." Consequently, we are proposing as an additional option to amend Refinery MACT 1 to refer directly to the storage vessel control requirements in subpart WW. As the cost-effectiveness of the control retrofits are predicated on a lack of additional emissions and cost associated with emptying and degassing the storage vessel, we are providing up to 10 years for compliance with these requirements as provided for in 40 CFR 63.1063(a)(ix) of subpart WW. Because these controls are cost-effective and incrementally reduce public exposure, we believe this option, in addition to the two options proposed earlier, would provide an ample margin of safety and meet the requirements of the technology review.

Table 1. Nationwide Impacts of Various Storage Vessel Regulatory Options

Control option	Total capital investment (\$ million)	Total annualized cost without recovery (\$ million)	Product recovery credit (\$ million)	Total annualized costs (\$ million/yr)	HAP emissions (tons per year) ^a	HAP emission reductions (tons per year)	Cost-effectiveness (\$/ton HAP)
Option 1: Baseline (proposed at 72 FR 50726-27) ^a	0	0	0	0	2,970	0	N/A
Option 2: Slotted guide pole sleeves (proposed at 72 FR 50726-27) ^a	5.3	0.76	-3.3	-2.6	2,300	660	-3,900
Option 3: Full deck and guide pole controls	10	1.5	-8.3	-6.8	1,300	1,640	-4,100

^a Costs and emission reductions have been revised since September 2007 proposal; see memorandum entitled "Storage Vessels: Revised Control Options and Impact Estimates" in Docket ID No. EPA-HQ-OAR-2003-0146 for details on these revisions.

Table 2 of this preamble presents the risk reduction associated with the control option for storage vessels.

Table 2. Inhalation Risk Impacts of Regulatory Alternative for Storage Vessels

Parameter		Baseline Option 1	Control Option 2	Control Option 3
Risk to Most Exposed Individual	Cancer (in 1 million)	30	30	30
	Noncancer (HI)	0.3	0.3	0.3
Size of Population at Cancer Risk	> 100-in-1 million	0	0	0
	> 10-in-1 million	4,000	3,900	3,800
	> 1-in-1 million	460,000	450,000	440,000
Number of Plants at Cancer Risk Level	> 100-in-1 million	0	0	0
	> 10-in-1 million	23	23	22
	> 1-in-1 million	88	88	87
Population with HI > 1 ^a		0	0	0

No of Plants with HI > 1	0	0	0
Annual Cancer Incidence ^b	0.032 - 0.049	0.031 - 0.048	0.030 - 0.046
Cancer Incidence Reduction (Percent)	NA	2	5
HAP Emission Reduction (Percent)	NA	4	10

^a If the Hazard Index (HI) is calculated to be less than or equal to 1, then no adverse non-cancer chronic health effects are expected as a result of the exposure. However, an HI exceeding 1 does not translate to a probability that adverse effects occur. Rather, it suggests the possibility that adverse health effects may occur. Acute non-cancer effects not estimated in this analysis

^b The range of cancer incidence reflects the cancer potency range of benzene, either end of which is considered equally plausible.

B. Cooling Towers

To respond to public comments that our floor analysis did not include existing State standards, we collected additional information on cooling tower requirements for multiple petroleum refineries in several States. Using these data, we reanalyzed the MACT floor for new and existing sources and identified 39 petroleum refineries in California, Illinois, Indiana, Louisiana, Minnesota, and Texas with permit requirements for HAP and/or VOC in cooling tower return water along with cooling tower monitoring requirements. We note that the permit requirements are based on calculated emission estimates using the water recirculation rates and monitored concentrations in the cooling waters. Consequently, the permit requirements effectively define a maximum allowable concentration limit of strippable organics in the cooling water so that the effective

leak definition could be determined for each cooling tower. We further note that no refineries directly measure cooling tower emissions, and we reaffirm our conclusion that cooling tower work practice standards are appropriate because the emissions are not emitted through a stack or other conveyance and are, therefore, not practically measurable.

We ranked cooling tower requirements based on the projected emissions that would occur given the specific cooling tower monitoring provision. Based on preliminary calculations performed using the cooling tower impacts model (see "Cooling Towers: Control Alternatives and Impact Estimates" memorandum in Docket ID No. EPA-HQ-OAR-2003-0146), the leak definition was the primary factor influencing the emissions limitations achieved by a cooling tower monitoring program; the second most important factor was the specification of time frames for completing repairs and provisions or limitations for delay of repair. Monitoring frequency, while a contributing factor to overall cooling tower emissions performance, was not as important as the leak definition and specified repair deadlines. We selected the 6th percentile cooling tower as indicative of the average emission limitation achieved by the best performing 12 percent of cooling towers. Based on this, we determined that the MACT floor for cooling towers at existing sources is cooling

water sampling on a monthly basis for total strippable VOC compounds, where a leak is defined as 6.2 ppmv of total strippable VOC compounds in the stripping air of the TCEQ Modified El Paso method. We note that this leak definition is equivalent to the controlled emission factor in AP-42,² and that many refineries use this controlled emission factor when estimating and reporting their cooling tower emissions.

Additionally, based on this MACT floor analysis, we determined that the existing source MACT floor repair requirements include identifying the source of the leak and repairing within 45 days of originally finding the leak. Delay of repair is allowed under certain conditions if the total strippable VOC is less than 62 ppmv, but is not allowed if the total strippable VOC concentration is equal to or greater than 62 ppmv. When total strippable VOC is less than 62 ppmv, delay of repair is allowed for up to 120 days if the necessary equipment, parts, or personnel are not available, and delay of repair is allowed until the next shutdown if a shutdown is required to effect the repair. For delay of repair, the refinery must document the basis for the delay, including the

² U.S. EPA (Environmental Protection Agency). 1995. Compilation of Air Pollutant Emission Factors. Sections 5.1. AP-42. Office of Air Quality Planning and Standards, Research Triangle Park, NC.

reason for delaying repair, provide a schedule for completing the repair, and determine the emissions of HAP during the time duration of the delay.

While these delay of repair provisions are based on our MACT floor assessment, we note that some of the permits for facilities in the top 12 percent provide time to implement the monitoring requirements before the ban on delay of repairs for leaks exceeding 62 ppmv becomes effective. We recognize that when facilities first start to monitor their cooling towers, the likelihood of finding large leaks is much greater than after a monthly monitoring program has been implemented. As such, when first implementing the monthly monitoring, they may identify heat exchange systems that have leaks exceeding 62 ppmv, but may not have the spare parts or adequate time to plan for the repair of the heat exchange system that would typically be available after the monthly monitoring program has been in place for some time. As such, we propose to phase-in the cooling tower requirements for existing sources. The monitoring and leak repair provisions for existing sources would become effective no later than 18 months after promulgation of the final rule; however, the delay of repair is allowed regardless of the leak size for the first 18 months of the monitoring program. No later than 3 years from the promulgation date of these

amendments, no delay of repair is allowed for leaks exceeding 62 ppmv total strippable VOC.

The new source MACT for cooling towers must be no less stringent than the best-performing refinery cooling towers. In our ranking of the information collected on monitoring requirements, the best-performing cooling tower has a leak definition of 3.1 ppmv of strippable total organics as methane in the stripping air using monthly Modified El Paso method sampling and analysis. As such, the MACT floor for cooling towers at new sources is monthly cooling water sampling for total strippable VOC, where a leak is defined as 3.1 ppmv of total strippable VOC in the stripping air using the Modified El Paso method. The repair requirements for the top-performing cooling towers include identifying the source of the leak and repairing within 45 days of originally finding the leak. Delay of repair for the top-performing cooling towers is allowed if strippable total VOC concentration is less than 62 ppmv, but not allowed if strippable total VOC concentration is equal to or greater than 62 ppmv. That is, the delay of repair provisions for the new source MACT floor cooling towers are the same as those for an existing source MACT floor cooling towers.

We revised our cooling tower emissions estimates since the 2007 proposal based on reanalysis of the emissions inventory

information obtained from TCEQ for the 2004 reporting year, as well as other information collected regarding cooling tower monitoring provisions and flow data from the Industrial Cooling Tower National Emission Standards for Hazardous Air Pollutants (NESHAP). Model cooling tower emissions for each refinery facility in the nation were estimated based on crude throughput data which were used to estimate total cooling water flow rates and generic refinery stream VOC and HAP compositions. These data were used with controlled and uncontrolled AP-42 emission factors for VOC emissions from cooling towers and the fraction of cooling towers with specific monitoring requirements to estimate cooling tower baseline HAP emissions. The nationwide baseline HAP emissions were estimated at 770 tpy as compared to a baseline estimate of greater than 3,000 tpy in the 2007 proposal. These emissions compare reasonably well with the organic HAP emissions estimate based on the TCEQ data, as revised, to correct a reporting error identified by a public commenter. From the updated TCEQ 2004 database, we estimated the organic HAP emissions from cooling towers to be 95 tpy for Texas refineries alone. Extrapolation of the Texas data based on direct crude distillation capacity provides a nationwide emissions estimate for cooling towers of 352 tpy of organic HAP. However, refineries in Texas had the most stringent cooling

tower monitoring provisions of any of the State requirements, and the Texas refineries used the controlled AP-42 emission factor for their cooling tower emission estimates. If the non-Texas refineries operate nearer the uncontrolled AP-42 emission factor, nationwide cooling tower emissions are projected to be 2,300 tpy of organic HAP. While there is significant uncertainty in the actual cooling tower emission estimate, the projected baseline emissions fall easily within the range expected based on reanalysis of the Texas dataset.

Following reanalysis of the MACT floor for cooling towers, we also conducted a revised cost analysis for the MACT floor level of control. We included costs for a strippable total VOC monitoring system, increased the time needed for sampling and analysis for each cooling tower, and added costs for sampling and analysis for specific heat exchangers for triggered monitoring following identification of a cooling tower leak. We also increased the cost associated with repairing a leaking heat exchanger. The cost-effectiveness of the MACT floor control for cooling towers at both new and existing sources was approximately \$4,700 per ton of HAP reduced when considering product recovery credits and approximately \$8,200 per ton when product recovery credits were not included. See Table 3 of this preamble.

We also evaluated the costs of applying the new source leak definition to existing sources and implementing this option with continuous strippable total VOC monitoring systems as a beyond-the-MACT floor control options. The first alternative reduces an additional 40 tpy of HAP emissions at an incremental cost-effectiveness of almost \$6,000 per ton on HAP emission reduction and the second option with continuous monitoring reduces HAP emissions by an additional 10 tpy and has an incremental cost-effectiveness of almost \$600,000 per ton of HAP reduced.

Based on this analysis, we conclude that the beyond-the-MACT floor control options are not cost-effective and we are proposing standards for cooling towers commensurate with the MACT floor determinations under CAA sections 112 (d)(2) and (3). Further, we are proposing that the MACT floor level of control also provides an ample margin of safety and satisfies the risk review requirements under CAA section 112 (f)(2). For more information on the costing methodology, see Table 3 of this preamble and the "Cooling Towers: Control Alternatives and Impact Estimates" memorandum in the docket (Docket ID No. EPA-HQ-OAR-2003-0146).

Table 3. Nationwide Impacts for Cooling Tower Options

Control option	Total capital investment	Total annualized cost without	Product recovery credit	Total annualized costs (\$	HAP emissions (tpy)	Cost-effectiveness (\$/ton HAP)
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	(\$ million)	recovery (\$ million)	(\$ million)	million)		HAP emission reductions (tpy)	Overall	Incremental
MACT Floor	16	5.2	-2.2	3.0	140	630	4,700	4,700
Beyond-the-floor Alternative 1	16	5.5	-2.3	3.2	100	670	4,700	5,700
Beyond-the-floor Alternative 2	72	11	-2.2	8.8	90	680	13,000	580,000

Table 4 of this preamble provides information relevant to our proposed ample margin of safety determination under CAA section 112(f)(2). Specifically, the table presents the pre-MACT risk, the risk associated with the proposed MACT floor which is the baseline for our residual risk analysis, and the risk reduction for the first beyond the MACT floor alternative for cooling towers. Reductions in risk for the second alternative are not shown because this alternative is clearly not cost-effective.

Table 4. Inhalation Risk Impacts for Cooling Towers

Parameter		Baseline pre-MACT	MACT floor (risk baseline)	Beyond the MACT floor alternative 1
Risk to Most Exposed Individual	Cancer (in 1 million)	30	30	30
	Noncancer (HI)	0.3	0.3	0.3
Size of Population at Cancer Risk	> 100-in-1 million	0	0	0
	> 10-in-1 million	4,000	3,900	3,800
	> 1-in-1 million	460,000	450,000	440,000

Number of Plants at Cancer Risk Level	> 100-in-1 million	0	0	0
	> 10-in-1 million	23	22	22
	> 1-in-1 million	88	88	87
Population with HI > 1 ^a		0	0	0
No of Plants with HI > 1		0	0	0
Annual Cancer Incidence ^b		0.032 - 0.049	0.031 - 0.047	0.030 - 0.047
Cancer Incidence Reduction (Percent)		NA	3	4
HAP Emission Reduction (Percent)		NA	4	6

^a If the Hazard Index (HI) is calculated to be less than or equal to 1, then no adverse non-cancer chronic health effects are expected as a result of the exposure. However, an HI exceeding 1 does not translate to a probability that adverse effects occur. Rather, it suggests the possibility that adverse health effects may occur. Acute non-cancer effects not estimated in this analysis.

^b The range of cancer incidence reflects the cancer potency range of benzene, either end of which is considered equally plausible.

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action" because it may raise novel legal or policy issues. Accordingly, EPA submitted this action to OMB for review under Executive Order 12866, and any changes made in response to OMB recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the OMB under the

Paperwork Reduction Act, 44 U.S.C. 3501, et seq. The Information Collection Request (ICR) document prepared by EPA has been assigned ICR number 2334.01.

The information requirements in the proposed amendments include monitoring, recordkeeping, and reporting provisions for storage vessels and cooling towers. Owners or operators of storage vessels must comply with the inspection, recordkeeping, and reporting requirements in 40 CFR part 63, subpart WW. Owners or operators of cooling towers must conduct monthly monitoring of each heat exchanger to identify and repair leaks. Records of monitoring and repair data also must be kept. All respondents must submit one-time notifications and semiannual compliance reports.

The information collection requirements in the proposed amendments are needed by EPA and delegated authorities to determine that compliance has been achieved. The recordkeeping and reporting requirements in this proposed rule are based on the information collection requirements in the part 63 General Provisions (40 CFR part 63, subpart A). The recordkeeping and reporting requirements in the General Provisions are mandatory pursuant to section 114 of the CAA (42 U.S.C. 7414). All information submitted to EPA pursuant to the information collection requirements for which a claim of confidentiality is

made is safeguarded according to CAA section 114(c) and the Agency's implementing regulations at 40 CFR part 2, subpart B.

The annual burden for this information collection averaged over the first 3 years of this ICR is estimated to total 13,714 labor hours per year at a cost of \$1,056,081 for one new refinery and 153 existing refineries. The average annual reporting burden is 353.9 labor hours for 205.9 total annual responses; the average annual burden per response is 1.72 hours. Responses include notifications of compliance status for cooling towers and storage vessels at new and existing refineries, notification of initial startup for storage vessels at one new refinery, and semiannual compliance reports containing information on cooling towers and storage vessels at new and existing refineries. Capital/startup costs are estimated at \$16,306,000. The operation and maintenance costs associated with the proposed rule amendments are estimated at \$61,711. Burden is defined at 5 CFR 1320.3(b).

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 EPA's regulations in 40 CFR are listed in 40 CFR part 9.

To comment on the EPA's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this action, which includes this ICR, under Docket ID No. EPA-HQ-OAR-2003-0146. Submit any comments related to the ICR for the proposed rule to EPA and OMB. See the **ADDRESSES** section at the beginning of this preamble for where to submit comments to EPA. Send comments to OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Because OMB is required to make a decision concerning the ICR between 30 and 60 days after [INSERT DATE OF PUBLICATION], a comment to OMB is best assured of having its full effect if OMB receives it by [INSERT DATE 30 DAYS FROM DATE OF PUBLICATION]. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the

agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For the purposes of assessing the impacts of this proposed rule on small entities, small entity is defined as: (1) a small business that meets the Small Business Administration size standards for small businesses at 13 CFR 121.201 (a firm having no more than 1,500 employees; (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. Based on our economic impact analysis, the proposed amendments will result in a nationwide net annualized cost savings of about \$3.8 million due to a return of about \$10.5 million per year from reductions in product losses. Only one oil refining entity would incur net annualized costs as a result of the proposed amendments; all other refinery entities would

have net savings. This refinery entity is a small parent entity. Net annualized costs for this affected small entity are well below 0.01 percent of their revenue; therefore, no "significant" adverse economic impacts are expected for any small entity. Thus, the costs associated with the proposed amendments will not result in any "significant" adverse economic impact for any small entity. For more information, please refer to the economic impact analysis that is in the docket for this rulemaking.

Although the proposed rule will not have a significant economic impact on a substantial number of small entities, we nonetheless tried to reduce the impact of the proposed rule on small entities. We held meetings with industry trade associations and company representatives to discuss the proposed rule and have included provisions for small facilities that address their concerns. We continue to be interested in the potential impacts of the proposed action on small entities and welcome comments on issues related to such impacts.

D. Unfunded Mandates Reform Act

This action contains no Federal mandates under the provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531-1538 for State, local, or tribal governments or the private sector.

The proposed rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or to the private sector in any one year. As discussed earlier in this preamble, these amendments result in nationwide net savings to the private sector. Therefore, the proposed rule is not subject to the requirements of sections 202 or 205 of the UMRA.

This proposed rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. The proposed amendments contain no requirements that apply to such governments, and impose no obligations upon them.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled Federalism (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that 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.”

The proposed amendments do not have federalism implications. They would 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, as specified in Executive Order 13132. The proposed amendments add control and monitoring requirements. They do not modify existing responsibilities or create new responsibilities among EPA Regional offices, States, or local enforcement agencies. Thus, Executive Order 13132 does not apply to the proposed amendments.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this proposed rule from State and local officials.

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

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). The proposed amendments will not have substantial direct effects on tribal governments, on the relationship between the Federal

government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. The proposed amendments impose no requirements on tribal governments. Thus, Executive Order 13175 does not apply to this action.

EPA specifically solicits additional comment on this proposed action from tribal officials.

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

This action is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it is not economically significant as defined in Executive Order 12866, and because the Agency does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in the revised Residual Risk Assessment for MACT 1 Petroleum Refining Sources, which is available in the docket.

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

The proposed amendments are not a "significant energy action" as defined in Executive Order 13211 (66 FR 28355, May 22, 2001) because they are not likely to have a significant adverse effect on the supply, distribution, or use of energy.

Further, we have concluded that the proposed amendments are not likely to have any adverse energy effects because they result in overall savings due to product recovery.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Public Law No. 104-113, 15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities, unless to do so would be inconsistent with applicable law or otherwise impractical. VCS are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by VCS bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency does not use available and applicable VCS.

This proposed rule involves technical standards. EPA proposes to use "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources," Revision Number One, dated January 2003, and will incorporate the method by reference (see 40 CFR 63.14).

This method is available at

http://www.tceq.state.tx.us/assets/public/implementation/air/sip/sipdocs/2002-12-HGB/02046sipapp_ado.pdf, or from the Texas

Commission on Environmental Quality (TCEQ) Library, Post Office

Box 13087, Austin, Texas, 78711-3087, telephone number (512) 239-0028. This method was chosen based on public comments regarding the sampling and analysis of air emissions from cooling towers, and is required in these proposed amendments instead of the originally proposed requirements in 40 CFR 61.355(c) for water sample collection, and EPA Method 8260B for analysis of water samples taken from cooling tower return lines.

This TCEQ method utilizes a dynamic or flow-through system for air stripping a sample of the water and analyzing the resultant off-gases for VOC using a common flame ionization detector (FID) analyzer. While direct water analyses, such as purge and trap analyses of water samples utilizing gas chromatography and/or mass spectrometry techniques, have been shown to be effective for cooling tower measurements of heavier molecular weight organic compounds with relatively high boiling points, it has been determined that this approach may be ineffective for capture and measurement of VOC with lower boiling points, such as ethylene, propylene, 1,3-butadiene, and butenes. The VOC with a low molecular weight and boiling point are generally lost in the sample collection step of purge/trap type analyses. Consequently, this TCEQ air stripping method is used for cooling tower and other applicable water matrix

emission measurements when VOC with boiling points below 140° F need to be evaluated.

Under 40 CFR 63.7(f) and 40 CFR 63.8(f) of subpart A of the General Provisions, a source may apply to EPA for permission to use alternative test methods or alternative monitoring requirements in place of any required testing methods, performance specifications, or procedures in the proposed amendments.

EPA welcomes comments on this aspect of the proposed rulemaking and, specifically, invites the public to identify potentially applicable voluntary consensus standards and to explain why such standards should be used in the regulations.

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

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and

activities on minority populations and low-income populations in the United States.

EPA has determined that these proposed amendments will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because they increase the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population.

The proposed amendments add new control requirements to established national standards for petroleum refineries to address risk remaining after implementation of the 1995 standards and, thus, decrease the amount of toxic emissions to which all affected populations are exposed.

**National Emission Standards for Hazardous Air Pollutants From
Petroleum Refineries--Page 44 of 93**

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Incorporation by reference, Reporting and recordkeeping requirements.

Dated:

Stephen L. Johnson,
Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is proposed to be amended as follows:

Part 63--[AMENDED]

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

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

Subpart A--[AMENDED]

2. Section 63.14 is amended by adding paragraph (n) to read as follows:

§63.14 Incorporations by reference.

* * * * *

(n) The following material is available from the Texas Commission on Environmental Quality (TCEQ) Library, Post Office Box 13087, Austin, Texas 78711-3087, telephone number (512) 239-0028 or at

http://www.tceq.state.tx.us/assets/public/implementation/air/sip/sipdocs/2002-12-HGB/02046sipapp_ado.pdf:

(1) "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources", Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003, IBR approved for §63.654(c)(1) and (g)(4)(i) of

Subpart CC of this part.

(2) [Reserved]

Subpart CC--[AMENDED]

3. Section 63.640 is amended by:

- a. Revising paragraph (a) introductory text;
- b. Revising paragraph (b)(2);
- c. Revising paragraph (c) introductory text;
- d. Revising paragraphs (c)(6) and (7);
- e. Adding paragraph (c)(8);
- f. Revising paragraph (e) introductory text, and paragraph (e)(2)(iii);
- g. Revising paragraph (f) introductory text, and paragraph (f)(5);
- h. Revising paragraph (h) introductory text;
- i. Revising paragraphs (h)(1) and (2);
- j. Revising paragraph (h)(4);
- k. Adding paragraph (h)(6);
- l. Revising paragraphs (k)(1), (k)(2)(i), (k)(2)(ii), (k)(2)(iii), and the first sentence in paragraph (k)(2)(vi);
- m. Revising paragraph (l) introductory text, paragraph (l)(2)(i), the first sentence in paragraph (l)(2)(ii), the first sentence in paragraph (l)(3) introductory text, paragraph (l)(3)(i), paragraph (l)(3)(ii), the first sentence in paragraph (l)(3)(vi), and the first sentence in paragraph (l)(3)(vii);

n. Revising paragraph (n) introductory text and paragraphs (n)(1), (n)(2), (n)(8)(ii), and (n)(9)(i);

o. Removing and reserving paragraph (n)(5); and

p. Revising paragraph (p).

§63.640 Applicability and designation of affected source.

(a) This subpart applies to petroleum refining process units and to related emissions points that are specified in paragraphs (c)(5) through (8) of this section that are located at a plant site and that meet the criteria in paragraphs (a)(1) and (2) of this section:

* * * * *

(b) * * *

(2) The determination of applicability of this subpart to petroleum refining process units that are designed and operated as flexible operation units shall be reported as specified in §63.655(h)(6)(i).

(c) For the purposes of this subpart, the affected source shall comprise all emissions points, in combination, listed in paragraphs (c)(1) through (8) of this section that are located at a single refinery plant site.

* * * * *

(6) All marine vessel loading operations located at a petroleum refinery meeting the criteria in paragraph (a) of this section and the applicability criteria of subpart Y, §63.560;

(7) All storage vessels and equipment leaks associated with a bulk gasoline terminal or pipeline classified under Standard Industrial Classification code 2911 located within a contiguous area and under common control with a refinery meeting the criteria in paragraph (a) of this section; and

(8) All heat exchange systems associated with petroleum refining process units meeting the criteria in paragraph (a) of this section and which are in organic hazardous air pollutants (HAP) service as defined in this subpart.

* * * * *

(e) The owner or operator of a storage vessel constructed on or before August 18, 1994, shall follow the procedures specified in paragraphs (e)(1) and (e)(2) of this section to determine whether a storage vessel is part of a source to which this subpart applies. The owner or operator of a storage vessel constructed after August 18, 1994, shall follow the procedures specified in paragraphs (e)(1), (e)(2)(i), and (e)(2)(ii) of this section to determine whether a storage vessel is part of a source to which this subpart applies.

* * * * *

(2) * * *

(iii) If the predominant use of a storage vessel varies from year to year, then the applicability of this subpart shall be determined based on the utilization of that storage vessel

during the year preceding August 18, 1995. This determination shall be reported as specified in §63.655(h)(6)(ii).

(f) The owner or operator of a distillation unit constructed on or before August 18, 1994, shall follow the procedures specified in paragraphs (f)(1) through (f)(4) of this section to determine whether a miscellaneous process vent from a distillation unit is part of a source to which this subpart applies. The owner or operator of a distillation unit constructed after August 18, 1994, shall follow the procedures specified in paragraphs (f)(1) through (f)(5) of this section to determine whether a miscellaneous process vent from a distillation unit is part of a source to which this subpart applies.

* * * * *

(5) If the predominant use of a distillation unit varies from year to year, then the applicability of this subpart shall be determined based on the utilization of that distillation unit during the year preceding August 18, 1995. This determination shall be reported as specified in §63.655(h)(6)(iii).

* * * * *

(h) Except as provided in paragraphs (k), (l), or (m) of this section, sources subject to this subpart are required to achieve compliance on or before the dates specified in paragraphs (h)(1) through (6) of this section.

(1) Except as provided in paragraphs (h)(1)(i) and (ii) of this section, new sources that commence construction or reconstruction after July 14, 1994, shall be in compliance with this subpart upon initial startup or August 18, 1995, whichever is later.

(i) Heat exchange systems that commence construction or reconstruction after September 4, 2007, shall be in compliance with new source standards in §63.654 upon initial startup or by the date of publication of the final amendments in the FEDERAL REGISTER, whichever is later.

(ii) New sources shall be in compliance with §63.646 upon initial startup or 90 days after the date of publication of the final amendments in the FEDERAL REGISTER, whichever is later.

(2) Except as provided in paragraphs (h)(3) through (h)(6) of this section, existing sources shall be in compliance with this subpart no later than August 18, 1998, except as provided in §63.6(c)(5) of subpart A of this part, or unless an extension has been granted by the Administrator as provided in §63.6(i) of subpart A of this part.

* * * * *

(4) All Group 1 storage vessels that are part of an existing source shall be in compliance with §63.646 of this subpart no later than 90 days after publication of the final amendments in the FEDERAL REGISTER.

* * * * *

(6) Heat exchange systems that commence construction or reconstruction on or before September 4, 2007, shall be in compliance with the existing source standards in §63.654 no later than 18 months after publication of the final amendments in the FEDERAL REGISTER.

* * * * *

(k) * * *

(1) The reconstructed source, addition, or change shall be in compliance with the new source requirements upon initial startup of the reconstructed source or by August 18, 1995, whichever is later; and

(2) * * *

(i) The application for approval of construction or reconstruction shall be submitted as soon as practical before the construction or reconstruction is planned to commence (but it need not be sooner than November 16, 1995);

(ii) The Notification of Compliance Status report as required by §63.655(f) for a new source, addition, or change;

(iii) Periodic Reports and other reports as required by §63.655(g) and (h);

* * * * *

(vi) Reports and notifications required by §63.428(b), (c), (g)(1), (h)(1) through (h)(3), and (k) of subpart R. * *

*

* * * * *

(1) If an additional petroleum refining process unit is added to a plant site or if a miscellaneous process vent, storage vessel, gasoline loading rack, marine tank vessel loading operation, or heat exchange system that meets the criteria in paragraphs (c)(1) through (8) of this section is added to an existing petroleum refinery or if another deliberate operational process change creating an additional Group 1 emissions point(s) (as defined in §63.641) is made to an existing petroleum refining process unit, and if the addition or process change is not subject to the new source requirements as determined according to paragraphs (i) or (j) of this section, the requirements in paragraphs (1)(1) through (3) of this section shall apply. Examples of process changes include, but are not limited to, changes in production capacity, or feed or raw material where the change requires construction or physical alteration of the existing equipment or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of this paragraph and paragraph (m) of this section, process changes do not include: Process upsets, unintentional temporary process changes, and changes that are within the equipment configuration and operating conditions documented in the Notification of Compliance Status report

required by §63.655(f).

* * * * *

(2) * * *

(i) If a petroleum refining process unit is added to a plant site or an emission point(s) is added to any existing petroleum refining process unit, the added emission point(s) shall be in compliance upon initial startup of any added petroleum refining process unit or emission point(s) or by August 18, 1998, whichever is later.

(ii) If a deliberate operational process change to an existing petroleum refining process unit causes a Group 2 emission point to become a Group 1 emission point (as defined in §63.641), the owner or operator shall be in compliance upon initial startup or by August 18, 1998, whichever is later, unless the owner or operator demonstrates to the Administrator that achieving compliance will take longer than making the change. * * *

(3) The owner or operator of a petroleum refining process unit or of a storage vessel, miscellaneous process vent, wastewater stream, gasoline loading rack, marine tank vessel loading operation, or heat exchange system meeting the criteria in paragraphs (c)(1) through (8) of this section that is added to a plant site and is subject to the requirements for existing sources shall comply with the reporting and recordkeeping

requirements that are applicable to existing sources including, but not limited to, the reports listed in paragraphs (l)(3)(i) through (vii) of this section. * * *

(i) The Notification of Compliance Status report as required by §63.655(f) for the emission points that were added or changed;

(ii) Periodic Reports and other reports as required by §63.655(g) and (h);

* * * * *

(vi) Reports and notifications required by §63.428(b), (c), (g)(1), (h)(1) through (h)(3), and (k) of subpart R. * *

*

(vii) Reports and notifications required by §§63.565 and 63.567 of subpart Y. * * *

* * * * *

(n) Overlap of subpart CC with other regulations for storage vessels. As applicable, paragraphs (n)(1), (n)(3), (n)(4), (n)(6), and (n)(7) of this section apply for Group 2 storage vessels. Beginning 90 days after publication of the final amendments in the FEDERAL REGISTER, paragraph (n)(2) of this section applies for Group 1 storage vessels.

(1) After the compliance dates specified in paragraph (h) of this section, a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR

part 60, subpart Kb, is required to comply only with the requirements of 40 CFR part 60, subpart Kb, except as provided in paragraph (n)(8) of this section.

(2) After the compliance dates specified in paragraph (h) of this section, a Group 1 storage vessel that is subject to 40 CFR part 60, subparts K, Ka, or Kb is required to comply only with this subpart.

* * * * *

(5) [Reserved]

* * * * *

(8) * * *

(ii) If the owner or operator determines that it is unsafe to perform the seal gap measurements required in 40 CFR 60.113b(b) or to inspect the vessel to determine compliance with 40 CFR 60.113b(a) because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the owner or operator shall comply with the requirements in either §63.1063(c)(2)(iv)(A) or §63.1063(c)(2)(iv)(B) of subpart WW.

* * * * *

(9) * * *

(i) If the owner or operator determines that it is unsafe to perform the seal gap measurements required in 40 CFR 60.113a(a)(1) because the floating roof appears to be

structurally unsound and poses an imminent danger to inspecting personnel, the owner or operator shall comply with the requirements in either §63.1063(c)(2)(iv)(A) or §63.1063(c)(2)(iv)(B) of subpart WW.

* * * * *

(p) Overlap of subpart CC with other regulations for equipment leaks.

(1) After the compliance dates specified in paragraph (h) of this section, equipment leaks that are also subject to the provisions of 40 CFR parts 60 and 61 standards promulgated before September 4, 2007, are required to comply only with the provisions specified in this subpart.

(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.

* * * * *

4. Section 63.641 is amended by:

a. Adding, in alphabetical order, definitions for "Cooling tower," "Cooling tower return line," "Heat exchange system," and "Heat exchanger exit line"; and

b. Revising the definitions of "Continuous record" and "Reference control technology for storage vessels" to read as follows:

§63.641 Definitions.

* * * * *

Continuous record means documentation, either in hard copy or computer readable form, of data values measured at least once every hour and recorded at the frequency specified in §63.655(i).

* * * * *

Cooling tower means a heat removal device used to remove the heat absorbed in circulating cooling water systems by transferring the heat to the atmosphere using natural or mechanical draft.

Cooling tower return line means the main water trunk lines at the inlet to the cooling tower before exposure to the atmosphere.

* * * * *

Heat exchange system means a device or series of devices used to transfer heat from process fluids to water without intentional direct contact of the process fluid with the water (i.e., non-contact heat exchanger) and to transport and/or cool the water in a closed loop recirculation system (cooling tower system) or a once through system (e.g., river or pond water). A heat exchange system can include one or more heat exchangers, all water lines to and from the heat exchanger(s), and, for recirculating systems, the cooling tower or towers that receive

water from the heat exchanger(s).

Heat exchanger exit line means the cooling water line at the exit of the heat exchanger, where cooling water leaves the heat exchanger and is routed to the cooling tower return line.

* * * * *

Reference control technology for storage vessels means either:

(1) An internal floating roof meeting the specifications of §§63.1063(a)(1)(i), (a)(2), and (b) of subpart WW;

(2) An external floating roof meeting the specifications of §§63.1063(a)(1)(ii), (a)(2), and (b) of subpart WW;

(3) An external floating roof converted to an internal floating roof meeting the specifications of §§63.1063(a)(1)(ii), (a)(2), and (b); or

(4) A closed-vent system to a control device that reduces organic HAP emissions by 95 percent, or to an outlet concentration of 20 parts per million by volume (ppmv).

(5) For purposes of emissions averaging, these four technologies are considered equivalent.

* * * * *

5. Section 63.642 is amended by:

a. Revising paragraph (k)(1); and

b. Revising paragraph (l)(2) to read as follows:

§63.642 General standards.

* * * * *

(k) * * *

(1) The owner or operator using this compliance approach shall also comply with the requirements of §63.655 as applicable.

* * * * *

(1) * * *

(2) Comply with the requirements of §§63.652, 63.653, and 63.655, as applicable.

* * * * *

6. Section 63.644 is amended by:

- a. Revising paragraph (b) introductory text;
- b. Revising paragraph (c)(1);
- c. Revising paragraph (d); and
- d. Revising paragraph (e) to read as follows:

§63.644 Monitoring provisions for miscellaneous process vents.

* * * * *

(b) An owner or operator of a Group 1 miscellaneous process vent may request approval to monitor parameters other than those listed in paragraph (a) of this section. The request shall be submitted according to the procedures specified in §63.655(h). Approval shall be requested if the owner or operator:

* * * * *

(c) * * *

(1) Install, calibrate, maintain, and operate a flow indicator that determines whether a vent stream flow is present at least once every hour. Records shall be generated as specified in §63.655(h) and (i). The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or

* * * * *

(d) The owner or operator shall establish a range that ensures compliance with the emissions standard for each parameter monitored under paragraphs (a) and (b) of this section. In order to establish the range, the information required in §63.655(f)(3) shall be submitted in the Notification of Compliance Status report.

(e) Each owner or operator of a control device subject to the monitoring provisions of this section shall operate the control device in a manner consistent with the minimum and/or maximum operating parameter value or procedure required to be monitored under paragraphs (a) and (b) of this section. Operation of the control device in a manner that constitutes a period of excess emissions, as defined in §63.655(g)(6), or failure to perform procedures required by this section shall constitute a violation of the applicable emission standard of this subpart.

7. Section 63.645 is amended by revising paragraph (h)(2) to read as follows:

§63.645 Test methods and procedures for miscellaneous process vents.

* * * * *

(h) * * *

(2) Where the recalculated TOC emission rate is greater than 33 kilograms per day for an existing source or greater than 6.8 kilograms per day for a new source, the owner or operator shall submit a report as specified in §63.655(f), (g), or (h) and shall comply with the appropriate provisions in §63.643 by the dates specified in §63.640.

* * * * *

8. Section 63.646 is amended by:

- a. Revising paragraph (a);
- b. Revising paragraphs (b) introductory text and (b)(1);
- c. Revising paragraph (c);
- d. Revising paragraph (d);
- e. Revising paragraph (e);
- f. Revising paragraph (f);
- g. Revising paragraph (g); and
- h. Removing paragraphs (h) through (l) to read as follows:

§63.646 Storage vessel provisions.

(a) On and after the applicable compliance date for a

Group 1 storage vessel located at a new or existing source as specified in §63.640(h)(1)(ii) and (h)(4), the owner or operator of a Group 1 storage vessel that is part of a new or existing source shall comply with the requirements of subpart WW according to the requirements in paragraphs (b) through (g) of this section.

(b) As used in this section, all terms not defined in §63.641 shall have the meaning given them in 40 CFR part 63, subpart A or WW. The definitions of "Group 1 storage vessel" and "storage vessel" in §63.641 shall apply in lieu of the definition of "storage vessel" in §63.1061 of subpart WW.

(1) An owner or operator may use good engineering judgment or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

* * * * *

(c) For the purposes of this subpart, all references to "the proposal date for a referencing subpart" and "the proposal date of the referencing subpart" in subpart WW mean September 4, 2007.

(d) For the purposes of this subpart, all references to "10 years after promulgation of the referencing subpart" and "10 years after the promulgation date of the referencing subpart" in

subpart WW mean the date 10 years after publication of the final amendments in the FEDERAL REGISTER.

(e) Failure to perform inspections and monitoring required by this section shall constitute a violation of the applicable standard of this subpart.

(f) References in §63.1066(a) to initial startup notification requirements do not apply.

(g) References to the Periodic Reports in §63.1066(b) mean the Periodic Report required by §63.655(g).

9. Section 63.650 is amended by revising paragraph (a) to read as follows.

§63.650 Gasoline loading rack provisions.

(a) Except as provided in paragraphs (b) through (c) of this section, each owner or operator of a Group 1 gasoline loading rack classified under Standard Industrial Classification code 2911 located within a contiguous area and under common control with a petroleum refinery shall comply with subpart R, §§63.421, 63.422(a) through (c) and (e), 63.425(a) through (c) and (i), 63.425(e) through (h), 63.427(a) and (b), and 63.428(b), (c), (g)(1), (h)(1) through (3), and (k).

* * * * *

10. Section 63.651 is amended by revising paragraphs (a) and (c) to read as follows:

§63.651 Marine tank vessel loading operation provisions.

(a) Except as provided in paragraphs (b) through (d) of this section, each owner or operator of a marine tank vessel loading operation located at a petroleum refinery shall comply with the requirements of §§63.560 through 63.568.

* * * * *

(c) The notification reports under §63.567(b) are not required.

* * * * *

11. Section 63.652 is amended by:

- a. Revising paragraph (a);
- b. Revising paragraph (d)(2);
- c. Revising paragraph (e)(5);
- d. Revising the first sentence of paragraph (f)(3)

introductory text;

e. Revising the first sentence in paragraph (g)(5)(ii)(B)(1); and

- f. Revising paragraph (1)(1) to read as follows:

§63.652 Emissions averaging provisions.

(a) This section applies to owners or operators of existing sources who seek to comply with the emission standard in §63.642(g) by using emissions averaging according to §63.642(1) rather than following the provisions of §§63.643 through 63.647, and §§63.650 and 63.651. Existing marine tank vessel loading operations located at the Valdez Marine Terminal

source may not comply with the standard by using emissions averaging.

* * * * *

(d) * * *

(2) Group 1 emission points that are controlled by a reference control technology unless the reference control technology has been approved for use in a different manner and a higher nominal efficiency has been assigned according to the procedures in paragraph (i) of this section;

* * * * *

(e) * * *

(5) Record and report quarterly and annual credits and debits in the Periodic Reports as specified in §63.655(g)(8). Every fourth Periodic Report shall include a certification of compliance with the emissions averaging provisions as required by §63.655(g)(8)(iii).

(f) * * *

(3) For emission points for which continuous monitors are used, periods of excess emissions as defined in §63.655(g)(6)(i). * * *

* * * * *

(g) * * *

(5) * * *

(ii) * * *

(B) * * *

(1) The percent reduction for a control device shall be measured according to the procedures and test methods specified in §63.565(d) of subpart Y. * * *

* * * * *

(1) * * *

(1) The owner or operator shall notify the Administrator of excess emissions in the Periodic Reports as required in §63.655(g)(6).

* * * * *

12. Section 63.653 is amended by:

a. Revising paragraphs (a)(3)(i) and (a)(7);

b. Revising paragraph (b);

c. Revising paragraph (c); and

d. Revising paragraph (d) introductory text, paragraph (d)(2)(vii) introductory text, and paragraph (d)(2)(viii)(G) to read as follows:

§63.653 Monitoring, recordkeeping, and implementation plan for emissions averaging.

* * * * *

(a) * * *

(3) * * *

(i) Perform the monitoring or inspection procedures in §63.646 and §63.1063 of subpart WW; and

* * * * *

(7) If an emission point in an emissions average is controlled using a pollution prevention measure or a device or technique for which no monitoring parameters or inspection procedures are specified in §§63.643 through 63.647 and §§63.650 and 63.651, the owner or operator shall establish a site-specific monitoring parameter and shall submit the information specified in §63.655(h)(4) in the Implementation Plan.

(b) Records of all information required to calculate emission debits and credits and records required by §63.655 shall be retained for 5 years.

(c) Notifications of Compliance Status report, Periodic Reports, and other reports shall be submitted as required by §63.655.

(d) Each owner or operator of an existing source who elects to comply with §63.655(g) and (h) by using emissions averaging for any emission points shall submit an Implementation Plan.

* * * * *

(2) * * *

(vii) The information specified in §63.655(h)(4) for:

* * * * *

(viii) * * *

(G) For each pollution prevention measure, treatment

process, or control device used to reduce air emissions of organic HAP from wastewater and for which no monitoring parameters or inspection procedures are specified in §63.647, the information specified in §63.655(h)(4) shall be included in the Implementation Plan.

* * * * *

13. Sections 63.654 and 63.655 are redesignated as §§63.655 and 63.656.

14. Section 63.654 is added to read as follows:

§63.654 Heat exchange systems.

(a) Except as specified in paragraph (b) of this section, the owner or operator of a heat exchange system that meets the criteria in §63.640(c)(8) must comply with the requirements of paragraphs (c) through (g) of this section.

(b) A heat exchange system is exempt from the requirements in paragraphs (c) through (g) of this section if it meets any one of the criteria in paragraphs (b)(1) through (3) of this section.

(1) The heat exchange system operates with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

(2) The heat exchange system contains an intervening cooling fluid, containing less than 5 percent by weight of total HAP listed in Table 1 to this subpart, between the process and

the cooling water. This intervening fluid must serve to isolate the cooling water from the process fluid and must not be sent through a cooling tower or discharged. For purposes of this section, discharge does not include emptying for maintenance purposes.

(3) The heat exchange system cools process fluids that contain less than 5 percent by weight of total HAP listed in Table 1 to this subpart (i.e., the heat exchange system is not in organic HAP service as defined in this subpart).

(c) You must perform monthly monitoring to identify leaks of total strippable volatile organic compound (VOC) from each heat exchange system subject to the requirements of this subpart according to the procedures in paragraphs (c)(1) and (2) of this section.

(1) Collect and analyze a sample from each cooling tower return line prior to exposure to air for each heat exchanger system in organic HAP service or from each heat exchanger exit line for each heat exchanger in organic HAP service within that heat exchange system to determine the total strippable VOC concentration (as methane) from the air stripping testing system using "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources" Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring,

prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see §63.14).

(2) For a heat exchange system at an existing source, a leak is a total strippable VOC concentration (as methane) in the stripping gas of 6.2 ppmv or greater. For a heat exchange system at a new source, a leak is a total strippable VOC concentration (as methane) in the stripping gas of 3.1 ppmv or greater.

(d) If a leak is detected, you must repair the leak to reduce the measured concentration to below the applicable action level as soon as practicable, but no later than 45 days after identifying the leak, except as specified in paragraphs (e) and

(f). Actions that can be taken to achieve repair include but are not limited to:

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

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

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

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

or

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

(e) If you detect a leak when monitoring a cooling tower return line under paragraph (c)(1), you may conduct additional monitoring to identify leaks of total strippable VOC emissions using Modified El Paso method from each heat exchanger in organic HAP service associated with the heat exchange system for which the leak was detected. If the additional monitoring shows that the total strippable VOC concentration in the stripped air at the heat exchanger exit line for each heat exchanger in organic HAP service is less than 6.2 ppmv for existing sources or less than 3.1 ppmv for new sources, the heat exchange system is excluded from repair requirements in paragraph (d).

(f) You may delay the repair of a leaking heat exchanger when you meet one of the conditions in paragraphs (f)(1) through (3) of this section. You must determine if a delay of repair is necessary as soon as practicable, but no later than 45 days after first identifying the leak.

(1) If the repair is technically infeasible without a shutdown and the total strippable VOC concentration (as methane) is initially and remains less than 62 ppmv for all monthly monitoring periods during the delay of repair, you may delay repair until the next scheduled shutdown of the heat exchange system. If, during subsequent monthly monitoring, the total strippable VOC concentration (as methane) is 62 ppmv or greater, you must repair the leak within 30 days of the monitoring event

in which the leak was equal to or exceeded 62 ppmv total strippable VOC (as methane), except as provided in paragraph (f)(3) of this section.

(2) If the necessary equipment, parts, or personnel are not available and the total strippable VOC concentration (as methane) is initially and remains less than 62 ppmv for all monthly monitoring periods during the delay of repair, you may delay the repair for a maximum of 120 calendar days. You must demonstrate that the necessary equipment, parts, or personnel were not available. If, during subsequent monthly monitoring, the total strippable VOC concentration (as methane) is 62 ppmv or greater, you must repair the leak within 30 days of the monitoring event in which the leak was equal to or exceeded 62 ppmv total strippable VOC (as methane), except as provided in paragraph (f)(3) of this section, or the original 120 day delay of repair deadline, whichever occurs first.

(3) Prior to 3 years after the date of publication of the final amendments in the FEDERAL REGISTER, you may delay the repair of a heat exchanger for which the total strippable VOC concentration (as methane) is 62 ppmv or greater as provided in paragraphs (f)(3)(i) through (f)(3)(iii) of this section. On and after the date 3 years after publication of the final amendments in the FEDERAL REGISTER, you are not allowed to delay the repair of a heat exchanger for which the total strippable

VOC concentration (as methane) is 62 ppmv or greater.

(i) If the repair is technically infeasible without a shutdown and a shutdown of the unit is scheduled within 60 days of determining a delay of repair is necessary.

(ii) If the necessary equipment, parts, or personnel are not available, may delay the repair for a maximum of 120 calendar days.

(iii) If the repair is technically infeasible without a shutdown and a shutdown of the unit will cause more emissions than the delay of repair.

(g) To delay the repair under paragraph (f), you must record the information in paragraphs (g)(1) through (g)(4) of this section.

(1) The reason(s) for delaying repair.

(2) A schedule for completing the repair as soon as practical.

(3) The date and concentration of the leak as first identified and the results of all subsequent monthly monitoring events during the delay of repair.

(4) An estimate of the potential emissions from the leaking heat exchange system or heat exchanger following the procedures in paragraphs (g)(4)(i) and (g)(4)(ii) of this section.

(i) Determine the total strippable VOC concentration in

the cooling water, in parts per million by weight (ppmw), using equation 7-1 from Modified El Paso method (incorporated by reference in §63.14), based on the total strippable concentration in the stripped air, ppmv, from monitoring.

(ii) Calculate the VOC emissions for the leaking heat exchange system or heat exchanger by multiplying the VOC concentration in the cooling water, ppmw, by the flow rate of the cooling water from the leaking tower or heat exchanger and by the expected duration of the delay.

15. Newly redesignated §63.655 is amended by:

- a. Revising the first sentence of paragraph (b);
- b. Revising the first sentence of paragraph (c);
- c. Revising paragraph (f)(1) introductory text and adding paragraph (f)(1)(vi);
- d. Revising paragraph (g) introductory text, and paragraphs (g)(1), (g)(2), (g)(3), (g)(5), and (g)(8)(ii)(C);
- e. Adding paragraph (g)(9);
- f. Revising the first sentence in paragraph (h)(2)(i)(B) and revising paragraph (h)(2)(ii);
- g. Revising paragraph (i)(1);
- h. Redesignating existing paragraph (i)(4) as (i)(5); and
- i. Adding paragraph (i)(4) to read as follows.

§63.655 Reporting and recordkeeping requirements.

* * * * *

(b) Each owner or operator subject to the gasoline loading rack provisions in §63.650 shall comply with the recordkeeping and reporting provisions in §63.428 (b) and (c), (g)(1), (h)(1) through (h)(3), and (k) of subpart R. * * *

(c) Each owner or operator subject to the marine tank vessel loading operation standards in §63.651 shall comply with the recordkeeping and reporting provisions in §63.567(a) and §63.567(c) through (k) of subpart Y. * * *

* * * * *

(f) * * *

(1) The Notification of Compliance Status report shall include the information specified in paragraphs (f)(1)(i) through (f)(1)(vi) of this section.

* * * * *

(vi) For each heat exchange system, identification of the heat exchange systems that are subject to the requirements of this subpart.

* * * * *

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

Compliance Status report is required to be submitted. A Periodic Report is not required if none of the compliance exceptions identified in paragraph (g)(1) through (6) of this section or paragraph (g)(9) of this section occurred during the 6-month period unless emissions averaging is utilized.

Quarterly reports must be submitted for emission points included in emission averages, as provided in paragraph (g)(8) of this section. An owner or operator may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs (g)(1) through (9) of this section.

(1) For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph (g)(2) through (g)(5) of this section.

(2) An owner or operator who elects to comply with §63.646 by using a fixed roof and an internal floating roof or by using an external floating roof converted to an internal floating roof shall submit the results of each inspection conducted in accordance with §63.1063(c)(1), (d)(1), and (d)(2) of subpart WW in which a failure is detected in the control equipment. For vessels for which inspections are required under §63.1063(c) and (d), the specifications and requirements listed in paragraphs (g)(2)(i) through (g)(2)(iii) of this section apply.

(i) A failure is defined in §63.1063(d)(1) of subpart WW.

(ii) Each Periodic Report shall include a copy of the inspection record required by §63.1065(b) of subpart WW when a failure occurs.

(iii) An owner or operator who elects to use an extension in accordance with §63.1063(e)(2) of subpart WW shall, in the next Periodic Report, submit the documentation required by §63.1063(e)(2).

(3) An owner or operator who elects to comply with §63.646(a) through (1) by using an external floating roof shall meet the periodic reporting requirements specified in paragraphs (g)(3)(i) and (g)(3)(ii) of this section.

(i) For vessels for which inspections are required under §63.1063(c)(2), (d)(1), and (d)(3) of subpart WW, the owner or operator shall submit, as part of the Periodic Report, a copy of the inspection record required by §63.1065(b) of subpart WW when a failure occurs. A failure is defined in §63.1063(d)(1).

(ii) An owner or operator who elects to use an extension in accordance with §63.1063(e)(2) or §63.1063(c)(2)(iv)(B) of subpart WW shall, in the next Periodic Report, submit the documentation required by those paragraphs.

* * * * *

(5) An owner or operator who elects to comply with §63.646 by installing a closed vent system and other alternate control

device as described in §63.1064 of subpart WW shall submit, as part of the next Periodic Report, a written application as described in §63.1066(b)(3) of subpart WW.

* * * * *

(8) * * *

(ii) * * *

(C) The information required to be reported by §§63.567(e)(4) and 63.567(j)(3) of subpart Y for each marine tank vessel loading operation included in an emissions average, unless the information has already been submitted in a separate report;

* * * * *

(9) For heat exchange systems, Periodic Reports must include the following information:

(i) The number of heat exchange systems in HAP service.

(ii) The number of heat exchange systems in HAP service found to be leaking.

(iii) A summary of the monitoring data that indicate a leak, including the number of leaks determined to be equal to or greater than the leak definitions specified in §63.654(c)(2);

(iv) If applicable, the date a leak was identified, the date the source of the leak was identified, and the date of repair;

(v) If applicable, a summary of the reason for delayed

repair of any leak and the date of repair; and

(vi) Estimate of VOC emissions for delay of repair.

* * * * *

(h) * * *

(2) * * *

(i) * * *

(B) Except as provided in paragraph (h)(2)(i)(C) of this section, if the internal inspection required by §63.1063(d)(1) of subpart WW is not planned and the owner or operator could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the owner or operator shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. * * *

* * * * *

(ii) In order to afford the Administrator the opportunity to have an observer present, the owner or operator of a storage vessel equipped with an external floating roof shall notify the Administrator of any seal gap measurements. The notification shall be made in writing at least 30 calendar days in advance of any gap measurements required by §63.1062(d)(3) of subpart WW. The State or local permitting authority can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

* * * * *

(i) * * *

(1) Each owner or operator subject to the storage vessel provisions in §63.646 shall keep records as specified in paragraphs (i)(1)(i) and (i)(1)(ii) of this section.

(i) Each owner or operator of a Group 1 storage vessel subject to the provisions in §63.646 shall keep the records specified in §63.1065 of subpart WW.

(ii) Each owner or operator of a Group 2 storage vessel shall keep the records specified in §63.1065(a) of subpart WW. If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources or 2 percent for new sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

* * * * *

(4) The owner or operator of a heat exchange system subject to the monitoring requirements in §63.654 shall comply with the recordkeeping requirements in paragraphs (i)(4)(i) through (vi) of this section.

(i) Identification of all heat exchangers at the facility and the average annual HAP concentration and the range of HAP concentrations of process fluid or intervening cooling fluid described in §63.654(c).

(ii) Identification of all heat exchange systems that are

in organic HAP service. For each heat exchange system that is subject to this subpart, this must include identification of all heat exchangers within each heat exchange system, identification of the individual heat exchangers in organic HAP service within each heat exchange system, and the cooling tower included in each heat exchange system.

(iii) Results of the following monitoring data for each monthly monitoring event:

(A) Date/time of event.

(B) Barometric pressure.

(C) El Paso air stripping apparatus water flow (ml/min) and air flow, ml/min, and air temperature, °C.

(D) FID reading (ppmv).

(E) Heat exchange exit line flow or cooling tower return line flow, gal/min.

(F) Calibration information identified in Section 5.4.2 of the Modified El Paso Method, incorporated by reference in §63.14(n).

(iv) The date when a leak was identified and the date when the heat exchanger was repaired or taken out of service.

(vi) If a repair is delayed, the reason for the delay, the schedule for completing the repair, and the estimate of potential emissions for the delay of repair.

* * * * *

16. Newly redesignated §63.656 is amended by revising the first sentence of paragraph (c)(1) to read as follows:

§63.656 Implementation and enforcement.

* * * * *

(c) * * *

(1) Approval of alternatives to the requirements in §§63.640, 63.642(g) through (l), 63.643, 63.646 through 63.652, and 63.654. * * *

* * * * *

Appendix to Subpart CC of Part 63—Tables [AMENDED]

17. Table 1 of the appendix to subpart CC is revised to read as follows:

Table 1 to Subpart CC of Part 63—Hazardous Air Pollutants

Chemical name	CAS No. ^a
Benzene	71432
Biphenyl	92524
Butadiene (1,3)	10990
Carbon disulfide	75150
Carbonyl sulfide	463581
Cresol (mixed isomers ^b)	1319773
Cresol (m-)	108394
Cresol (o-)	95487
Cresol (p-)	106445

Cumene	98828
Dibromoethane (1,2) (ethylene dibromide)	106934
Dichloroethane (1,2)	107062
Diethanolamine	111422
Ethylbenzene	100414
Ethylene glycol	107211
Hexane	110543
Methanol	67561
Methyl isobutyl ketone (hexone)	108101
Methyl tert butyl ether	1634044
Naphthalene	91203
Phenol	108952
Toluene	108883
Trimethylpentane (2,2,4)	540841
Xylene (mixed isomers ^b)	1330207
xylene (m-)	108383
xylene (o-)	95476
xylene (p-)	106423

^a CAS number = Chemical Abstract Service registry number assigned to specific compounds, isomers, or mixtures of compounds.

^b Isomer means all structural arrangements for the same number of atoms of each element and does not mean salts, esters, or derivatives.

18. Table 4 of the appendix to subpart CC is revised to read as follows:

Table 4 to Subpart CC of Part 63—Gasoline Distribution Emission Point Recordkeeping and Reporting Requirements^a

Reference (section of subpart Y)	Description	Comment
63.428(b) or (k)	Records of test results for each gasoline cargo tank loaded at the facility.	
63.428(c)	Continuous monitoring data recordkeeping requirements.	
63.428(g)(1)	Semiannual report loading rack information	Required to be submitted with the Periodic Report required under 40 CFR part 63, subpart CC.
63.428 (h)(1) through (h)(3)	Excess emissions report loading rack information	Required to be submitted with the Periodic Report required under 40 CFR part 63, subpart CC.

^a This table does not include all the requirements delineated under the referenced sections. See referenced sections for specific requirements.

19. Table 5 of the appendix to subpart CC is revised to read as follows:

Table 5 to Subpart CC of Part 63—Marine Vessel Loading and Unloading Operations Recordkeeping and Reporting Requirements^a

Reference (section of subpart Y)	Description	Comment
63.562(e)(2)	Operation and maintenance plan for control equipment and monitoring equipment	

63.565(a)	Performance test/site test plan	The information required under this paragraph is to be submitted with the Notification of Compliance Status report required under 40 CFR part 63, subpart CC.
63.565(b)	Performance test data requirements	
63.567(a)	General Provisions (subpart A) applicability	
63.567(c)	Request for extension of compliance	
63.567(d)	Flare recordkeeping requirements	
63.567(e)	Summary report and excess emissions and monitoring system performance report requirements	The information required under this paragraph is to be submitted with the Periodic Report required under 40 CFR part 63, subpart CC.
63.567(f)	Vapor collection system engineering report	
63.567(g)	Vent system valve bypass recordkeeping requirements	
63.567(h)	Marine vessel vapor-tightness documentation	
63.567(i)	Documentation file maintenance	
63.567(j)	Emission estimation reporting and recordkeeping procedures	

^a This table does not include all the requirements delineated under the referenced sections. See referenced sections for specific requirements.

20. Table 6 of the appendix to subpart CC is revised to read as follows:

**Table 6 to Subpart CC of Part 63—General Provisions
Applicability to Subpart CC^a**

Reference	Applies to subpart CC	Comment
63.1(a)(1)	Yes	
63.1(a)(2)	Yes	
63.1(a)(3)	Yes	
63.1(a)(4)	Yes	
63.1(a)(5)	No	Reserved.
63.1(a)(6)	Yes	Except the correct mail drop (MD) number is C404-04
63.1(a)(7)- 63.1(a)(9)	No	Reserved.
63.1(a)(10)	Yes	
63.1(a)(11)	Yes	
63.1(a)(12)	Yes	
63.1(b)(1)	Yes	Except subpart CC specifies pollutants subject to the rule are listed in Table 1.
63.1(b)(2)	No	Reserved.
63.1(b)(3)	Yes	
63.1(c)(1)	Yes	
63.1(c)(2)	Yes	Except area sources are not subject to subpart CC and are not required to obtain a title V permit solely for subpart CC.
63.1(c)(3)- 63.1(c)(4)	No	Reserved.
63.1(c)(5)	Yes	Except that sources are not required to submit notifications overridden by this table.
63.1(d)	No	Reserved.
63.1(e)	No	No CAA section 112(j) standard applies to the affected sources under subpart CC.
63.2	Yes	§63.641 of subpart CC specifies that if the same term is defined in subparts A and CC, it shall have the meaning given in subpart CC.
63.3	Yes	
63.4(a)(1)- 63.4(a)(2)	Yes	

63.4(a)(3)- 63.4(a)(5)	No	Reserved.
63.4(b)	Yes	
63.4(c)	Yes	
63.5(a)	Yes	
63.5(b)(1)	Yes	
63.5(b)(2)	No	Reserved.
63.5(b)(3)	Yes	
63.5(b)(4)	Yes	Except the cross-reference to §63.9(b) is changed to §63.9(b)(4) and (5). Subpart CC overrides §63.9(b)(2).
63.5(b)(5)	No	Reserved.
63.5(b)(6)	Yes	
63.5(c)	No	Reserved.
63.5(d)	Yes	Except that the application in §63.5(d)(1)(i) shall be submitted as soon as practicable before startup, but no later than 90 days after the promulgation date of subpart CC if the construction or reconstruction had commenced and initial startup had not occurred before the promulgation of subpart CC.
63.5(e)	Yes	
63.5(f)	Yes	
63.6(a)	Yes	
63.6(b)(1)- 63.6(b)(5)	No	Subpart CC specifies compliance dates and notifications for sources subject to subpart CC.
63.6(b)(6)	No	Reserved.
63.6(b)(7)	Yes	
63.6(c)(1)- 63.6(c)(2)	No	§63.640 of subpart CC specifies the compliance date.
63.6(c)(3)- 63.6(c)(4)	No	Reserved.
63.6(c)(5)	Yes	
63.6(d)	No	Reserved.
63.6(e)(1)	Yes	Except the startup, shutdown, or malfunction plan does not apply to Group 2 emission points that are not part of an emissions averaging group. ^b
63.6(e)(2)	No	Reserved.

63.6(e)(3)(i)	Yes	Except the startup, shutdown, or malfunction plan does not apply to Group 2 emission points that are not part of an emissions averaging group. ^b
63.6(e)(3)(ii)	No	Reserved.
63.6(e)(3)(iii)- 63.6(e)(3)(ix)	Yes	Except the reports specified in §63.6(e)(3)(iv) do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report.
63.6(f)	Yes	Except the phrase "as specified in §63.7(c)" in §63.6(f)(2)(iii)(D) does not apply because subpart CC does not require a site-specific test plan.
63.6(g)	Yes	
63.6(h)(1) and 63.6(h)(2)	Yes	Except subparagraph §63.6(h)(2)(ii), which is reserved.
63.6(h)(3)	No	Reserved.
63.6(h)(4)	No	Notification of visible emission test not required in subpart CC.
63.6(h)(5)	No	Visible emission requirements and timing is specified in §63.645(i) of subpart CC
63.6(h)(6)	Yes	
63.6(h)(7)	No	Subpart CC does not require opacity standards.
63.6(h)(8)	Yes	
63.6(h)(9)	No	Subpart CC does not require opacity standards.
63.6(i)	Yes	Except for §63.6(i)(15), which is reserved.
63.6(j)	Yes	
63.7(a)(1)	Yes	
63.7(a)(2)	Yes	Except test results must be submitted in the Notification of Compliance Status report due 150 days after compliance date, as specified in §63.655(f) of subpart CC.
63.7(a)(3)	Yes	
63.7(a)(4)	Yes	
63.7(b)	No	Subpart CC requires notification of performance test at least 30 days (rather than 60 days) prior to the performance test.

63.7(c)	No	Subpart CC does not require a site-specific test plan.
63.7(d)	Yes	
63.7(e)(1)	Yes	Except the performance test must be conducted at the maximum representative capacity as specified in §63.642(d)(3) of subpart CC.
63.7(e)(2)- 63.7(e)(4)	Yes	
63.7(f)	No	Subpart CC specifies applicable methods and provides alternatives without additional notification or approval.
63.7(g)	No	Performance test reporting specified in §63.655(f).
63.7(h)(1)	Yes	
63.7(h)(2)	Yes	
63.7(h)(3)	Yes	Yes, except site-specific test plans shall not be required, and where §63.7(g)(3) specifies submittal by the date the site-specific test plan is due, the date shall be 90 days prior to the Notification of Compliance Status report in §63.655(f).
63.7(h)(4)(i)	Yes	
63.7(h)(4)(ii)	No	Site-specific test plans are not required in subpart CC
63.7(h)(4)(iii) and (iv)	Yes	
63.7(h)(5)	Yes	
63.8(a)	Yes	Except §63.8(a)(3), which is reserved.
63.8(b)	Yes	
63.8(c)(1)	Yes	
63.8(c)(2)	Yes	
63.8(c)(3)	Yes	Except that verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment would monitor accurately.

63.8(c)(4)	No	Subpart CC specifies monitoring frequency in §63.655(i)(3) of subpart CC.
63.8(c)(5)- 63.8(c)(8)	No	
63.8(d)	No	
63.8(e)	No	Subpart CC does not require performance evaluations; however, this shall not abrogate the Administrator's authority to require performance evaluation under section 114 of the Clean Air Act.
63.8(f)(1)	Yes	
63.8(f)(2)	Yes	
63.8(f)(3)	Yes	
63.8(f)(4)(i)	No	Timeframe for submitting request is specified in §63.655(h)(5)(i) of subpart CC.
63.8(f)(4)(ii)	Yes	
63.8(f)(4)(iii)	No	Timeframe for submitting request is specified in §63.655(h)(5)(i) of subpart CC.
63.8(f)(5)	Yes	
63.8(f)(6)	No	Subpart CC does not require continuous emission monitors.
63.8(g)	No	Subpart CC specifies data reduction procedures in §63.655(i)(3).
63.9(a)	Yes	Except that the owner or operator does not need to send a copy of each notification submitted to the Regional Office of the EPA as stated in §63.9(a)(4)(ii).
63.9(b)(1)	Yes	Except the notification of compliance status report specified in §63.655(f) of subpart CC may also serve as the initial compliance notification required in §63.9(b)(1)(iii).
63.9(b)(2)	No	A separate Initial Notification report is not required under subpart CC.
63.9(b)(3)	No	Reserved.
63.9(b)(4)	Yes	Except for subparagraphs §63.9(b)(4)(ii) through (iv), which are reserved.
63.9(b)(5)	Yes	
63.9(c)	Yes	

63.9(d)	Yes	
63.9(e)	No	Subpart CC requires notification of performance test at least 30 days (rather than 60 days) prior to the performance test and does not require a site-specific test plan.
63.9(f)	No	Subpart CC does not require advanced notification of visible emissions test.
63.9(g)	No	
63.9(h)	No	Subpart CC §63.655(f) specifies Notification of Compliance Status report requirements.
63.9(i)	Yes	
63.9(j)	No	
63.10(a)	Yes	
63.10(b)(1)	No	§63.644(d) of subpart CC specifies record retention requirements.
63.10(b)(2)(i)	Yes	
63.10(b)(2)(ii)	Yes	
63.10(b)(2)(iii)	No	
63.10(b)(2)(iv)	Yes	
63.10(b)(2)(v)	Yes	
63.10(b)(2)(vi)	Yes	
63.10(b)(2)(vii)	No	
63.10(b)(2)(viii)	Yes	
63.10(b)(2)(ix)	Yes	
63.10(b)(2)(x)	Yes	
63.10(b)(2)(xi)	No	
63.10(b)(2)(xii)	Yes	
63.10(b)(2)(xiii)	No	
63.10(b)(2)(xiv)	Yes	
63.10(b)(3)	Yes	
63.10(c)(1)- 63.10(c)(6)	No	
63.10(c)(7) and 63.10(c)(8)	Yes	
63.10(c)(9)- 63.10(c)(15)	No	
63.10(d)(1)	Yes	
63.10(d)(2)	No	§63.655(f) of subpart CC specifies performance test reporting.

63.10(d)(3)	No	Results of visible emissions test are included in Compliance Status Report as specified in §63.655(f)
63.10(d)(4)	Yes	
63.10(d)(5)(i)	Yes ^b	Except that reports required by §63.10(d)(5)(i) may be submitted at the same time as periodic reports specified in §63.655(g) of subpart CC.
63.10(d)(5)(ii)	Yes	Except that actions taken during a startup, shutdown, or malfunction that are not consistent with the startup, shutdown, and malfunction plan and that cause the source to exceed any applicable emission limitation do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report.
63.10(e)	No	
63.10(f)	Yes	
63.11-63.16	Yes	

^a Wherever subpart A specifies "postmark" dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

^b The plan, and any records or reports of startup, shutdown, and malfunction do not apply to Group 2 emission points that are not part of an emissions averaging group.

21. Table 10 of the appendix to subpart CC is amended by revising footnotes d, f, and g to read as follows:

Table 10 to Subpart CC of Part 63—Miscellaneous Process Vents—Monitoring, Recordkeeping, and Reporting Requirements for Complying with 98 Weight-Percent Reduction of Total Organic HAP Emissions or a Limit of 20 Parts Per Million by Volume

* * * * *

^d NCS = Notification of Compliance Status Report described in §63.655.

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^f When a period of excess emission is caused by insufficient monitoring data, as described in §63.655(g)(6)(i)(C) or (D), the duration of the period when monitoring data were not collected shall be included in the Periodic Report.

^g PR = Periodic Reports described in §63.655(g).

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