not alter the relationship or the distribution of power and responsibilities established in the CAA. This rule also is not subject to Executive Order 13045 ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), because it is not economically significant. In addition, this rule does not involve technical standards, thus the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule also does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: June 3, 2013.

A. Stanley Meiburg,

Acting Regional Administrator, Region 4.

40 CFR part 52 is corrected by making the following correcting amendments:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

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

Subpart K—Florida

§ 52.520 [Amended]

■ 2. Section 52.520(c) is amended under Chapter 62–297 by removing the entries for ''62–297.411'', ''62–297.412'', ''62–297.413'', ''62–297.415'', ''62–297.416'', ''62–297.417'' and ''62–297.423''.

[FR Doc. 2013–14509 Filed 6–19–13; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2003–0146; FRL–9751–4]

RIN 2060–AP84

National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action amends the national emission standards for hazardous air pollutants for heat exchange systems at petroleum refineries. The amendments address issues raised in a petition for reconsideration of the EPA's final rule setting maximum achievable control technology rules for these systems and also provides additional clarity and regulatory flexibility with regard to that rule. This action does not change the level of environmental protection provided under those standards. The final amendments do not add any new cost burdens to the refining industry and may result in cost savings by establishing an additional monitoring option that sources may use in lieu of the monitoring provided in the original standard.

DATES: The final amendments are effective on June 20, 2013. The incorporation by reference of certain publications listed in the final rule amendments is approved by the Director of the Federal Register as of June 20, 2013.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2003–0146. All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, *e.g.,* confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in *www.regulations.gov* or in hard copy at the EPA Docket Center, National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries, EPA West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: Ms. Brenda Shine, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, Refining and Chemicals Group (E143–01), Environmental Protection Agency, Research Triangle Park, NC 27711, telephone number: (919) 541–3608; fax number: (919) 541–0246; email address: *shine.brenda@epa.gov.*

SUPPLEMENTARY INFORMATION: The information in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

The regulated category and entities potentially affected by this final action include:

Category	NAICS [1] Code	Examples of regulated entities
Industry	324110	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 this final rule. To determine whether your facility is regulated by this action, you should carefully examine the applicability criteria in 40 CFR 63.640 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 the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

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

In addition to being available in the docket, an electronic copy of this final action is available on the Worldwide Web (WWW) through the Technology Transfer Network (TTN). Following signature, a copy of this final action will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at *http://www.epa.gov/ttn/oarpg/*. The TTN provides information and technology exchange in various areas of air pollution control.

The EPA has created a redline document comparing the existing regulatory text of 40 CFR Part 63, subpart CC and the final amendments to aid the public's ability to understand the changes to the regulatory text. This document has been placed in the docket for this rulemaking (Docket ID No. EPA–HQ–OAR–2003–0146).

C. Judicial Review

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of this final rule is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by August 19, 2013. Under section 307(d)(7)(B) of the CAA, the requirements established by these final rules may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce these requirements.

Section 307(d)(7)(B) of the CAA further provides that ''[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review.'' This section also provides a mechanism for us to convene a proceeding for reconsideration, ''[i]f the person raising an objection can demonstrate to the EPA that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule.'' Any person seeking to make such a demonstration to us should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, Ariel Rios Building, 1200 Pennsylvania Ave. NW., Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW., Washington, DC 20460.

II. Background Information

A. Executive Summary

1. Purpose of the Regulatory Action

This action finalizes amendments that were proposed on January 6, 2012, to address reconsideration issues related to the maximum achievable control technology standards (MACT) for heat exchange systems we promulgated on October 28, 2009. This action also finalizes additional amendments intended to clarify rule provisions and to provide additional flexibility.

2. Summary of Major Provisions

We are finalizing three significant revisions to the standards for heat exchange systems that were promulgated on October 28, 2009. First, we are revising the regulations to include an alternative monitoring option for heat exchange systems that would allow owners and operators at existing sources to monitor quarterly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 3.1 parts per million by volume (ppmv); the current regulations (40 CFR 63.654) provide only one monitoring option, which requires monitoring monthly at a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 6.2 ppmv. We performed modeling of the monitoring alternative and the modeling indicates that quarterly monitoring at the lower leak action level provides equivalent emission reductions to monthly monitoring at the higher leak action level in the existing regulations. These amendments also include specific recordkeeping and reporting requirements for owners and operators electing to use the alternative monitoring frequency.

The second significant amendment is the revision to the definition of heat exchange system to improve clarity regarding applicability of the monitoring and repair provisions for individual heat exchangers within the heat exchange system.

The third significant revision is an amendment to the monitoring requirements for once-through cooling systems to allow monitoring at an aggregated location for once-through cooling water heat exchange systems, provided that the combined cooling water flow rate at the monitoring location does not exceed 40,000 gallons per minute.

These final amendments do not include the proposed cross-referencing of the Uniform Standards for Heat Exchange Systems (40 CFR Part 65, subpart L). These final amendments also do not include the use of direct water sampling methods that were proposed as alternatives to using the ''Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources'' (Modified El Paso Method), Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, January 31, 2003 (incorporated by reference—see § 63.14) within the Uniform Standards for Heat Exchange Systems. The EPA concluded that the alternative as proposed was not feasible for petroleum refineries and that alternatives suggested during the comment period were not equivalent.

3. Costs and Benefits

The actions we are taking will have no cost, environmental, energy or economic impacts beyond those impacts presented in the October 2009 final rule for heat exchange systems at petroleum

refineries and may result in a cost savings for refiners who select the proposed alternative monitoring frequency. For sources that choose the quarterly monitoring alternative, the cost is projected to be less than the cost of the monthly monitoring requirement in the October 2009 final rule, while achieving the same environmental impacts. Similarly, sources that choose to monitor at an aggregated location, for the small number of refineries that operate once-through systems, will have reduced monitoring costs. The clarifications and other changes we are proposing in response to reconsideration are cost-neutral.

B. Background of the Refinery NESHAP

Section 112 of the CAA establishes a regulatory process to address emissions of hazardous air pollutants (HAP) from stationary sources. After the EPA has identified categories of sources emitting one or more of the HAP listed in section 112(b) of the CAA, section 112(d) calls for us to promulgate national emission standards for hazardous air pollutants (NESHAP) for those sources. For ''major sources'' that emit or have the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year, these technology-based standards must reflect the maximum reductions of HAP achievable (after considering cost, energy requirements and non-air quality health and environmental impacts) and are commonly referred to as MACT standards.

For MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as floor requirements. See CAA section 112(d)(3). Specifically, for new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT, we must also consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts and energy requirements.

We published the first set of MACT standards for petroleum refineries (40 CFR Part 63, subpart CC) on August 18, 1995 (60 FR 43620). These standards are commonly referred to as the ''Refinery MACT 1'' standards because certain process vents were excluded from this source category and subsequently regulated under a second MACT standard specific to these petroleum refinery process vents (40 CFR Part 63, subpart UUU, referred to as ''Refinery MACT 2'').

We issued an initial proposed rule to include requirements for heat exchange systems for the petroleum refineries subject to the Refinery MACT 1 on September 4, 2007, and held a public hearing in Houston, Texas, on November 27, 2007. In response to public comments on the initial proposal, we collected additional information and revised our analysis of the MACT floor. Based on the results of these additional analyses, we issued a supplemental proposal on November 10, 2008, that proposed a new MACT floor for heat exchange systems. A public hearing for the supplemental proposal was held in Research Triangle Park, North Carolina, on November 25, 2008. We took final action to establish standards for heat exchange systems in the Refinery MACT 1 standards (40 CFR Part 63, subpart CC) on October 28, 2009.

On December 23, 2009, the American Petroleum Institute (API) requested an administrative reconsideration under CAA section 307(d)(7)(B) of certain provisions of 40 CFR Part 63, subpart CC that they had identified in an April 7, 2009, letter to the EPA. On January 6, 2012, we issued a proposed rule addressing the issues in the reconsideration petition and proposed amendments to 40 CFR Part 63, subpart CC. As part of the January 6, 2012, proposal, we also proposed Uniform Standards for Heat Exchange Systems (40 CFR Part 65, subpart L), which included the same substantive provisions for heat exchange systems that were in the October 2009 Refinery MACT 1 final standards (40 CFR Part 63, subpart CC). We proposed to remove from the Refinery MACT 1 standards most of the substantive provisions addressing heat exchange systems and to cross-reference the Uniform Standards from Refinery MACT 1.

III. Summary of Final Amendments to NESHAP for Petroleum Refineries and Changes Since Proposal

As described in section II.B. of this preamble, we proposed, on January 6, 2012, Uniform Standards for Heat Exchange Systems as 40 CFR Part 65, subpart L and amendments to Refinery MACT 1 (40 CFR Part 63, subpart CC). We are not finalizing the Uniform Standards for Heat Exchange Systems at this time because we are still evaluating comments received on the March 26, 2012, proposed Uniform Standards for storage vessels, equipment leaks and closed vent system and control devices (see 77 FR 17898). We believe it is appropriate to consider all the comments received on the Uniform Standards proposed rules together, particularly since some of the comments received on the March 26, 2012, proposal relate to the overall concept and implementation of Uniform Standards across multiple industry categories. We are retaining in Refinery MACT 1 the substantive requirements for heat exchange systems. However, we are revising Refinery MACT 1 to incorporate many of the substantive changes in the work practice standards for heat exchange systems at petroleum refineries included in the Uniform Standards as part of the January 6, 2012, proposal.

First, we are amending the definition of ''heat exchange system'' based on the proposed clarification of the definition and the public comments received. As proposed, we are replacing ''series of devices'' with ''collection of devices.'' In response to comments, we also are amending the definition of ''heat exchange system'' to improve clarity regarding the applicability of the monitoring and repair requirements for individual heat exchangers within the heat exchange system. Specifically, we are revising the definition of ''heat exchange system'' to focus on heat exchangers (and not sample coolers) that are in organic HAP service and that are associated with a petroleum refinery process unit. Therefore, we are finalizing the definition of ''heat exchange system'' to mean a device or collection 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). For closed-loop recirculation systems, the heat exchange system consists of a cooling tower, all petroleum refinery process unit heat exchangers that are in organic HAP service (as defined in this subpart) serviced by that cooling tower, and all water lines to and from these petroleum refinery process unit heat exchangers. For once-through systems, the heat exchange system consists of all heat

exchangers that are in organic HAP service (as defined in this subpart) servicing an individual petroleum refinery process unit and all water lines to and from these heat exchangers. Sample coolers or pump seal coolers are not considered heat exchangers for the purpose of this definition and are not part of the heat exchange system. Intentional direct contact with process fluids results in the formation of a wastewater.

In the January 2012 proposal, we included clarifications of the sampling requirements and leak action level for once-through heat exchange systems when determining strippable hydrocarbon concentrations for the inlet water stream. We are finalizing these clarifications as proposed. After considering public comments, we are also revising the sampling requirement for once-through systems to allow monitoring at an aggregated location for once-through heat exchange systems, provided that the combined cooling water flow rate at the monitoring location does not exceed 40,000 gallons per minute.

In the January 2012 proposal, we also proposed a direct water sampling and analysis option as an alternative to using the ''Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources'' (Modified El Paso Method), Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, January 31, 2003 (incorporated by reference—see § 63.14), as well as amendments to the recordkeeping and reporting requirements when this alternative is elected. After considering public comments, we are not revising Refinery MACT 1 to include this alternative.

In the January 2012 proposal, we included an alternative monitoring frequency for heat exchange systems at existing sources. This monitoring frequency is quarterly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 3.1 ppmv; the only monitoring frequency in existing Refinery MACT 1 is monthly at a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 6.2 ppmv. We are revising Refinery MACT 1 to include the alternative monitoring frequency, as proposed.

We proposed a clarification that the water flow rate could be determined based on direct measurement, pump curves, heat balance calculations or other engineering methods. We are finalizing this clarification as proposed. We also proposed clarifications to the applicability dates for heat exchange systems at new sources. We are finalizing these clarifications as proposed.

The proposed Uniform Standards at 40 CFR 65.610(b) contained three exemptions: one based on pressure differential, one based on not being ''in regulated material service,'' and one based on size (targeted to exclude sample coolers). As previously noted, we are not finalizing the Uniform Standards or the cross-references to those Uniform Standards from Refinery MACT 1. The corresponding section in Refinery MACT 1 (40 CFR 63.654, Subpart CC) that we are finalizing in today's action contains only two exemptions: one based on pressure differential and one for intervening fluid. The exemptions for ''in HAP service'' and small heat exchangers are not needed based on the revised definition of ''heat exchange system.'' These heat exchangers are not part of the affected heat exchange system as that term is defined in these final amendments.

We are finalizing several technical and clarifying corrections in response to issues identified by public commenters. One of these amendments is in response to a commenter's request for clarity on how delay of repair emissions are to be calculated and for confirmation that the emissions should be estimated for the period of time that the delay of repair occurred. The October 2009 standards required the calculation of emissions projected for the ''expected duration of delay'' using the monitored leak concentration. As the heat exchange system for which repair is delayed must be monitored monthly, we interpret the rule to require a monthly estimate of the emissions projected for the duration of the delay of repair. However, the reporting requirement is an estimate of the emissions that occur as a result of delayed repairs over the reporting period. As such, the owner or operator must actually calculate the emissions projected over each monitoring interval and sum these estimates for the period covered by the semi-annual report. Therefore, in order to better align the calculation, recordkeeping and reporting requirements, we have revised the requirement to develop a monthly emission estimate for ''the duration of the expected delay of repair'' to require calculation of emissions projected for ''each monitoring interval.'' We also revised the recordkeeping requirements to keep records of these ''monitoring interval'' emission estimates, which can be directly used to develop the emission estimates required in the semi-annual reports. We are also clarifying that the delay begins on the date the leak would have had to be repaired had the repair not been delayed. We are revising the recordkeeping requirement for the ''identification of all heat exchangers at the facility'' to instead require records for ''identification of all petroleum refinery process unit heat exchangers at the facility'' commensurate with our revision of the definition of ''heat exchange system'' and our desire to focus the Refinery MACT 1 heat exchange system requirements on heat exchangers associated with petroleum refinery process units. Finally, we are specifying that records related to the heat exchanger provisions be retained for 5 years, consistent with retention requirements for other emissions sources.

Today's final rule also addresses 10 reconsideration issues raised by the API. The API requested an administrative reconsideration under CAA section 307(d)(7)(B) of certain provisions of 40 CFR part 63, subpart CC that they had identified in an April 7, 2009, letter to the EPA. As described in detail in the January 6, 2012, proposal (see 77 FR 964), we denied API's request for six of the reconsideration issues either because they were irrelevant after the subsequent withdrawal of the amendments to the Refinery MACT 1 storage vessel requirements or because the issues could have been raised during the public comment period. We granted reconsideration on the following issues: (1) The use of the promulgation date to describe the applicability for new sources in 40 CFR 63.640(h)(1); (2) the definition of ''heat exchange system'' in 40 CFR 63.641 as it relates to once-through heat exchange systems and refinery process units; (3) the monitoring procedures for once-through heat exchange systems in 40 CFR 63.654(c); and (4) the determination of the cooling water flow rate in 40 CFR 63.654(g). This final action reflects our reconsideration of issues raised in API's request for reconsideration.

IV. Summary of Comments and Responses

A. Uniform Standards for Heat Exchange Systems

On January 6, 2012, we proposed Uniform Standards for Heat Exchange Systems (40 CFR part 65, subpart L). We also proposed to remove most of the substantive requirements for heat exchange systems from Refinery MACT 1, to include them in the Uniform Standards, and to cross-reference the Uniform Standards from Refinery

MACT 1. We received numerous comments on the creation of Uniform Standards for Heat Exchange Systems and the proposed cross-referencing to the Uniform Standards within Refinery MACT 1 (40 CFR part 63, subpart CC). We are not taking final action to create Uniform Standards for Heat Exchange Systems at this time. We will address the comments that focused on the creation of the Uniform Standards in the context of future Uniform Standards regulatory actions. Section IV.B of this preamble addresses the comments regarding the substance of requirements that we proposed to include in the Uniform Standards but that we are now finalizing as part of Refinery MACT 1, or requirements proposed in the Uniform Standards that we have decided not to finalize as they would apply to heat exchange systems at refineries.

B. Refinery MACT 1 Requirements for Heat Exchange Systems

1. Definition of Heat Exchange System

Comment: One commenter supported the proposed change to the definition of ''heat exchange system'' that clarifies that heat exchangers need not be piped in series.

Response: We appreciate support of this clarification.

Comment: One commenter stated that including the cooling tower in the definition of ''heat exchange system'' means there can be only one heat exchange system per cooling tower, and this unduly complicates the rule (because the rule has to discuss requirements for individual exchangers and groups of exchangers as well as the heat exchange system). The commenter also suggested that the definition be limited to heat exchangers that serve petroleum refining process units to clarify that heat exchangers outside of the affected source are not subject to the Refinery MACT 1 requirements, which would be clearer than relying on the affected source description in 40 CFR 63.640 to limit applicability. Another commenter stated that monitoring provisions in 40 CFR 63.654(a) should focus on heat exchangers that service refinery process units because there is no legal basis for applying the rule to heat exchangers that service non-refinery processes even if they share a cooling tower.

Response: We disagree that including the cooling tower in the definition of heat exchange system creates confusion. Even if the cooling tower were not part of the heat exchange system, the regulatory language would still have to discuss heat exchangers, groups of heat exchangers and heat exchange systems to allow both centralized and separate monitoring of heat exchangers (or groups of heat exchangers). The flexibility provided in the monitoring locations, not the inclusion of the cooling tower, appears to be the primary source of complexity in the rule. As we allow monitoring of the cooling water at the cooling tower, it is logical that the cooling tower be part of the heat exchange system. Furthermore, the cooling tower is a central and essential part of a closed-loop heat exchange system for the system to operate properly. It is easily identifiable for permitting and enforcement personnel and it is the location at which most refineries are expected to perform the required monitoring. The cooling tower is also the location at which the strippable hydrocarbons are emitted.

With respect to limiting the definition to heat exchangers that serve petroleum refining process units, we find that this comment has merit. Because Refinery MACT 1 is a NESHAP, in this final action, we intentionally limited repairs to heat exchangers that are ''in organic HAP service.'' The rule as finalized in 2009 also limited applicability by defining as part of the affected source ''all heat exchange systems associated with refinery process units and which are in organic HAP service'' in 40 CFR 63.640(c)(8). While we expect most heat exchange systems at petroleum refineries to process cooling water from heat exchangers associated only with refinery process units, we recognize that there may be other process units at a refinery, particularly ethylene units and units subject to the National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (40 CFR part 63, subpart F) (''HON'').

We generally prefer not to include applicability criteria in emission source definitions, but recognizing the complexity of the current construct, we considered whether revising the definition of heat exchange system might increase the clarity of the monitoring and repair requirements for specific heat exchangers within the heat exchange system. Specifically, we considered defining a closed-loop heat exchange system as ''a cooling tower, all petroleum refinery process unit heat exchangers serviced by that cooling tower that are in organic HAP service, as defined in this subpart, and all water lines to and from these petroleum refinery process unit heat exchangers.'' The qualifications in this definition provide clarity that the repair requirements in 40 CFR 63.654 apply only to refinery process unit heat exchangers that are in organic HAP service; other heat exchangers that might be serviced by a common cooling tower are not part of the ''heat exchange system.'' A similar revision for once-through systems would be ''all heat exchangers that are in organic HAP service, as defined in this subpart, servicing an individual petroleum refinery process unit and all water lines to and from these heat exchangers.'' Considering the broad definition of ''petroleum refinery process unit'' and the existing exclusions in 40 CFR 63.640(g), we are finalizing these revisions to the definition of heat exchange system because we believe that these revisions clarify the intent of the requirements within Refinery MACT 1 as finalized in October 2009 and limit the applicability of the repair requirements to individual heat exchangers servicing refinery process units.

Comment: Two commenters suggested that all sample coolers and pump seal coolers should be specifically exempted from the monitoring requirements and/or that the threshold in 40 CFR 65.610(b)(3) should be raised from 10 gallons per minute to 50 gallons per minute. The commenters stated that it was burdensome to have to evaluate the flow rate for every sample cooler at the refinery in order to assess the monitoring applicability and that sample coolers were not considered in the EPA analysis of heat exchange systems.

Response: In the January 2012 proposal, we included an exemption for very small heat exchange systems (those with water flow rates less than 10 gallons per minute). This exemption was specifically targeted to exempt sample coolers and pump seal coolers because we did not consider these coolers significant sources of emissions and did not include them in our MACT floor and impacts analysis for the October 2009 final rule. We considered providing a higher flow exclusion to individual heat exchangers, but this would still require the refinery owners and operators to identify and assess the flow rates of each sample cooler. After reviewing the options, we have concluded that adding language to specifically exclude sample coolers and pump seal coolers from the definition of heat exchange system provides the clearest means to ensure that the regulations do not unintentionally capture these ''coolers'' that were not considered part of a ''heat exchange system'' in our original analysis and that we did not intend to be monitored under the Refinery MACT 1 regulations.

See the new regulatory definition at 40 CFR 63.641 for heat exchange system.

Comment: One commenter suggested that the EPA define the term ''strippable hydrocarbons'' to mean the hydrocarbons measured by any of the methods specified in 40 CFR 65.610(a)(3).

Response: We considered providing a specific definition of ''strippable hydrocarbons'' in these final amendments, but the suggested definition is unnecessary since we are not finalizing the use of water methods as an alternative monitoring method for petroleum refineries. The monitoring method required by the regulations, the Modified El Paso Method, provides the best definition of strippable hydrocarbons as it relates to potential emissions from heat exchange systems.

2. Applicability and Exemptions

Comment: One commenter supported the proposed revisions clarifying the construction date criteria for defining a new source for the purpose of the heat exchange provisions.

Response: We appreciate support of this clarification.

Comment: One commenter recommended deleting the provision that limits once-through heat exchange systems to a single process unit because the MACT floor analysis does not support this approach. Although the process unit restriction is currently in 40 CFR 63.641, the commenter noted that this language was not in the September 4, 2007, proposal or the November 10, 2008, supplemental proposal and, therefore, has not been subject to public comment until now. The commenter stated that, if the process unit restriction is maintained, the EPA should limit the rule to monitoring systems with a flow greater than 5,000 gallons per minute because the EPA's analysis shows control for smaller systems is not cost effective. The commenter also suggested that the EPA's analysis did not consider monitoring once-through systems individually.

Response: Although the original MACT floor and impacts analysis (see the technical memorandum titled, ''Cooling Towers: Control Alternatives and Impact Estimates,'' Docket Item No. EPA–HQ–OAR–2003–0146–0143) referred to ''cooling towers'' rather than ''heat exchange systems,'' we believe the analysis adequately considered all heat exchange systems at all petroleum refineries. We projected the nationwide total number of ''cooling towers'' to be 520 using information from the Texas Commission on Environmental Quality (TCEQ) for 50 petroleum refineries and extrapolating (considering capacity) to all U.S. petroleum refineries. Based on this analysis, every refinery was projected to have several ''cooling towers'' or ''heat exchange systems'' in our MACT floor and impacts analysis, and we assumed that refineries with once-through cooling systems would have a similar number of heat exchange systems (per refining capacity) as refineries with closed-loop (cooling tower) systems. We conducted analyses to determine how the number of cooling towers or heat exchange systems would affect our MACT floor calculations if there were more than our estimated 520. Because the monitoring and repair requirements for many of the best-performing heat exchange systems were identical, we determined that the MACT floor requirements for existing sources would be the same even if there were as many as 666 affected ''cooling towers'' or ''heat exchange systems'' (see the technical memorandum titled, ''Revised Impacts for Heat Exchange Systems at Petroleum Refineries,'' Docket Item No. EPA–HQ–OAR–2003–0146–0230).

To further verify our MACT floor calculations, we reviewed the information collected during the detailed information collection request (ICR) for petroleum refineries (see Docket Item Nos. EPA–HQ–OAR–2010–0682–0061 through 0069). The definition for heat exchange system in the ICR was identical to the definition in Refinery MACT 1 (with once-though systems limited to individual process units). Based on the ICR responses, there are 525 heat exchange systems that are in organic HAP service and that do not qualify for the exemption from monitoring based on higher water-side pressures; only 21 of these 525 are once-through heat exchange systems. We note that there are 50 additional closed-loop heat exchange systems for which respondents did not answer these ''applicability'' questions, so we project that the total number of affected heat exchange systems is somewhat more than 525 but less than 575. Therefore, our estimate of 520 affected heat exchange systems (including once-through systems) was reasonably accurate, and the existing source MACT floor monitoring requirements would not be impacted had we used the upper range estimate from the ICR data. As such, we disagree that our MACT floor analysis is inconsistent with the restriction of once-through systems to a single process unit.

With respect to the suggestion that we limit the monitoring of closed-loop heat exchange systems to only those with flows of 5,000 gallons per minute or more, we note that closed-loop heat exchange systems that have flow rates less than 5,000 gallons per minute are common at refineries. These smaller heat exchange systems were included in our MACT floor and impacts analysis, and we did not subcategorize these heat exchange systems by size. The assertion that monitoring these smaller heat exchange systems is not cost effective is not relevant; we do not consider costs in developing the MACT floor requirements. We only consider costs when evaluating alternatives beyond the MACT floor. As described previously, we believe we adequately considered the total number of affected heat exchange systems (including once-through and small heat exchange systems) when establishing the MACT floor requirements for existing sources.

We noted in the January 2012 proposal that: ''A once-through heat exchange system could include all heat exchangers at the entire facility. The potential to aggregate all cooling water at a facility (as opposed to a single process unit) prior to sampling for a once-through system would greatly reduce the effectiveness of the leak monitoring methods and would allow HAP or VOC leaks to remain undetected, based solely on the dilution effect from the vast quantity of water processed at the facility.'' (See 77 FR 967). We specifically requested comment on how we might allow some aggregation across units but not allow dilution across all units at the plant. The commenter did not provide any suggestions on this point, but rather suggested that if aggregation were not allowed, once-through heat exchange systems with flow less than 5,000 gallons per minute should be excluded.

For closed-loop heat exchange systems, there are physical limitations on the cooling tower that limit the number of units that can be serviced by the cooling tower. Again, our analysis suggested there would be several heat exchange systems per refinery compared to a single heat exchange system for once-through systems. On the other hand, we recognize that the definition of ''heat exchange system'' in the October 2009 final rule limits aggregation for refineries operating once-through systems more than refineries that operate closed-loop systems. Therefore, we evaluated several ways to afford some aggregation for once-through heat exchange systems so that these systems would be more comparable to the ''cooling tower'' heat exchange systems identified in the MACT floor memorandum (Docket Item No. EPA–HQ–OAR–2003–0146–0143). We identified no appropriate way to allow some, but constrained aggregation

across process units within the definition of heat exchange system. Therefore, we are not modifying the definition of ''heat exchange system'' as it relates to once-through systems (*i.e.,* a once-through heat exchange system is still limited to the heat exchangers associated with a single refinery process unit). As an alternative, we evaluated allowing monitoring for once-through cooling systems at locations that include cooling water from several heat exchange systems. Based on the responses from the detailed ICR, approximately 90 percent of all cooling towers (i.e., closed-loop heat exchange systems) at petroleum refineries have flow rates of 40,000 gallons per minute or less. As such, we consider that this 90th percentile value provides a reasonable proxy of the upper level of aggregation provided to facilities with closed-loop heat exchange systems. By allowing once-through heat exchange systems to monitor at locations that include cooling water from several heat exchange systems, provided that the combined cooling water flow rate at the monitoring location does not exceed 40,000 gallons per minute, we are providing a means to aggregate across process units in a manner similar to that afforded to closed-loop heat exchange systems, which is the assumption made in our MACT floor and impacts analyses. As this level of aggregation is similar to that for closed-loop heat exchange systems, we expect that this provision will achieve the same emission reductions at the same costs as projected for our model closed-loop heat exchange systems. We also note that this approach is preferable to the suggested exemption for all once-through heat exchange systems below 5,000 gallons per minute because it achieves greater emission reductions at similar costs. Therefore, we have amended the monitoring location for once-through heat exchange systems to allow monitoring at a point where discharges from multiple heat exchange systems are combined, provided that the combined cooling water flow rate at the monitoring location does not exceed 40,000 gallons per minute.

Comment: Several commenters stated that the EPA should retain the exemption for heat exchange systems that have an intervening cooling fluid that contains less than 5 percent by weight of HAP.

Response: This exemption was included in the October 2009 final standards for refinery heat exchange systems and it was our intent to retain this existing exemption for petroleum refineries. However, when the heat exchange system Uniform Standards were proposed, we inadvertently omitted a cross-reference to this exemption from Refinery MACT 1. As noted previously, we are not promulgating the Uniform Standards or the cross-references to the Uniform Standards from Refinery MACT 1. The provision to exempt heat exchange systems that use an intervening fluid that is less than 5 percent by weight HAP is retained as a part of Refinery MACT 1.

Comment: One commenter suggested that the introductory paragraph in 40 CFR 65.610(b) should specify that engineering judgment may be used to determine whether any of the exemption criteria are met.

Response: As noted in section III of this preamble, heat exchangers may be excluded from a ''heat exchange system'' based on differential pressure or the presence and content of an intervening fluid. We did not specify that engineering judgment can be used for the differential pressure exemption, either in the October 2009 final rule or the January 2012 proposed amendments. We expect that direct pressure measurements of the process fluids and cooling water lines will be made in a representative location at which the pressure exclusion can be documented. With respect to the intervening fluid exemption, we intended that the same requirements used to determine ''in organic HAP service'' would apply to the intervening fluid. We revised the description of this exemption to specify that the provisions of 40 CFR 63.180(d) of subpart H should be used; 40 CFR 63.180(d) allows the use of ''good engineering judgment'' under most circumstances.

3. Compliance Date

Comment: One commenter suggested that the compliance date be reset to be at least 1 year after the promulgation date of the final amendments to provide time for the refineries to develop procedures for complying with the proposed options and any other changes made in response to public comments.

Response: Petroleum refinery owners and operators have been on notice of the October 29, 2012, compliance date since promulgation of the heat exchange standards in October 2009. Refinery owners and operators that follow the requirements in the October 2009 final rule will be in compliance with these final amendments. If a facility elects to change to quarterly monitoring at the lower leak definition, there are provisions in the final amendments for how this change can be made. Therefore, there is no need to reset the compliance date.

4. Monitoring Locations and Analytical Methods

Comment: Several commenters requested that a leak be determined based on the difference between inlet and outlet concentrations. One commenter specifically noted that the EPA should reconsider this approach, which is used in the Hazardous Organic NESHAP (''HON''; 40 CFR part 63 subpart F), for refinery heat exchange systems. The commenter disputed the EPA claims that accumulating hydrocarbons in the cooling water are evidence of a leak and that small leaks are cost effective to repair, stating the build-up of organic chemicals can be caused by the use of chemical additives for corrosion or biological growth prevention and these heavy compounds are not stripped in the cooling tower as completely as they are in the Modified El Paso Method stripping column.

Response: The rule does not provide for the use of inlet and outlet sampling for closed-loop heat exchange systems because the MACT floor requirements for heat exchange systems were based on existing monitoring of the cooling water return line only. If the rule allowed the use of a concentration differential, it would be less stringent than the MACT floor because the MACT floor monitoring was not based on a differential concentration, but the direct concentration in the cooling water return line. Although we expect that the strippable hydrocarbons measured by the Modified El Paso Method will be largely removed (i.e., released to the air) in the cooling tower so that the cooling water inlet to the heat exchangers will have limited concentrations of strippable hydrocarbons, it is unlikely that this concentration would be exactly zero. Therefore, using a concentration differential produces a concentration that has been adjusted to account for hydrocarbons still in the water after the cooling tower, and is lower and therefore less likely to trigger the leak definition. We did not allow this option for closed–loop heat exchangers. The rule does provide for the use of inlet and outlet sampling for once-through heat exchange systems. While we have taken the position that once-through heat exchange systems have a similar emission potential as closed-loop systems, we acknowledge that these systems are different in operation and that contaminants may be present in the pond, river or other source of once-through cooling water that is beyond the control of the refinery owner or operator and that will not be ''pre-stripped'' in a cooling tower. Therefore, we conclude that it is reasonable and necessary to

allow a concentration differential to be used to determine a leak for once-through heat exchange systems.

Comment: One commenter noted that the requirements in 40 CFR 65.610(e) are unnecessarily burdensome because they require a source to monitor all heat exchangers to find a leak and they appear to require continued monthly testing of all heat exchangers even if the leak is not from an exchanger that is subject to the repair requirements. This commenter also recommended simply requiring the leaking exchanger to be identified by the most expeditious process and then requiring repair only if the leaking exchanger is in service associated with a referencing subpart.

Response: The cited provisions do not require monitoring of all affected heat exchangers to find a leak. The refinery owner or operator can use any method they choose to identify the leaking heat exchanger. If the identified leaking heat exchanger is not in HAP service, then the refinery owner or operator has two options: (1) fix the leak and continue to monitor in the main cooling tower return line or (2) demonstrate that all heat exchangers within the heat exchange system that are subject to the monitoring and repair provisions are not leaking by monitoring each heat exchanger or group of heat exchangers subject to the repair provisions. Thus, the option of monitoring each heat exchanger or group of heat exchangers is not required to identify the leaking heat exchanger; rather, this monitoring option is provided only for the case in which the refinery owner or operator elects not to fix a leak that was identified through monitoring of the cooling tower return line on the grounds that the leaking heat exchanger is not subject to the repair provisions in Refinery MACT 1.

Comment: One commenter suggested that the monitoring frequency/leak definition alternatives for existing sources should be allowed on an individual or group of heat exchangers basis as well as on a heat exchange system basis.

Response: The rule allows monitoring at the individual heat exchanger (or group of heat exchangers) level or at the heat exchange system level (i.e., monitoring at the cooling tower). However, in order to allow this flexibility for either aggregate or individual monitoring to be performed without any notification to the EPA, all heat exchangers that are part of a heat exchange system must use the same monitoring frequency and leak definition. We considered allowing the suggested alternative for individual heat exchangers within a heat exchange system, but concluded that it would likely result in uncertainty regarding what compliance monitoring, reporting and recordkeeping requirements would be required for individual heat exchangers. As the affected facility is the heat exchange system, we consider it appropriate that the same monitoring frequency and leak definition be used for all monitoring locations within one heat exchange system. The final rule clearly allows (in 40 CFR 63.654(c)(4)) the owner or operator of existing sources to use the alternative quarterly monitoring option for some heat exchange systems and the monthly monitoring option for others but all heat exchangers or groups of heat exchangers within a single heat exchange system must use the same monitoring frequency and leak definition.

Comment: Two commenters noted that section 5.1.1.4 of the Modified El Paso Method specifies that samples must be drawn from a location prior to the risers. The commenter requested clarification that monitoring may instead be conducted either prior to the risers or in any individual riser because the concentration of hydrocarbons is distributed equally to each riser and the system has no openings to the atmosphere prior to discharge into the cooling tower cells. They also noted that refineries often monitor in a riser and changes needed to enable monitoring prior to the riser would require a significant capital expenditure.

Response: The final amendments describe monitoring locations specific for Refinery MACT 1 and then separately describes the allowed monitoring methods. Reference to the Modified El Paso Method is confined to the monitoring method section of Refinery MACT 1, and the Modified El Paso Method's restriction on sampling in the riser is not applicable. Nonetheless, we have provided specific clarifications in the monitoring location section that monitoring in the cooling tower riser (prior to exposure to the atmosphere) is allowed.

Comment: One commenter stated that, in addition to a flame ionization detector, the EPA should allow use of other detectors, such as a photo ionization detector or mass spectrometry and online gas chromatograph (GC) capable of equivalent sensitivity for target compounds when using the Modified El Paso Method.

Response: We specifically require the stripping gas concentration to be determined in ppmv as methane. While a refinery owner or operator may elect to use a GC and other analyzers to speciate the compounds present in the cooling water in order to identify the specific heat exchangers or group of heat exchangers responsible for the leak, the leak itself must be determined using a flame ionization detector calibrated with methane following the procedures in section 6.1 of the Modified El Paso Method. As discussed in further detail in the following comment and response, we find that speciated analysis of target compounds in the stripping gas is likely to result in incomplete characterization of the total hydrocarbon concentration and could be less stringent than the MACT floor determined for petroleum refinery heat exchange systems. We have further clarified this requirement in these final amendments by specifically referencing section 6.1 of the Modified El Paso Method. However, this requirement does not preclude the refinery owner or operator from conducting additional analysis of the stripping gas as a means to identify the leaking heat exchanger.

Comment: Several commenters requested that the rule allow additional measurement methods in order to characterize the compounds that could leak into the cooling water. The measurement methods suggested include EPA Method 624 of Appendix A to 40 CFR part 136 and SW–846 Methods 8270 and 8315. Commenters also stated that characterizing all volatile compounds (or even all volatile organic HAP) is often impossible due to the high number of compounds that may be in a process stream, and it is not necessary, as detection of key compounds from the process is all that is needed to identify a leak. One commenter suggested that this rule should be like the TCEQ's rule that requires characterization of compounds with boiling points less than 140 degrees Fahrenheit (°F). This commenter recommended allowing any measurement method that is sensitive to at least 90 percent of the species with boiling points less than 140 °F, and allowing subtraction of compounds with boiling points greater than 140 °F from the ''total strippable hydrocarbon'' concentration. Several commenters recommended including a general procedure for monitoring surrogate species or indicator species rather than requiring full speciation. For example, one commenter requested that the rule allow the analysis to focus on one compound that the method easily detects and then estimate the total strippable hydrocarbon concentration assuming the ratio of that compound to all organic compounds in the cooling water is the same as in the process fluid.

Response: We acknowledge the difficulty characterizing all compounds

in a petroleum refinery process stream. While we considered including additional test methods, the inclusion of additional test methods did not appear to address the primary issue regarding the ability to fully characterize the compounds that could leak into the cooling water. We disagree that the characterization of compounds should be limited to compounds with boiling points less than 140 °F. Hexane, benzene and toluene all have boiling points above 140 °F; these compounds are expected to be emitted from heat exchange systems and are expected to be detectable using the Modified El Paso Method. The Modified El Paso Method was designed to have high (99 percent or higher) recovery of compounds with boiling points below 140 °F and avoids potential losses of highly volatile compounds associated with direct water sampling methods. For this reason, while the Modified El Paso Method is required to be used by the TCEQ for cooling tower sampling when pollutants have boiling points below 140 °F, it is incorrect to conclude that the Modified El Paso Method will not measure any compounds with boiling points greater than 140 °F.

Since the data used to establish the MACT floor were based on the Modified El Paso Method, in order to be at least as stringent as the MACT floor, any alternative monitoring option provided in the rule must be as effective as the El Paso Method in detecting the HAP that are indicative of a leak. Limiting the direct water method analysis only to compounds with boiling points less than 140 °F would be less stringent than the Modified El Paso Method and thus we disagree with the commenter that direct water methods should be provided as an option.

In the proposed Heat Exchanger Uniform Standards, we proposed to allow the use of a water method that would identify all leaked compounds as an alternative monitoring method. Our intent was for this approach to be used where a heat exchanger cooled a process fluid that contained a very limited number of compounds. We expected that very few, if any, petroleum refinery heat exchange systems would choose to use the water methods for most heat exchangers, given the requirement to fully characterize all compounds that could leak into the cooling water.

The proposed water methods were expected to be at least as stringent as the Modified El Paso Method because the requirement to fully characterize the pollutants that could leak into the wastewater would include all compounds, even those that may not be effectively stripped in the stripping column (or cooling tower). Options to limit the full characterization requirement call into question the ability of the water methods to be as stringent as the total strippable hydrocarbon analysis using the Modified El Paso Method.

In light of the complexity of most petroleum refinery process streams, we are concerned that there may be a leak that exceeds 40 parts per billion by weight (ppbw) total strippable hydrocarbons in the water-phase as determined by back-calculation from the Modified El Paso Method results, but because of the number of different compounds present in the petroleum refinery stream (often on the order of 50 to 100 different compounds), the concentrations of the individual compounds could all be below the analytical detection limit (typically about 5 to 10 ppbw in the cooling water). In such a case, the water methods, even with low detection limits, may not provide a suitable alternative to the Modified El Paso Method for refinery heat exchange systems.

To further evaluate our concerns regarding the use of water measurement methods for refinery heat exchange systems, we reviewed the source test data received in response to the cooling water testing required as part of the detailed information collection request for petroleum refineries. We compared the stripping column gas sampling results with those from the direct water methods (see the memorandum titled, ''Evaluation of the Refinery ICR Cooling Water Analysis Results'' in Docket ID No. EPA–HQ–OAR–2003–0146). We found that the analytical methods for chemical species (in both stripping gas analysis and water samples) greatly underestimated the overall concentrations of hydrocarbons, primarily because these analyses were conducted using a specific target analyte list. As the water methods (or gas-phase speciated analysis methods) generally include a specific list of target analytes, we now expect that these methods could lead to less effective leak identification.

We considered the alternative of monitoring a specific compound and extrapolating that compound concentration to determine a total strippable hydrocarbon concentration, but we determined that this approach generally would be more complicated and burdensome than direct Modified El Paso monitoring, given the complexity of petroleum refinery process fluids and the likelihood that several different heat exchangers (with process fluids of differing compositions) may be serviced by a single cooling tower (i.e., heat exchange system). We see no easy way to specify ''a general procedure for monitoring surrogate species or indicator species'' while ensuring equivalency with the Modified El Paso Method. One would need to use the Modified El Paso Method to develop the extrapolation factor for each process fluid that could potentially leak into the cooling water and to verify that the method used provides adequate detection limits. This would be difficult to do and complex, considering the potential variation in compounds and concentrations across process streams.

Given the complexity of most petroleum refinery process streams, we were unable to identify from the currently available water methods a method that would be suitable for determining the total strippable hydrocarbon concentration with the accuracy and sensitivity needed to be comparable to the Modified El Paso Method. Therefore, we are not finalizing any alternative water methods for monitoring petroleum refinery heat exchange systems.

Comment: Several commenters requested that the rule allow measurement of surrogates. One commenter requested inclusion of the full spectrum of monitoring methods currently listed in the HON, the National Emission Standards For Ethylene Manufacturing Process Units: Heat Exchange Systems And Waste Operations (40 CFR part 63, subpart XX) (''Ethylene NESHAP''), and the online monitoring for ethylene and propylene that is allowed in TCEQ HRVOC Rule (TAC Title 30 Part I Chapter 115 Div. 2 § 115.764). One commenter noted that the proposed methods would require most facilities to use offsite test resources, but other methods, particularly if surrogates can be measured, would allow sites to conduct analyses themselves and respond more quickly to any leaks.

Response: We disagree with the comments suggesting all measurement methods provided in the HON, the Ethylene NESHAP or the TCEQ rules should be allowed. The leak definition for petroleum refineries is lower than specified in those rules. In our revised impacts analysis for the proposed amendments(see the technical memorandum titled, ''Revised Impacts for Heat Exchange Systems at Petroleum Refineries,'' Docket Item No. EPA–HQ–OAR–2003–0146–0230), the leak detection level was generally the most important parameter influencing the effectiveness of the heat exchange system monitoring program. We evaluated a series of ''surrogate''

methods when evaluating different heat exchange system monitoring alternatives for the October 2009 final rule and concluded that these surrogate methods were not as effective as identifying leaks as the Modified El Paso Method.

We acknowledge that the proposed water method alternatives would often require the use of external laboratories; however, as discussed previously, we are not finalizing the proposed water method alternatives. The Modified El Paso Method, on the other hand, is performed on-site. The method is relatively simple and can be operated by refinery personnel or outside contractors to provide immediate leak monitoring results, so it has the same advantages of the ''surrogate'' methods while also being able to detect small leaks.

Comment: One commenter requested that sources be allowed up to 7 calendar days for re-monitoring a heat exchange system to verify repair when a repaired heat exchanger is returned to service either after the end of the 45-day normal repair window (as long as the heat exchanger was taken out of service before the end of that 45-day window) or after an allowed delay of repair period. The commenter noted that if the heat exchanger is taken out of service as the means of repair and then brought back into service after the 45-day window, then additional time is needed to start up, line-out, and retest that heat exchanger.

Response: In the January 2012 proposal, we proposed to clarify that under the existing MACT standard, ''repair'' includes verification that the actions taken to repair the leak were effective through re-monitoring of the heat exchange system. We consider the 45-day repair window for a typical repair as well as the additional time provided for a delayed repair to be adequate considering the time necessary to re-monitor the heat exchange system. We expect that repairs will be made as expeditiously as possible and that the actions will be taken with sufficient time to confirm the repairs within the 45-day repair window. Refinery MACT 1 specifically allows the use of removing a heat exchanger from service as a means to effect repair in 40 CFR 63.654(d)(5). The heat exchange system would need to be re-monitored within the 45-day window to verify that the removal of the heat exchanger effectively reduced the total hydrocarbons in the cooling water to below the leak threshold levels. In this case, the removal of the heat exchanger from service would accomplish the repair and the owner or operator could revert back to their chosen monitoring frequency.

The rule is silent on a special monitoring event for the case in which the removed heat exchanger is subsequently placed back into service. This case is similar to the case where a new heat exchanger (or group of heat exchangers) is added to an existing heat exchange system. We interpret the rule to require only the routine heat exchange system monitoring with no special monitoring event required when adding these ''new'' heat exchangers to the heat exchange system. We anticipate that any ''new'' or ''repaired'' heat exchanger would be properly pressure tested prior to being placed in service. As such, these heat exchangers would be unlikely to leak, so the routine monitoring frequency is considered sufficient. We also note that, if an owner or operator removes a heat exchanger from service as a means to effect a repair, but then returns the same heat exchanger to service without any modification or repair, that owner or operator could be subject to potential enforcement actions for not complying with the operating and maintenance requirement ''. . . to maintain any affected source . . . in a manner consistent with safety and good air pollution control practices for minimizing emissions'' as required in the General Provisions at 40 CFR 63.6(e).

5. Delay of Repair

Comment: One commenter suggested allowing delay of repair until the next scheduled process shutdown if the source opts to strip hydrocarbon from the cooling water and either recover it (as fuel or for process use) or collect and convey it to combustion control.

Response: Provided that the stripped gases are properly captured and controlled, the current provisions would not exclude these actions as a means of compliance. The rule only lists those repair actions that are most likely to occur but we explicitly indicate that the list of repair actions is not all inclusive. If the actions described by the commenter reduce the concentration of strippable hydrocarbons to below the applicable leak action levels while preventing the release of those hydrocarbons to the atmosphere, we consider that these actions qualify under 40 CFR 63.654(d) as a repair, in which case the delay of repair would not be needed.

If the actions described by the commenter do not reduce the strippable hydrocarbon concentration to below the leak action level, the existing delay of repair provisions, if applicable, can be used to continue operating until the next scheduled shutdown. In this case, the actions described by the commenter could be used to help prevent an exceedance of the delay of repair action level and thereby maintain the delayed repair. However, if the leak ever exceeds the delay of repair action level, the owner or operator could not use these actions merely to reduce the strippable concentration to below the delay of repair action level. Once the delay of repair threshold is exceeded, the owner or operator of the affected heat exchange system must repair the source within 30 days by reducing the strippable hydrocarbon concentration to below the leak action level.

Comment: One commenter requested confirmation that the guidelines given in TCEQ's Sampling Procedures Manual, Appendix P, paragraph 7.2 should be used for determining the molecular weight to use in equation 7.1 of the Modified El Paso Method when determining potential emissions during a delayed repair.

Response: The TCEQ's Sampling Procedures Manual, Appendix P, is the Modified El Paso Method that is incorporated by reference in the heat exchange system provisions of Refinery MACT 1. In 40 CFR 63.654(g)(4), we specifically indicate that the stripping air concentration must be converted to a water concentration using Equation 7–1 of the Modified El Paso Method. Paragraph 7.2 of the Modified El Paso Method specifically notes that ''[f]or total VOC based on the portable FID analyzer procedure in Section 6.1, calculate total VOC concentration in the water and emission rate based on the molecular weight of methane . . .'' We specifically require the use of the stripping gas concentration to be determined using flame ionization detector (FID), as noted in section 6.1 of the Modified El Paso Method, calibrated with methane (''as methane''). Therefore, the molecular weight of methane (16 grams per mole) should be used when determining the equivalent water concentration using Equation 7–1 of the Modified El Paso Method when calculating the potential strippable hydrocarbon emissions for a delayed repair. We have clarified this requirement in these final standards.

6. Reporting and Recordkeeping Provisions

Comment: One commenter requested clarification that the requirement to record water flow rates applies only to monitoring events in which a leak is detected and the equipment is placed on delay of repair because this is the only occasion in which flow rates are

needed. Another commenter stated that records of water flow and emissions estimates should be required only if the rule allows delay of repair based on a demonstration that the emissions caused by delaying repair are less than the emissions caused by a process unit shutdown, if needed, to effect the repair because this is the only situation where water flow and emissions are relevant. If these requirements are not deleted, one of the commenters stated that the EPA should clarify that the recordkeeping requirement is an estimate of ''potential strippable hydrocarbon emissions'' instead of ''potential emissions'' because the latter might be misinterpreted to mean organic HAP emissions, which are only a fraction of the hydrocarbon emissions. In addition, a commenter stated that the EPA should clarify that reporting of ''an estimate of total strippable hydrocarbon emissions for each delayed repair over the reporting period'' covers only the time period from the date by which repair would have had to be completed if it were not delayed until the repair was completed.

Response: The October 2009 final rule requires a record of the cooling water flow rate for each monitoring event. However, the commenter correctly notes that the requirement in 40 CFR 63.654(g)(4)(ii) to determine the flow rate of cooling water only applies during periods in which repair is delayed. As such, we agree with the commenter that the regulations should not require records of the cooling water flow rate for all cooling towers or heat exchangers because the flow rate only needs to be determined for heat exchange systems for which repair is delayed. Therefore, we are moving the requirement to keep a record of the cooling water flow rate to the paragraph that is limited to delayed repairs, which is 40 CFR 63.655(i)(4)(v) in today's final rule.

We disagree that recordkeeping and reporting of flow rate and potential emissions should only be required where emission caused by delay of repair are demonstrated to be less than they otherwise would be during a shutdown. Stakeholders including the public should be made aware of the potential air emissions releases that may occur based on the decision to delay repair.

We agree that the phase ''potential strippable hydrocarbon emissions'' more accurately describes the delay of repair emission estimate than the phrase ''potential emissions'' and we are clarifying the language as suggested by the commenter. Specifically, we are revising ''potential emissions'' to instead read ''potential strippable hydrocarbon emissions'' in the heat exchange system requirements at 40 CFR 63.654(g)(4), the reporting requirements at 40 CFR 63.655(g)(9)(v) and the recordkeeping requirements at 40 CFR 63.655(i)(4)(v) in today's final rule.

As described previously in section III of this preamble, today's final rule requires that these emission estimates be determined for each monitoring interval instead of over the ''expected duration of the delay.'' To address the commenter's concern, we are specifying in 40 CFR 63.654(g)(4)(iii) that ''The duration of the delay of repair monitoring interval is the time period starting at midnight of the day of the previous monitoring event or midnight of the day the repair would have had to be completed if the repair had not been delayed, whichever is later, . . .'' Given this clarification in the start of the delay of repair interval and the coordination between the emission estimate methodology and reporting requirements, we do not believe that additional language is needed in 40 CFR 63.655(g)(9)(v) to further clarify that the delay of repair starts at the end of the 45-day period provided to complete a repair under normal circumstances.

Comment: One commenter requested clarification of the term ''original date'' in the reporting requirements in 40 CFR 63.655(g)(9)(v) for delayed repair.

Response: We are clarifying this regulatory provision by revising the phrase ''original date'' to instead say ''date when the delay of repair began.'' As noted in the clarified language regarding the calculation of potential emissions during a delayed repair, the date the delay of repair began is equivalent to the day the repair would have had to be completed if the repair had not been delayed.

Comment: One commenter stated that the proposed requirements to identify the ''measured or estimated average annual regulated material concentration of process fluid or intervening cooling fluid processed in each heat exchanger'' will be a very burdensome and unnecessary ongoing requirement rather than one-time requirement as specified in 40 CFR 63.655(i)(4)(i).

Response: We agree that we should retain this as a one-time requirement. We did not intend to make this an ongoing requirement. The revised language cited by the commenter was part of the proposed Uniform Standards, which we proposed to cross-reference from Refinery MACT 1 but are not finalizing in this action. We are not revising the ''one-time'' requirement as specified in 40 CFR 63.655(i)(4)(i).

Comment: One commenter suggested deleting paragraphs (b) and (c) in 40 CFR 65.620 (*i.e.,* reporting the number of heat exchange systems in regulated material service found to be leaking and the summary of the monitoring data that indicate a leak) because they duplicate the information required by paragraph (d) (*i.e.,* reporting the date a leak was identified, the date the source of the leak was identified and the date of repair) or are unnecessary. Alternatively, the commenter suggested that the EPA should at least revise 40 CFR 65.620(b) to require reporting of the number of leaking heat exchangers rather than heat exchange systems, and revise 40 CFR 65.620(c) to clarify what monitoring data to report and eliminate the redundancy.

Response: The comments refer to the reporting and recordkeeping provisions that we proposed to codify as part of the Uniform Standards, which we are not finalizing in this action. The similar provisions in Refinery MACT 1, which we are retaining rather than cross-referencing the Uniform Standards, as proposed, are the reporting provisions in 40 CFR 63.655(g)(9)(ii) through (iv). We disagree with the commenter that there is undue overlap in these provisions. The number of heat exchange systems at the plant site found to be leaking (40 CFR 63.655(g)(9)(ii)) provides a useful summary to the report review. Analogous to the number of fugitive components found to be leaking over a semiannual period, which is also required to be reported under Refinery MACT 1, this information is an indicator of both leak program effectiveness and the refinery's operating and maintenance practices. While one could count each entry in the list of leaking heat exchange systems required in 40 CFR 63.655(g)(9)(iii), we do not consider this duplicative of the list. We do agree that the ''summary of monitoring data'' could be more clearly delineated. To address this concern, we have revised the provisions in 40 CFR 63.655(g)(9)(iii) to specifically list the desired reporting elements. We also consolidated some of the reporting elements from 40 CFR 63.655(g)(9)(iv) into 40 CFR 63.655(g)(9)(iii) and revised 40 CFR 63.655(g)(9)(iv) to focus on reporting elements for leaks that were repaired during the reporting period. These reporting requirements are now more clear and distinct with no duplication.

Comment: One commenter noted that it would be burdensome to identify, characterize or include pump seal coolers and sample coolers in the heat exchanger inventory and applicability determination. The commenter stated

that there is no need for this requirement because those that are once-through coolers should be presumed to meet the low flow exemption criteria and those that are part of a recirculating system with large heat exchangers would be effectively regulated by monitoring of the cooling tower return lines.

Response: We never intended to require monitoring of sample coolers and pump seal coolers. As discussed previously, sample coolers and pump seal coolers are specifically excluded from the definition of heat exchange system in today's final rule, so these coolers do not have to be identified as part of the heat exchange system recordkeeping provisions.

V. Summary of Impacts

These final amendments will have no cost, environmental, energy or economic impacts beyond those impacts presented in the October 2009 final rule for heat exchange systems at petroleum refineries. If the owner or operator of an existing petroleum refinery elects the quarterly monitoring alternative at the lower leak definition or if the owner or operator of a once-through system can aggregate flows across process unit boundaries, we anticipate that the facility will realize a net cost savings compared to the costs estimated for the October 2009 final rule. All other amendments are projected to be cost-neutral.

VI. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory 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, the EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011), and any changes made in response to OMB recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

This action does not impose any new information collection burden. The final amendments are clarifications and technical corrections that do not affect the estimated burden of the existing rule. Therefore, we have not revised the information collection request for the existing rule. However, OMB has previously approved the information collection requirements contained in the existing rule (40 CFR Part 63, subpart CC) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501, *et seq.,* and has assigned OMB control number 2060–0340. The OMB control numbers for the EPA's regulations are listed in 40 CFR Part 9.

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 (SISNOSE). Small entities include small businesses, small organizations and small governmental jurisdictions.

For the purposes of assessing the impacts of this final 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 final rule on small entities, I certify that this action will not have a SISNOSE. In determining whether a rule has a SISNOSE, the impact of concern is any significant *adverse* economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives ''which minimize any significant economic impact of the rule on small entities.'' 5 U.S.C. 603 and 604. Thus, an agency may certify that a rule will not have a SISNOSE if the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule.

Based on our economic impact analysis, the amendments will have no direct cost impacts (or they will result in a nationwide net cost savings). No small entities are expected to incur annualized costs as a result of the final amendments; therefore, no adverse economic impacts are expected for any small or large entity. Thus, the costs associated with the final amendments will not result in any ''significant'' adverse economic impact for any small entity. We have, therefore, concluded that today's final rule will relieve regulatory burden for all affected small entities.

D. Unfunded Mandates Reform Act

This 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 are cost neutral and may result in net cost savings for the private sector. Thus, this rule is not subject to the requirements of sections 202 or 205 of the Unfunded Mandates Reform Act (UMRA).

This 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 final amendments contain no requirements that apply to such governments, and impose no obligations upon them.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. These final amendments do not add new control and performance demonstration 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 this action. In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between the EPA and state and local governments, the EPA specifically solicited comment on the proposed amendments 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 final 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

final amendments impose no requirements on tribal governments. Thus, Executive Order 13175 does not apply to this action.

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

The EPA interprets Executive Order 13045 (62 FR 19885, April 23, 1997) as applying to those regulatory actions that concern health or safety risks, such that the analysis required under section 5–501 of the Order has the potential to influence the regulation. This action is not subject to Executive Order 13045 because it is based solely on technology performance.

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

This action is not a ''significant energy action'' as defined in Executive Order 13211 (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. Further, we have concluded that the final amendments are not likely to have any adverse energy effects because they are cost neutral and may result in cost savings if the quarterly monitoring option is elected.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, 12(d) (15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards (VCS) in its regulatory activities, unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.,* materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by VCS bodies. The NTTAA directs the EPA to provide Congress, through OMB, explanations when the agency decides not to use available and applicable VCS.

This action does not involve any new technical standards. Therefore, the EPA did not consider the use of any additional VCS.

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 (EJ). Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make EJ 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.

The EPA has determined that this final rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment. The final amendments do not relax the control measures on regulated sources, and, therefore, do not change the level of environmental protection.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801, *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this final rule and other required information to the United States Senate, the United States House of Representatives and the Comptroller General of the United States prior to publication of the final rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2). This final rule will be effective on June 20, 2013.

List of Subjects in 40 CFR Part 63

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

Dated: June 12, 2013.

Bob Perciasepe,

Acting Administrator.

For the reasons stated in the preamble, the Environmental Protection Agency amends title 40, chapter I, of the Code of Federal Regulations as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

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

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

Subpart A—General Provisions

■ 2. Section 63.14 is amended by revising paragraph (n)(1) to read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(n) * * *

(1) ''Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources'' (Modified El Paso Method), Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, January 31, 2003, IBR approved for §§ 63.654(c), 63.654(g), 63.655(i), and 63.11920.

* * * * *

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

■ 3. Section 63.640 is amended by:

■ a. Revising paragraph (a) introductory text;

■ b. Revising paragraph (c)(8);

■ c. Revising paragraph (h)(1) introductory text, adding paragraph (h)(1)(i) and revising paragraph (h)(1)(ii); and

■ d. Removing reserved paragraph (h)(1)(iii) and paragraph (h)(1)(iv).

The additions and revisions read as follows:

§ 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)(1) 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:

* * * * *

(c) * * *

(8) All heat exchange systems, as defined in this subpart.

* * * * *

(h) * * *

(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) At new sources that commence construction or reconstruction after July 14, 1994, but on or before September 4, 2007, heat exchange systems shall be in compliance with the existing source requirements for heat exchange systems specified in § 63.654 no later than October 29, 2012.

(ii) At new sources that commence construction or reconstruction after September 4, 2007, heat exchange systems shall be in compliance with the new source requirements in § 63.654 upon initial startup or October 28, 2009, whichever is later.

* * * * *

■ 4. Section 63.641 is amended by revising the definitions of ''Heat exchange system'' and ''In organic hazardous air pollutant service'' to read as follows:

§ 63.641 Definitions.

* * * * *

Heat exchange system means a device or collection 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). For closed-loop recirculation systems, the *heat exchange system* consists of a cooling tower, all petroleum refinery process unit heat exchangers that are in organic HAP service, as defined in this subpart, serviced by that cooling tower, and all water lines to and from these petroleum refinery process unit heat exchangers. For once-through systems, the *heat exchange system* consists of all heat exchangers that are in organic HAP service, as defined in this subpart, servicing an individual petroleum refinery process unit and all water lines to and from these heat exchangers. Sample coolers or pump seal coolers are not considered heat exchangers for the purpose of this definition and are not part of the *heat exchange system.* Intentional direct contact with process fluids results in the formation of a wastewater.

* * * * *

In organic hazardous air pollutant service or *in organic HAP service* means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of § 63.180(d) of this part and table 1 of this subpart. The provisions of § 63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

* * * * *

■ 5. Section 63.654 is amended by:
■ a. Revising paragraphs (b) and (c);
■ b. Revising paragraph (d) introductory text;
■ c. Revising paragraphs (e) and (f);
■ d. Revising paragraph (g) introductory text and paragraph (g)(4).

The revisions read as follows:

§ 63.654 Heat exchange systems.

* * * * *

(b) A heat exchange system is exempt from the requirements in paragraphs (c) through (g) of this section if all heat exchangers within the heat exchange system either:

(1) Operate with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side; or

(2) Employ an intervening cooling fluid containing less than 5 percent by weight of total organic HAP, as determined according to the provisions of § 63.180(d) of this part and table 1 of 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.

(c) The owner or operator must perform monitoring to identify leaks of total strippable volatile organic compounds (VOC) from each heat exchange system subject to the requirements of this subpart according to the procedures in paragraphs (c)(1) through (6) of this section.

(1) *Monitoring locations for closed-loop recirculation heat exchange systems.* For each closed loop recirculating heat exchange system, collect and analyze a sample from the location(s) described in either paragraph (c)(1)(i) or (c)(1)(ii) of this section.

(i) Each cooling tower return line or any representative riser within the cooling tower prior to exposure to air for each heat exchange system.

(ii) Selected heat exchanger exit line(s) so that each heat exchanger or group of heat exchangers within a heat exchange system is covered by the selected monitoring location(s).

(2) *Monitoring locations for once-through heat exchange systems.* For each once-through heat exchange system, collect and analyze a sample from the location(s) described in paragraph (c)(2)(i) of this section. The owner or operator may also elect to collect and analyze an additional sample from the location(s) described in paragraph (c)(2)(ii) of this section.

(i) Selected heat exchanger exit line(s) so that each heat exchanger or group of heat exchangers within a heat exchange system is covered by the selected monitoring location(s). The selected monitoring location may be at a point where discharges from multiple heat exchange systems are combined provided that the combined cooling water flow rate at the monitoring location does not exceed 40,000 gallons per minute.

(ii) The inlet water feed line for a once-through heat exchange system prior to any heat exchanger. If multiple heat exchange systems use the same water feed (*i.e.,* inlet water from the same primary water source), the owner or operator may monitor at one representative location and use the monitoring results for that sampling location for all heat exchange systems that use that same water feed.

(3) *Monitoring method.* Determine the total strippable hydrocarbon concentration (in parts per million by volume (ppmv) as methane) at each monitoring location using the ''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) using a flame ionization detector (FID) analyzer for on-site determination as described in Section 6.1 of the Modified El Paso Method.

(4) *Monitoring frequency and leak action level for existing sources.* For a heat exchange system at an existing source, the owner or operator must comply with the monitoring frequency and leak action level as defined in paragraph (c)(4)(i) of this section or comply with the monitoring frequency and leak action level as defined in paragraph (c)(4)(ii) of this section. The owner or operator of an affected heat exchange system may choose to comply with paragraph (c)(4)(i) of this section for some heat exchange systems at the petroleum refinery and comply with paragraph (c)(4)(ii) of this section for other heat exchange systems. However, for each affected heat exchange system, the owner or operator of an affected heat exchange system must elect one monitoring alternative that will apply at all times. If the owner or operator intends to change the monitoring alternative that applies to a heat exchange system, the owner or operator must notify the Administrator 30 days in advance of such a change. All ''leaks'' identified prior to changing monitoring alternatives must be repaired. The monitoring frequencies specified in paragraphs (c)(4)(i) and (ii) of this section also apply to the inlet water feed line for a once-through heat exchange

system, if monitoring of the inlet water feed is elected as provided in paragraph (c)(2)(ii) of this section.

(i) Monitor monthly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 6.2 ppmv.

(ii) Monitor quarterly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 3.1 ppmv unless repair is delayed as provided in paragraph (f) of this section. If a repair is delayed as provided in paragraph (f) of this section, monitor monthly.

(5) *Monitoring frequency and leak action level for new sources.* For a heat exchange system at a new source, the owner or operator must monitor monthly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 3.1 ppmv.

(6) *Leak definition.* A leak is defined as described in paragraph (c)(6)(i) or (c)(6)(ii) of this section, as applicable.

(i) For once-through heat exchange systems for which the inlet water feed is monitored as described in paragraph (c)(2)(ii) of this section, a leak is detected if the difference in the measurement value of the sample taken from a location specified in paragraph (c)(2)(i) of this section and the measurement value of the corresponding sample taken from the location specified in paragraph (c)(2)(ii) of this section equals or exceeds the leak action level.

(ii) For all other heat exchange systems, a leak is detected if a measurement value of the sample taken from a location specified in either paragraph (c)(1)(i), (c)(1)(ii), or (c)(2)(i) of this section equals or exceeds the leak action level.

(d) If a leak is detected, the owner or operator 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) of this section. Repair includes re-monitoring at the monitoring location where the leak was identified according to the method specified in paragraph (c)(3) of this section to verify that the measured concentration is below the applicable action level. Actions that can be taken to achieve repair include but are not limited to:

* * * * *

(e) If the owner or operator detects a leak when monitoring a cooling tower return line under paragraph (c)(1)(i) of this section, the owner or operator may conduct additional monitoring of each heat exchanger or group of heat exchangers associated with the heat exchange system for which the leak was detected as provided under paragraph (c)(1)(ii) of this section. If no leaks are detected when monitoring according to the requirements of paragraph (c)(1)(ii) of this section, the heat exchange system is considered to meet the repair requirements through re-monitoring of the heat exchange system as provided in paragraph (d) of this section.

(f) The owner or operator may delay the repair of a leaking heat exchanger when one of the conditions in paragraph (f)(1) or (f)(2) of this section is met and the leak is less than the delay of repair action level specified in paragraph (f)(3) of this section. The owner or operator 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 hydrocarbon concentration is initially and remains less than the delay of repair action level for all monthly monitoring periods during the delay of repair, the owner or operator may delay repair until the next scheduled shutdown of the heat exchange system. If, during subsequent monthly monitoring, the delay of repair action level is exceeded, the owner or operator must repair the leak within 30 days of the monitoring event in which the leak was equal to or exceeded the delay of repair action level.

(2) If the necessary equipment, parts, or personnel are not available and the total strippable hydrocarbon concentration is initially and remains less than the delay of repair action level for all monthly monitoring periods during the delay of repair, the owner or operator may delay the repair for a maximum of 120 calendar days. The owner or operator must demonstrate that the necessary equipment, parts, or personnel were not available. If, during subsequent monthly monitoring, the delay of repair action level is exceeded, the owner or operator must repair the leak within 30 days of the monitoring event in which the leak was equal to or exceeded the delay of repair action level.

(3) The delay of repair action level is a total strippable hydrocarbon concentration (as methane) in the stripping gas of 62 ppmv. The delay of repair action level is assessed as described in paragraph (f)(3)(i) or (f)(3)(ii) of this section, as applicable.

(i) For once-through heat exchange systems for which the inlet water feed is monitored as described in paragraph (c)(2)(ii) of this section, the delay of repair action level is exceeded if the difference in the measurement value of the sample taken from a location specified in paragraph (c)(2)(i) of this section and the measurement value of the corresponding sample taken from the location specified in paragraph (c)(2)(ii) of this section equals or exceeds the delay of repair action level.

(ii) For all other heat exchange systems, the delay of repair action level is exceeded if a measurement value of the sample taken from a location specified in either paragraphs (c)(1)(i), (c)(1)(ii), or (c)(2)(i) of this section equals or exceeds the delay of repair action level.

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

(4) An estimate of the potential strippable hydrocarbon emissions from the leaking heat exchange system or heat exchanger for each required delay of repair monitoring interval following the procedures in paragraphs (g)(4)(i) through (iv) of this section.

(i) Determine the leak concentration as specified in paragraph (c) of this section and convert the stripping gas leak concentration (in ppmv as methane) to an equivalent liquid concentration, in parts per million by weight (ppmw), using equation 7–1 from ''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) and the molecular weight of 16 grams per mole (g/mol) for methane.

(ii) Determine the mass flow rate of the cooling water at the monitoring location where the leak was detected. If the monitoring location is an individual cooling tower riser, determine the total cooling water mass flow rate to the cooling tower. Cooling water mass flow rates may be determined using direct measurement, pump curves, heat balance calculations, or other engineering methods. Volumetric flow measurements may be used and converted to mass flow rates using the density of water at the specific monitoring location temperature or using the default density of water at 25 degrees Celsius, which is 997 kilograms per cubic meter or 8.32 pounds per gallon.

(iii) For delay of repair monitoring intervals prior to repair of the leak,

calculate the potential strippable hydrocarbon emissions for the leaking heat exchange system or heat exchanger for the monitoring interval by multiplying the leak concentration in the cooling water, ppmw, determined in (g)(4)(i) of this section, by the mass flow rate of the cooling water determined in (g)(4)(ii) of this section and by the duration of the delay of repair monitoring interval. The duration of the delay of repair monitoring interval is the time period starting at midnight on the day of the previous monitoring event or at midnight on the day the repair would have had to be completed if the repair had not been delayed, whichever is later, and ending at midnight of the day the of the current monitoring event.

(iv) For delay of repair monitoring intervals ending with a repaired leak, calculate the potential strippable hydrocarbon emissions for the leaking heat exchange system or heat exchanger for the final delay of repair monitoring interval by multiplying the duration of the final delay of repair monitoring interval by the leak concentration and cooling water flow rates determined for the last monitoring event prior to the re-monitoring event used to verify the leak was repaired. The duration of the final delay of repair monitoring interval is the time period starting at midnight of the day of the last monitoring event prior to re-monitoring to verify the leak was repaired and ending at the time of the re-monitoring event that verified that the leak was repaired.

■ 6. Section 63.655 is amended by:
■ a. Revising paragraph (f)(1)(vi);
■ b. Revising paragraph (g)(9);
■ c. Adding paragraph (h)(7); and
■ d. Revising paragraph (i)(4).

The addition and revisions read as follows:

§ 63.655 Reporting and recordkeeping requirements.

* * * * *

(f) * * *

(1) * * *

(vi) For each heat exchange system, identification of the heat exchange systems that are subject to the requirements of this subpart. For heat exchange systems at existing sources, the owner or operator shall indicate whether monitoring will be conducted as specified in § 63.654(c)(4)(i) or § 63.654(c)(4)(ii).

* * * * *

(g) * * *

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

(i) The number of heat exchange systems at the plant site subject to the monitoring requirements in § 63.654.

(ii) The number of heat exchange systems at the plant site found to be leaking.

(iii) For each monitoring location where the total strippable hydrocarbon concentration was determined to be equal to or greater than the applicable leak definitions specified in § 63.654(c)(6), identification of the monitoring location (e.g., unique monitoring location or heat exchange system ID number), the measured total strippable hydrocarbon concentration, the date the leak was first identified, and, if applicable, the date the source of the leak was identified;

(iv) For leaks that were repaired during the reporting period (including delayed repairs), identification of the monitoring location associated with the repaired leak, the total strippable hydrocarbon concentration measured during re-monitoring to verify repair, and the re-monitoring date (i.e., the effective date of repair); and

(v) For each delayed repair, identification of the monitoring location associated with the leak for which repair is delayed, the date when the delay of repair began, the date the repair is expected to be completed (if the leak is not repaired during the reporting period), the total strippable hydrocarbon concentration and date of each monitoring event conducted on the delayed repair during the reporting period, and an estimate of the potential strippable hydrocarbon emissions over the reporting period associated with the delayed repair.

(h) * * *

(7) The owner or operator of a heat exchange system at an existing source must notify the Administrator at least 30 calendar days prior to changing from one of the monitoring options specified in § 63.654(c)(4) to the other.

(i) * * *

(4) The owner or operator of a heat exchange system subject to this subpart shall comply with the recordkeeping requirements in paragraphs (i)(4)(i) through (v) of this section and retain these records for 5 years.

(i) Identification of all petroleum refinery process unit heat exchangers at the facility and the average annual HAP concentration of process fluid or intervening cooling fluid estimated when developing the Notification of Compliance Status report.

(ii) Identification of all heat exchange systems subject to the monitoring requirements in § 63.654 and identification of all heat exchange systems that are exempt from the monitoring requirements according to the provisions in § 63.654(b). For each heat exchange system that is subject to the monitoring requirements in § 63.654, this must include identification of all heat exchangers within each heat exchange system, and, for closed-loop recirculation systems, the cooling tower included in each heat exchange system.

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

(A) Date/time of event.

(B) Barometric pressure.

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

(D) FID reading (ppmv).

(E) Length of sampling period.

(F) Sample volume.

(G) Calibration information identified in Section 5.4.2 of the ''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).

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

(v) If a repair is delayed, the reason for the delay, the schedule for completing the repair, the heat exchange exit line flow or cooling tower return line average flow rate at the monitoring location (in gallons/minute), and the estimate of potential strippable hydrocarbon emissions for each required monitoring interval during the delay of repair.

* * * * *

[FR Doc. 2013–14624 Filed 6–19–13; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 622

[Docket No. 1206013412–2517–02]

RIN 0648–XC702

Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; 2013 Commercial Accountability Measure and Closure for Gulf of Mexico Greater Amberjack

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and