ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 60

[EPA–HQ–OAR–2010–0505, FRL–9844–4]

RIN 2060–AR75

Oil and Natural Gas Sector: Reconsideration of Certain Provisions of New Source Performance Standards

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Amendments.

SUMMARY: This action finalizes the amendments to new source performance standards for the oil and natural gas sector. The Administrator received petitions for reconsideration of certain aspects of the August 12, 2012, final standards. These amendments are a result of reconsideration of certain issues raised by petitioners related to implementation of storage vessel provisions. The final amendments provide clarity of notification and compliance dates, ensure control of all storage vessel affected facilities and update key definitions. This action also corrects technical errors that were inadvertently included in the final standards.

DATES: This final rule is effective on September 23, 2013.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2010–0505. All documents in the docket are listed on the *http://www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, *e.g.,* confidential business information 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 through *http://www.regulations.gov* or in hard copy at the EPA's Docket Center, Public Reading Room, EPA West Building, Room Number 3334, 1301 Constitution Avenue NW., Washington, DC 20004. 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: Mr. Bruce Moore, Sector Policies and Programs Division (E143–05), Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number: (919) 541–5460; facsimile number: (919) 685–3200; email address: *moore.bruce@epa.gov.*

SUPPLEMENTARY INFORMATION:

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

I. Preamble Acronyms and Abbreviations

Several acronyms and terms are included in this preamble. While this may not be an exhaustive list, to ease the reading of this preamble and for reference purposes, the following terms and acronyms are defined here:

API American Petroleum Institute
AVO Auditory, Visual and Olfactory
BOE Barrels of Oil Equivalent
bbl Barrel
bpd Barrels Per Day
BID Background Information Document
BSER Best System of Emissions Reduction
CAA Clean Air Act
CFR Code of Federal Regulations
CPMS Continuous Parametric Monitoring Systems
EIA Energy Information Administration
EPA Environmental Protection Agency
GOR Gas to Oil Ratio
HAP Hazardous Air Pollutant
HPDI HPDI, LLC
Mcf Thousand Cubic Feet
NTTAA National Technology Transfer and Advancement Act of 1995
NEI National Emissions Inventory
NEMS National Energy Modeling System
NESHAP National Emissions Standards for Hazardous Air Pollutants
NSPS New Source Performance Standards
OAQPS Office of Air Quality Planning and Standards
OMB Office of Management and Budget
PRA Paperwork Reduction Act
PTE Potential to Emit
RFA Regulatory Flexibility Act
SISNOSE Significant Economic Impact on a Substantial Number of Small Entities
tpy Tons per Year
TTN Technology Transfer Network
UMRA Unfunded Mandates Reform Act
VCS Voluntary Consensus Standards
VOC Volatile Organic Compounds
VRU Vapor Recovery Unit

II. General Information

A. Executive Summary

1. Purpose of This Regulatory Action

The purpose of this action is to finalize amendments to the 40 CFR part 60, subpart OOOO, Standards of Performance for Crude Oil and Natural Gas Production, Transmission and

Distribution final rule promulgated under section 111(b) of the Clean Air Act (CAA), which was published on August 16, 2012 [77 FR 49490]. The amendments being finalized were proposed on April 12, 2012 [78 FR 22126]. Specifically, this final rule action amends aspects of the 2012 new source performance standards (2012 NSPS) to address select issues raised by different stakeholders through several administrative petitions for reconsideration of the 2012 NSPS. The select issues being reconsidered and addressed by this action are related primarily to implementation of the storage vessel provisions.

2. Summary of Major Amendments to the NSPS

This rule finalizes a number of aspects of the proposal but, after consideration of public comments received, it also makes certain changes, as described in this section.

a. Initial Notification and Compliance Dates

For Group 1 storage vessels (*i.e.,* those the construction, reconstruction or modification of which began after August 23, 2011, and on or before April 12, 2013),[1] the final amendments require that owners/operators estimate emissions from the storage vessels to determine affected facility no later than October 15, 2013, and a notification be submitted with the facilities' annual report due by January 15, 2014, to inform regulatory agencies of the existence and location of the Group 1 storage vessel affected facilities. The final amendments retain the requirement that all Group 1 storage vessel affected facilities comply with the emission standards but, in a change from proposal, extend the compliance deadline to April 15, 2015. Since all Group 1 affected facilities are required to meet the emission standards, the final amendments do not require Group 1 storage vessel affected facilities to track emission increase events, as we had proposed.

For Group 2 storage vessel affected facilities (*i.e.,* those the construction, reconstruction or modification of which began after April 12, 2013), the final amendments extend the compliance date to April 15, 2014 (or 60 days after startup, whichever is later), for implementing the emission standards, as proposed.

In response to comments regarding the confusion about when the affected facility status for Group 1 storage vessels should be determined, we have also made clarifying changes to § 60.5365(e) in the final amendments that clearly specify October 15, 2013, as the deadline for calculating potential volatile organic compound (VOC) emissions from Group 1 storage vessels for determining the affected facility status.

b. Group 1 and Group 2 Storage Vessel Emission Standards Applicability

We have amended § 60.5395 to more clearly specify that the requirements of the NSPS apply to Group 1 and Group 2 storage vessel *affected* facilities (*i.e.,* those with potential to emit (PTE) 6 or more tpy of VOC, as determined by the methods and dates specified in this final rule). We amended this language in response to several comments expressing confusion about whether the requirements applied to all Group 1 storage vessels or just those with VOC emissions of 6 tpy or greater (*i.e.,* affected facilities).

c. Group 1 Storage Vessel Affected Facility Emission Standards and Compliance Dates

A key feature of this action is that the final amendments require control of all storage vessel affected facilities constructed since the August 23, 2011, proposal date of the 2012 NSPS. This decision, as summarized in this section and discussed fully in sections IV.A and V.C of this preamble, was based on new information we received that indicates that the projected control device supply appears to be greater than we originally estimated.

In the preamble to the proposed amendments, based on the information then available to the EPA, we developed an estimate of the supply of the type of combustors likely to be used by owners and operators to comply with the control requirements and concluded that control supply would not catch up with its demand under this rule until 2016. To avoid delaying control until such time, we proposed that Group 1 affected facilities notify the EPA of their presence and location by October 15, 2013, but need not comply with the 95 percent reduction requirement unless they experience an emission increase event. However, new information we received since proposal indicates that the combustor suppliers have the manufacturing capacity to meet the demand posed both by this regulation and a variety of state and local regulations that require the installation of control devices. Therefore, in the final amendments, we are not changing the requirement of the 2012 NSPS that Group 1 storage vessel affected facilities comply with the emission standard requirements. However, we have extended the current compliance deadline. For the reasons discussed in detail in section IV.A, these final amendments require that Group 2 affected facilities comply with the emission standards by April 15, 2014, as we proposed, and that Group 1 affected facilities comply by April 15, 2015.

d. Alternative 4-tpy Uncontrolled Actual VOC Emission Rate

To help alleviate the control supply shortage believed to exist at the time, we had proposed that affected facilities meet the 95% reduction requirement or an uncontrolled actual VOC emission rate of less than 4 tpy, which would allow control devices to be removed from storage vessel affected sources below that emission rate and relocated to those that have just come on line and have PTE of 6 tpy VOC or more. As mentioned above, new information we received since proposal indicate that the combustor suppliers have the manufacturing capacity to meet the demand posed by this regulation, which in turn would suggest that a supply buffer may no longer be necessary. However, for the reasons provided in section V.C of this preamble, we are finalizing the amendment to the storage vessel emission standards as proposed due to questionable cost effectiveness, the secondary environmental impact and the energy impacts from the continued operation of the combustion control device at an inlet stream concentration of less than about 4 tpy. We were aware but had not highlighted these concerns in the proposed amendment because the perceived supply problem alone necessitated proposing the amendment. The resolution of the supply issue, however, shifts our focus back to these concerns. As explained in more detail in section V.C of this preamble, in light of the questionable cost effectiveness of additional control, the secondary environmental impact and the energy impacts we conclude that the best system of emissions reduction (BSER) for reducing VOC emissions from storage vessel affected facilities is not represented by continued control when their sustained uncontrolled emission rates fall below 4 tpy. We are therefore finalizing the amendment as proposed. Under the final amendments, an owner or operator may comply with the uncontrolled actual VOC emission rate instead of the 95 percent control requirement where it can be demonstrated that, based on records of monthly determinations of actual

[1] The 2012 NSPS proposal was published on August 23, 2011, and the proposed rule for this action was published on April 12, 2013.

emission rate for the 12 consecutive months immediately preceding the demonstration, that the storage vessel affected facility uncontrolled actual VOC emissions for each month during that 12-month period have been below 4 tpy. The final amendments require that the owner or operator re-evaluate the uncontrolled actual VOC emissions on a monthly basis. If the results of the monthly determination show that the uncontrolled actual VOC emission rate is 4 tpy or more, the owner or operator would have 30 days to meet the 95 percent control requirement. We discuss this further in section V.C of this preamble.

e. Definition of Storage Vessel Affected Facility

We have finalized the proposed amendments to the definition of ''storage vessel affected facility'' in the final rule (see § 60.5365(e)) to (1) include the 6 tpy VOC emission threshold and to clarify that a source can take into account any legally and practically enforceable emission limit under federal, state, local or tribal authority when determining the VOC emission rate for purposes of this threshold; (2) clarify that a storage vessel affected facility whose VOC PTE decreases to less than 6 tpy would remain an affected facility; and (3) to clarify that PTE does not include any vapor recovered and routed to a process.

f. Streamlined Compliance Monitoring Provisions

We received several comments regarding the streamlined compliance monitoring provisions; our review of the comments did not result in significant changes since proposal. These compliance monitoring provisions include inspections of covers, closed-vent systems and control devices, performed at least monthly. We believe that these measures are sufficient to ensure that storage vessel affected facilities that have installed controls meet the 95 percent VOC reduction standard. Although the more stringent compliance monitoring provisions in the 2012 NSPS may provide better assurance of compliance, there are significant issues regarding their implementation, which have been raised in several administrative reconsideration petitions. We continue to evaluate the reconsideration issues related to compliance monitoring and intend to complete our reconsideration by the end of 2014.

3. Cost and Benefits

Owners and operators of storage vessel affected facilities are expected to install and operate the same or similar air pollution control technologies under these final amendments as would have been necessary to meet the previously finalized standards for the oil and natural gas sector under the 2012 NSPS. We project that these amendments will not result in a significant change in costs and or benefits compared to the 2012 NSPS. The final amendments continue to require that all storage vessel affected facilities comply with the emission standards. Although the final amendments may not achieve the same level of emission reductions as the 2012 NSPS, it was necessary to revise the standards due to the limitations of the 2012 rule. The revisions provided in the final amendments were needed for the reasons explained in this preamble, and we believe the rule provides significant benefits. We anticipate that, if there are any changes in costs for these units, such changes would likely be small relative to both the overall costs of the individual projects and the overall costs and benefits of the final rule.

B. Does this reconsideration notice apply to me?

Categories and entities potentially affected by today's notice include:

TABLE 1—INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS ACTION

Category	NAICS code [1]	Examples of regulated entities
Industry	211111	Crude Petroleum and Natural Gas Extraction.
	211112	Natural Gas Liquid Extraction.
	221210	Natural Gas Distribution.
	486110	Pipeline Distribution of Crude Oil.
	486210	Pipeline Transportation of Natural Gas.
Federal government		Not affected.
State/local/tribal government		Not affected.

[1] North American Industry Classification System.

This table is not intended to be exhaustive, but rather is meant to provide a guide for readers regarding entities likely to be affected by this action. If you have any questions regarding the applicability of this action to a particular entity, consult either the air permitting authority for the entity or your EPA regional representative as listed in 40 CFR 60.4 or 40 CFR 63.13 (General Provisions).

C. How do I obtain a copy of this document and other related information?

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

D. Judicial Review

Under section 307(b)(1) of the CAA, judicial review of this final rule is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by November 22, 2013. Under section 307(d)(7)(B) of the CAA, only an objection to this final rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements established by this final rule 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.

III. Summary of Final Amendments

The final amendments include revisions to certain reconsidered aspects of the existing 2012 NSPS which primarily affect the implementation of the regulation of VOC emissions from storage vessels. A summary of the final amendments resulting from our reconsideration are provided in the following paragraphs.

A. Initial Notification and Compliance Dates

For Group 1 storage vessel affected facilities, we have amended the 2012 NSPS to require that a notification be submitted with the initial annual report, to inform regulatory agencies of the existence and location of the vessels. In addition, we have amended the 2012 NSPS to require that all Group 1 storage vessel affected facilities comply with the emission standards no later than April 15, 2015, and that all Group 2 storage vessel affected facilities comply no later than April 15, 2014, (or 60 days after startup, whichever is later).

The final amendments also make clarifying changes to § 60.5395 that clearly specify October 15, 2013, as the deadline for calculating potential VOC emissions from Group 1 storage vessels to determine affected facility status.

B. Group 1 and Group 2 Storage Vessel Emission Standards Applicability

We have amended § 60.5395 to clearly state that the emission standards apply to Group 1 and Group 2 storage vessel affected facilities (as opposed to all storage vessels).

C. Group 1 Storage Vessel Affected Facility Control Requirements

The final amendments retain the requirement in the 2012 NSPS that all storage vessel affected facilities meet the emission standards. However, the final amendments require that owners and operators of Group 1 storage vessel affected facilities comply with the emission standards by April 15, 2015, and that Group 2 storage vessel affected facilities comply by April 15, 2014.

D. Alterative 4-tpy Uncontrolled Actual VOC Emission Rate

We have amended the storage vessel standards to include a sustained uncontrolled actual VOC emission rate of less than 4 tpy. Specifically, an owner or operator may comply with the uncontrolled actual VOC emission rate instead of the 95 percent control requirement where it can be demonstrated that, based on records of monthly emission estimates for the 12 months immediately preceding the demonstration, that the storage vessel affected facility uncontrolled actual VOC emissions estimated each of those months were below 4 tpy. The owner or operator would be required to re-evaluate the uncontrolled actual VOC emissions on a monthly basis. If the results of the monthly determination show that the uncontrolled actual VOC emission rate is 4 tpy or more, the owner or operator would have 30 days to meet the 95 percent control requirement, unless the increase was associated with the fracturing or refracturing of a well feeding the storage vessel affected facility. In that case, 95 percent control would be required as soon as liquids are routed from the fractured or refractured well to the storage vessel. We discuss this further in section V.C of this preamble.

E. Definition of Storage Vessel

The final amendments revise the definition of ''storage vessel'' to clarify that it refers only to vessels containing crude oil, condensate, intermediate hydrocarbon liquids or produced water.

F. Definition of Storage Vessel Affected Facility

The final amendments revise the definition of ''storage vessel affected facility'' (see § 60.5365(e)) to (1) include the 6 tpy VOC emission limit and to clarify that a source can take into account any legally and practically enforceable emission limit under federal, state, local or tribal authority when determining the VOC emission rate for purposes of this threshold; (2) clarify that a storage vessel affected facility whose VOC PTE decreases to less than 6 tpy would remain an affected facility; (3) clarify that ''other mechanisms'' (or non-federally enforceable mechanisms) must be legally and practically enforceable under federal, state, local or tribal authority; and (4) clarify that vapor from a storage vessel that is recovered and routed to a process is not to be counted in the PTE for purposes of determining affected facility status.

We also added language at § 60.5395(f) to address storage vessel affected facilities that are removed from service. Owners and operators are required to include a notification in their next annual report that the storage vessel has been taken out of service. If a storage vessel's return to service is associated with fracturing or refracturing of a well feeding the storage vessel, the storage vessel is subject to control requirements immediately upon returning to service. If, however, the storage vessel's return to service is not associated with well fracturing or refracturing, the PTE of the storage vessel must be determined within 30 days. If the PTE is 4 tpy or greater, then the storage vessel affected facility must comply with control requirements within 60 days of returning to service.

G. Streamlined Compliance Monitoring Provisions

For storage vessels that install controls to meet the 95 percent VOC reduction standard, we have amended the 2012 NSPS to adopt the streamlined compliance monitoring provisions as proposed without significant changes. These compliance monitoring provisions include inspections performed at least monthly of covers, closed-vent systems and control devices. As mentioned above, we continue to evaluate the reconsideration issues raised concerning the compliance monitoring provisions in the 2012 NSPS and intend to complete our reconsideration by the end of 2014.

H. Combustion Control Device Manufacturer Test Protocol

We have finalized amendments to the enclosed combustor manufacturer test protocol in the NSPS to align it with a similar protocol in the Oil and Natural Gas National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR 63, subpart HH).

I. Annual Report and Compliance Certification

We finalized amendments to allow 90 days after the end of the compliance period for submittal of the annual report and compliance certification.

IV. Summary of Significant Changes Since Proposal

Section III summarized the amendments to the 2012 NSPS that the

EPA is finalizing in this rule. This section will discuss the key changes the EPA has made since the April 12, 2013, proposal. These changes are the result of the EPA's consideration of the many substantive and thoughtful comments submitted on the proposal and other information received since proposal. We believe that the changes we have made sufficiently address concerns expressed by commenters and improve the clarity of the rule while improving or preserving public health and environmental protection required under the CAA.

A. Group 1 Storage Vessel Affected Facility Control Requirements and Applicability

We received comments requesting clarification regarding Group 1 storage vessel affected facility control requirement applicability. We also received comments on our estimate of the supply of combustors used to comply with the control requirements and our use of this estimate to determine the requirements for Group 1 storage vessel affected facilities.

To the extent that there was confusion regarding the applicability of Group 1 storage vessel affected facility control requirements, we agree that there is a need for more clarity in the final amendments. To accomplish this, we have included amendments to § 60.5395(b) that make it clear that these requirements apply only to Group 1 storage vessel *affected facilities* (emphasis added) (*i.e.,* those that have the PTE of 6 tpy VOC or more, as determined by the dates specified in the rule, as amended), not all Group 1 storage vessels. Refer to section V.A of this preamble for further discussion of comments and responses pertaining to these changes.

In the proposed amendments, based on the information then available to the EPA, we concluded that control supply would not catch up with its demand under this rule until 2016. To avoid delaying control until such time, we proposed that Group 1 affected facilities notify the EPA of their presence and location by October 15, 2013, but need not comply with the 95 percent reduction requirement unless they experience an emission increase event. Information we received since proposal indicate that the combustor suppliers have the manufacturing capacity to meet the demand posed both by this regulation and a variety of state and local regulations that require the installation of control devices even when accounting for the need to cover Group 1 well in advance of the projected 2016 date. Therefore, in the final amendments we did not finalize the proposed requirement for Group 1 storage vessel affected facilities to be controlled only if there is an emission increase event. However, as explained in more detail below, we have concerns regarding the projections of potential combustor supply; the pace at which the combustor manufacturing industry can ramp up production and provide the necessary supply in the short-term; and the availability of trained personnel to install these devices on all affected facilities that will have already come on line by the current compliance date of October 15, 2013, as well as the additional approximately 1,100 new affected facilities per month that may need control. Consideration of these factors leads us to conclude that an adjustment to the compliance schedule is warranted.

First, we note that there is a great variability in the projections of potential combustor supply, with one supplier's projection greatly exceeding the other suppliers' projections. Our revised conclusion regarding supply of control devices is largely based on this one supplier's manufacturing capacity, which, if changed, could potentially affect sources' ability to acquire and install control by the current compliance deadline (*i.e.,* October 15, 2013 or 60 days after startup, whichever is later). In light of the above, additional time is needed beyond October 15, 2013, for compliance with the 95 percent reduction requirement. Secondly, we share the concern raised by several commenters that, due to the large number of storage vessel affected facilities, some may not be able to secure the necessary trained personnel to install control devices by the current compliance deadline, especially in the near term. Under the 2012 NSPS, installation of controls would be required by the current compliance date of October 15, 2013, for over 20,000 affected facilities that we estimate will have already come on line since the August 23, 2011, proposal date of the 2012 NSPS, as well as the additional approximately 1,100 new affected facilities per month that will need to install control 60 days after start-up. Lastly, while the overall supply of combustors appears to be adequate, we have concerns about how quickly the combustor manufacturing industry can ramp up production and provide the necessary supply in the short-term. We are doubtful that, even at full current capacity, there would be sufficient control devices to meet the October 15, 2013, compliance date. For the reasons stated above, we decided to take a phase-in compliance approach that requires the newer affected facilities (which would have higher emissions) to comply first. Accordingly, the final amendments require that Group 2 affected facilities comply with the emission standards by April 15, 2014, as we proposed, and that Group 1 affected facilities comply by April 15, 2015.

Refer to section V.C of this preamble for further discussion regarding these changes.

In addition, we had proposed a list of examples of ''events'' that would trigger control requirements for Group 1 storage vessel affected facilities. As noted, all Group 1 storage vessel affected facilities must meet the control requirements by April 15, 2015. Therefore, we no longer need to look to events that may be presumed to increase emissions to determine which Group 1 storage vessel affected facilities are subject to control requirements. All proposed provisions related to tracking events have been removed from the final amendments, thereby simplifying the rule and avoiding additional burden and potential confusion.

Refer to section V.A of this preamble for further discussion regarding these changes.

B. Applicability Dates and Compliance Dates

As discussed in section IV.A of this preamble, the EPA previously concluded that there will be an insufficient supply of combustion control devices for all storage vessel affected facilities until 2016, based on information available at proposal. To avoid postponing control for all storage vessels affected facilities until 2016, we proposed alternative measures for Group 1 and Group 2 storage vessel affected facilities. For Group 1 storage vessel affected facilities, we proposed to require initial notification by October 15, 2013, to inform regulatory agencies of the existence and location of these storage vessels. We also proposed that Group 1 storage vessel affected facilities that undergo an event after April 12, 2013, that could reasonably be expected to lead to an increase in VOC PTE would be subject to control requirements. For Group 2 storage vessel affected facilities, we proposed April 15, 2014, as the compliance date for implementing control requirements.

In response to comments concerning Group 1 storage vessel control requirement applicability and compliance being tied to the ''events'' listed in § 60.5395(b)(2) and unclear notification and compliance dates for both Group 1 and Group 2 storage vessels, we have made changes to the final amendments. For Group 1 storage vessels, we are requiring that the owner or operator determine whether the storage vessel is an affected facility no later than October 15, 2013. In the proposed amendments, owners or operators of Group 1 storage vessel affected facilities had to submit an initial notification of these storage vessels by October 15, 2013, as well as an initial annual report by January 15, 2014. In the final amendments, the initial notification may be combined with the initial annual report to reduce the burden of submitting two notifications within a 90-day period. As discussed previously in section IV.A of this preamble, the final amendments retain the requirement in the 2012 NSPS that all Group 1 storage vessel affected facilities comply with emission standards, and specify that compliance must be achieved by April 15, 2015. Therefore, we have removed all provisions related to tracking emission increase events from the final amendments.

For Group 2 storage vessel affected facilities, we are finalizing April 15, 2014, (or 60 days after startup, whichever is later) as the compliance date for implementing control requirements.

Refer to section V.A of this preamble for further discussion of comments and responses regarding these provisions.

C. Definition of Storage Vessel Affected Facility

We proposed to amend the definition of ''storage vessel affected facility'' to specify that the storage vessel must have a VOC PTE equal to or greater than 6 tpy to be an affected facility and to clarify that the owner or operator can take into account any legally and practically enforceable emission limit in an operating permit, or by another mechanism under state, local or tribal authority, when determining the VOC PTE. The proposed amendment also clarified that a storage vessel affected facility whose potential VOC emissions decrease to less than the threshold of 6 tpy would remain an affected facility. We proposed this amendment to clarify that a storage vessel complying with the proposed uncontrolled actual VOC emission rate would remain an affected facility.

We received comments opposing the revisions to the definition of ''storage vessel affected facility'' to the extent that it may allow storage vessel operators to account for non-federally enforceable emission limitations that may change in the future and are not enforceable by the EPA in the determination of VOC PTE. Upon evaluation, we believe that the commenters' concern arises from language we used in the proposed amendments to § 60.5365(e) to define the storage vessel affected facility which could have been confusing due to the phrase ''other mechanisms.'' Therefore, the final amendments clarify that ''other mechanisms'' must be legally and practically enforceable under federal, state, local or tribal authority.

We received public comments that requested that the 6 tpy threshold for storage vessel affected facilities be determined after application of a vapor recovery unit (VRU) (i.e., taking the VRU vapor recovery into account in the emissions determination) for Group 1 and Group 2 storage vessels.

In September 2012, in response to issues brought to the EPA's attention after the publication of the 2012 NSPS, we clarified that we do not consider VRUs that route recovered gas and vapor back to the process to be control devices, which is consistent with their treatment under 40 CFR part 63, subpart HH.[2]

As long as certain operating requirements are met, we believe it is appropriate to take into account reductions in VOC emissions that result from the recovery of vapor and routing of it to a VRU when determining the VOC PTE from a storage vessel for purposes of determining affected facility status. Routing of vapor through a VRU to a process reduces VOC emissions without secondary environmental impacts (*e.g.,* NO_X emissions) and is responsible conservation of our energy resources. However, it does not totally eliminate VOC emissions, since the VRU cannot operate 100 percent of the time due to maintenance and repair down time. Our September 28, 2012, letter clarified that the cover and closed vent requirements must be met when VRU is used to meet the 95 percent reduction emission standards. That said, we previously determined that routing of vapor through a cover and properly operated closed-vent system would recover all vapor routed to the system as long as the VRU is operating (*i.e.,* 95 percent of the vapor being routed to a line when operating for 95 percent of the time). In light of the above, as long as the VRU is operated consistent with those requirements, we believe that it is appropriate to exclude 95 percent of the vapor that would otherwise be emitted if not recovered when determining PTE for purposes of determining affected facility status. As a result of this comment, and based on our prior clarification of this issue, the final amendments to § 60.5365(e) include a provision that ''any vapor from the storage vessel that is recovered and routed to a process through a VRU designed and operated as specified in this section is not required to be included in the determination of VOC potential to emit for purposes of determining affected facility status.'' Further, we have added language to § 60.5365(e) that provides for this adjustment of PTE as long as (1) the storage vessel is operated in compliance with cover requirements in § 60.5411(b) and the closed-vent system requirements in § 60.5411(c), which has a requirement that the CVS (including the VRU) is operational at least 95 percent of the time, and that the operator maintain records demonstrating compliance with these requirements.

We were concerned that, should a VRU be removed or operated inconsistent with the conditions that were the basis for the PTE reduction following the PTE determination for assessing whether the storage vessel is an affected facility, emissions could increase without the storage vessel being subject to control. To address that possibility, we have added language to § 60.5365(e) such that, in the event of removal of apparatus that recovers and routes vapor to a process or operation that is inconsistent with the conditions for qualifying for the PTE reduction, the owner or operator would be required to determine PTE from the storage vessel within 30 days of such removal or operation. If the PTE is determined to be 6 tpy VOC or more, then the storage vessel would be an affected facility and subject to the control requirements in § 60.5395. We believe this approach will help avoid circumvention of the NSPS.

We received comment that storage vessel affected facilities that are removed from service should cease to be considered affected facilities. Although, for the reasons presented in section V.C of this preamble, we disagree with the commenter and have added language at § 60.5395(f) to address storage vessel affected facilities that are removed from service. Owners and operators are required to include a notification in their next annual report following removal from service that the storage vessel has been taken out of service. If a storage vessel's return to service is associated with the fracturing or refracturing of a well feeding the storage vessel, the storage vessel is subject to control requirements immediately upon returning to service. If, however, the storage vessel's return to service is not

[2] Letter from Peter Tsirigotis to Matthew Todd, American Petroleum Institute. September 28, 2012. Docket Item No. EPA–HQ–OAR–2010–0505–4595.

associated with well fracturing or refracturing, the PTE of the storage vessel must be determined within 30 days. If the PTE is 4 tpy or greater, then the storage vessel affected facility must comply with control requirements within 60 days of returning to service.

V. Summary of Significant Comments and Responses

This section summarizes the significant comments on our proposed amendments and our response thereto.

A. Major Comments Concerning Applicability Dates and Compliance Dates

1. When do Group 1 storage vessels have to determine emissions?

a. Applicability Determination

Comment: One commenter requested that the final rule specify the date upon which the determination of the potential VOC emission rate should occur for the purpose of determining whether the storage vessel is an affected facility. According to the commenter, since the EPA has stipulated controls to not be cost effective for storage vessels emitting less than 6 tpy of VOC, and emission rates for storage vessels in the oil production segment tend to decrease as production declines, the commenter believes the determination should be made near to the date upon which controls would be required in order to minimize the potential to install controls on storage vessels for which production decline has rendered controls no longer cost effective. The commenter stated that the proposed revisions would require a determination by October 15, 2013, of whether individual Group 1 storage vessels are affected facilities, and thus October 15, 2013, would be an appropriate date upon which determination of the potential VOC emission rate should be based. According to the commenter, this would remain consistent with the requirement for determining the potential VOC emission rate for Group 2 storage vessels by April 15, 2014 or 30 days after startup, whichever comes later.

The commenter appears to suggest that, like Group 2, Group 1 storage vessel affected facilities located in the natural gas processing and natural gas transmission and storage segments should also be required to determine potential VOC emissions as the trigger for installing control instead of tracking events but to do so by April 15, 2015 (instead of April 15, 2014, proposed for Group 2). According to the commenter, control of the relatively low number of Group 1 storage vessel affected facilities in these segments could likely be accommodated by this date.

Another commenter pointed out that the proposed reconsideration rule does not establish the date for a Group 1 storage vessel to determine its potential emissions. The commenter also recommended that notifications are only required for tanks that exceed the 6 tpy threshold on October 15, 2013. Although the publication date of the proposed reconsideration rule was April 12, 2013, the commenter contends that the EPA is not required to, nor should it, establish the emissions determination date for the source category of Group 1 storage vessels on that date. First, given the rapidly declining emissions at storage vessels following initial fracturing, the commenter believes that the expected emissions reduction to be gained from Group 1 storage vessels is likely to be limited. The commenter also states that the proposal date of April 12, 2013, has passed and operators may not be able to accurately back-calculate emissions from that date. Moreover, the commenter contends that emissions from many of these storage vessels will be below the 6 tpy affected source threshold as of October 2013. Given EPA's proposed approach, where storage vessel affected facilities whose emissions drop below 6 tpy remain subject to the standard, the commenter believes that many Group 1 storage vessels will be unnecessarily captured in the source category and required to indefinitely track ''events'' and perhaps install control devices even if their emissions never again exceed 6 tpy.

Response: The final amendments to § 60.5365(e) specify that Group 1 storage vessel affected facilities must determine potential VOC emissions by October 15, 2013, for purposes of determining whether it is an affected facility. For the reasons provided in the Response to Public Comments on the Proposed Amendments document available in the docket, the final amended § 60.5365(e) requires that Group 1 affected facilities submit a notification with the first annual report by January 15, 2014, to inform regulatory agencies of their existence and locations. Determining potential emissions and affected source status early on is not only necessary for Group 1 affected facilities to comply with the notification requirement by January 15, 2014,[3] it will also provide Group 1 affected facilities advance notice and time to secure the necessary control devices and schedule the installation personnel to perform the installation by April 15, 2015. We reject suggestions by some commenters that emission determination be conducted closer to the deadline for installing control because such delay would frustrate the reason for extending the compliance date for Group 1 affected facilities in the final amendments (i.e., to provide advance notice and time to secure the necessary control devices and schedule the installation personnel to perform installation). Further, the commenters apparently assumed, though incorrectly, that the EPA has concluded that control is not cost effective when VOC emissions are below 6 tpy. No such determination has been made by the EPA or demonstrated by commenters. On the contrary, as discussed in section V.C of this preamble, we have determined that continuing control at uncontrolled emission rates of 4 tpy or above is cost-effective. For the reasons stated above, the final amendments specify October 15, 2013, as the deadline for determining the VOC PTE for Group 1 storage vessels. If the VOC PTE of the Group 1 storage vessel is 6 tpy or greater on October 15, 2013 (or an earlier date if the owner or operator chooses to make the determination prior to October 15, 2013), then the storage vessel is a Group 1 storage vessel affected facility and is subject to the NSPS, which for Group 1 includes the notification requirement by January 15, 2014 (i.e., the date by which the first annual report is due), and the control requirement by April 15, 2015. We are not finalizing the proposed requirement that Group 1 storage vessels track events that may increase the VOC PTE of the storage vessel (refer to section V.A of this preamble) and install control should there be such event; this proposed Group 1 storage vessel requirement is no longer necessary since the final amendments retain the control requirement for all Group 1 storage vessel affected facilities.

One of the commenters expressed concern that Group 1 storage vessels will have to indefinitely track events for these storage vessels and install controls even if VOC emissions do not exceed 6 tpy. The final amendments do not include requirements for owners and operators to track events for Group 1 storage vessels, so this comment is now moot.

The EPA does not believe it is necessary to defer the date at which Group 1 storage vessels located in the natural gas processing and natural gas transmission and storage segments are required to determine emissions. The commenter was suggesting an

[3] We had proposed to require such notification by October 15, 2013, but, in response to comment, we have extended this deadline slightly to January 15, 2014, to allow Group 1 affected facilities to submit the notification with their annual report instead of separately.

alternative to tracking events for storage vessels in these segments, and the final amendments do not include the proposed event tracking provisions.

b. Determination After an Event

Comment: One commenter sought clarification that the requirement to re-estimate emissions when there is an event that could reasonably be expected to increase emissions does not apply to non-affected facilities. Two commenters requested that the EPA specify whether the VOC emissions increase for Group 1 storage vessels are to be based on potential or actual emissions. Another commenter suggested that the EPA clarify that the baseline emissions used to determine whether a Group 1 storage vessel experiences an emission increase is the level of emissions immediately prior to the event.

Response: In the final amendments, we have removed the requirement to track events for Group 1 storage vessels (refer to section IV.A of this preamble). Therefore, these concerns are now moot.

2. Which Group 1 storage vessels are subject to the initial notification requirements and when are the notifications due?

Comment: One commenter states that the definitions for ''Group 1 storage vessel'' and ''storage vessel'' in § 60.5430 do not contain the 6 tpy threshold required for a ''storage vessel affected facility'' under § 60.5365(e). The commenter believes that the EPA's intent is to only be notified by October 15, 2013, of Group 1 storage vessels that exceed 6 tpy and for operators to monitor these vessels for a subsequent ''event'' because any storage vessel under 6 tpy is not an affected facility and therefore should not be subject to requirements under the rule. The commenter further states that in § 60.5395, the heading which premises paragraph (b)(1) states, ''You must comply with the standards in this section for each storage vessel affected facility.'' The commenter asserts that, based on the definition of Group 1 storage vessel and the order of requirements in the above provisions, this requirement could be misinterpreted to mean that all storage vessels between those specified Group 1 dates must be reported, regardless of their PTE.

Another commenter agreed, stating that none of the storage vessel definitions contains the 6 tpy threshold that is included in the § 60.5365(e) definition of ''storage vessel affected facility.'' The commenter added that, as proposed, § 60.5395(b) seems to include requirements for ''Group 1 storage vessel affected facilities'' but the notification and event requirements in proposed § 60.5395(b)(1) and (2) apply to ''Group 1 storage vessels'' rather than ''Group 1 storage vessel affected facilities.'' The commenter believes that these requirements may be misinterpreted to apply to all storage vessels containing an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water, regardless of whether their potential emissions meet the 6 tpy threshold.

Response: As proposed, § 60.5395(a)(1) states that owners or operators of Group 1 storage vessel affected facilities must comply with paragraph § 60.5395(b). The commenters are correct in their interpretation that the § 60.5395(b) requirements apply only to Group 1 storage vessel affected facilities (i.e., those Group 1 storage vessels with potential VOC emissions of 6 tpy or more), not all Group 1 storage vessels. For clarity, we have moved the affected facility determination requirements from § 60.5395 to § 60.5365(e) and have only requirements that apply to affected facilities now in § 60.5395. The final amendments to § 60.5365(e) clarify our intent.

We also proposed in § 60.5395(b) that owners or operators submit the initial notification of Group 1 storage vessel affected facilities by October 15, 2013. As discussed in section V.A of this preamble, the final amendments require that owners or operators determine the VOC PTE of Group 1 storage vessels by October 15, 2013, and submit the initial notification for Group 1 storage vessel affected facilities, which may be included in the first annual report, by January 15, 2014. The provisions in the final amendments to allow the initial notification of Group 1 storage vessel affected facilities to be submitted with the initial annual report are discussed further in the Response to Public Comments on the Proposed Amendments, available in the docket.

3. Group 1 Storage Vessels That Become Affected Facilities on or After April 12, 2013

Comment: One commenter requested that Group 1 storage vessels that experience a triggering event should follow the same schedule for Group 2 storage vessel affected facilities to install controls (by April 15, 2014, or 60 days after startup, whichever is later), except that there could be a hard deadline for Group 1 storage vessel affected facilities along a natural gas pipeline. The commenter pointed to the preamble of the proposed amendments (FR 78 22131) that indicates the EPA's intent was for Group 1 storage vessel affected facilities, after a triggering event, to become subject to the same control requirements as those in Group 2, and that these controls would be required no later than 60 days after the event, or April 15, 2014, whichever is later. According to the commenter, this intent was overlooked in the proposed rule amendments.

Two commenters added that the final rule should specify a compliance period for Group 1 storage vessels that originally had potential VOC emissions less than 6 tpy and subsequently experience an event that causes the potential VOC emission rate to meet or exceed 6 tpy. In such cases, the commenters requested that the storage vessel should be required to achieve compliance within 60 days after the event.

Another commenter contended that almost all events that would increase emissions at Group 1 storage vessels are planned or are of a foreseeable nature. The commenter believes that it is feasible for storage vessel operators to install and operate controls simultaneously with the occurrence of such planned events. The commenter added that because emissions from storage vessels are likely to be highest immediately after the events listed in 60.5395(b)(2), it is also essential for protection of public health that controls be implemented as soon as possible.

Response: As explained in section IV.A of this preamble, the emission standards remain applicable to all Group 1 affected facilities, as in the 2012 NSPS. Accordingly, we are not finalizing the proposed requirement to track emission increase events and meet the control requirement as a result of such events for Group 1 storage vessels affected facilities. Thus, comments/issues relative to compliance schedule for Group 1 storage vessel affected facilities that experience an event are now moot.

B. Major Comments Concerning the Storage Vessel Affected Facility Definition

Comment: In the reconsideration proposal, the EPA proposed to include a VOC emissions threshold of 6 tpy to determine, in part, which storage vessels are affected facilities. Additionally, the proposal allowed operators to take into account requirements under a legally and practically enforceable limit in an operating permit or by other mechanism. One commenter opposed this proposal to the extent that it allows storage vessel operators to account for non-federally enforceable emission limitations. According to the commenter, the inclusion of non-federally enforceable limitations leads to oversight concerns, and some storage vessels would avoid the NSPS under the proposed threshold.

Additionally, the commenter maintains that the CAA does not allow ''synthetic minor'' programs to determine applicability of its NSPS regulations. The commenter states that the term ''potential to emit'' is not found in section 111 of the CAA but is a concept from CAA programs governing expressly defined major sources. As a result, the commenter states that the CAA does not specify that a minor source program run by the states or other entities should be a means to avoid NSPS regulations. According to the commenter, allowing non-federally enforceable standards to exempt sources from NSPS is problematic because states vary widely in the letter, implementation, and enforcement of their synthetic minor programs.

Response: In the preamble to the proposed amendments we stated that our intent was that ''a source can take into account any legal and practically enforceable emissions limit under federal, state, local or tribal authority when determining the VOC emission rate for purposes of [the 6 tpy] threshold'' (78 FR 22132). The language we used in the proposed amendments to § 60.5365(e) to define the storage vessel affected facility allows the owner or operator to ''tak[e] into account requirements under a legally and practically enforceable limit in an operating permit or by other mechanism.'' We agree with the commenter in so much as the term ''other mechanism'' may be construed to include non-federally enforceable mechanisms that may have questionable, if any, enforceability provisions. Therefore, the final amendments removed the term ''other mechanisms'' and revised the provision to allow the owner or operator to ''tak[e] into account requirements under a legally and practically enforceable limit in an operating permit or requirement under a Federal, state, local or tribal authority.'' We believe that the amendment clarifies only legally and practically enforceable limits can be considered when a source determines its PTE. The EPA's ability to require Federal enforceability rather than just legal and practical enforceability has been an issue since the DC Circuit decision in *National Mining Assn.* v. *EPA,* 59 F.3d 1351 (D.C. Cir. 1995). As we have yet to address this remand/vacatur, the agency does not feel at this time that it can dictate Federal enforceability in this context.

Concerning the comments on our use of PTE as an applicability threshold, that was based on our BSER determination made in the 2012 NSPS taking into account the control's cost effectiveness. Section 111(a)(1) of the CAA specifically identifies cost of achieving reduction as a factor to consider in setting NSPS standards. Nothing in section 111 of the CAA prohibits the EPA from using PTE to reflect our cost consideration in establishing applicability thresholds under section 111. Petitioner failed to explain how the fact that PTE is often used in connection with determining major source status in other provisions of the CAA bars its use for determining applicability status under section 111.

C. Major Comments Concerning Storage Vessel Control Requirements

1. CAA Section 111 Requirements

Comments: According to one commenter, section 111 of the CAA is fundamentally a technology-forcing provision that can and should be used to spur aggressive deployment of emission control technologies. The commenter contends that standards are to be set stringently, in order to force the development of new technology. If the EPA must phase in controls, and can otherwise justify such an approach under section 111, the commenter believes the EPA must do so in as limited a way possible, ensuring it does not disrupt incentives which would otherwise expand pollution control development.

The commenter added that the courts have clarified that EPA's selection of BSER is only limited by cost when industry demonstrates an ''inability to adjust itself in a healthy economic fashion to the end sought by the Act as represented by the standards prescribed.'' Further, the commenter states that creating deferrals meant to track control equipment supply is not technology-forcing, but market-following. According to the commenter, this ignores the role of standard-setting in incentivizing higher production of control equipment. If EPA cites availability of control devices in deferring or reducing the stringency of an NSPS, the commenter contends that the EPA must offer a strong demonstration that supply constraints render the standard unachievable or prohibitively expensive for the industry as a whole.

Response: As explained in section IV.A of this preamble, the EPA proposed to phase in the control requirement for storage vessel affected facilities based on its belief at the time that there would not be enough control devices to meet the demand of all storage vessel affected facilities by the October 15, 2013, compliance date in the 2012 NSPS or any time in the near future. Although new information received since our proposal indicates that control supply may not be an issue, the EPA is phasing in the storage vessel control requirement in the final amendments for the reasons provided in section IV.A. The phase-in approach has never been based on cost, as the commenter suggests; rather, as indicated in section IV.A of this preamble and in the preamble to the April 12, 2013, reconsideration proposal, the phase-in approach is intended to avoid setting a control requirement that cannot be met due to limitations associated with installing control devices. We do not believe that a standard that ignores such limitations accurately represents the BSER for these affected facilities.

2. Group 1 Requirements

a. No Control of Group 1 Storage Vessels

Comment: According to one commenter the proposal to exempt Group 1 storage vessels that do not experience increases in emissions rests on questionable projections of estimated current and future supply of control devices, number of storage vessels and decline of oil and natural gas well production. The commenter contends that the EPA cited only unidentified oil and gas industry sources for the asserted level of control device production and provided no justification for forecasted rate of production increase or the production rate plateau of 1,400 units per month. The commenter believes that it is as or more likely that industry would continue to expand control device production in response to the proposed standards, but the proposed delays would slow control manufacture by removing demand. According to the commenter, the EPA could remove its artificial ceiling for control manufacture and accelerate the compliance deadline for Group 2 storage vessels and require most or all Group 1 storage vessels to control emissions by mid-2015. The commenter contended that the EPA must disclose the information underlying these forecasts to allow the public to evaluate their reasonableness and offer comments.

The commenter added that the assumption of one storage vessel per well overestimates the number of new storage vessels and is unjustified. The commenter provided examples of increased use of multi-well pads.

According to the commenter, the EPA uses the fact that oil and gas wells decline in production over time as justification for exempting Group 1 storage vessels from control requirements. The commenter states that the EPA's forecast of control equipment availability implies no reduction in the number of storage vessels requiring control. This is contrary to the justification given for exempting Group 1 storage vessels from control requirements. According to estimates of a decline in production, the commenter believes that some Group 1 storage vessels could remain a significant source of emissions.

The commenter also contended that the EPA's projections indicate that the supply of existing control devices will be adequate to meet the combined demands of Group 1 and 2 storage vessels by 2016. It is not clear to the commenter what portion of the estimated 20,000 Group 1 storage vessels would ultimately be subject to control, so it is unclear whether subpart OOOO would ever apply to those Group 1 storage vessels with high emissions. Even assuming that emissions from these Group 1 storage vessels generally continue to decline over their remaining lives, the commenter believes that allowing this group of storage vessels to be uncontrolled would result in a large amount of excess emissions relative to the current rule. Conservative estimates by the commenter indicate that the proposal to leave Group 1 storage vessels unregulated would allow over 3 million tpy VOC and 700,000 tpy of methane to be emitted. Taking into account the production decline, the commenter contends that an analysis of the Bakken shale formation indicates that in 2015 storage vessels could still be emitting about 30 percent of their initial emissions. For the reasons given above, the commenter believes that the Group 1 storage vessel exemption is arbitrary and falls short of section 111 mandates that standards of performance reflect BSER.

The commenter further contended that if EPA's analysis indicates a sufficient supply of control devices will be available in the future, then Group 1 storage vessels should be controlled within a reasonable time. The commenter states that a compliance deadline in mid 2015 would provide adequate time for all storage vessels currently subject to the proposed rule to come into compliance. To support this view, the commenter reasons that, if some fraction of the Group 1 storage vessels will no longer have emissions exceeding 6 tpy, the demand for control devices is likely to be lower than the EPA's projections, given the opportunities to manifold closely-spaced storage vessels, the increased practice of multi-well pads which would share storage vessels, and the EPA's statement in the preamble to the proposed rule that control device manufacturers are likely to be flexible in their ability to meet equipment demand increases in the future.

Another commenter agrees that an alternate compliance schedule is necessary to accommodate the increased demand for control devices but recommended that Group 1 storage vessels that continue to have emissions greater than 6 tpy as of the Group 2 compliance date be required to comply with the control requirements of the rule.

Several commenters express concern that the increased demand for control devices will lead to delays in getting the devices installed and that additional time to comply with the proposed standards is required. One commenter states that the companies that supply the services to comply with the proposed amendments will have their time monopolized by the large oil and gas companies, leading to a shortage of these services for small oil and gas companies. Another commenter similarly expresses concern that small independent producers will experience a shortage of service personnel because the smaller producers have less leverage and buying power than large producers.

Response: In the preamble to the proposed amendments, we discussed our rationale for requiring controls only on those Group 1 storage vessel affected facilities that have an event that would likely lead to an increase in the potential to emit VOC (78 FR 22130). Our decision to require controls only on Group 1 storage vessels that experience such an event was based, in large part, on our understanding at that time and the information then available of the supply of combustors that likely would be used to comply with the control requirements. As we understood the combustor manufacturing industry at the time of proposal, the total capacity to produce combustors was approximately 300 units per month, which was based on information from six combustor manufacturers, and that the industry had the capability of increasing that capacity by about 100 units per month.

In response to comments questioning our combustor supply analysis, we reassessed the production capacity of the combustor manufacturing industry. We were able to confirm the data for some of the six manufacturers for which we had data at proposal, which leads us to believe the data as a whole for these manufacturers are reasonable (*i.e.,* current capacity on average of about 600 units per year for each company). In addition, we were able to identify five additional combustor manufacturers. Of these five, three provided production capacity estimates that were in line with the data we originally had for the six companies, one provided production estimates that were significantly higher than any of the other companies, and one did not provide any data. We averaged the production capacity of the nine similar companies to complete the missing data from the one facility that did not provide data. We then summed the capacity of these 11 companies to determine total current manufacturing capacity of combustors, which was approximately 2,300 units per month.

We also estimated future capacity of the combustor manufacturers based on information provided by the manufacturers for anticipated future increases in production capacity. Based on this information, we estimated future capacity to be as high as approximately 3,000 units per month by April 15, 2015.

The new information described above (for further details, see the memorandum entitled *Combustor Supply and Demand Analysis,* available in the docket) seems to indicate that the combustor suppliers have the manufacturing capacity to meet the demand posed by all (*i.e.,* both Group 1 and Group 2) storage vessel affected facilities required to comply with emission standards in the 2012 NSPS. Therefore, in the final amendments, we continue to require that Group 1 storage vessel affected facilities comply with the emission standard requirements. However, we have extended the current compliance deadline for the reasons stated below.

While the overall projected supply of combustors appears to be adequate, we do not have information as to whether the combustor manufacturers are producing at the projected capacity and, if not, how quickly they can ramp up production to provide the necessary supply for the 2012 NSPS. More importantly, we note that there is a great variability in the projections of combustor supply, where one supplier's projection greatly exceeds the other suppliers' projections and accounts for a significant portion of the supply. To gauge the sensitivity of this one company on the combustor supply, we revisited our supply analysis assuming this company could manufacture combustors only at the highest manufacturing rate reported by any of the other combustor manufacturers. We found that under this scenario the supply of combustors never satisfies the demand. Thus, this one manufacturer is critical in meeting the overall demand imposed by the 2012 NSPS.

Because this company plays such an important role in meeting the combustor supply, any factor that may delay or slow their production may significantly affect the ability of Group 1 and Group 2 storage vessel affected facilities to achieve compliance by the current compliance deadline in the 2012 NSPS (*i.e.,* October 15, 2013, or 60 days after startup, whichever is later). In light of the above, we believe it is prudent to allow more time for compliance to lift the pressure on the demand of control devices, especially in the short term. Under the 2012 NSPS, compliance is required by October 15, 2013, for an estimated over 20,000 storage vessel affected facilities that will have come on line since the August 23, 2011, (the proposal date of the 2012 NSPS), and an additional 1,100 new affected facilities per month will need to install control 60 days after start-up. Extending the current compliance deadline would allow the market to more easily absorb any events that may cause combustor manufacturing to fall short of the projected production capacity.

In addition to the supply issues described above, commenters raise the concern about not being able to secure the necessary trained personnel to install control devices by the current compliance deadline. In light of the large number of storage vessel affected facilities (estimated over 20,000 by October 15, 2013, with an additional 1,000 per month after that), and given the wide geographic distribution of oil and gas wells across the United States, we believe that the commenters raise a legitimate concern. In particular, we are concerned about how a potential shortage of trained personnel may impact small businesses. The comments we received indicate that larger owners and operators may be able to garner the majority of the available installation personnel due to their greater resources and influence. This may result in a situation where small owners and operators may be placed in a disadvantage to their larger competitors in obtaining installation personnel. If such a situation should occur, the smaller owners and operators may be forced to shut down wells or delay drilling new wells until installation personnel are made available.

In light of the issues described above that may hinder storage vessel affected facilities' ability to comply by the current October 15, 2013, deadline, we do not believe it is reasonable to retain that compliance date. Instead, in the final amendments, we take a phase-in compliance approach that first addresses newer affected facilities (which would have higher emissions) while assuring that all affected facilities have time to acquire and schedule installation of control. The final amendments establish Group 1 and Group 2 affected facilities, as proposed, where Group 1 are those affected facilities that came on line on or before April 12, 2013, and Group 2 are those that come on line after that date. The final amendments require that Group 2 comply by April 15, 2014 (or 60 days after start-up, whichever is later), a 6-month extension from the current October 15, 2013, deadline for these newer affected facilities. The final amendments require that Group 1 comply by April 15, 2015. Were we to require that both groups comply by April 15, 2014, an estimated 30,000 affected facilities would be competing to acquire and install control by that date; as a result, the 6 month extension would do little to ease the demand for control or skilled personnel to install control should either become an issue in the near future. Also, requiring Group 1 to comply by April 15, 2014 would likely affect Group 2's ability to comply, thus undermining our goal to address the newer storage affected facilities sooner. Lastly, considering the large number of Group 1 affected facilities (which we estimate to be around 19,400), we believe that requiring all Group 1 affected facilities to comply by April 15, 2015 is reasonable. In light of the issues discussed above, we do not expect that these affected facilities would wait until near that deadline and risk noncompliance; rather, we believe that the deadline provides Group 1 advance notice and allows them time to plan for acquiring and scheduling installation of control device by that date. Therefore, in the final amendments, we have specified that all Group 1 storage vessel affected facilities must comply by April 15, 2015, and that Group 2 storage vessel affected facilities must comply by April 15, 2014, or 60 days after startup, whichever is later.

b. Clarification of ''Events'' That May Increase Emissions

Comment: Several commenters request that the EPA more clearly define the types of events that would trigger emission increases for Group 1 storage vessels. Seven commenters request that the EPA limit the examples to a finite list of events to remove ambiguity. One commenter states that the ''events'' that trigger control requirements for Group 1 tanks should be more specific for storage vessels at well sites. According to the commenter, only the events described in § 60.5395(b)(2)(i) through (iii) of the proposed amendments should be considered triggering events for storage vessels that store reservoir fluids (*i.e.,* at well sites, tank batteries, centralized production facilities).

One commenter requested that the EPA delete the list of examples of events that would increase emissions from the rule language and provide that control requirements are triggered by a change that, in the owner's/operator's judgment, is one that could reasonably be expected to increase VOC emissions.

One commenter suggests that the EPA should clarify the illustrative list of emission-increasing events to include well maintenance activities, such as liquids unloading, various well workover procedures, and any other well maintenance activities which increase production.

Response: As discussed in section IV.A of this preamble, the final amendments do not change the requirement in the 2012 NSPS that all storage vessel affected facilities, including those we define as Group 1 affected facilities, to meet the emission standards, although the amendments extend the time for compliance. Since all Group 1 storage vessel affected facilities remain subject to control requirements, there is no need to track events in order to determine which Group 1 storage vessel affected facilities are subject to control requirements, we are not finalizing the proposed provisions related to events in the final amendments.

c. At what emission rate are Group 1 storage vessels that experience an event required to install controls?

Comment: Three commenters request that the EPA clarify that Group 1 storage vessels that experience an event that results in an increase in emissions would not be required to install controls if the VOC emissions are below the 6-tpy emission threshold. Two commenters recommend that the 6 tpy threshold be included either in the definition of ''Group 1 storage vessels'' in § 60.5430 or be explicitly listed as a condition in the requirement under § 60.5395(b)(1).

One commenter states that if emissions from a Group 1 storage vessel affected facility decrease below 6 tpy due to production decline, and it was determined even after a potentially triggering event that emissions had not returned to a level above 6 tpy, the storage vessel should not become subject to Group 2 controls. This view is generally supported by two additional commenters. The commenter refers to § 60.5410(i) which specifies that the requirement for installing Group 2-level controls is further limited to Group 1 storage vessel affected facilities for which the potential VOC emission rate is 6 tpy or greater after the triggering event. According to the commenter, this 6 tpy threshold is reasonable and appropriate because the EPA concluded in the initial rulemaking that Group 2 controls would not be cost effective for storage vessels emitting less than 6 tpy of VOC.

The commenter adds that based on statements in the preamble (78 FR 22132) and regulatory language in § 60.5410(i), this 6 tpy threshold should be repeated in § 60.5395.

Response: As discussed in the previous comment response, the final amendments do not require that Group 1 storage vessels track events. Therefore, these comments are now moot.

3. Alternative 4-tpy Uncontrolled Actual VOC Emission Rate

Comment: One commenter states that the proposed 4 tpy emission rate, below which controls would not be required, is not BSER and would allow large and unjustifiable emissions increases. According to the commenter, the 95 percent control limit ensures that actual emissions do not exceed 0.2 tpy. Under the proposal, a storage vessel could emit up to 4 tpy indefinitely which is nearly a 3.8 tpy increase above the emissions that would be allowed under the proposed NSPS.

According to the commenter, once control devices are removed, it is more likely that unplanned events will cause significant emissions spikes, further increasing air pollution. For example, if an operator diverts a sudden surge of VOC-containing liquids to a storage vessel for which the operator has removed controls under the proposed mass-based limit, there will be no way to control the resulting emissions spike. The commenter contends that the result is that transient but significant emissions events may become more common at storage vessels using the proposed mass-based limits.

The commenter adds that even if it is assumed that the proposed emission rate would apply for a single year of a given group of storage vessels' lives, the proposal would allow tens of thousands of tons of pollution in that year. If storage vessels operate longer, or decline more slowly after passing the 4 tpy threshold, the amount of additional air emissions will be even higher.

The commenter could find no authority in the CAA for abandoning BSER controls after they have been installed. Having already determined that 95 percent control is BSER, the commenter states that the EPA provided no justification of the basic premise or the level of the proposed emission rate. The emission rate has not been demonstrated to alleviate any control device shortage, and control devices that would become available due to the emission rate are unlikely to be available for more than a decade after the proposal is finalized.

The commenter contends that the EPA has not shown that the proposed 4 tpy limit corresponds to BSER. To make such a demonstration, the commenter believes, it would be necessary for the EPA to show that control technology has not been demonstrated below the 4 tpy emission rate, meaning that such sources can properly escape control, or that controls are not cost-effective for the industry as a whole below such an emission rate. According to the commenter, controls clearly are available for storage vessels with emissions of 4 tpy and below, so there is no justification for the 4 tpy emission rate on control technology availability grounds. Additionally, the commenter contends that significant VOC emissions can be captured below the proposed threshold. With respect to cost, the commenter believes recent information indicates the annualized cost of storage vessel combustors has declined substantially since subpart OOOO was finalized, significantly enhancing the cost effectiveness of controlling VOC emissions from storage vessels with a PTE of 4 tpy or less. The commenter provides information from a Colorado Department of Public Health and Environment (DPHE) pending rulemaking showing that the annualized combustor costs are around $15,900/yr, as compared to the previous value of $19,600/yr, resulting in a cost effectiveness of $4200/ton at 4 tpy.

Further, the commenter believes that the EPA's control costs overestimate actual costs because the EPA does not take into account savings that would be experienced when controls are shared among storage vessels. As a result, controls are more affordable at lower uncontrolled emissions thresholds. According to the commenter, if the EPA sets a very low emission threshold at which removal and reuse is permissible, more vessels would have to buy new control devices, raising control costs again. Thus, the commenter believes that the EPA's analysis does not compare this variation, or considered the appropriate way to design such a system in light of the variation.

According to the commenter, the EPA states in the proposal that control device manufacture will lag the growing population of storage vessels for a few years and used this rationale to separately waive controls for Group 1 storage vessels and assure adequate supply of control devices for Group 2 storage vessels. The commenter contends that the EPA further states that allowing affected storage vessels to remove controls under the proposed emission rate would help alleviate the control device shortage. According to the commenter, the EPA's justification that imposing the emission rate is due to uncertainty in their control technology projections and that an additional exemption would ''help build a buffer'' against this uncertainty is not a cognizable justification for a section 111 standard under the CAA. Further, the commenter does not believe that the EPA has demonstrated either the necessity or appropriateness of the proposed emission rate.

The commenter states that the EPA's concerns about ''buffering'' technology supply could only justify this departure from the existing standard if the proposed emission rate was also demonstrated to be BSER. According to the commenter, the EPA determined that requiring storage vessels with uncontrolled emissions greater than 6 tpy to achieve 95 percent control of those emissions reflects BSER and is cost effective. The commenter states that if these controls were maintained on a storage vessel as its emissions declined over time, total uncontrolled emissions would continue to fall. But under the proposed emission rate, the commenter contends that emissions could instead jump sharply after the threshold has been crossed. The commenter believes that this reversal in the emissions trend does not reflect BSER because it does not reflect the best demonstrated system of emissions control. According to the commenter, it is instead what happens when BSER controls are removed.

The commenter adds that for the EPA's ''buffer'' rationale to hold up, operators must be able to cost-effectively and regularly remove used control devices, store them as needed, and transfer them to new storage vessels at a rate which will meaningfully address the control device shortage which the EPA projects. The commenter asserts that the EPA provided no evidence showing operators would be able to do this, or would choose to do so. According to the commenter, storage vessels installed now would in all likelihood not take advantage of the proposal until the 15th year of operation (based on decline curve data provided by the commenter showing that it would take up to 15 years for well production to decline to a level to produce uncontrolled storage vessel emissions of

4 tpy). As a result, the commenter believes that the proposed emission rate would not generate any control devices for transfer for more than a decade, which is long after the EPA estimates adequate control devices will be available. Thus, according to the commenter's analysis, even if control devices could be transferred, such transfers will not buffer a short-term shortage. That shortage, if it exists, will long have passed. Instead, the commenter believes that the proposed emission rate would simply increase air pollution.

The commenter further states that even if the EPA were to actually require operators to build the buffer it desires, the EPA offers no evidence that such a buffer is required indefinitely. Elsewhere in the proposal, the commenter contends, the EPA expresses its view that control device manufacturers will respond to the standards by manufacturing enough control devices to meet the demand imposed by the standards, perhaps after an initial delay. The commenter points out that past experience shows that control devices become available if they are required, and this technology-forcing function is central to how section 111 is intended to work. By instead allowing operators to avoid purchasing new controls, and to remove them from other sources and reuse them, the commenter contends that the EPA permanently limits the market for new control technology, while also allowing excess emissions. The result will be fewer controls in the long-term, and more pollution.

The commenter believes that the Wyoming guidance the EPA mentions in the proposal does not comply with section 111 standards, and contends that the EPA does not offer evidence that it has avoided excess pollution.

Another commenter believes the EPA's choice of an uncontrolled emission rate of 4 tpy as the emission rate is arbitrary and unsupported. The commenter states that the EPA provided no engineering basis, credible health benefit estimate, or other justification for why the 4 tpy emission rate is appropriate.

The commenter also states that the EPA did not provide any justification or analysis demonstrating whether control at 4 tpy is cost effective. The commenter states a cost effectiveness analysis was performed for the 6 tpy applicability threshold, but no such information is provided for the proposed 4 tpy emission rate. The commenter opined that this approach will create situations of great inequity where neighboring facilities may have identical PTE VOC emissions from a single storage vessel or battery, but very different regulatory burdens. The commenter provides an example where a site with emissions of 5.95 tpy is not subject to any of the notification, reporting, or control requirements of this NSPS. However, a neighboring site with initial production emissions of 6.1 tpy must notify, control, monitor, record, and report to comply with the NSPS. The commenter provides that, as natural production declines occur, after a year of uncontrolled emissions of 3.95 tpy (below the 4 tpy threshold) the additional controls may be removed, but the burden of reporting and recordkeeping continues indefinitely for this site.

The commenter also states that this approach may also drive companies to design their sites in a way that results in increased emissions overall, defeating the goal of the rule itself. For example, according to the commenter, to avoid applicability of the rule as a whole, new sites will likely be designed with more tanks such that no single tank will exceed the 6 tpy applicability threshold but emissions from the larger number of small tanks may have higher overall emissions. The commenter believes that this in turn may exacerbate the shortage of storage tanks that already exists and may further delay production due to the lack of tank availability. Further, the commenter states that the proposed emission rate may lead to hastily constructed tanks that may not be as soundly designed and constructed creating potential concerns for public health and safety as well as air quality.

The commenter contends that the EPA focused on the concept of any planned event that has the potential to increase emissions to or above 4 tpy. However, according to the commenter, this does not account for any potential short-term activities that may trigger reinstallation of controls such as degassing, refilling, inspection or maintenance when emissions in the long-term would otherwise remain below the 4 tpy level. The commenter states that this may result in the delay of appropriate maintenance or other actions that would otherwise be conducted. Building on the example of neighboring sites described above, the commenter states that, if the second site wanted to confirm tank integrity by inspection and cleaning, one-time emissions may raise the annual uncontrolled PTE to over 4 tpy, thus triggering not only reinstallation of controls but all associated monitoring, recordkeeping and reporting requirements.

Several commenters believe that a more appropriate approach would be to allow the removal of controls if a storage vessel has had uncontrolled actual emissions that remain below 6 tpy VOCs for 6 months. The commenters also believe that this initial determination is sufficient and that no further monitoring should be required unless otherwise required under § 60.5395(b)(2). According to the commenters, wells experiencing natural production decline are unlikely to ever experience an increase in emissions, but instead will continue to experience an emissions decrease. The commenters state that this continuing natural decline also supports the contention that 6 months is a sufficient timeframe to monitor emissions before removing controls.

One commenter adds that the proposed approach would require owners/operators to make a one-time commitment of what a tank will contain to the extent that potential emissions will ever exceed 6 tpy. The commenter believes that this inappropriately extends the ''once in, always in'' policy beyond its previous applications. While it appears that EPA would allow vessels to come in and out of regulation based on whether they contain crude oil, condensate, intermediate hydrocarbon liquids, or produced water at a given time, the commenter contended that the proposal would create a one-time determination of potential emissions that forever captures a tank, regardless of whether it continues to hold the materials that would bring it within regulation. In proposing low emitting storage vessels remain subject to the rule indefinitely, the commenter believes that the EPA is imposing unnecessary and burdensome control, recordkeeping, and reporting requirements on many storage vessels. Should EPA retain this ''once in, always in'' requirement, the commenter recommends that it should affirm that storage vessels no longer holding VOC-containing liquids or that are taken out of service are no longer an affected source.

Concerning re-installation of controls, several commenters state that the threshold should be 6 tpy instead of 4 tpy based on the EPA's cost effectiveness determination.

Response: To help alleviate the control supply shortage believed to exist at the time, we had proposed to amend the storage vessel emission standards to require compliance with either the 95 percent reduction requirement or an uncontrolled actual VOC emission rate of less than 4 tpy, which would allow control devices to be removed from storage vessel affected facilities below that emission rate and relocated to those that have just come on line and have the VOC PTE of 6 tpy or more. As previously mentioned, new information we received since proposal indicates that the combustor suppliers have the manufacturing capacity to meet the demand posed by this NSPS, which in turn suggests that a supply buffer may no longer be necessary. However, for the reasons stated below, we have amended the storage vessel emission standards as proposed due to the cost effectiveness of continuing control and the increasing environmental disbenefits and energy impacts from the continued operation of the combustion control device at an inlet stream VOC concentration of less than 4 tpy.

As shown in the memo entitled *Cost and Secondary Environmental Impacts Associated with Controlling Storage Vessels under the Oil and Natural Gas Sector New Source Performance Standards,* available in the docket, our analysis indicates that the cost of controls for each storage vessel affected facility at a VOC emission rate of 4 tpy is approximately $5,100 per ton. This cost increases to approximately $6,900 per ton at an emission rate of 3 tpy, and to approximately $10,000 per ton at 2 tpy. For comparison, we note that, in a previous NSPS rulemaking [72 FR 64864 (November 16, 2007)], we had concluded that a VOC control option was not cost effective at a cost of $5,700/ton, which calls into question the cost effectiveness of continuing control of storage vessel affected facilities at an emission rate below 4 tpy.

One commenter recommends that, if we retain the uncontrolled VOC emission rate, it should be set no higher than 0.3 tpy (representing the emission rate of a 6 tpy VOC emission stream controlled at 95 percent) rather than 4 tpy. We emphasize that the 4 tpy uncontrolled VOC emission rate is not based on equivalency to the 95 percent reduction, nor do we think such conversion to an emission limit is appropriate considering it would result in a range of emission limits depending on the baseline uncontrolled emissions. The 0.3 tpy suggested by the commenter only represents the limit for sources with PTE of 6 tpy while those with higher PTE would have higher limits that equate to 95 percent reduction. Further, at the commenter's suggested emission rate of 0.3 tpy, the cost would be approximately $70,000 per ton of emission reduction, which we do not consider to be cost effective.

One commenter questioned the basis of our control cost estimates and pointed to a recent update by Colorado DPHE, an earlier version of which we used as the basis for our cost estimate, which indicated a lower cost of control. We point out that the lower cost in the revised Colorado analysis is primarily due to a lower cost (by approximately half) of the fuel for the pilot flame. Our assumption is that gas prices will remain relatively stable over time and question whether this lower fuel cost is applicable to all areas of the U.S. outside Colorado and whether such costs will be maintained in the long term. We also point out that the Colorado analysis did not include costs for a surveillance system or data management system, which were included in our analysis. Finally, the Colorado analysis showed an increase in capital cost of about $2,000 over the capital costs in our analysis. For these reasons, we believe our costs, if anything, may underestimate costs rather than overestimate as the commenter claims. We made no changes to our cost analysis based on this comment.

Another commenter suggested that our cost estimate overestimates costs because we did not take into account savings that would result when control devices are shared by storage vessels. The comment is incorrect. In our analysis, we assumed that there would be one control device used per well site. We also acknowledged that there are likely multiple storage vessels per well site, all of which would be routed to a single control device.

In addition to cost effectiveness, we evaluated the secondary impact from continuing control below 4 tpy. As shown in the memo entitled *Cost and Secondary Environmental Impacts Associated with Controlling Storage Vessels under the Oil and Natural Gas Sector New Source Performance Standards,* available in the docket, on a nationwide basis, the combustion of the pilot flame fuel and the combustion of the VOC vapor in the storage vessel vent stream will result in increases in NO_X, CO, CO_2, and methane emissions, most notably CO_2 emissions. We estimate that the operation of each combustion control device on a VOC storage vessel vent stream flow rate of 3 tpy will result in the following secondary emissions: 54 tpy of carbon dioxide (CO_2), 0.14 tpy of carbon monoxide (CO) and 0.028 tpy of nitrogen oxides (NO_X).

We also evaluated the energy impacts associated with continuing control below 4 tpy. The discussion here for secondary energy and environmental impacts is on the basis of one combustion control device. As of the date of publication of this preamble, we estimate that there are approximately 20,000 storage vessel affected facilities that require combustion control devices and that the number is projected to increase by about 11,000 per year. We also estimate that on average, from 2014 through 2020, approximately 8,000 storage vessel affected facilities per year will experience VOC emissions decline to below 4 tpy. Our information indicates that the fuel usage (primarily methane) for the pilot flame on a single combustion control device may be approximately 12 tpy (based on a fuel flow rate of 70 scf/hr for the pilot flame, or about 613 Mcf per year). Thus, at a storage vessel VOC emission rate of 4 tpy, a combustion device would have to combust an amount of fuel gas about 3 times the mass of the VOC vapor from the tank being controlled simply to keep the pilot flame operating. This ratio increases even further for VOC emission rates less than 4 tpy. Considering the nationwide energy impact of continuing to operate the pilot flame of an extremely large number of combustion control devices for VOC flow rates far lower than the pilot flame fuel flow rates, we question whether this is a responsible use of our energy resources.

In light of the cost-effectiveness, the secondary environmental impacts and the energy impacts, we have concluded that the BSER for reducing VOC emissions from storage vessel affected facilities is not represented by continued control when their sustained uncontrolled emission rates fall below 4 tpy. For the reason stated above, we have amended the storage vessel emission standards to require that, at all times, affected facilities comply with either the 95 percent reduction requirement or an uncontrolled actual VOC emission rate of less than 4, as proposed. Under the final amendments, an owner or operator may comply with the uncontrolled VOC emission rate instead of the 95 percent control requirement where it can be demonstrated that, based on records of monthly determinations of VOC emissions for the 12 consecutive months immediately preceding the demonstration, that the storage vessel affected facility uncontrolled actual VOC emissions each month during that 12-month period are below 4 tpy. The final amendments require that the owner or operator re-evaluate the uncontrolled VOC emissions on a monthly basis. For the same reasons discussed below in this section in our response to comments concerning storage vessels that are taken out of service, the 4 tpy alternative emission standards in the final amendments at § 60.5395(d)(2) require control to be applied in either of two cases. First, if a well feeding a storage vessel affected facility undergoes fracturing or refracturing, the owner or operator must comply with the 95 percent reduction requirements in § 60.5395(d)(1) as soon as liquids from the well following fracturing or refracturing are routed to the storage vessel affected facility, regardless of the last monthly emissions determination. On the other hand, if a monthly emissions determination required in § 60.5395(d)(2) indicates that VOC emissions from a storage vessel affected facility have increased to 4 tpy or greater, and the increase is not associated with fracturing or refracturing of a well feeding the storage vessel, then the owner or operator must apply 95 percent control according to § 60.5395(d)(1) within 30 days of the monthly calculation.

One commenter stated that the 4 tpy uncontrolled VOC emission rate does not represent BSER. As previously explained, due to the cost effectiveness, the secondary environmental impact and energy impact, the 4 tpy emission rate likely represents a point below which continued control ceases to be the BSER for reducing VOC emissions from storage vessel affected facilities.

One commenter asserted that some maintenance events at neighboring sites may cause short-term spikes in VOC emissions of 4 tpy or more, thereby triggering control for at least another 12 months. As discussed above, the final amendments provide for two alternative emission standards, either of which must be met at all times. However, the 2012 NSPS contains affirmative defense provisions that may be considered in cases where malfunctions occur causing emissions to exceed the standard. Planned activities are expected to be conducted in compliance with the emission standards.

We also made changes to the final amendments to clarify our intent that the uncontrolled VOC emission rate is available for all storage vessel affected facilities. In the proposed amendments, § 60.5395(d)(2) conditionally allowed the owner or operator to meet an uncontrolled actual VOC emission rate so long as the monthly actual uncontrolled emission rate remained below 4 tpy. However, in the proposed amendments we included the following qualifier in § 60.5395(d)(2): ''provided that you have been using a control device and have demonstrated that the VOC emissions have been below 4 tpy without considering control for at least the 12 consecutive months immediately preceding the demonstration.''

We now believe that this qualifier places undue restriction on the use of the emission rate. Under the qualifier, Group 1 affected facilities that had uncontrolled emission below 4 tpy by the amended compliance date would not be able to avail itself of this option. We see no reason for such limitation and have therefore removed the qualifier language in the final amendments.

Concerning a commenter's assertion that one storage vessel with PTE of just over 6 tpy would be subject to control, recordkeeping and reporting requirements but that a storage vessel with PTE of just under 6 tpy would not be subject to any requirements, we respond that applicability thresholds exist for many rules and that subpart OOOO is not unique in that regard. With regard to the assertion that owners and operators may try to circumvent the NSPS by installing multiple small throughput storage vessels to keep individual tank emissions below the 6 tpy threshold, this comment pertains to the 2012 NSPS and not the proposed reconsideration, since changes to that threshold were not proposed. In response to the commenter's concern about transient emissions above 4 tpy that are caused by operator actions, storage vessels that increase emissions to at least the 4 tpy actual VOC emissions limit are subject to the control requirements. Owners and operators must ensure that they are aware of emissions increases that may occur after an activity and take appropriate action to control those emissions as required by the NSPS. With regard to uncontrolled VOC emissions of 6 tpy for 6 consecutive months being a more appropriate uncontrolled actual VOC emission limit, we have explained in section IV.B our rationale for the 4 tpy emission limit. In addition, we have never determined that control below 6 tpy is not cost-effective; to the contrary, we have determined that control at 4 tpy and above is cost-effective. Furthermore, we are concerned that setting the emission limit to allow removal of control if uncontrolled emissions are below 6 tpy for 6 consecutive months does not provide for reasonable certainty that emissions would not be controlled to the maximum extent possible that is still cost-effective and that does not create undue secondary impacts. Moreover, a full 12 months of sustained monthly uncontrolled actual emissions estimates below the 4 tpy limit will reasonably ensure that emissions fluctuations will not cause excursions above the limit, requiring controls to be reapplied. In the context of once in always in, the EPA has not extended this policy by providing that storage vessel affected facilities that subsequently reduce PTE to below 6 tpy remain affected facilities. The EPA historically has never let facilities in and out of affected facility status and is consistent in subpart OOOO. Having storage vessels remain affected facilities when emissions decline allows regulatory agencies to track emissions of these storage vessels and to monitor compliance if they increase. Further, operators are not restricted as to what they store in a tank; if the contents are crude oil, condensate, hydrocarbon intermediates or produced water, and the storage vessel has PTE of at least 6 tpy, it is a storage vessel affected facility and subject to subpart OOOO. In addition, in response to a comment that a tank is forever an affected facility regardless of its future contents, we disagree. If a tank ceases to be used for a purpose other than to hold an accumulation of any of the materials listed above, then it ceases to fit the definition of storage vessel under subpart OOOO and is therefore no longer an affected facility subject to the standards.

One commenter requests that we clarify that a storage vessel affected facility that is taken out of service ceases to be an affected facility under the NSPS. On the contrary, the storage vessel remains to be an affected facility, although we realize that there may be undue burden associated with control and monitoring, recordkeeping and reporting requirements for storage vessels that are not in service. However, if a storage vessel affected facility that is out of service is returned to service, an emissions determination is necessary to see whether it can continue compliance with the 4 tpy uncontrolled emission rate or it must now install control to meet the 95 percent reduction requirement. In the 2012 NSPS, we concluded that we need to provide sufficient time for determining emissions and, if necessary, installing control. See 77 FR 49490, at 49526 (August 16, 2012). Accordingly, the 2012 NSPS provide 30 days for determining emissions and an additional 30 days to make control operational. We believe that a similar time frame is needed for a dormant storage vessel returned to service to demonstrate continued compliance with the 4 tpy uncontrolled emission rate or to install control to meet the 95 percent reduction requirement. After all, these storage vessels may very well have very low emissions upon startup and should not be forced to install control immediately without an opportunity to demonstrate that they can continue compliance with the 4 tpy uncontrolled emission rate. However, we are concerned that a dormant storage vessel that is returned to service associated with the fracturing or refracturing of a well feeding it is likely to release substantial amounts of vapor if not controlled right away due to the initially high liquid flow and flash emissions from freshly fractured or refractured wells. We also believe that potential emissions associated with fracturing and refracturing of a well are unlikely to meet the 4 tpy uncontrolled emission rate. We are therefore not providing the time period described above for storage vessels returned to service associated with fracturing or refracturing of a well. In light of these considerations, we have added language at § 60.5395(f) of the final amendments to address storage vessel affected facilities that are removed from service. After taking a storage vessel affected facility out of service, owners or operators are required provide notification in their next annual report that the storage vessel has been taken out of service. If a storage vessel's return to service is associated with fracturing or refracturing of a well feeding the storage vessel, the storage vessel must comply with control requirements in § 60.5395(d) immediately upon returning to service. If, however, the storage vessel's return to service is not associated with well fracturing or refracturing, the PTE of the storage vessel must be determined within 30 days. If the PTE is 4 tpy or greater, then the storage vessel affected facility must comply with control requirements in § 60.5395(d) within 60 days of being returned to service.

D. Major Comments Concerning Ongoing Compliance Requirements

1. Burden of Monitoring and Testing Requirements

Comment: One commenter states that the monitoring and testing requirements for storage vessels in the 2012 NSPS are overly complex and stringent given the large number of units affected and the remoteness of some wells sites. The commenter supports the EPA's intent to reduce the monitoring and testing burden on affected sources by means of the streamlined monitoring provisions in the proposed amendments. However, the commenter contends that many of these ''streamlined'' provisions remain overly burdensome due to the large number of affected vessels and the remoteness of the well sites at which they are installed. In particular, the commenter believes that § 60.5416 should only require an annual auditory, visual and olfactory (AVO) inspection of the vessel and control device, and that Method 22 observation should be required only if smoke is observed by the operator.

Another commenter states that, as proposed, the monthly inspections and obligations for prompt repairs can be accomplished with existing personnel and not add significantly to the cost of compliance while ensuring that the required emissions controls are operating properly.

Response: In this action, the EPA is finalizing the streamlined compliance monitoring requirements, as proposed, with minor clarifying changes. As we stated in the preamble to the proposed amendments (78 FR 22134), we will continue to fully evaluate the compliance demonstration and monitoring issues. We intend to complete our reconsideration of these requirements, along with other issues for which we intend to grant reconsideration, by the end of 2014.

In response to the comment stating that the streamlined monitoring provisions are still too burdensome, the EPA has re-evaluated the Method 22 requirements in the proposed reconsideration rule and continues to believe that an observation time of fifteen minutes with a one minute smoke allowance for all combustion controls is appropriate. For manufacturer-tested enclosed combustors, the required frequency of the Method 22 test is quarterly. For all other combustion controls, the required frequency of the Method 22 test is monthly. A ''smoke/no smoke'' determination is essentially what Method 22 requires. Method 22 simply requires the observer to note how long emissions were seen over a period of time (15 minutes for monthly testing, 1 hour for quarterly testing). If smoke is seen for more than a specified amount of time, it is a violation. We have information indicating that personnel are on-site at each well at least monthly. Since the Method 22 observation does not require highly trained personnel to conduct the test, we believe the personnel already on-site are capable of performing the test. Thus, we do not agree with the commenter that the monitoring provisions in the reconsideration proposal would result in undue burden, or that they are inappropriate considering the remoteness of the well sites. We have therefore finalized those provisions.

2. Streamlined Compliance Monitoring

Comment: Several commenters commented on the proposed streamlined compliance monitoring requirements for closed vent systems and control devices installed to reduce VOC emissions from storage vessels. Four commenters request that the EPA make the streamlined compliance monitoring requirements permanent. One of these commenters states that monitoring requirements imposed by the 2012 NSPS would be particularly onerous for small, independent operators that cannot afford the number of employees-hours required to travel to distant well sites with such high frequency. According to the commenters, their suggested changes to the proposed amendments would meet the goal of proper monitoring of emissions without requiring such a large amount of human and capital resources. Two commenters oppose the streamlined monitoring requirements and request that the EPA reinstate the more rigorous requirements in the 2012 NSPS. One commenter states that portions of the streamlined monitoring requirements are unnecessary and burdensome.

Another commenter expresses concern that the proposed amendments replace instrument-based monitoring of control devices and closed vent systems (CVS) with less reliable methods. Effective monitoring of the integrity and performance of emission control devices is vital to ensuring compliance with emissions limitations under section 111, according to the commenter, and is evident in the radically revised number of storage vessels with emissions exceeding 6 tpy.

The commenter pointed out that the current subpart OOOO requirements for continuous parametric monitoring system (CPMS) and Method 22 testing, as well as Method 21 monitoring, build on other long-standing EPA regulations, including storage vessel standards under subpart HH and the NSPS for volatile organic liquid storage vessels, subpart Kb. The commenter added that they are also consistent with the proposed Uniform Standards for CVS and storage vessels. According to the commenter, the EPA went in the wrong direction by proposing to eliminate the CPMS requirements, shorten the Method 22 visible emissions testing, and allow operators to inspect CVS using OVA inspections.

The commenter states that previous agency studies indicate that instrument-based monitoring is cost-effective and more sensitive than sensory inspections, suggesting that if anything subpart OOOO should extend such monitoring to all roof fittings that could emit VOC. The commenter contends that the EPA provided no information in the proposed reconsideration that questions the findings of the Uniform Standards on relative effectiveness or cost of instrument monitoring of storage vessel components. The commenter also points to the Fort Berthold Indian Reservation Federal Implementation Plan (FBIR FIP) where the EPA required continuous parametric monitoring of enclosed combustors, utility flares, and other control devices. Also in the FBIR FIP according to the commenter, the EPA rejected reducing the Method 22 observation period to 1 hour to mitigate burdensome compliance costs as an option that was not suitable. The commenter does not believe the EPA provided specific information to warrant a different approach.

The commenter adds that the EPA did not demonstrate that the proposed changes are necessary to mitigate cost and burdens raised by industry. The commenter states that the EPA cited general personnel and infrastructure concerns in the preamble but did not provide an analysis of the anticipated costs of implementing monitoring. In proposing to determine that the current monitoring requirements were infeasible, the commenter contends that the EPA did not indicate whether it took into account the reduced monitoring costs associated with the Group 1 exemption for storage vessels that do not undergo an emissions-increasing event and the deferral of the Group 2 storage vessel compliance date.

Further, the commenter states that there is no indication as to whether Method 21 inspections, CPMS and full Method 22 testing would be infeasible at storage vessels at or near manned facilities. As a result, the commenter contends that the EPA's streamlined monitoring requirements appear to be overly broad as well as inadequately supported.

Another commenter adds that periodic monitoring of closed-vent systems and control devices is a very important part of controlling the air quality in the nation. The commenter asserts that most well sites are located far away from cities and sometimes it can be bothersome to drive back and forth in order to accomplish testing and monitoring processes. The commenter believes that the best way to encourage operators to use the appropriate models is by not letting them install equipment without proper documentation, and to fine them, or even stop onsite operations in case they do not obey the requirement.

Response: In today's action, the EPA is finalizing the streamlined compliance monitoring requirements, as proposed, with minor clarifying changes. In finalizing these provisions, the EPA has made no determination on the cost or feasibility of the compliance monitoring provisions in the 2012 NSPS, as some commenters appear to suggest. We also agree with the commenters about those provisions' reliability and effectiveness. However, as we explained in the preamble to the proposed amendments (78 FR 22134), significant issues regarding their implementation have been raised in the administrative petitions for reconsideration of the 2012 NSPS, which we are continuing to evaluate. We intend to complete our reconsideration of these requirements, along with any other issues for which we intend to grant reconsideration, by the end of 2014. We do not believe it is appropriate to impose these monitoring requirements on affected facilities while we are still evaluating their implementation issues. However, to avoid delaying compliance, we have proposed and are finalizing in today's action a set of streamlined compliance monitoring requirements. We believe that they are adequate to assure compliance. Several commenters urge us to retain the monitoring provisions in the 2012 NSPS for the reasons summarized above, but none of them claim that the streamlined provisions laid out in the proposal are inadequate to assure compliance. In light of the above, we are finalizing the streamlined compliance monitoring requirements, as proposed, with minor clarifying changes.

E. Major Comments Concerning Design Requirements

Comment: Three commenters support the inclusion of design parameters in the final amendments. One commenter states that design parameters are important to reduce the possibility for an unintended loophole in the rule language which might result in potentially significant emissions. The commenter adds that their agency has observed the highest emission rates corresponding to flash VOC emissions while liquids are being added to an existing storage vessel and believes that this is common at well sites, where the natural formation results in high pressure liquids which are then routed through the separator to a storage vessel that is at or around atmospheric pressure. The commenter contends that if a closed cover is not maintained during such liquids addition, a large percentage of the annual emissions could vent out of a pressure relief valve or thief hatch, rather than being routed to a control device.

Another commenter supported this view and states that the final amendments must ensure that vapor collection systems and control devices will reduce 95 percent of VOCs during all phases of operation, including when air pressure significantly increases during loading. The commenter contends that where systems are currently in place to control condensate tank emissions at natural gas exploration and production sites, they are sometimes inadequate for controlling the high-pressure vapor produced when the tanks receive a slug of condensate. The commenter points out that the EPA has noted in this rulemaking that the feasibility of meeting the storage-vessel standards with a vapor recovery unit may be affected by ''fluctuations in vapor loading caused by surges in throughput and flash emissions from the storage vessel.'' The commenter provides several possible approaches to assure equipment is properly designed to meet the storage vessel standards.

One of the commenters adds that the inclusion of design requirements would provide enforceable provisions that would assist permitting agencies in regulating sources.

Eight commenters generally opposed the inclusion of design requirements in the final amendments. One commenter states that the EPA has already established BSER for affected storage vessels as the reduction of VOC emissions by 95 percent or greater and established work practice standards for the closed vent system to any control device or vapor recovery system. According to the commenter, these work practice standards address potential equipment design and maintenance issues that could affect the proper collection of and destruction or recovery of VOC emissions from storage vessels. The commenter asserts that a storage vessel, closed vent system, and control device that are not properly designed would not be able to meet the work practice standards and minimum control device destruction efficiency already required in the proposed rule; therefore, any process design standards would only be duplicative requirements and result in more burden to industry and state agencies responsible for compliance.

The commenter maintains that the EPA should not attempt to expand any NSPS regulations by specifically regulating the process or mechanical design of storage vessels or the closed vent system to control devices or vapor recovery systems. The commenter further states that owners and operators are responsible for designing process equipment based on individual site process conditions and safety considerations. According to the commenter, it would be a massive undertaking for the EPA to attempt to write regulations regarding the specific ''proper'' design of storage vessels and closed vent systems. The commenter expresses doubt that the EPA could provide enough flexibility in process and mechanical design of equipment regulations to cover all the unique process conditions at individual facilities.

One commenter adds that over-prescriptive regulations on storage vessel design could stifle technological innovation, including new tank designs that emit less than current storage vessels. Additionally, according to the commenter, storage vessels are specifically designed in accordance with federal safety standards and these specifications should not be potentially compromised under any circumstances. Further, the commenter states that it is in the best economic interest of all operators to procure properly designed equipment and operate storage vessels efficiently. Lastly, the commenter states that, under the CAA, operators already have a general duty requirement to ''maintain and operate any affected facility including air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.''

One commenter does not believe that the EPA has the authority under NSPS to require a particular technology or design as a performance standard. The commenter contends that the EPA should not mandate a particular technology, but rather allow companies to choose the technology to best meet the emission standard.

One state agency commenter believes that specifying design requirements in regulations will stifle innovation and create a plateau for new products. The commenter believes that such restrictions will not allow for economic or technological creation of new methods or equipment. The commenter further states that, as the industry grows and changes, so too should the facilities and equipment associated with it, but prescriptive design requirements would not allow this to happen. Also, according to the commenter, due to high variability of materials and situations in the field it seems illogical and inappropriate to deem only certain designs of facilities and equipment acceptable or not. The commenter contends that design requirements specified by rule could cause certain facilities or regions to be unable to implement engineering solutions necessary to account for site- or region-specific conditions.

Response: The EPA appreciates the information provided by these commenters in response to the EPA's solicitation of comment on whether the NSPS should include design requirements for storage vessels, closed vent system and control devices. In the preamble to the proposed rule, we had solicited comment on whether the EPA should require that storage vessel installations and associated controls be sized and designed properly for specific applications to minimize excess emissions due to improperly sized and designed storage vessels or control systems. We did not solicit comment on whether the EPA should require specific technology or design parameters. Accordingly, because the reconsideration proposal did not include any specific design requirements for storage vessels and associated closed vent systems and control device, no such requirement is included in the final amendments.

F. Major Comments Concerning Impacts

Comment: One commenter contends that the EPA failed to assess the air quality impacts of its proposed amendments and the EPA must provide further analysis of air quality impacts to support that the proposed revised standards is BSER. According to the commenter's analysis, Group 1 storage vessels that do not experience an event that would increase emissions would result in an increase from the final NSPS in VOC emissions of over 3 million tpy and methane emissions of over 700,000 tpy. In addition, the commenter states that the six-month delay of the compliance date for Group 2 storage vessels results in an increases of 450,000 tpy of VOC emissions and 100,000 tpy of methane emissions. The commenter added that the removal of a control device from sources whose uncontrolled emissions drop below 4 tpy would result in an emission increase of 3.8 tpy VOC per vessel. Assuming that the 11,600 new vessels the EPA projects would qualify for the uncontrolled actual VOC emission rate, emissions would increase by 23,000 tpy VOC and 5,000 tpy methane. The commenter also contends that the removal of the control device would result in sources left uncontrolled during any unplanned events that would generate significant emissions. Additionally, the commenter states that using their decline curve analysis, new sources would not qualify for uncontrolled actual VOC emission rate for at least 14 years, and the increase in pollution is not justified by the EPA's control device availability concerns.

Response: As we discussed in section IV.A of this preamble, we are not finalizing our proposal to subject only those Group 1 storage vessels that experience an event to the emission standards. Thus, all Group 1 storage vessel affected facilities will be subject to the emission standards, as required under the 2012 NSPS. We believe this addresses the commenters' concerns about any increase in emissions based on our proposal to require Group 1 to control only if there is a subsequent emission increase event. The commenter is also concerned with emission increase from delayed compliance. However, we believe that the extended deadlines in the final amendments are justified for the reasons stated in section IV.A, and we are phasing the compliance deadlines to address facilities with projected higher emissions more quickly.

We have also provided further analysis of air quality impacts, as the commenter suggests, as well as the cost effectiveness and energy impact associated with the proposed uncontrolled emission rate of less than 4 tpy. As discussed in more detail in section V.C of this preamble, 4 tpy likely represents a point below which control ceases to be the BSER for reducing VOC emissions from storage vessel affected facilities due to the cost effectiveness, the secondary environmental impact and energy impact.

VI. Technical Corrections and Clarifications

The EPA is finalizing corrections to recordkeeping and reporting requirements for all affected facilities. In addition, the final amendments include corrections that are editorial in nature, such as typographical and grammatical errors, as well as incorrect cross-references.

VII. Impacts of These Final Amendments

Our analysis shows that owners and operators of storage vessel affected facilities would choose to install and operate the same or similar air pollution control technologies under the proposed standards as would have been necessary to meet the previously finalized standards. We project that this rule will result in no significant change in costs, emission reductions, or benefits. Even if there were changes in costs for these units, such changes would likely be small relative to both the overall costs of the individual projects and the overall costs and benefits of the final rule. Since we believe that owners and operators would put on the same controls for this revised final rule that they would have for the original final rule, there should not be any incremental costs related to this proposed revision.

A. What are the air impacts?

We believe that owners and operators of storage vessel affected facilities will install the same or similar control technologies to comply with the revised standards finalized in this action as they would have installed to comply with the previously finalized standards. Accordingly, we believe that this final rule will not result in significant changes in emissions of any of the regulated pollutants.

B. What are the energy impacts?

This final rule is not anticipated to have an effect on the supply, distribution, or use of energy. As previously stated, we believe that owners and operators of storage vessel affected facilities would install the same or similar control technologies as they would have installed to comply with the previously finalized standards.

C. What are the compliance costs?

We believe there will be no significant change in compliance costs as a result of this final rule because owners and operators of storage vessel affected facilities would install the same or similar control technologies as they would have installed to comply with the previously finalized standards. However, we note that there likely will be reductions of costs imposed on owners and operators associated with the streamlined compliance monitoring procedures provided in the final amendments.

D. What are the economic and employment impacts?

Because we expect that owners and operators of storage vessel affected facilities would install the same or similar control technologies to meet the standards finalized in this action as they would have chosen to comply with the previously finalized standards, we do not anticipate that this final rule will result in significant changes in emissions, energy impacts, costs, benefits, or economic impacts. Likewise, we believe this rule will not have any impacts on the price of electricity, employment or labor markets, or the U.S. economy.

E. What are the benefits of the proposed standards?

As previously stated, the EPA anticipates the oil and natural gas sector will not incur significant compliance costs or savings as a result of this rule and we do not anticipate any significant emission changes resulting from this rule. Therefore, there are no direct monetized benefits or disbenefits associated with this rule.

VIII. Statutory and Executive Order Reviews

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

This action is not a ''significant regulatory action'' under the terms of Executive Order 12866 (58 FR 51735, October 4, 1993) and is therefore not subject to review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011).

An RIA was prepared for the April 2012 NSPS and can be found at: *http://www.epa.gov/ttn/ecas/regdata/RIAs/oil_natural_gas_final_neshap_nsps_ria.pdf.* This final rule will not result in a significant change in costs, emission reductions, or benefits in 2015 (the year of full implementation of the 2012 NSPS being amended with this action).

B. Paperwork Reduction Act

This action does not impose any new information collection burden. This action does not change the information collection requirements previously finalized under the 2012 NSPS and, as a result, does not impose any additional burden on industry. However, OMB has previously approved the information collection requirements contained in the existing regulations (see 77 FR 49490) under the provisions of the *Paperwork Reduction Act,* 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2060–0673). The OMB control numbers for the EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of this rule on small entities, a small entity is defined as: (1) A small business in the oil or natural gas industry whose parent company has no more than 500 employees (or revenues of less than $7 million for firms that transport natural gas via pipeline); (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 today's final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. The EPA has determined that none of the small entities will experience a significant impact because these final amendments will not impose additional compliance costs on owners or operators of affected facilities.

D. Unfunded Mandates Reform Act

This action contains no federal mandates under the provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531–1538 for State, local, or tribal governments or the private sector. This action imposes no enforceable duty on any state, local or tribal governments or the private sector. Therefore, this action is not subject to the requirements of sections 202 or 205 of the UMRA.

This action 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. This action contains no requirements that apply to small governments nor does it impose 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. This final rule is a reconsideration of an existing rule and imposes no new impacts or costs. Thus, Executive Order 13132 does not apply to this action.

In the spirit of Executive Order 13132, and consistent with the EPA policy to promote communications between the EPA and state and local governments, the EPA specifically solicited comment on the proposed action 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). It will not have substantial direct effect on tribal governments, on the relationship between the federal government and tribal governments or on the distribution of power and responsibilities between the federal government and tribal governments, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.

In the spirit of Executive Order 13175, and consistent with the EPA policy to promote communications between the EPA and tribal governments, the EPA specifically solicited comment on the proposed action from tribal officials. The EPA notes that significant oil and natural gas development is occurring on some tribal lands and has been mindful of this in consideration of these final amendments.

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

This action is not subject to EO 13045 (62 FR 19885, April 23, 1997) because it is not economically significant as defined in EO 12866, and because the agency does not believe the environmental health risks or safety risks addressed by this action present a disproportionate risk to children. This final rule will not result in a significant change in emission reductions and benefits in 2015, the year of full implementation of the 2012 NSPS being amended with this action. Therefore, health and risk assessments were not conducted.

The public was invited to submit comments or identify peer-reviewed studies and data that assess effects of early life exposure to HAP from oil and natural gas sector activities.

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

This action is not subject to Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is not a significant regulatory action under Executive Order 12866.

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 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 voluntary consensus standards bodies. The NTTAA directs the EPA to provide Congress, through OMB, explanations when the agency decides not to use available and applicable voluntary consensus standards.

This final rule does not involve technical standards. Therefore, the EPA is not considering the use of any voluntary consensus standards.

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

Executive Order (EO) 12898 (59 FR 7629 (Feb. 16, 1994)) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

The EPA has determined that this final rule will not have disproportionately high and adverse human health or environmental effects on minority, low-income, or indigenous populations because it does not affect the level of human health or environmental protection for all affected populations. This final rule is a reconsideration of an existing rule and imposes no new impacts or costs. Therefore, this final rule would not have any disproportionately high and adverse human health or environmental effects on any population, including any minority, low income or indigenous populations.

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 Congress and to the Comptroller General of the United States. The 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). This rule will be effective September 23, 2013.

List of Subjects in 40 CFR Part 60

Administrative practice and procedure, Air pollution control, Intergovernmental relations, Reporting and recordkeeping.

Dated: August 2, 2013.

Gina McCarthy,

Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

■ 1. The authority citation for part 60 continues to read as follows:

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

Subpart OOOO—[Amended]

■ 2. Section 60.5365 is amended by revising paragraphs (e) and (h)(4) to read as follows:

§ 60.5365 Am I subject to this subpart?

* * * * *

(e) Each storage vessel affected facility, which is a single storage vessel located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment, and has the potential for VOC emissions equal to or greater than 6 tpy as determined according to this section by October 15, 2013 for Group 1 storage vessels and by April 15, 2014, or 30 days after startup (whichever is later) for Group 2 storage vessels. A storage vessel affected facility that subsequently has its potential for VOC emissions decrease to less than 6 tpy shall remain an affected facility under this subpart. The potential for VOC emissions must be calculated using a generally accepted model or calculation methodology, based on the maximum average daily throughput determined for a 30-day period of production prior to the applicable emission determination deadline specified in this section. The determination may take into account requirements under a legally and practically enforceable limit in an operating permit or other requirement established under a Federal, State, local or tribal authority. Any vapor from the storage vessel that is recovered and routed to a process through a VRU designed and operated as specified in this section is not required to be included in the determination of VOC potential to emit for purposes of determining affected facility status, provided you comply with the requirements in paragraphs (e)(1) through (4) of this section.

(1) You meet the cover requirements specified in § 60.5411(b).

(2) You meet the closed vent system requirements specified in § 60.5411(c).

(3) You maintain records that document compliance with paragraphs (e)(1) and (2) of this section.

(4) In the event of removal of apparatus that recovers and routes vapor to a process, or operation that is inconsistent with the conditions specified in paragraphs (e)(1) and (2) of this section, you must determine the storage vessel's potential for VOC emissions according to this section within 30 days of such removal or operation.

* * * * *

(h) * * *

(4) A gas well facility initially constructed after August 23, 2011, is considered an affected facility regardless of this provision.

■ 3. Section 60.5380 is amended by revising paragraphs (a)(2), (b), and (c) to read as follows:

§ 60.5380 What standards apply to centrifugal compressor affected facilities?

* * * * *

(a) * * *

(2) If you use a control device to reduce emissions, you must equip the wet seal fluid degassing system with a cover that meets the requirements of § 60.5411(b), that is connected through a closed vent system that meets the requirements of § 60.5411(a) and routed to a control device that meets the conditions specified in § 60.5412(a), (b) and (c). As an alternative to routing the closed vent system to a control device, you may route the closed vent system to a process.

(b) You must demonstrate initial compliance with the standards that apply to centrifugal compressor affected facilities as required by § 60.5410(b).

(c) You must demonstrate continuous compliance with the standards that apply to centrifugal compressor affected facilities as required by § 60.5415(b).

* * * * *

■ 4. Section 60.5390 is amended by:

■ a. Revising the introductory text;

■ b. Revising paragraph (a); and

■ c. Revising paragraph (c).

The revisions read as follows:

§ 60.5390 What standards apply to pneumatic controller affected facilities?

For each pneumatic controller affected facility you must comply with the VOC standards, based on natural gas as a surrogate for VOC, in either paragraph (b)(1) or (c)(1) of this section, as applicable. Pneumatic controllers meeting the conditions in paragraph (a) of this section are exempt from this requirement.

(a) The requirements of paragraph (b)(1) or (c)(1) of this section are not required if you determine that the use of a pneumatic controller affected facility with a bleed rate greater than the applicable standard is required based on functional needs, including but not limited to response time, safety and positive actuation. However, you must tag such pneumatic controller with the month and year of installation, reconstruction or modification, and identification information that allows traceability to the records for that pneumatic controller, as required in § 60.5420(c)(4)(ii).

* * * * *

(c)(1) Each pneumatic controller affected facility constructed, modified or reconstructed on or after October 15, 2013, at a location between the wellhead and a natural gas processing plant or the point of custody transfer to an oil pipeline must have a bleed rate less than or equal to 6 standard cubic feet per hour.

(2) Each pneumatic controller affected facility at a location between the wellhead and a natural gas processing plant or the point of custody transfer to an oil pipeline must be tagged with the month and year of installation, reconstruction or modification, and identification information that allows traceability to the records for that controller as required in § 60.5420(c)(4)(iii).

* * * * *

■ 5. Section 60.5395 is revised to read as follows:

§ 60.5395 What standards apply to storage vessel affected facilities?

Except as provided in paragraph (h) of this section, you must comply with the standards in this section for each storage vessel affected facility.

(a)(1) If you are the owner or operator of a Group 1 storage vessel affected facility, you must comply with paragraph (b) of this section.

(2) If you are the owner or operator of a Group 2 storage vessel affected facility, you must comply with paragraph (c) of this section.

(b) *Requirements for Group 1 storage vessel affected facilities.* If you are the owner or operator of a Group 1 storage vessel affected facility, you must comply with paragraphs (b)(1) and (2) of this section.

(1) You must submit a notification identifying each Group 1 storage vessel affected facility, including its location, with your initial annual report as specified in § 60.5420(b)(6)(iv).

(2) You must comply with paragraphs (d) through (g) of this section.

(c) *Requirements for Group 2 storage vessel affected facilities.* If you are the owner or operator of a Group 2 storage vessel affected facility, you must comply with paragraphs (d) through (g) of this section.

(d) You must comply with the control requirements of paragraph (d)(1) of this section unless you meet the conditions specified in paragraph (d)(2) of this section.

(1) Reduce VOC emissions by 95.0 percent according to the schedule specified in (d)(1)(i) and (ii) of this section.

(i) For each Group 2 storage vessel affected facility, you must achieve the required emissions reductions by April 15, 2014, or within 60 days after startup, whichever is later.

(ii) For each Group 1 storage vessel affected facility, you must achieve the required emissions reductions by April 15, 2015.

(2) Maintain the uncontrolled actual VOC emissions from the storage vessel affected facility at less than 4 tpy without considering control. Prior to using the uncontrolled actual VOC emission rate for compliance purposes, you must demonstrate that the uncontrolled actual VOC emissions have remained less than 4 tpy as determined monthly for 12 consecutive months. After such demonstration, you must determine the uncontrolled actual VOC emission rate each month. The uncontrolled actual VOC emissions must be calculated using a generally accepted model or calculation methodology. Monthly calculations must be based on the average throughput for the month. Monthly calculations must be separated by at least 14 days. You must comply with paragraph (d)(1) of this section if your storage vessel affected facility meets the conditions specified in paragraphs (d)(2)(i) or (ii) of this section.

(i) If a well feeding the storage vessel affected facility undergoes fracturing or refracturing, you must comply with paragraph (d)(1) of this section as soon as liquids from the well following fracturing or refracturing are routed to the storage vessel affected facility.

(ii) If the monthly emissions determination required in this section indicates that VOC emissions from your storage vessel affected facility increase to 4 tpy or greater and the increase is not associated with fracturing or refracturing of a well feeding the storage vessel affected facility, you must comply with paragraph (d)(1) of this section within 30 days of the monthly calculation.

(e) *Control requirements.* (1) Except as required in paragraph (e)(2) of this section, if you use a control device to reduce emissions from your storage vessel affected facility, you must equip the storage vessel with a cover that meets the requirements of § 60.5411(b) and is connected through a closed vent system that meets the requirements of § 60.5411(c), and you must route emissions to a control device that meets the conditions specified in § 60.5412(c) and (d). As an alternative to routing the closed vent system to a control device, you may route the closed vent system to a process.

(2) If you use a floating roof to reduce emissions, you must meet the requirements of § 60.112b(a)(1) or (2) and the relevant monitoring, inspection, recordkeeping, and reporting requirements in 40 CFR part 60, subpart Kb.

(f) *Requirements for storage vessel affected facilities that are removed from service.* If you are the owner or operator of a storage vessel affected facility that is removed from service, you must comply with paragraphs (f)(1) and (2) of this section.

(1) You must submit a notification in your next annual report, identifying all storage vessel affected facilities removed from service during the reporting period.

(2) If the storage vessel affected facility identified in paragraph (f)(1) of this section is returned to service, you must comply with paragraphs (f)(2)(i) through (iii) of this section.

(i) If returning your storage vessel affected facility to service is associated with fracturing or refracturing of a well feeding the storage vessel affected facility, you must comply with paragraph (d) of this section immediately upon returning the storage vessel to service.

(ii) If returning your storage vessel affected facility to service is not associated with a well that was fractured or refractured, you must comply with paragraphs (f)(2)(ii)(A) and (B) of this section.

(A) You must determine emissions as specified in § 60.5365(e) within 30 days of returning your storage vessel affected facility to service.

(B) If the uncontrolled VOC emissions without considering control from your storage vessel affected facility are 4 tpy or greater, you must comply with paragraph (d) of this section within 60 days of returning to service.

(iii) You must submit a notification in your next annual report identifying each storage vessel affected facility that has been returned to service.

(g) *Compliance, notification, recordkeeping, and reporting.* You must comply with paragraphs (g)(1) through (3) of this section.

(1) You must demonstrate initial compliance with standards as required by § 60.5410(h) and (i).

(2) You must demonstrate continuous compliance with standards as required by § 60.5415(e)(3).

(3) You must perform the required notification, recordkeeping and reporting as required by § 60.5420.

(h) *Exemptions.* This subpart does not apply to storage vessels subject to and controlled in accordance with the requirements for storage vessels in 40 CFR part 60, subpart Kb, 40 CFR part 63, subparts G, CC, HH, or WW.

■ 6. Section 60.5410 is amended by:
■ a. Revising the introductory text;
■ b. Revising paragraphs (a)(3) and (4);
■ c. Revising paragraphs (b)(2) through (5);
■ d. Revising paragraphs (b)(7) and (8);
■ e. Removing and reserving paragraph (c)(2);
■ f. Revising paragraphs (d) introductory text, (d)(1), (d)(2), and (d)(4);
■ g. Removing and reserving paragraph (e); and
■ h. Adding paragraphs (h) and (i).

The revisions and additions read as follows:

§ 60.5410 How do I demonstrate initial compliance with the standards for my gas well affected facility, my centrifugal compressor affected facility, my reciprocating compressor affected facility, my pneumatic controller affected facility, my storage vessel affected facility, and my equipment leaks and sweetening unit affected facilities at onshore natural gas processing plants?

You must determine initial compliance with the standards for each affected facility using the requirements in paragraphs (a) through (i) of this section. The initial compliance period begins on October 15, 2012, or upon initial startup, whichever is later, and ends no later than one year after the initial startup date for your affected facility or no later than one year after October 15, 2012. The initial compliance period may be less than one full year.

(a) * * *

(3) You must maintain a log of records as specified in § 60.5420(c)(1)(i) through (iv) for each well completion operation conducted during the initial compliance period.

(4) For each gas well affected facility subject to both § 60.5375(a)(1) and (3), as an alternative to retaining the records specified in § 60.5420(c)(1)(i) through (iv), you may maintain records of one or more digital photographs with the date the photograph was taken and the latitude and longitude of the well site imbedded within or stored with the digital file showing the equipment for storing or re-injecting recovered liquid, equipment for routing recovered gas to the gas flow line and the completion combustion device (if applicable) connected to and operating at each gas well completion operation that occurred during the initial compliance period. As an alternative to imbedded latitude and longitude within the digital photograph, the digital photograph may consist of a photograph of the equipment connected and operating at each well completion operation with a photograph of a separately operating GIS device within the same digital picture, provided the latitude and longitude output of the GIS unit can be clearly read in the digital photograph.

(b) * * *

(2) If you use a control device to reduce emissions, you must equip the wet seal fluid degassing system with a cover that meets the requirements of § 60.5411(b) that is connected through a closed vent system that meets the requirements of § 60.5411(a) and is routed to a control device that meets the conditions specified in § 60.5412(a), (b) and (c). As an alternative to routing the closed vent system to a control device, you may route the closed vent system to a process.

(3) You must conduct an initial performance test as required in § 60.5413 within 180 days after initial startup or by October 15, 2012, whichever is later, and you must comply with the continuous compliance requirements in § 60.5415(b)(1) through (3).

(4) You must conduct the initial inspections required in § 60.5416(a) and (b).

(5) You must install and operate the continuous parameter monitoring systems in accordance with § 60.5417(a) through (g), as applicable.

* * * * *

(7) You must submit the initial annual report for your centrifugal compressor affected facility as required in § 60.5420(b)(3) for each centrifugal compressor affected facility.

(8) You must maintain the records as specified in § 60.5420(c)(2).

(c) * * *

(2) [Reserved]

* * * * *

(d) To achieve initial compliance with emission standards for your pneumatic controller affected facility you must comply with the requirements specified in paragraphs (d)(1) through (6) of this section, as applicable.

(1) You must demonstrate initial compliance by maintaining records as specified in § 60.5420(c)(4)(ii) of your determination that the use of a pneumatic controller affected facility with a bleed rate greater than 6 standard cubic feet of gas per hour is required as specified in § 60.5390(a).

(2) You own or operate a pneumatic controller affected facility located at a natural gas processing plant and your pneumatic controller is driven by a gas other than natural gas and therefore emits zero natural gas.

* * * * *

(4) You must tag each new pneumatic controller affected facility according to the requirements of § 60.5390(b)(2) or (c)(2).

* * * * *

(e) [Reserved]

* * * * *

(h) For each storage vessel affected facility, you must comply with paragraphs (h)(1) through (5) of this section. For a Group 1 storage vessel affected facility, you must demonstrate initial compliance by April 15, 2015, except as otherwise provided in paragraph (i) of this section. For a Group 2 storage vessel affected facility, you must demonstrate initial compliance by April 15, 2014, or within 60 days after startup, whichever is later.

(1) You must determine the potential VOC emission rate as specified in § 60.5365(e).

(2) You must reduce VOC emissions in accordance with § 60.5395(d).

(3) If you use a control device to reduce emissions, or if you route emissions to a process, you must demonstrate initial compliance by meeting the requirements in § 60.5395(e).

(4) You must submit the information required for your storage vessel affected facility as specified in § 60.5420(b).

(5) You must maintain the records required for your storage vessel affected facility, as specified in § 60.5420(c)(5) through (8) and § 60.5420(c)(12) and (13) for each storage vessel affected facility.

(i) For each Group 1 storage vessel affected facility, you must submit the notification specified in § 60.5395(b)(2) with the initial annual report specified in § 60.5420(b)(6).

■ 7. Section 60.5411 is amended by:

■ a. Revising the section heading;

■ b. Revising paragraphs (a) introductory text, (a)(1), and (a)(3)(i)(A);

■ c. Revising the heading of paragraph (b), and paragraphs (b)(1) and (b)(2)(iv);

■ d. Adding paragraph (b)(3); and

■ e. Adding paragraph (c).

The revisions and additions read as follows:

§ 60.5411 What additional requirements must I meet to determine initial compliance for my covers and closed vent systems routing materials from storage vessels and centrifugal compressor wet seal degassing systems?

* * * * *

(a) Closed vent system requirements for centrifugal compressor wet seal degassing systems. (1) You must design the closed vent system to route all gases, vapors, and fumes emitted from the material in the wet seal fluid degassing system to a control device or to a process that meets the requirements specified in § 60.5412(a) through (c).

* * * * *

(3) * * *

(i) * * *

(A) You must properly install, calibrate, maintain, and operate a flow indicator at the inlet to the bypass device that could divert the stream away from the control device or process to the atmosphere that is capable of taking periodic readings as specified in § 60.5416(a)(4) and sounds an alarm when the bypass device is open such that the stream is being, or could be, diverted away from the control device or process to the atmosphere.

* * * * *

(b) *Cover requirements for storage vessels and centrifugal compressor wet seal degassing systems.* (1) The cover and all openings on the cover (*e.g.,* access hatches, sampling ports, pressure relief valves and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the liquid in the storage vessel or wet seal fluid degassing system.

(2) * * *

(iv) To vent liquids, gases, or fumes from the unit through a closed-vent system designed and operated in accordance with the requirements of paragraph (a) or (c) of this section to a control device or to a process.

(3) Each storage vessel thief hatch shall be weighted and properly seated. You must select gasket material for the hatch based on composition of the fluid in the storage vessel and weather conditions.

(c) *Closed vent system requirements for storage vessel affected facilities using a control device or routing emissions to a process.* (1) You must design the closed vent system to route all gases, vapors, and fumes emitted from the material in the storage vessel to a control device that meets the requirements specified in § 60.5412(c) and (d), or to a process.

(2) You must design and operate a closed vent system with no detectable emissions, as determined using olfactory, visual and auditory inspections. Each closed vent system that routes emissions to a process must be operational 95 percent of the year or greater.

(3) You must meet the requirements specified in paragraphs (c)(3)(i) and (ii) of this section if the closed vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device or to a process.

(i) Except as provided in paragraph (c)(3)(ii) of this section, you must comply with either paragraph (c)(3)(i)(A) or (B) of this section for each bypass device.

(A) You must properly install, calibrate, maintain, and operate a flow indicator at the inlet to the bypass device that could divert the stream away from the control device or process to the atmosphere that sounds an alarm, or, initiates notification via remote alarm to the nearest field office, when the bypass device is open such that the stream is being, or could be, diverted away from the control device or process to the atmosphere.

(B) You must secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.

(ii) Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of paragraph (c)(3)(i) of this section.

■ 8. Section 60.5412 is amended by:

■ a. Revising paragraphs (a) introductory text, (a)(1) introductory text, and (a)(2);

■ b. Revising paragraph (b);

■ c. Revising paragraphs (c) introductory text and (c)(1); and

■ d. Adding paragraph (d).

The revisions and addition read as follows:

§ 60.5412 What additional requirements must I meet for determining initial compliance with control devices used to comply with the emission standards for my storage vessel or centrifugal compressor affected facility?

* * * * *

(a) Each control device used to meet the emission reduction standard in § 60.5380(a)(1) for your centrifugal compressor affected facility must be installed according to paragraphs (a)(1) through (3) of this section. As an alternative, you may install a control device model tested under § 60.5413(d), which meets the criteria in § 60.5413(d)(11) and § 60.5413(e).

(1) Each combustion device (*e.g.,* thermal vapor incinerator, catalytic vapor incinerator, boiler, or process heater) must be designed and operated in accordance with one of the performance requirements specified in paragraphs (a)(1)(i) through (iv) of this section.

* * * * *

(2) Each vapor recovery device (*e.g.,* carbon adsorption system or condenser) or other non-destructive control device must be designed and operated to reduce the mass content of VOC in the gases vented to the device by 95.0 percent by weight or greater as determined in accordance with the requirements of § 60.5413. As an alternative to the performance testing requirements, you may demonstrate initial compliance by conducting a design analysis for vapor recovery devices according to the requirements of § 60.5413(c).

* * * * *

(b) You must operate each control device installed on your centrifugal compressor affected facility in accordance with the requirements specified in paragraphs (b)(1) and (2) of this section.

(1) You must operate each control device used to comply with this subpart at all times when gases, vapors, and fumes are vented from the wet seal fluid degassing system affected facility, as required under § 60.5380(a), through the closed vent system to the control device. You may vent more than one affected facility to a control device used to comply with this subpart.

(2) For each control device monitored in accordance with the requirements of § 60.5417(a) through (g), you must demonstrate compliance according to the requirements of § 60.5415(b)(2), as applicable.

(c) For each carbon adsorption system used as a control device to meet the requirements of paragraph (a)(2) or (d)(2) of this section, you must manage the carbon in accordance with the requirements specified in paragraphs (c)(1) or (2) of this section.

(1) Following the initial startup of the control device, you must replace all carbon in the control device with fresh carbon on a regular, predetermined time interval that is no longer than the carbon service life established according to § 60.5413(c)(2) or (3) or according to the design required in paragraph (d)(2) of this section, for the carbon adsorption system. You must maintain records identifying the schedule for replacement and records of each carbon replacement as required in § 60.5420(c)(10) and (12).

* * * * *

(d) Each control device used to meet the emission reduction standard in § 60.5395(d) for your storage vessel affected facility must be installed according to paragraphs (d)(1) through (3) of this section, as applicable. As an alternative, you may install a control device model tested under § 60.5413(d), which meets the criteria in § 60.5413(d)(11) and § 60.5413(e).

(1) Each enclosed combustion device (*e.g.,* thermal vapor incinerator, catalytic vapor incinerator, boiler, or process heater) must be designed to reduce the mass content of VOC emissions by 95.0 percent or greater. You must follow the requirements in paragraphs (d)(1)(i) through (iii) of this section.

(i) Ensure that each enclosed combustion device is maintained in a leak free condition.

(ii) Install and operate a continuous burning pilot flame.

(iii) Operate the enclosed combustion device with no visible emissions, except for periods not to exceed a total of one minute during any 15 minute period. A visible emissions test using section 11 of EPA Method 22, 40 CFR part 60, appendix A, must be performed at least once every calendar month, separated by at least 15 days between each test. The observation period shall be 15 minutes. Devices failing the visible emissions test must follow manufacturer's repair instructions, if available, or best combustion engineering practice as outlined in the unit inspection and maintenance plan, to return the unit to compliant operation. All inspection, repair and maintenance activities for each unit must be recorded in a maintenance and repair log and must be available for inspection. Following return to operation from maintenance or repair activity, each device must pass a Method 22, 40 CFR part 60, appendix A, visual observation as described in this paragraph.

(2) Each vapor recovery device (*e.g.,* carbon adsorption system or condenser) or other non-destructive control device must be designed and operated to reduce the mass content of VOC in the gases vented to the device by 95.0 percent by weight or greater. A carbon replacement schedule must be included in the design of the carbon adsorption system.

(3) You must operate each control device used to comply with this subpart at all times when gases, vapors, and fumes are vented from the storage vessel affected facility through the closed vent system to the control device. You may vent more than one affected facility to a control device used to comply with this subpart.

■ 9. Section 60.5413 is amended by:

■ a. Revising the introductory text;

■ b. Revising paragraph (a)(7);

■ c. Revising paragraph (d); and

■ d. Adding paragraph (e).

The revisions and addition read as follows:

§ 60.5413 What are the performance testing procedures for control devices used to demonstrate compliance at my storage vessel or centrifugal compressor affected facility?

This section applies to the performance testing of control devices used to demonstrate compliance with the emissions standards for your centrifugal compressor affected facility. You must demonstrate that a control device achieves the performance requirements of § 60.5412(a) using the performance test methods and procedures specified in this section. For condensers, you may use a design analysis as specified in paragraph (c) of this section in lieu of complying with paragraph (b) of this section. In addition, this section contains the requirements for enclosed combustion device performance tests conducted by the manufacturer applicable to both storage vessel and centrifugal compressor affected facilities.

(a) * * *

(7) A control device whose model can be demonstrated to meet the performance requirements of § 60.5412(a) through a performance test conducted by the manufacturer, as specified in paragraph (d) of this section.

* * * * *

(d) *Performance testing for combustion control devices—manufacturers' performance test.* (1) This paragraph applies to the performance testing of a combustion control device conducted by the device manufacturer. The manufacturer must demonstrate that a specific model of control device achieves the performance requirements in paragraph (d)(11) of this section by conducting a performance test as specified in paragraphs (d)(2) through (10) of this section. You must submit a test report for each combustion control device in accordance with the requirements in paragraph (d)(12) of this section.

(2) Performance testing must consist of three one-hour (or longer) test runs for each of the four firing rate settings specified in paragraphs (d)(2)(i) through (iv) of this section, making a total of 12 test runs per test. Propene (propylene) gas must be used for the testing fuel. All fuel analyses must be performed by an independent third-party laboratory (not affiliated with the control device manufacturer or fuel supplier).

(i) 90–100 percent of maximum design rate (fixed rate).

(ii) 70–100–70 percent (ramp up, ramp down). Begin the test at 70 percent of the maximum design rate. During the first 5 minutes, incrementally ramp the firing rate to 100 percent of the maximum design rate. Hold at 100 percent for 5 minutes. In the 10–15 minute time range, incrementally ramp back down to 70 percent of the maximum design rate. Repeat three more times for a total of 60 minutes of sampling.

(iii) 30–70–30 percent (ramp up, ramp down). Begin the test at 30 percent of the maximum design rate. During the first 5 minutes, incrementally ramp the firing rate to 70 percent of the maximum design rate. Hold at 70 percent for 5 minutes. In the 10–15 minute time range, incrementally ramp back down to 30 percent of the maximum design rate. Repeat three more times for a total of 60 minutes of sampling.

(iv) 0–30–0 percent (ramp up, ramp down). Begin the test at the minimum firing rate. During the first 5 minutes, incrementally ramp the firing rate to 30 percent of the maximum design rate. Hold at 30 percent for 5 minutes. In the 10–15 minute time range, incrementally ramp back down to the minimum firing rate. Repeat three more times for a total of 60 minutes of sampling.

(3) All models employing multiple enclosures must be tested simultaneously and with all burners operational. Results must be reported for each enclosure individually and for the average of the emissions from all interconnected combustion enclosures/chambers. Control device operating data must be collected continuously throughout the performance test using an electronic Data Acquisition System. A graphic presentation or strip chart of the control device operating data and emissions test data must be included in the test report in accordance with paragraph (d)(12) of this section. Inlet fuel meter data may be manually recorded provided that all inlet fuel data readings are included in the final report.

(4) Inlet testing must be conducted as specified in paragraphs (d)(4)(i) through (ii) of this section.

(i) The inlet gas flow metering system must be located in accordance with Method 2A, 40 CFR part 60, appendix A–1, (or other approved procedure) to measure inlet gas flow rate at the control device inlet location. You must position the fitting for filling fuel sample containers a minimum of eight pipe diameters upstream of any inlet gas flow monitoring meter.

(ii) Inlet flow rate must be determined using Method 2A, 40 CFR part 60, appendix A–1. Record the start and stop reading for each 60-minute THC test. Record the gas pressure and temperature at 5-minute intervals throughout each 60-minute test.

(5) Inlet gas sampling must be conducted as specified in paragraphs (d)(5)(i) through (ii) of this section.

(i) At the inlet gas sampling location, securely connect a Silonite-coated stainless steel evacuated canister fitted with a flow controller sufficient to fill the canister over a 3-hour period. Filling must be conducted as specified in paragraphs (d)(5)(i)(A) through (C) of this section.

(A) Open the canister sampling valve at the beginning of each test run, and close the canister at the end of each test run.

(B) Fill one canister across the three test runs such that one composite fuel sample exists for each test condition.

(C) Label the canisters individually and record sample information on a chain of custody form.

(ii) Analyze each inlet gas sample using the methods in paragraphs (d)(5)(ii)(A) through (C) of this section. You must include the results in the test report required by paragraph (d)(12) of this section.

(A) Hydrocarbon compounds containing between one and five atoms of carbon plus benzene using ASTM D1945–03.

(B) Hydrogen (H_2), carbon monoxide (CO), carbon dioxide (CO_2), nitrogen (N_2), oxygen (O_2) using ASTM D1945–03.

(C) Higher heating value using ASTM D3588–98 or ASTM D4891–89.

(6) Outlet testing must be conducted in accordance with the criteria in paragraphs (d)(6)(i) through (v) of this section.

(i) Sample and flow rate must be measured in accordance with paragraphs (d)(6)(i)(A) through (B) of this section.

(A) The outlet sampling location must be a minimum of four equivalent stack diameters downstream from the highest peak flame or any other flow disturbance, and a minimum of one equivalent stack diameter upstream of the exit or any other flow disturbance. A minimum of two sample ports must be used.

(B) Flow rate must be measured using Method 1, 40 CFR part 60, appendix A–1 for determining flow measurement traverse point location, and Method 2, 40 CFR part 60, appendix A–1 for measuring duct velocity. If low flow conditions are encountered (*i.e.,* velocity pressure differentials less than 0.05 inches of water) during the performance test, a more sensitive manometer must be used to obtain an accurate flow profile.

(ii) Molecular weight and excess air must be determined as specified in paragraph (d)(7) of this section.

(iii) Carbon monoxide must be determined as specified in paragraph (d)(8) of this section.

(iv) THC must be determined as specified in paragraph (d)(9) of this section.

(v) Visible emissions must be determined as specified in paragraph (d)(10) of this section.

(7) Molecular weight and excess air determination must be performed as specified in paragraphs (d)(7)(i) through (iii) of this section.

(i) An integrated bag sample must be collected during the Method 4, 40 CFR part 60, appendix A–3, moisture test following the procedure specified in (d)(7)(i)(A) through (B) of this section. Analyze the bag sample using a gas chromatograph-thermal conductivity detector (GC–TCD) analysis meeting the criteria in paragraphs (d)(7)(i)(C) through (D) of this section.

(A) Collect the integrated sample throughout the entire test, and collect representative volumes from each traverse location.

(B) Purge the sampling line with stack gas before opening the valve and beginning to fill the bag. Clearly label each bag and record sample information on a chain of custody form.

(C) The bag contents must be vigorously mixed prior to the gas chromatograph analysis.

(D) The GC–TCD calibration procedure in Method 3C, 40 CFR part 60, appendix A, must be modified by using EPA Alt–045 as follows: For the initial calibration, triplicate injections of any single concentration must agree within 5 percent of their mean to be valid. The calibration response factor for a single concentration re-check must be within 10 percent of the original calibration response factor for that concentration. If this criterion is not met, repeat the initial calibration using at least three concentration levels.

(ii) Calculate and report the molecular weight of oxygen, carbon dioxide, methane, and nitrogen in the integrated bag sample and include in the test report specified in paragraph (d)(12) of this section. Moisture must be determined using Method 4, 40 CFR part 60, appendix A–3. Traverse both ports with the Method 4, 40 CFR part 60, appendix A–3, sampling train during each test run. Ambient air must not be introduced into the Method 3C, 40 CFR part 60, appendix A–2, integrated bag sample during the port change.

(iii) Excess air must be determined using resultant data from the EPA Method 3C tests and EPA Method 3B, 40 CFR part 60, appendix A, equation 3B–1.

(8) Carbon monoxide must be determined using Method 10, 40 CFR part 60, appendix A. Run the test simultaneously with Method 25A, 40 CFR part 60, appendix A–7 using the same sampling points. An instrument range of 0–10 parts per million by volume-dry (ppmvd) is recommended.

(9) Total hydrocarbon determination must be performed as specified by in paragraphs (d)(9)(i) through (vii) of this section.

(i) Conduct THC sampling using Method 25A, 40 CFR part 60, appendix A–7, except that the option for locating the probe in the center 10 percent of the stack is not allowed. The THC probe must be traversed to 16.7 percent, 50 percent, and 83.3 percent of the stack diameter during each test run.

(ii) A valid test must consist of three Method 25A, 40 CFR part 60, appendix A–7, tests, each no less than 60 minutes in duration.

(iii) A 0–10 parts per million by volume-wet (ppmvw) (as propane) measurement range is preferred; as an alternative a 0–30 ppmvw (as carbon) measurement range may be used.

(iv) Calibration gases must be propane in air and be certified through EPA Protocol 1—''EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards,'' September 1997, as amended August 25, 1999, EPA–600/R–97/121(or more recent if updated since 1999).

(v) THC measurements must be reported in terms of ppmvw as propane.

(vi) THC results must be corrected to 3 percent CO_2, as measured by Method 3C, 40 CFR part 60, appendix A–2. You must use the following equation for this diluent concentration correction:

$$Ccorr = Cmeas\left(\frac{3}{CO_{2meas}}\right)$$

Where:

C_{meas} = The measured concentration of the pollutant.

CO_{2meas} = The measured concentration of the CO_2 diluent.

3 = The corrected reference concentration of CO_2 diluent.

C_{corr} = The corrected concentration of the pollutant.

(vii) Subtraction of methane or ethane from the THC data is not allowed in determining results.

(10) Visible emissions must be determined using Method 22, 40 CFR part 60, appendix A. The test must be performed continuously during each test run. A digital color photograph of the exhaust point, taken from the position of the observer and annotated with date and time, must be taken once per test run and the 12 photos included in the test report specified in paragraph (d)(12) of this section.

(11) *Performance test criteria.* (i) The control device model tested must meet the criteria in paragraphs (d)(11)(i)(A) through (D) of this section. These criteria must be reported in the test report required by paragraph (d)(12) of this section.

(A) Method 22, 40 CFR part 60, appendix A, results under paragraph (d)(10) of this section with no indication of visible emissions.

(B) Average Method 25A, 40 CFR part 60, appendix A, results under paragraph (d)(9) of this section equal to or less than 10.0 ppmvw THC as propane corrected to 3.0 percent CO_2.

(C) Average CO emissions determined under paragraph (d)(8) of this section equal to or less than 10 parts ppmvd, corrected to 3.0 percent CO_2.

(D) Excess combustion air determined under paragraph (d)(7) of this section equal to or greater than 150 percent.

(ii) The manufacturer must determine a maximum inlet gas flow rate which must not be exceeded for each control device model to achieve the criteria in paragraph (d)(11)(iii) of this section. The maximum inlet gas flow rate must be included in the test report required by paragraph (d)(12) of this section.

(iii) A control device meeting the criteria in paragraph (d)(11)(i)(A) through (D) of this section must demonstrate a destruction efficiency of 95 percent for VOC regulated under this subpart.

(12) The owner or operator of a combustion control device model tested under this paragraph must submit the information listed in paragraphs (d)(12)(i) through (vi) in the test report required by this section in accordance with § 60.5420(b)(8).

(i) A full schematic of the control device and dimensions of the device components.

(ii) The maximum net heating value of the device.

(iii) The test fuel gas flow range (in both mass and volume). Include the maximum allowable inlet gas flow rate.

(iv) The air/stream injection/assist ranges, if used.

(v) The test conditions listed in paragraphs (d)(12)(v)(A) through (O) of this section, as applicable for the tested model.

(A) Fuel gas delivery pressure and temperature.

(B) Fuel gas moisture range.

(C) Purge gas usage range.

(D) Condensate (liquid fuel) separation range.

(E) Combustion zone temperature range. This is required for all devices that measure this parameter.

(F) Excess combustion air range.

(G) Flame arrestor(s).

(H) Burner manifold.

(I) Pilot flame indicator.

(J) Pilot flame design fuel and calculated or measured fuel usage.

(K) Tip velocity range.

(L) Momentum flux ratio.

(M) Exit temperature range.

(N) Exit flow rate.

(O) Wind velocity and direction.

(vi) The test report must include all calibration quality assurance/quality control data, calibration gas values, gas cylinder certification, strip charts, or other graphic presentations of the data annotated with test times and calibration values.

(e) *Continuous compliance for combustion control devices tested by the manufacturer in accordance with paragraph (d) of this section.* This paragraph applies to the demonstration of compliance for a combustion control device tested under the provisions in paragraph (d) of this section. Owners or operators must demonstrate that a control device achieves the performance requirements in (d)(11) of this section by installing a device tested under paragraph (d) of this section and complying with the criteria specified in paragraphs (e)(1) through (6) of this section.

(1) The inlet gas flow rate must be equal to or less than the maximum specified by the manufacturer.

(2) A pilot flame must be present at all times of operation.

(3) Devices must be operated with no visible emissions, except for periods not to exceed a total of 2 minutes during any hour. A visible emissions test using Method 22, 40 CFR part 60, appendix A, must be performed each calendar quarter. The observation period must be 1 hour and must be conducted according to EPA Method 22, 40 CFR part 60, appendix A.

(4) Devices failing the visible emissions test must follow manufacturer's repair instructions, if available, or best combustion engineering practice as outlined in the unit inspection and maintenance plan, to return the unit to compliant operation. All repairs and maintenance activities for each unit must be recorded in a maintenance and repair log and must be available for inspection.

(5) Following return to operation from maintenance or repair activity, each device must pass an EPA Method 22, 40 CFR part 60, appendix A, visual observation as described in paragraph (e)(3) of this section.

(6) If the owner or operator operates a combustion control device model tested under this section, an electronic copy of the performance test results required by this section shall be submitted via email to *Oil_and_Gas_PT@EPA.GOV* unless the test results for that model of combustion control device are posted at the following Web site: *epa.gov/airquality/oilandgas/.*

■ 10. Section 60.5415 is amended by:

■ a. Revising paragraphs (b) introductory text and (b)(2);

■ b. Revising paragraph (e) introductory text;

■ c. Removing and reserving paragraphs (e)(1) and (2);

■ d. Adding paragraph (e)(3); and

■ e. Revising paragraph (h)(1) introductory text.

The revisions and addition read as follows:

§ 60.5415 How do I demonstrate continuous compliance with the standards for my gas well affected facility, my centrifugal compressor affected facility, my stationary reciprocating compressor affected facility, my pneumatic controller affected facility, my storage vessel affected facility, and my affected facilities at onshore natural gas processing plants?

* * * * *

(b) For each centrifugal compressor affected facility, you must demonstrate continuous compliance according to paragraphs (b)(1) through (3) of this section.

* * * * *

(2) For each control device used to reduce emissions, you must demonstrate continuous compliance with the performance requirements of § 60.5412(a) using the procedures specified in paragraphs (b)(2)(i) through (vii) of this section. If you use a condenser as the control device to achieve the requirements specified in § 60.5412(a)(2), you must demonstrate compliance according to paragraph (b)(2)(viii) of this section. You may switch between compliance with paragraphs (b)(2)(i) through (vii) of this section and compliance with paragraph (b)(2)(viii) of this section only after at least 1 year of operation in compliance with the selected approach. You must provide notification of such a change in the compliance method in the next annual report, as required in § 60.5420(b), following the change.

(i) You must operate below (or above) the site specific maximum (or minimum) parameter value established according to the requirements of § 60.5417(f)(1).

(ii) You must calculate the daily average of the applicable monitored parameter in accordance with § 60.5417(e) except that the inlet gas flow rate to the control device must not be averaged.

(iii) Compliance with the operating parameter limit is achieved when the daily average of the monitoring parameter value calculated under paragraph (b)(2)(ii) of this section is either equal to or greater than the minimum monitoring value or equal to or less than the maximum monitoring value established under paragraph (b)(2)(i) of this section. When performance testing of a combustion control device is conducted by the device manufacturer as specified in § 60.5413(d), compliance with the operating parameter limit is achieved when the criteria in § 60.5413(e) are met.

(iv) You must operate the continuous monitoring system required in § 60.5417 at all times the affected source is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits and required zero and span adjustments). A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.

(v) You may not use data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. You must use all the data collected during all other required data collection periods to assess the operation of the control device and associated control system.

(vi) Failure to collect required data is a deviation of the monitoring requirements, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required quality monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits and required zero and span adjustments).

(vii) If you use a combustion control device to meet the requirements of § 60.5412(a) and you demonstrate compliance using the test procedures specified in § 60.5413(b), you must comply with paragraphs (b)(2)(vii)(A) through (D) of this section.

(A) A pilot flame must be present at all times of operation.

(B) Devices must be operated with no visible emissions, except for periods not to exceed a total of 2 minutes during any hour. A visible emissions test using section 11. of Method 22, 40 CFR part 60, appendix A, must be performed each calendar quarter. The observation period must be 1 hour and must be conducted according to section 11. of EPA Method 22, 40 CFR part 60, appendix A.

(C) Devices failing the visible emissions test must follow manufacturer's repair instructions, if available, or best combustion engineering practice as outlined in the unit inspection and maintenance plan, to return the unit to compliant operation. All repairs and maintenance activities for each unit must be recorded in a maintenance and repair log and must be available for inspection.

(D) Following return to operation from maintenance or repair activity, each device must pass a Method 22, 40 CFR part 60, appendix A, visual observation as described in paragraph (b)(2)(vii)(B) of this section.

(viii) If you use a condenser as the control device to achieve the percent reduction performance requirements specified in § 60.5412(a)(2), you must demonstrate compliance using the procedures in paragraphs (b)(2)(viii)(A) through (E) of this section.

(A) You must establish a site-specific condenser performance curve according to § 60.5417(f)(2).

(B) You must calculate the daily average condenser outlet temperature in accordance with § 60.5417(e).

(C) You must determine the condenser efficiency for the current operating day using the daily average condenser outlet temperature calculated under paragraph (b)(2)(viii)(B) of this section and the condenser performance curve established under paragraph (b)(2)(viii)(A) of this section.

(D) Except as provided in paragraphs (b)(2)(viii)(D)(*1*) and (*2*) of this section, at the end of each operating day, you must calculate the 365-day rolling average TOC emission reduction, as appropriate, from the condenser efficiencies as determined in paragraph (b)(2)(viii)(C) of this section.

(*1*) After the compliance dates specified in § 60.5370, if you have less than 120 days of data for determining average TOC emission reduction, you must calculate the average TOC emission reduction for the first 120 days of operation after the compliance dates. You have demonstrated compliance with the overall 95.0 percent reduction requirement if the 120-day average TOC emission reduction is equal to or greater than 95.0 percent.

(*2*) After 120 days and no more than 364 days of operation after the compliance date specified in § 60.5370, you must calculate the average TOC emission reduction as the TOC emission reduction averaged over the number of days between the current day and the applicable compliance date. You have demonstrated compliance with the overall 95.0 percent reduction requirement, if the average TOC emission reduction is equal to or greater than 95.0 percent.

(E) If you have data for 365 days or more of operation, you have demonstrated compliance with the TOC emission reduction if the rolling 365-day average TOC emission reduction calculated in paragraph (b)(2)(viii)(D) of this section is equal to or greater than 95.0 percent.

* * * * *

(e) You must demonstrate continuous compliance according to paragraph (e)(3) of this section for each storage vessel affected facility, for which you are using a control device or routing emissions to a process to meet the requirement of § 60.5395(d)(1).

(1) [Reserved]

(2) [Reserved]

(3) For each storage vessel affected facility, you must comply with paragraphs (e)(3)(i) and (ii) of this section.

(i) You must reduce VOC emissions as specified in § 60.5395(d).

(ii) For each control device installed to meet the requirements of § 60.5395(d), you must demonstrate continuous compliance with the performance requirements of § 60.5412(d) for each storage vessel affected facility using the procedure specified in paragraph (e)(3)(ii)(A) and either (e)(3)(ii)(B) or (e)(3)(ii)(C) of this section.

(A) You must comply with § 60.5416(c) for each cover and closed vent system.

(B) You must comply with § 60.5417(h) for each control device.

(C) Each closed vent system that routes emissions to a process must be operated as specified in § 60.5411(c)(2).

* * * * *

(h) * * *

(1) To establish the affirmative defense in any action to enforce such a standard, you must timely meet the reporting requirements in § 60.5415(h)(2), and must prove by a preponderance of evidence that:

* * * * *

■ 11. Section 60.5416 is amended by:

■ a. Revising the introductory text;

■ b. Revising paragraphs (a) introductory text, (a)(1)(ii), (a)(2)(iii), and (a)(3)(ii);

■ c. Revising paragraphs (b) introductory text, (b)(9) introductory text, and (b)(11); and

■ d. Adding paragraph (c).

The revisions and addition read as follows:

§ 60.5416 What are the initial and continuous cover and closed vent system inspection and monitoring requirements for my storage vessel and centrifugal compressor affected facility?

For each closed vent system or cover at your storage vessel or centrifugal compressor affected facility, you must comply with the applicable requirements of paragraphs (a) through (c) of this section.

(a) *Inspections for closed vent systems and covers installed on each centrifugal compressor affected facility.* Except as provided in paragraphs (b)(11) and (12) of this section, you must inspect each closed vent system according to the procedures and schedule specified in paragraphs (a)(1) and (2) of this section, inspect each cover according to the procedures and schedule specified in paragraph (a)(3) of this section, and inspect each bypass device according to the procedures of paragraph (a)(4) of this section.

(1) * * *

(ii) Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices. You must monitor a component or connection using the test methods and procedures in paragraph (b) of this section to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced or the connection is unsealed. You must maintain records of the inspection results as specified in § 60.5420(c)(6).

(2) * * *

(iii) Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; liquid leaks; or broken or missing caps or other closure devices. You must maintain records of the inspection results as specified in § 60.5420(c)(6).

(3) * * *

(ii) You must initially conduct the inspections specified in paragraph (a)(3)(i) of this section following the installation of the cover. Thereafter, you must perform the inspection at least once every calendar year, except as provided in paragraphs (b)(11) and (12) of this section. You must maintain records of the inspection results as specified in § 60.5420(c)(7).

* * * * *

(b) *No detectable emissions test methods and procedures.* If you are required to conduct an inspection of a closed vent system or cover at your centrifugal compressor affected facility as specified in paragraphs (a)(1), (2), or (3) of this section, you must meet the requirements of paragraphs (b)(1) through (13) of this section.

* * * * *

(9) *Repairs.* In the event that a leak or defect is detected, you must repair the leak or defect as soon as practicable according to the requirements of paragraphs (b)(9)(i) and (ii) of this section, except as provided in paragraph (b)(10) of this section.

* * * * *

(11) *Unsafe to inspect requirements.* You may designate any parts of the closed vent system or cover as unsafe to inspect if the requirements in paragraphs (b)(11)(i) and (ii) of this section are met. Unsafe to inspect parts are exempt from the inspection requirements of paragraphs (a)(1) through (3) of this section.

(i) You determine that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (a)(1), (2), or (3) of this section.

(ii) You have a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

* * * * *

(c) *Cover and closed vent system inspections for storage vessel affected facilities.* If you install a control device or route emissions to a process, you must inspect each closed vent system according to the procedures and schedule specified in paragraphs (c)(1) of this section, inspect each cover according to the procedures and schedule specified in paragraph (c)(2) of this section, and inspect each bypass device according to the procedures of paragraph (c)(3) of this section. You must also comply with the requirements of (c)(4) through (7) of this section.

(1) For each closed vent system, you must conduct an inspection at least once every calendar month as specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) You must maintain records of the inspection results as specified in § 60.5420(c)(6).

(ii) Conduct olfactory, visual and auditory inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices.

(iii) Monthly inspections must be separated by at least 14 calendar days.

(2) For each cover, you must conduct inspections at least once every calendar month as specified in paragraphs (c)(2)(i) through (iii) of this section.

(i) You must maintain records of the inspection results as specified in § 60.5420(c)(7).

(ii) Conduct olfactory, visual and auditory inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover, or between the cover and the separator wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case where the storage vessel is buried partially or entirely underground, you must inspect only those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (*e.g.,* fill ports, access hatches, gauge wells, etc.) and can be opened to the atmosphere.

(iii) Monthly inspections must be separated by at least 14 calendar days.

(3) For each bypass device, except as provided for in § 60.5411(c)(3)(ii), you must meet the requirements of paragraphs (c)(3)(i) or (ii) of this section.

(i) Set the flow indicator to sound an alarm at the inlet to the bypass device when the stream is being diverted away from the control device or process to the atmosphere. You must maintain records of each time the alarm is sounded according to § 60.5420(c)(8).

(ii) If the bypass device valve installed at the inlet to the bypass device is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device. You must maintain records of the inspections and records of each time the key is checked out, if applicable, according to § 60.5420(c)(8).

(4) *Repairs.* In the event that a leak or defect is detected, you must repair the leak or defect as soon as practicable according to the requirements of paragraphs (c)(4)(i) through (iii) of this section, except as provided in paragraph (c)(5) of this section.

(i) A first attempt at repair must be made no later than 5 calendar days after the leak is detected.

(ii) Repair must be completed no later than 30 calendar days after the leak is detected.

(iii) Grease or another applicable substance must be applied to deteriorating or cracked gaskets to improve the seal while awaiting repair.

(5) *Delay of repair.* Delay of repair of a closed vent system or cover for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, or if you determine that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. You must complete repair of such equipment by the end of the next shutdown.

(6) *Unsafe to inspect requirements.* You may designate any parts of the closed vent system or cover as unsafe to inspect if the requirements in paragraphs (c)(6)(i) and (ii) of this section are met. Unsafe to inspect parts are exempt from the inspection requirements of paragraphs (c)(1) and (2) of this section.

(i) You determine that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (c)(1) or (2) of this section.

(ii) You have a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(7) *Difficult to inspect requirements.* You may designate any parts of the closed vent system or cover as difficult to inspect, if the requirements in paragraphs (c)(7)(i) and (ii) of this section are met. Difficult to inspect parts are exempt from the inspection requirements of paragraphs (c)(1) and (2) of this section.

(i) You determine that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface.

(ii) You have a written plan that requires inspection of the equipment at least once every 5 years.

■ 12. Section 60.5417 is amended by:
■ a. Revising paragraph (a);
■ b. Revising paragraph (b) introductory text;
■ c. Revising paragraph (c) introductory text;
■ d. Revising paragraphs (d)(1)(viii)(A) and (B);
■ e. Revising paragraph (d)(2);
■ f. Revising paragraph (f)(1)(iii);
■ g. Revising paragraph (g)(6)(ii); and
■ h. Adding paragraph (h).

The revisions and addition read as follows:

§ 60.5417 What are the continuous control device monitoring requirements for my storage vessel or centrifugal compressor affected facility?

* * * * *

(a) For each control device used to comply with the emission reduction standard for centrifugal compressor affected facilities in § 60.5380, you must install and operate a continuous parameter monitoring system for each control device as specified in paragraphs (c) through (g) of this section, except as provided for in paragraph (b) of this section. If you install and operate a flare in accordance with § 60.5412(a)(3), you are exempt from the requirements of paragraphs (e) and (f) of this section.

(b) You are exempt from the monitoring requirements specified in paragraphs (c) through (g) of this section for the control devices listed in paragraphs (b)(1) and (2) of this section.

* * * * *

(c) If you are required to install a continuous parameter monitoring system, you must meet the specifications and requirements in paragraphs (c)(1) through (4) of this section.

* * * * *

(d) * * *

(1) * * *

(viii) * * *

(A) The continuous monitoring system must measure gas flow rate at the inlet to the control device. The monitoring instrument must have an accuracy of ±2 percent or better. The flow rate at the inlet to the combustion device must not exceed the maximum or minimum flow rate determined by the manufacturer.

(B) A monitoring device that continuously indicates the presence of the pilot flame while emissions are routed to the control device.

(2) An organic monitoring device equipped with a continuous recorder that measures the concentration level of organic compounds in the exhaust vent stream from the control device. The monitor must meet the requirements of Performance Specification 8 or 9 of 40 CFR part 60, appendix B. You must install, calibrate, and maintain the monitor according to the manufacturer's specifications.

* * * * *

(f) * * *

(1) * * *

(iii) If you operate a control device where the performance test requirement was met under § 60.5413(d) to demonstrate that the control device achieves the applicable performance requirements specified in § 60.5412(a), then your control device inlet gas flow rate must not exceed the maximum or minimum inlet gas flow rate determined by the manufacturer.

* * * * *

(g) * * *

(6) * * *

(ii) Failure of the quarterly visible emissions test conducted under § 60.5413(e)(3) occurs.

(h) For each control device used to comply with the emission reduction standard in § 60.5395(d)(1) for your storage vessel affected facility, you must demonstrate continuous compliance according to paragraphs (h)(1) through (h)(3) of this section. You are exempt from the requirements of this paragraph if you install a control device model tested in accordance with § 60.5413(d)(2) through (10), which meets the criteria in § 60.5413(d)(11), the reporting requirement in § 60.5413(d)(12), and meet the continuous compliance requirement in § 60.5413(e).

(1) For each combustion device you must conduct inspections at least once every calendar month according to paragraphs (h)(1)(i) through (iv) of this section. Monthly inspections must be separated by at least 14 calendar days.

(i) Conduct visual inspections to confirm that the pilot is lit when vapors are being routed to the combustion device and that the continuous burning pilot flame is operating properly.

(ii) Conduct inspections to monitor for visible emissions from the combustion device using section 11 of EPA Method 22, 40 CFR part 60, appendix A. The observation period shall be 15 minutes. Devices must be operated with no visible emissions, except for periods not to exceed a total of 1 minute during any 15 minute period.

(iii) Conduct olfactory, visual and auditory inspections of all equipment associated with the combustion device to ensure system integrity.

(iv) For any absence of pilot flame, or other indication of smoking or improper equipment operation (*e.g.,* visual, audible, or olfactory), you must ensure the equipment is returned to proper operation as soon as practicable after the event occurs. At a minimum, you must perform the procedures specified in paragraphs (h)(1)(iv)(A) and (B) of this section.

(A) You must check the air vent for obstruction. If an obstruction is observed, you must clear the obstruction as soon as practicable.

(B) You must check for liquid reaching the combustor.

(2) For each vapor recovery device, you must conduct inspections at least once every calendar month to ensure physical integrity of the control device according to the manufacturer's instructions. Monthly inspections must be separated by at least 14 calendar days.

(3) Each control device must be operated following the manufacturer's written operating instructions, procedures and maintenance schedule to ensure good air pollution control practices for minimizing emissions. Records of the manufacturer's written operating instructions, procedures, and maintenance schedule must be available for inspection as specified in § 60.5420(c)(13).

■ 13. Section 60.5420 is amended by:

■ a. Revising paragraph (a) introductory text;

■ b. Revising paragraph (a)(1);

■ c. Revising paragraph (b) introductory text;

■ d. Revising paragraph (b)(3)(iii);

■ e. Revising paragraph (b)(4)(i);

■ f. Revising paragraph (b)(5) introductory text;

■ g. Revising paragraph (b)(5)(i);

■ h. Revising paragraph (b)(6) introductory text;

■ i. Revising paragraphs (b)(6)(i) and (ii);

■ j. Adding paragraphs (b)(6)(iv) through (vii);

■ k. Revising paragraph (b)(7);

■ l. Adding paragraph (b)(8);

■ m. Revising paragraph (c) introductory text;

■ n. Revising paragraph (c)(1)(v);

■ o. Revising paragraph (c)(4)(ii);

■ p. Revising paragraph (c)(5);

■ q. Revising paragraphs (c)(6) through (11); and

■ r. Adding paragraphs (c)(12) and (13).

The revisions and additions read as follows:

§ 60.5420 What are my notification, reporting, and recordkeeping requirements?

(a) You must submit the notifications according to paragraphs (a)(1) and (2) of this section if you own or operate one or more of the affected facilities specified in § 60.5365 that was constructed, modified, or reconstructed during the reporting period.

(1) If you own or operate a gas well, pneumatic controller, centrifugal compressor, reciprocating compressor or storage vessel affected facility you are not required to submit the notifications required in § 60.7(a)(1), (3), and (4).

* * * * *

(b) Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (6) of this section to the Administrator and performance test reports as specified in paragraph (b)(7) or (8) of this section. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to § 60.5410. Subsequent annual reports are due no later than same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs (b)(1) through (6) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period.

* * * * *

(3) * * *

(iii) If required to comply with § 60.5380(a)(1), the records specified in paragraphs (c)(6) through (11) of this section.

(4) * * *

(i) The cumulative number of hours of operation or the number of months since initial startup, since October 15, 2012, or since the previous reciprocating compressor rod packing replacement, whichever is later.

* * * * *

(5) For each pneumatic controller affected facility, the information specified in paragraphs (b)(5)(i) through (iii) of this section.

(i) An identification of each pneumatic controller constructed, modified or reconstructed during the reporting period, including the identification information specified in § 60.5390(b)(2) or (c)(2).

* * * * *

(6) For each storage vessel affected facility, the information in paragraphs (b)(6)(i) through (vii) of this section.

(i) An identification, including the location, of each storage vessel affected facility for which construction, modification or reconstruction commenced during the reporting period. The location of the storage vessel shall be in latitude and longitude coordinates in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.

(ii) Documentation of the VOC emission rate determination according to § 60.5365(e).

* * * * *

(iv) You must submit a notification identifying each Group 1 storage vessel affected facility in your initial annual report. You must include the location of the storage vessel, in latitude and longitude coordinates in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.

(v) A statement that you have met the requirements specified in § 60.5410(h)(2) and (3).

(vi) You must identify each storage vessel affected facility that is removed from service during the reporting period as specified in § 60.5395(f)(1).

(vii) You must identify each storage vessel affected facility for which operation resumes during the reporting period as specified in § 60.5395(f)(2)(iii).

(7)(i) Within 60 days after the date of completing each performance test (see § 60.8 of this part) as required by this subpart, except testing conducted by the manufacturer as specified in § 60.5413(d), you must submit the results of the performance tests required by this subpart to the EPA as follows. You must use the latest version of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*) existing at the time of the performance test to generate a submission package file, which documents the performance test. You must then submit the file generated by the ERT through the EPA's Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed by logging in to the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). Only data collected using test methods supported by the ERT as listed on the ERT Web site are subject to this requirement for submitting reports electronically. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test to the Administrator at the appropriate address listed in § 60.4.

(ii) All reports, except as specified in paragraph (b)(8) of this section, required by this subpart not subject to the requirements in paragraph (a)(2)(i) of this section must be sent to the Administrator at the appropriate address listed in § 60.4 of this part. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy).

(8) For enclosed combustors tested by the manufacturer in accordance with § 60.5413(d), an electronic copy of the performance test results required by § 60.5413(d) shall be submitted via email to *Oil_and_Gas_PT@EPA.GOV* unless the test results for that model of combustion control device are posted at the following Web site: *epa.gov/airquality/oilandgas/*.

(c) *Recordkeeping requirements.* You must maintain the records identified as specified in § 60.7(f) and in paragraphs (c)(1) through (13) of this section. All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years.

(1) * * *

(v) For each gas well affected facility required to comply with both § 60.5375(a)(1) and (3), if you are using a digital photograph in lieu of the records required in paragraphs (c)(1)(i) through (iv) of this section, you must retain the records of the digital photograph as specified in § 60.5410(a)(4).

* * * * *

(4) * * *

(ii) Records of the demonstration that the use of pneumatic controller affected facilities with a natural gas bleed rate greater than the applicable standard are required and the reasons why.

* * * * *

(5) Except as specified in paragraph (c)(5)(v) of this section, for each storage vessel affected facility, you must maintain the records identified in paragraphs (c)(5)(i) through (iv) of this section.

(i) If required to reduce emissions by complying with § 60.5395(d)(1), the records specified in §§ 60.5420(c)(6) through (8), § 60.5416(c)(6)(ii), and § 60.6516(c)(7)(ii) of this subpart.

(ii) Records of each VOC emissions determination for each storage vessel affected facility made under § 60.5365(e) including identification of the model or calculation methodology used to calculate the VOC emission rate.

(iii) Records of deviations in cases where the storage vessel was not operated in compliance with the requirements specified in §§ 60.5395, 60.5411, 60.5412, and 60.5413, as applicable.

(iv) For storage vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), records indicating the number of consecutive days that the vessel is located at a site in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment. If a storage vessel is removed from a site and, within 30 days, is either returned to or replaced by another storage vessel at the site to serve the same or similar function, then the entire period since the original storage vessel was first located at the site, including the days when the storage vessel was removed, will be added to the count towards the number of consecutive days.

(v) You must maintain records of the identification and location of each storage vessel affected facility.

(6) Records of each closed vent system inspection required under § 60.5416(a)(1) for centrifugal compressors or § 60.5416(c)(1) for storage vessels.

(7) A record of each cover inspection required under § 60.5416(a)(3) for centrifugal compressors or § 60.5416(c)(2) for storage vessels.

(8) If you are subject to the bypass requirements of § 60.5416(a)(4) for centrifugal compressors or

§ 60.5416(c)(3) for storage vessels, a record of each inspection or a record each time the key is checked out or a record of each time the alarm is sounded.

(9) If you are subject to the closed vent system no detectable emissions requirements of § 60.5416(b) for centrifugal compressors, a record of the monitoring conducted in accordance with § 60.5416(b).

(10) For each centrifugal compressor affected facility, records of the schedule for carbon replacement (as determined by the design analysis requirements of § 60.5413(c)(2) or (3)) and records of each carbon replacement as specified in § 60.5412(c)(1).

(11) For each centrifugal compressor subject to the control device requirements of § 60.5412(a), (b), and (c), records of minimum and maximum operating parameter values, continuous parameter monitoring system data, calculated averages of continuous parameter monitoring system data, results of all compliance calculations, and results of all inspections.

(12) For each carbon adsorber installed on storage vessel affected facilities, records of the schedule for carbon replacement (as determined by the design analysis requirements of § 60.5412(d)(2)) and records of each carbon replacement as specified in § 60.5412(c)(1).

(13) For each storage vessel affected facility subject to the control device requirements of § 60.5412(c) and (d), you must maintain records of the inspections, including any corrective actions taken, the manufacturers' operating instructions, procedures and maintenance schedule as specified in § 60.5417(h). You must maintain records of EPA Method 22, 40 CFR part 60, appendix A, section 11 results, which include: company, location, company representative (name of the person performing the observation), sky conditions, process unit (type of control device), clock start time, observation period duration (in minutes and seconds), accumulated emission time (in minutes and seconds), and clock end time. You may create your own form including the above information or use Figure 22–1 in EPA Method 22, 40 CFR part 60, appendix A. Manufacturer's operating instructions, procedures and maintenance schedule must be available for inspection.

■ 14. Section 60.5430 is amended by:

■ a. Adding, in alphabetical order, definitions for the terms ''Condensate,'' ''Group 1 storage vessel,'' ''Group 2 storage vessel,'' ''Intermediate hydrocarbon liquid'' and ''Produced water;'' and

■ b. Revising the definitions for ''Flow line'' and ''Storage vessel'' to read as follows:

§ 60.5430 What definitions apply to this subpart?

* * * * *

Condensate means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature, pressure, or both, and remains liquid at standard conditions.

* * * * *

Flow line means a pipeline used to transport oil and/or gas to a processing facility, a mainline pipeline, re-injection, or routed to a process or other useful purpose.

* * * * *

Group 1 storage vessel means a storage vessel, as defined in this section, for which construction, modification or reconstruction has commenced after August 23, 2011, and on or before April 12, 2013.

Group 2 storage vessel means a storage vessel, as defined in this section, for which construction, modification or reconstruction has commenced after April 12, 2013.

* * * * *

Intermediate hydrocarbon liquid means any naturally occurring, unrefined petroleum liquid.

* * * * *

Produced water means water that is extracted from the earth from an oil or natural gas production well, or that is separated from crude oil, condensate, or natural gas after extraction.

* * * * *

Storage vessel means a tank or other vessel that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water, and that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support. For the purposes of this subpart, the following are not considered storage vessels:

(1) Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If you do not keep or are not able to produce records, as required by § 60.5420(c)(5)(iv), showing that the vessel has been located at a site for less than 180 consecutive days, the vessel described herein is considered to be a storage vessel since the original vessel was first located at the site.

(2) Process vessels such as surge control vessels, bottoms receivers or knockout vessels.

(3) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

* * * * *

■ 15. Tables 1 and 2 to Subpart OOOO of part 60 are revised to read as follows:

TABLE 1 TO SUBPART OOOO OF PART 60—REQUIRED MINIMUM INITIAL SO_2 EMISSION REDUCTION EFFICIENCY (Z_i)

H_2S content of acid gas (Y), %	Sulfur feed rate (X), LT/D			
	2.0≤X≤5.0	5.0<X≤15.0	15.0<X≤300.0	X>300.0
Y≥50	79.0	$88.51X^{0.0101}Y^{0.0125}$ or 99.9, whichever is smaller.		
20≤Y<50	79.0	$88.51X^{0.0101}Y^{0.0125}$ or 97.9, whichever is smaller		97.9
10≤Y<20	79.0	$88.51X^{0.0101}Y^{0.0125}$ or 93.5, whichever is smaller	93.5	93.5
Y<10	79.0	79.0	79.0	79.0

TABLE 2 TO SUBPART OOOO OF PART 60—REQUIRED MINIMUM SO_2 EMISSION REDUCTION EFFICIENCY (Z_c)

H_2S content of acid gas (Y), %	Sulfur feed rate (X), LT/D			
	2.0≤X≤5.0	5.0<X≤15.0	15.0<X≤300.0	X>300.0
Y≥50	74.0	$85.35X^{0.0144}Y^{0.0128}$ or 99.9, whichever is smaller.		
20≤Y<50	74.0	$85.35X^{0.0144}Y^{0.0128}$ or 97.5, whichever is smaller		97.5
10≤Y<20	74.0	$85.35X^{0.0144}Y^{0.0128}$ or 90.8, whichever is smaller	90.8	90.8
Y<10	74.0	74.0	74.0	74.0

X = The sulfur feed rate from the sweetening unit (*i.e.,* the H_2S in the acid gas), expressed as sulfur, Mg/D(LT/D), rounded to one decimal place.

Y = The sulfur content of the acid gas from the sweetening unit, expressed as mole percent H_2S (dry basis) rounded to one decimal place.

Z = The minimum required sulfur dioxide (SO_2) emission reduction efficiency, expressed as percent carried to one decimal place. Z_i refers to the reduction efficiency required at the initial performance test. Z_c refers to the reduction efficiency required on a continuous basis after compliance with Z_i has been demonstrated.

[FR Doc. 2013–22010 Filed 9–20–13; 8:45 am]

BILLING CODE 6560–50–P