



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2010-0895; 9958-01-OAR]

RIN 2060-AS90

National Emission Standards for Hazardous Air Pollutants:

Ferroalloys Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; notice of final action on reconsideration.

SUMMARY: This action sets forth the Environmental Protection Agency's (EPA's) final decision on the issues for which it announced reconsideration on July 12, 2016, that pertain to certain aspects of the June 30, 2015, final amendments for the Ferroalloys Production source category regulated under national emission standards for hazardous air pollutants (NESHAP). The EPA is amending the rule to allow existing facilities with positive pressure baghouses to perform visible emissions monitoring twice daily as an alternative to installing and operating bag leak detection systems (BLDS) to ensure the baghouses are operating properly. In addition, this final action explains that EPA is maintaining the requirement that facilities must use a digital camera opacity technique (DCOT) method to demonstrate compliance with opacity limits. However, this final action revises the rule such that it references the recently

updated version of the DCOT method. In this action, the EPA also explains that no changes are being made regarding the rule provision that requires quarterly polycyclic aromatic hydrocarbons (PAH) emission testing for furnaces producing ferromanganese (FeMn) with an opportunity for facilities to request decreased compliance test frequency from their permitting authority after the first year. Furthermore, in this action, the EPA is denying the request for reconsideration of the PAH emission limits for both FeMn and silicomanganese (SiMn) production furnaces.

DATES: This final action is effective on **[insert date of publication in the Federal Register]**. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of **[insert date of publication in the Federal Register]**.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2010-0895. All documents 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 Docket Center (EPA/DC), Room 3334, EPA WJC West Building, 1301 Constitution Ave., 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 Docket Center is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: Phil Mulrine, Sector Policies and Programs Division (D243-02), Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-5289; fax number: (919) 541-3207; email address: mulrine.phil@epa.gov.

SUPPLEMENTARY INFORMATION: Organization of this Document. The following outline is provided to aid in locating information in this preamble.

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I. General Information

A. Does this action apply to me?

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

Table 1. NESHAP and Industrial Source Categories Affected By This Final Action

NESHAP and Source Category	NAICS ^a Code
Ferroalloys Production	331112

^a North American Industry Classification System.

Table 1 of this preamble is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be affected by the final action for the source

category listed. To determine whether your facility is affected, you should examine the applicability criteria in 40 CFR part 63, subpart XXX (National Emission Standards for Hazardous Air Pollutants: Ferroalloys Production). If you have any questions regarding the applicability of this final action to a particular entity, consult either the air permitting authority for the entity or your EPA Regional representative as listed in 40 CFR 63.13 (General Provisions).

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

The docket number for this final action regarding the Ferroalloys Production NESHAP (40 CFR part 63, subpart XXX) is Docket ID No. EPA-HQ-OAR-2010-0895.

In addition to being available in the docket, an electronic copy of this document will also be available on the World Wide Web (WWW). Following signature, a copy of this document will be posted at <https://www.epa.gov/stationary-sources-air-pollution/ferromanganese-and-silicomanganese-production-national-emission>.

C. Judicial Review and Administrative Reconsideration

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by **[insert date 60 days after**

date of publication in the Federal Register]. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the 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 the EPA to reconsider the rule “[i]f the person raising an objection can demonstrate to the Administrator 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 should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding [**FOR FURTHER INFORMATION CONTACT**] section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

II. Background Information

The EPA published a final residual risk and technology review (RTR) rule for the Ferroalloys Production source category in the **Federal Register** on June 30, 2015 (80 FR 37366), which included, among other things, the following:

- Revisions to the emission limits for particulate matter (PM) from stacks for the electric arc furnaces, metal oxygen refining (MOR) processes, and crushing and screening operations to minimize PM emissions from these units;
- Emission limits for four previously unregulated hazardous air pollutants (HAP): formaldehyde, hydrogen chloride, mercury, and PAH;
- Requirements to capture process fugitive emissions using effective, enhanced local capture, and duct the captured emissions to control devices;
- An average opacity limit of 8 percent during a full furnace cycle and a maximum opacity limit of 20 percent for any two consecutive 6-minute periods to ensure effective capture and control of process fugitive emissions;
- A requirement to conduct opacity observations using the DCOT at least once per week for a full furnace cycle for each operating furnace and each MOR operation for at least 26

weeks. After 26 weeks, if all tests are compliant, facilities can decrease to monthly opacity observations;

- A requirement to use BLDS to monitor PM emissions from all furnace baghouses; and
- A requirement to conduct periodic performance testing to demonstrate compliance with the stack emission limits for the various HAP, including a requirement to conduct PAH performance testing every 3 months for furnaces producing FeMn with the opportunity to reduce to annual testing after the first year.

Following promulgation of the final rule, the EPA received two petitions for reconsideration of several provisions of the NESHAP pursuant to CAA section 307(d)(7)(B). The EPA received a petition dated August 25, 2015, from Eramet Marietta Inc.

(Eramet) and a petition dated August 28, 2015, from Felman Production LLC (Felman). In the petition submitted by Eramet, the company requested the EPA reconsider the following issues: (1) the requirement to conduct PAH performance testing every 3 months for furnaces producing FeMn; (2) the requirement to demonstrate compliance weekly with shop building opacity limits using the American Society for Testing and Materials (ASTM) DCOT test method; and (3) the PAH emission limits for existing furnaces producing FeMn and SiMn. In addition, Eramet requested a stay of 90 days from the effective date of the final

amendments pending completion of the reconsideration proceeding. In the petition submitted by Felman, the company stated that it supported and adopted the petition submitted by Eramet and requested reconsideration of the requirement to use BLDS to monitor emissions from positive pressure baghouses. Copies of the petitions are provided in the docket (see EPA Docket ID No. EPA-HQ-OAR-2010-0895).

On November 5, 2015, the EPA sent letters to the petitioners granting reconsideration of two issues: the PAH testing compliance frequency issue raised by Eramet and the use of BLDS on positive pressure baghouses raised by Felman. In those letters, the EPA said it was still reviewing the other issues and intended to take final action on those when it took final action on BLDS and PAH testing frequency. The agency also stated in the letters that a proposed **Federal Register** notice would be issued initiating the reconsideration process for the issues that the EPA is granting reconsideration. The EPA published the proposed notice of reconsideration in the **Federal Register** on July 12, 2016 (81 FR 45089).

In addition to the two requirements mentioned above (i.e., PAH testing frequency for furnaces producing FeMn and the use of BLDS to monitor PM emissions from positive pressure baghouses), the EPA also granted reconsideration of a third issue in the reconsideration proposal notice (81 FR 45089): the requirement

to use DCOT in accordance with ASTM D7520-13 to demonstrate compliance with shop building opacity standards. However, for each of these three requirements, after further analyses, evaluation, and consideration, we explained in the reconsideration proposal notice that we continued to believe these requirements were appropriate. Therefore, we did not propose any changes to these requirements. Instead, we provided further discussion and explanation as to why we believed it was appropriate to maintain these requirements in the rule, provided additional technical information to the record, and requested comment on the three requirements for which the EPA granted reconsideration.

III. Summary of Final Action on Issues Reconsidered

After reviewing and considering all the public comments received in response to the reconsideration proposal, the EPA has decided to amend the baghouse monitoring requirements to allow existing facilities with positive pressure baghouses to perform visible emissions monitoring twice daily using Method 22 as an alternative to using BLDS. In addition, although EPA is maintaining the requirement to use DCOT to demonstrate compliance with the opacity standards, this final action amends the references to the ASTM DCOT test method in the opacity monitoring requirements to the recently updated version of the method (ASTM D7520-16). The EPA is also maintaining the

quarterly PAH emission testing requirement for furnaces producing FeMn with an opportunity for facilities to request decreased compliance test frequency from their permitting authority after the first year. Each of these issues is discussed in more detail in this section of the preamble.

A. Alternative Monitoring for Existing Positive Pressure Baghouses

In their petition for reconsideration, one petitioner (Felman) objected to the EPA's requirement to use BLDS for positive pressure baghouses. The petitioner pointed out that the EPA's own guidance¹ indicates that BLDS are not appropriate for use on a positive pressure baghouse, given the different configurations of these types of units. The petitioner commented that although the EPA stated that it had knowledge of BLDS in operation on positive pressure baghouses, the EPA did not provide any specific examples. In addition, the petitioner claimed the EPA had not evaluated the costs associated with the application of BLDS on positive pressure baghouses but instead simply estimated the cost to be comparable with BLDS for negative pressure baghouses.

In their comments on the reconsideration proposal (81 FR 45089), the petitioner stated that the EPA's supporting

¹ EPA Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, EPA-454/R-98-015, September 1997.

documents did not provide any examples of BLDS in operation on positive pressure baghouses comparable to those used at the petitioner's facility, which are low airflow and use natural-draft openings instead of stacks. The petitioner provided cost quotes from vendors of \$1.1 million to install the BLDS and make the necessary structural improvements (including a catwalk system) to support the operation of the BLDS.

In light of the petitioner's assertions, we re-evaluated the BLDS requirement for positive pressure baghouses. While we maintain that BLDS can be installed and operated on positive pressure baghouses, we agree that, due to their particular circumstances, it would be difficult to retrofit this facility based on the specific design of their positive pressure baghouses. Furthermore, we agree that installing BLDS and the associated infrastructure would not be cost effective. In our analysis for the proposal, we estimated the capital cost of installing BLDS on the three positive pressure baghouses to be \$269,100, with annualized costs of \$219,000. However, we did not include any additional costs for structural improvements to support BLDS on these baghouses. The petitioner provided a cost estimate of \$870,000 for structural improvements to install BLDS on their three baghouses. Given this additional information, we now estimate the capital costs would be about \$1.1 million, and annualized costs would be \$330,000. Because of the structural

modifications needed to install BLDS, the higher annualized costs and the potential technical issues on this particular control configuration at Felman, it would be unreasonable to require BLDS as the sole method for monitoring positive pressure baghouses in this rule. Nevertheless, we believe the baghouses need to be monitored on a regular basis to ensure they are operating as intended and that there are no tears or holes in the bags. Therefore, we have revised the rule to allow for an alternative monitoring method to the BLDS requirement for positive pressure baghouses used to control emissions from an electric arc furnace. We are allowing twice daily visual monitoring of the outlet of each furnace baghouse using Method 22 for evidence of any visible emissions indicating abnormal operations as an alternative to BLDS. We believe this revision will reduce the cost burden associated with monitoring the positive pressure baghouses used to control emissions from the furnaces and avoid possible technical issues, but still provide assurance that the baghouses are functioning correctly and controlling metal HAP emissions from the furnaces. More details are available in the Summary of Public Comments and Responses on Reconsideration of the Ferroalloys Production NESHAP Final Rule in the docket for this rulemaking.

B. DCOT Compliance Demonstration and Revised DCOT Test Method

In the June 30, 2015, final rule (80 FR 37366), we finalized opacity standards for process fugitive emissions from the furnace buildings and required the use of DCOT and the ASTM D7520-13 test method to demonstrate compliance with the opacity standards. In their petitions for reconsideration, Eramet and Felman objected to the use of DCOT in lieu of EPA Method 9 and stated that the EPA did not propose DCOT as the only method for demonstrating compliance with the opacity standards. The petitioners argued that DCOT was an unproven substitute for EPA Method 9 to measure opacity from emission sources and that variability in plume location and orientation at the ferroalloy production buildings would make DCOT infeasible at their facilities. The petitioners also noted that the ASTM test method only applies to stack openings of 7 feet in diameter or less and that DCOT is only provided by one vendor.

In their comments on the reconsideration proposal (81 FR 45089), several commenters objected to the use of DCOT as the sole method for opacity compliance and stated that the EPA should allow the option of using EPA Method 9. The commenters argue that DCOT is limited to stationary point sources and not fugitive emissions, and they pointed out that the supporting data for DCOT are all from studies performed on stationary point sources and not long, open vent sources such as those at the

Eramet facility. A few commenters had concerns with the timeliness of the opacity determinations and the accuracy of the results. The commenters were also concerned that there is currently only one vendor of DCOT and that the EPA should not choose vendors for an entire industry.

On the other hand, a few commenters were supportive of the use of the DCOT. In the opinion of one commenter, DCOT is comparable to Method 9 observations, on all shapes, sizes, types of sources, and that DCOT is configurable with all types of cameras to tailor the implementation at the shop/building level to support cost-effective and efficient observations.

Another commenter explained that strong monitoring, testing and compliance measures are an essential part of the emission standards, and that the use of these measures also increases the incentive for sources to comply with the standards. The commenter states that EPA's requirement for DCOT is consistent with and an important way to implement EPA's "next generation compliance." The commenter notes that the EPA's next generation compliance policy includes, among other things, the following: (1) use and promotion of advanced emissions/pollutant detection technology so that regulated entities, the government, and the public can more easily see pollutant discharges, environmental conditions, and noncompliance; (2) expanded transparency by making information more accessible to the public; and (3)

development and use of innovative enforcement approaches (e.g., data analytics and targeting) to achieve more widespread compliance.

Other comments and responses on DCOT can be found in the Summary of Public Comments and Responses on Reconsideration of the Ferroalloys Production NESHAP Final Rule in the docket for this rulemaking.

Based on the information provided by the petitioners and the commenters, we re-evaluated the DCOT opacity monitoring requirement and determined that DCOT is still an appropriate method for determining opacity from the shop buildings for this source category.

As explained in the initial proposal (76 FR 72508), supplemental proposal (79 FR 60238), and in the 2015 final rule (80 FR 37366), process fugitive emissions from the shop buildings are a significant source of risk from the production of ferroalloys. In each of these three actions, we concluded risks were unacceptable, largely driven by process fugitive emissions of air toxics metals.

To reduce risks to acceptable levels and protect the public with an ample margin of safety, in the initial proposal, we proposed facilities would need to install and operate full building enclosures to capture and control fugitive emissions. In response to the initial proposal, industry commented that

full building enclosure requirement would be very costly and difficult to implement, and suggested an alternative approach using localized capture equipment to reduce fugitive emissions from the shop buildings. Modeling of the localized capture approach indicated that similar reductions in risk could be achieved, making this option more feasible and at significantly lower cost than full building enclosure. Based on these modeling results and consideration of costs and feasibility, we proposed the localized capture approach to significantly reduce fugitive emissions from the shop buildings in the supplemental proposal (79 FR 60238), and finalized this approach in the 2015 final rule (80 FR 37366). Specifically, the final rule requires facilities to install, maintain and operate a system designed to effectively capture and control process fugitive emissions. Furthermore, for this rule, opacity standards are the main compliance approach to ensure the process fugitive emissions are effectively captured and controlled on a continuous basis, and that the public is protected with ample margin of safety. Since process fugitive emissions were the main contributor to the unacceptable risks at baseline, and since opacity is the main tool to ensure these process fugitive emissions are effectively captured and controlled and that the public is protected with an ample margin of safety, we finalized requirements for the use of

DCOT to demonstrate compliance with the opacity standard in the June 30, 2015, final rule (80 FR 37366).

The DCOT provides a photographic record of each of the opacity readings. In addition, the photographs are evaluated by a third party and the opacity is determined by the degree the plume reduces the transmitted light and obscures the background. While we believe, based on validation studies, that EPA Method 9 and DCOT provide comparable opacity results, the DCOT provides better documentation, including a permanent re-analyzable photographic record of the opacity determinations, which we believe will be beneficial to both the industry and the public. There is an advantage of having better documentation in this specific case where fugitive emissions are driving the risk from the Ferroalloys Production source category. In addition, we disagree with the commenters assertion that this methodology will not work with this source category. Fugitive emissions from this source category are emitted through roof vents at the top of the furnace buildings. Currently, the facilities in this source category use EPA Method 9 to measure opacity from the roof vents. The EPA Method 9 opacity method has procedures and requirements for determining opacity from roof vents and rectangular outlets, which are the same procedures and requirements used in the DCOT test method (ASTM D7520-16). Because the same procedures and requirements are used to measure

opacity from roof vents from both these methods, we believe that opacity can be measured from this source category using the DCOT test method. Therefore, we are maintaining the requirement in the final rule that facilities in this source category must use the ASTM DCOT methodology to demonstrate compliance with the opacity standards and we are denying the petitioners' request to allow EPA Method 9 as an alternative method for determining compliance. However, we are revising the final rule language to replace the ASTM D7520-13 Standard Test Method for Determining the Opacity of a Plume in the Outdoor Ambient Atmosphere with the latest revision of the method, ASTM D7520-16. The ASTM D7520-13 method was revised by removing the stack diameter scope limitation along with editorial corrections in April 2016. We believe that this change will address the commenter's concerns specifically with the 7 foot stack diameter scope limitation in the ASTM D7520-13 method because the updated ASTM D7520-16 method has removed that limitation. However, fugitive emissions from this source category are not emitted from stacks with a diameter greater than 7 feet, but from roof vents. Therefore, we do not believe that the 7-foot diameter limitation prevented us from requiring the use of the ASTM method for measuring opacity using DCOT. As stated earlier in this section, the ASTM D7520-16 method provides the same approach for determining opacity from

nontraditional point sources such as roof vents as would EPA Method 9.

C. Quarterly PAH Testing for Furnaces Producing FeMn

In the reconsideration proposal (81 FR 45089), the EPA also reconsidered the requirement for furnaces producing FeMn to conduct PAH performance testing every 3 months with an option following the first year, to do annual performance testing. The petitioner stated that the PAH testing frequency for furnaces producing FeMn in the supplemental proposal (79 FR 60238) was every 5 years and that the quarterly testing requirement was added in the final rule. The petitioner also noted that the change in PAH testing frequency represents an increase in compliance costs of \$75,000 in the first year of implementation and an increase of \$475,000 in compliance costs over the first 5 years (assuming the facility is not granted reduced frequency of testing after the first year), in comparison to the supplemental proposal PAH testing requirement. The petitioner also argued that if the EPA believes that the PAH emissions dataset is inadequate to establish a representative and reliable MACT floor, the proper solution is to collect additional data pursuant to CAA section 114(a), rather than collecting data through compliance tests. We granted reconsideration on this issue to provide an opportunity for public comment on the PAH testing frequency for furnaces producing FeMn. A summary of the

comments received on this issue and the responses are provided in the Summary of Public Comments and Responses on Reconsideration of the Ferroalloys Production NESHAP Final Rule available in the docket for this rulemaking.

As we stated in the reconsideration proposal (81 FR 45089), we received additional PAH test data just 3 weeks prior to the signature of the supplemental proposal (which we were not able to include in our analyses in time for signature of the supplemental proposal) and yet more data during the comment period for the supplemental proposal. This new data showed PAH emissions from furnaces producing FeMn were over 12 times higher in concentration than previous test reports submitted by the petitioner. As we explained in the reconsideration proposal, this data thus demonstrates that PAH emissions from furnaces producing FeMn are highly variable. Moreover, PAH emissions are a major source of cancer risks from these furnaces. In the risk assessment performed for the supplemental proposal (79 FR 60238), we estimated the maximum lifetime individual cancer risk posed by actual emissions from the ferroalloys production facilities was 20-in-1 million, with PAH contributing 49 percent of the cancer risk.

Testing frequency is part of verification that the limit is met. Stack testing is an important tool used to determine a facility's compliance with both initial and on-going compliance

with the CAA requirements. A highly variable set of measurements on which the limit is based leads to us to want more certainty about the source's compliance with the limit, and such certainty can be provided by more frequent testing. Because of the variability of the PAH emissions during FeMn production, we believe that the quarterly testing is appropriate for ensuring compliance with the emission limit and protecting human health.

Furthermore, as we explained in the final rule and the reconsideration proposal, we believe the quarterly testing, along with the collection of process information that a facility may choose to collect voluntarily, could provide data that would help facilities learn what factors or conditions are contributing to the quantity and variation of PAH emissions. For example, we believe the collection and analyses of information about the amounts and types of input materials, types of electrodes used, electrode consumption rates, furnace temperature, and other furnace, process, or product information may help facilities understand what factors are associated with the higher PAH emissions and could provide insight regarding how to limit these emissions. Furthermore, as we described in the preamble of the final rule (80 FR 37383), if a facility decides to apply for a decreased frequency of performance testing from their permit authority, the type of information described above could be helpful input for such an application. For these

reasons, the quarterly performance testing with an opportunity after the first year for facilities to request from their permitting authority a decreased frequency to annual performance testing is appropriate for ensuring compliance with the PAH emission limit and protecting human health. The option for decreased performance testing also provides an incentive for the facilities to achieve compliance with the PAH standards. Therefore, we are not making any changes to the PAH testing frequency for furnaces producing FeMn.

IV. Denial of Petition for Reconsideration of FeMn and SiMn PAH Emission Limits

In the final rule, the EPA set PAH limits of 0.130 milligrams per dry standard cubic meter (mg/dscm) for furnaces producing SiMn and 12 mg/dscm for furnaces producing FeMn. Both petitioners requested reconsideration of these emission limits and asserted that they did not have an opportunity to comment on the limits. The petitioners were concerned that achieving these PAH emission limits may require additional controls. The petitioners also argued with how the PAH emission limits were calculated. The petitioners claimed that the EPA used a normal data distribution to determine the upper prediction limit (UPL), but the data sets have lognormal distributions. The petitioners further claim that had the EPA used a lognormal distribution, it would have resulted in higher emission limits. In addition, one

petitioner argued that EPA should not have excluded a 3-hour single test run.

As stated in the preamble for the final rule (80 FR 37366), the PAH emission limits were re-evaluated in the final rule to include PAH test data that were received just prior to publication of the supplemental proposal and during the comment period for the supplemental proposal. The expanded PAH test data set was analyzed using the same statistical procedures from the EPA's UPL memorandum used to calculate the PAH emissions limits in the supplemental proposal. Using the statistical procedures from this memorandum (which describes the EPA's established procedures for calculating MACT floor limits), the PAH data sets were determined to have a normal distribution. Therefore, the UPL equation for calculating the 99-percent UPL was used to determine the PAH emission limit. The EPA had already provided adequate notice of the analyses and application of the UPL in the memorandum in the supplemental proposal (79 FR 60238). With regard to the 3-hour single test run the petitioner referred to in their reconsideration petition, we determined there were quality assurance and control issues with the laboratory analysis, and therefore did not include these data in the UPL analysis. The results of every valid 3-run test provided by the industry were below the final PAH limits for both FeMn and SiMn production. Therefore, we believe both facilities should be able

to comply with these limits without the need for additional add-on controls. Furthermore, EPA calculated the limits using well established EPA policy and procedures. At the time the EPA published the supplemental proposal (79 FR 60238, October 6, 2014), the EPA made the existing PAH emissions data and the methodologies used to calculate the limits available for public comment. The limits in the final rule were a logical outgrowth of the limits in the supplemental proposal as EPA made no changes to the methodology used to calculate the limits and simply recalculated the limits after the addition of the newly available data with the previously received data. Therefore, we have decided to deny reconsideration of the PAH emission limits for both FeMn and SiMn production furnaces. More details are available in the Summary of Public Comments and Responses on Reconsideration of the Ferroalloys Production NESHAP Final Rule in the docket for this rulemaking.

V. Impacts Associated with this Final Rule

We project that this rule will result in no significant changes in costs, emission reductions or benefits. Even though there are changes to the costs, these changes are small relative to the overall costs and benefits of the 2015 final rule. However, the costs for monitoring baghouses will be lower than the costs in the final rule due to the additional option provided in this action to use visible emissions monitoring to

monitor positive pressure baghouses as an alternative to installing and operating a BLDS.

A. What are the air impacts?

Even though we have allowed for an alternative monitoring method to the BLDS requirement for positive pressure baghouses, we believe that this change will result in no additional emissions from the baghouses used to control emissions from the furnace. Accordingly, we believe that the final rule will not result in significant changes in emissions of any of the regulated pollutants.

B. What are the energy impacts?

The changes to the final rule are anticipated to have minimal effect on the supply, distribution or use of energy. As previously stated, we are allowing for an alternative monitoring method to the BLDS requirement for positive pressure baghouses controlling emissions from the furnace. By allowing this alternative, we anticipate slightly lower energy usage by the one facility that uses this type of baghouse.

C. What are the compliance costs?

We believe there will be no significant change in compliance costs as a result of the changes to the final rule. However, as mentioned above, we anticipate that one facility will have moderately lower compliance costs due to allowing an alternative monitoring method for positive pressure baghouses.

We anticipate that the alternative monitoring method will have an annual cost of \$38,000, whereas the annual operating cost for a BLDS was estimated to be \$219,000. Overall, we anticipate the Ferroalloys Production source category will not incur significant compliance costs or savings as a result of the changes to the final rule.

D. What are the economic and employment impacts?

We believe that there will be a slight economic benefit to one of the facilities due to allowing an alternative monitoring method for positive pressure baghouses. In the reconsideration proposal, we estimated the capital cost for the installation of BLDS for each facility would be \$269,100 and annualized costs would be \$219,000. For this final action, based on information received from the company, we now estimate capital costs for the BLDS for Felman would be \$1.1 million with annualized costs of \$330,000. We believe allowing an alternative monitoring method for positive pressure baghouses in this final action will reduce the cost of complying with the final rule for this facility. However, we believe this final action 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 final standards?

We do not anticipate any emission changes, and therefore there are no direct monetized benefits or disbenefits associated with the changes to this final rule.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at <http://www2.epa.gov/laws-regulations/laws-and-executive-orders>.

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

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2060-0676. This action adds an alternative monitoring requirement and a revised test method, but does not make revisions to the reporting requirements in the final rule. Therefore, this action does not change the information collection requirements previously

finalized and, as a result, does not impose any additional burden on industry.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This final action will not impose any requirements on small entities. The agency has determined that neither of the companies affected by this action is considered to be a small entity.

D. Unfunded Mandates Reform Act (UMRA)

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

E. Executive Order 13132: Federalism

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

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

This action does not have tribal implications as specified in Executive Order 13175. There are no ferroalloys production facilities that are owned or operated by tribal governments. Thus, Executive Order 13175 does not apply to this action.

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

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The health risk assessments completed for the final rule are presented in the Residual Risk Assessment for the Ferroalloys Source Category in Support of the 2015 Final Rule document, which is available in the docket for this action (EPA-HQ-OAR-2010-0895-0281), and are discussed in Section V.G of the preamble for the final rule (80 FR 37366).

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

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

I. National Technology Transfer and Advancement Act (NTTAA) and
1 CFR Part 51

This action involves technical standards. The EPA decided to use ASTM D7520-16, "Standard Test Method for Determining the Opacity of a Plume in the Outdoor Ambient Atmosphere," for measuring opacity from the shop buildings. The ASTM D7520-16 is a method to assess opacity whereby a Digital Still Camera is used to capture a set of digital images of a plume against a contrasting background. Each image is analyzed with software that determines plume opacity by comparing a user defined portion of the plume image where opacity is being measured in comparison to the background providing the contrasting values. The Analysis Software is used to average the opacities from the series of digital images taken of the plume over a fixed period of time. The software is also used to archive the image set utilized for each opacity determination including the portion of each image selected by the operator. Each DCOT vendor shall provide training for operators of their DCOT system. The training shall include the content of the "Principles of Visual Emissions Measurements and Procedures to Evaluate those Emissions Using the Digital Camera Optical Technique (DCOT)" and a description of how to operate that specific DCOT system that passed smoke school. This standard is an acceptable alternative to EPA Method 9 and is available from the American Society for

Testing and Materials, 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959. See

<http://www.astm.org/>.

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

The EPA believes that this action does **not** have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). This action does not affect the level of protection provided to human health or the environment because it only provides an alternative monitoring provision and revised test method that will not affect the emission standards that were finalized on June 30, 2015.

K. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

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

Dated: December 28, 2016 _____.

Gina McCarthy,
Administrator.

For the reasons stated in the preamble, the Environmental Protection Agency is amending title 40, chapter I, part 63 of the Code of Federal Regulations (CFR) as follows:

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

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

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

Subpart A - General Provisions

2. Section 63.14 is amended by:

- a. Redesignating paragraphs (h)(96) through (h)(104) as (h)(97) through (h)(105), respectively; and
- b. Adding new paragraph (h)(96).

§63.14 Incorporations by reference.

* * * * *

(h) * * *

(96) ASTM D7520-16, Standard Test Method for Determining the Opacity of a Plume in the Outdoor Ambient Atmosphere, approved April 1, 2016, IBR approved for §§63.1625(b).

* * * * *

**Subpart XXX—National Emission Standards for Hazardous Air
Pollutants for Ferroalloys Production: Ferromanganese and
Silicomanganese**

3. Section 63.1625 is amended by:

a. Revising paragraphs (b) (9) introductory text, (b) (9) (i), (b) (9) (ii), and (b) (9) (v); and

b. Revising paragraphs (d) (1) (ii) through (iv).

The revisions read as follows:

§63.1625 What are the performance test and compliance requirements for new, reconstructed, and existing facilities?

* * * * *

(b) * * *

(9) ASTM D7520-16 to determine opacity (incorporated by reference, see §63.14) with the following conditions:

(i) During the digital camera opacity technique (DCOT) certification procedure outlined in Section 9.2 of ASTM D7520-16, you or the DCOT vendor must present the plumes in front of various backgrounds of color and contrast representing conditions anticipated during field use such as blue sky, trees and mixed backgrounds (clouds and/or a sparse tree stand).

(ii) You must have standard operating procedures in place including daily or other frequency quality checks to ensure the equipment is within manufacturing specifications as outlined in Section 8.1 of ASTM D7520-16.

* * * * *

(v) Use of this method does not provide or imply a certification or validation of any vendor's hardware or software. The onus to maintain and verify the certification

and/or training of the DCOT camera, software and operator in accordance with ASTM D7520-16 and these requirements is on the facility, DCOT operator and DCOT vendor.

* * * * *

(d) * * *

(1) * * *

(ii) You must conduct the opacity observations according to ASTM D7520-16 (incorporated by reference, see § 63.14), for a period that includes at least one complete furnace process cycle for each furnace.

(iii) For a shop building that contains more than one furnace, you must conduct the opacity observations according to ASTM D7520-16 for a period that includes one tapping period from each furnace located in the shop building.

(iv) You must conduct the opacity observations according to ASTM D7520-16 for a 1-hour period that includes at least one pouring for each MOR located in the shop building.

* * * * *

4. Section 63.1626 is amended by:

- a. Revising paragraphs (c) introductory text and (c)(1);
- b. Redesignating paragraphs (d) through (o) as paragraphs (e) through (p), respectively;
- c. Adding new paragraph (d);
- d. Republishing the heading of redesignated paragraph (e),

and revising paragraphs (e) (1), (e) (3) introductory text, (e) (4) introductory text, and (e) (4) (ii);

e. Revising redesignated paragraph (h) introductory text;

f. Revising redesignated paragraph (j) introductory text;

g. Revising redesignated paragraph (k) introductory text;

and

h. Revising redesignated paragraph (p) introductory text.

The revisions and additions read as follows:

§63.1626 What monitoring requirements must I meet?

* * * * *

(c) For an existing positive pressure baghouse used to control emissions from an electric arc furnace that is not equipped with a bag leak detection system, you must specify in the standard operating procedures manual for inspections and routine maintenance, at a minimum, the requirements of paragraphs (c) (1) and (2) of this section.

(1) You must visually inspect the outlet of each baghouse using Method 22 on a twice daily basis (at least 4 hours apart) for evidence of any visible emissions indicating abnormal operations and must initiate corrective actions within 1 hour of any visible emissions that indicates abnormal operation. Corrective actions shall include, at a minimum, isolating, shutting down and conducting an internal inspection of the baghouse compartment that is the source of the visible emissions

that indicate abnormal operations.

* * * * *

(d) For all other non-furnace baghouses that are not equipped with bag leak detection or CEMS, the procedures that you specify in the standard operating procedures manual for inspections and routine maintenance must, at a minimum, include the requirements of paragraphs (d)(1) and (2) of this section.

(1) You must observe the baghouse outlet on a daily basis for the presence of any visible emissions.

(2) In addition to the daily visible emissions observation, you must conduct the following activities:

(i) Weekly confirmation that dust is being removed from hoppers through visual inspection, or equivalent means of ensuring the proper functioning of removal mechanisms.

(ii) Daily check of compressed air supply for pulse-jet baghouses.

(iii) An appropriate methodology for monitoring cleaning cycles to ensure proper operation.

(iv) Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.

(v) Quarterly visual check of bag tension on reverse air and shaker-type baghouses to ensure that the bags are not kinked (knead or bent) or lying on their sides. Such checks are not required for shaker-type baghouses using self-tensioning (spring

loaded) devices.

(vi) Quarterly confirmation of the physical integrity of the baghouse structure through visual inspection of the baghouse interior for air leaks.

(vii) Semiannual inspection of fans for wear, material buildup and corrosion through visual inspection, vibration detectors, or equivalent means.

* * * * *

(e) Bag leak detection system. (1) For each baghouse used to control emissions from an electric arc furnace, you must install, operate, and maintain a bag leak detection system according to paragraphs (e) (2) through (4) of this section, unless a system meeting the requirements of paragraph (p) of this section, for a CEMS and continuous emissions rate monitoring system, is installed for monitoring the concentration of particulate matter, or an existing positive pressure baghouse used to control emissions from an electric arc furnaces that is subject to paragraph (c) of this section. You may choose to install, operate, and maintain a bag leak detection system for any other baghouse in operation at the facility according to paragraphs (e) (2) through (4) of this section.

* * * * *

(3) Each bag leak detection system must meet the specifications and requirements in paragraphs (e) (3) (i) through

(viii) of this section.

* * * * *

(4) You must include in the standard operating procedures manual required by paragraph (a) of this section a corrective action plan that specifies the procedures to be followed in the case of a bag leak detection system alarm. The corrective action plan must include, at a minimum, the procedures that you will use to determine and record the time and cause of the alarm as well as the corrective actions taken to minimize emissions as specified in paragraphs (e) (4) (i) and (ii) of this section.

* * * * *

(ii) The cause of the alarm must be alleviated by taking the necessary corrective action(s) that may include, but not be limited to, those listed in paragraphs (e) (4) (ii) (A) through (F) of this section.

* * * * *

(h) Shop building opacity. In order to demonstrate continuous compliance with the opacity standards in §63.1623, you must comply with the requirements §63.1625(d) (1) and one of the monitoring options in paragraphs (h) (1) or (2) of this section. The selected option must be consistent with that selected during the initial performance test described in §63.1625(d) (2). Alternatively, you may use the provisions of §63.8(f) to request approval to use an alternative monitoring

method.

* * * * *

(j) Requirements for sources using CMS. If you demonstrate compliance with any applicable emissions limit through use of a continuous monitoring system (CMS), where a CMS includes a continuous parameter monitoring system (CPMS) as well as a continuous emissions monitoring system (CEMS), you must develop a site-specific monitoring plan and submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation (where applicable) of your CMS. Your site-specific monitoring plan must address the monitoring system design, data collection and the quality assurance and quality control elements outlined in this paragraph and in §63.8(d). You must install, operate and maintain each CMS according to the procedures in your approved site-specific monitoring plan. Using the process described in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (j)(1) through (6) of this section in your site-specific monitoring plan.

* * * * *

(k) If you have an operating limit that requires the use of a CPMS, you must install, operate and maintain each continuous parameter monitoring system according to the procedures in

paragraphs (k) (1) through (7) of this section.

* * * * *

(p) Particulate Matter CEMS. If you are using a CEMS to measure particulate matter emissions to meet requirements of this subpart, you must install, certify, operate and maintain the particulate matter CEMS as specified in paragraphs (p) (1) through (4) of this section.

* * * * *

5. Section 63.1656 is amended by revising paragraphs (b) (7) introductory text, (b) (7) (i) and (ii), and (b) (7) (v) to read as follows:

§63.1656 Performance testing, test methods, and compliance demonstrations.

* * * * *

(b) * * *

(7) Method 9 of appendix A-4 of 40 CFR part 60 to determine opacity. ASTM D7520-16, "Standard Test Method for Determining the Opacity of a Plume in the Outdoor Ambient Atmosphere" may be used (incorporated by reference, see § 63.14) with the following conditions:

(i) During the digital camera opacity technique (DCOT) certification procedure outlined in Section 9.2 of ASTM D7520-16, the owner or operator or the DCOT vendor must present the plumes in front of various backgrounds of color and contrast

representing conditions anticipated during field use such as blue sky, trees and mixed backgrounds (clouds and/or a sparse tree stand).

(ii) The owner or operator must also have standard operating procedures in place including daily or other frequency quality checks to ensure the equipment is within manufacturing specifications as outlined in Section 8.1 of ASTM D7520-16.

* * * * *

(v) Use of this approved alternative does not provide or imply a certification or validation of any vendor's hardware or software. The onus to maintain and verify the certification and/or training of the DCOT camera, software and operator in accordance with ASTM D7520-16 and these requirements is on the facility, DCOT operator and DCOT vendor.

* * * * *