Subpart FFFFF - National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities

What This Subpart Covers

§ 63.7780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and operation and maintenance requirements in this subpart.

§ 63.7781 Am I subject to this subpart?

You are subject to this subpart if you own or operate an integrated iron and steel manufacturing facility that is (or is part of) a major source of hazardous air pollutants (HAP) emissions. Your integrated iron and steel manufacturing facility is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7782 What parts of my plant does this subpart cover?

(a) This subpart applies to each new and existing affected source at your integrated iron and steel manufacturing facility.

(b) The affected sources are each new or existing sinter plant, blast furnace, and basic oxygen process furnace (BOPF) shop at your integrated iron and steel manufacturing facility.

(c) This subpart covers emissions from the sinter plant windbox exhaust, discharge end, and sinter cooler; the blast furnace casthouse; the blast furnace stove; and the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy). This subpart also covers ~~unmeasured~~ fugitive and intermittent particulate emissions from blast furnace~~BF~~ unplanned bleeder valve openings, blast furnace~~BF~~ planned bleeder valve openings, blast furnace~~BF~~ and BOPF slag processing, handling, and storage, blast furnace~~BF~~ bell leaks, beaching of iron from blast furnaces~~BFs~~, blast furnace~~BF~~ casthouse fugitives, and BOPF shop fugitives.

(d) A sinter plant, blast furnace, blast furnace stove, or BOPF shop at your integrated iron and steel manufacturing facility is existing if you commenced construction or reconstruction of the affected source before July 13, 2001.

(e) A sinter plant, blast furnace, blast furnace stove, or BOPF shop at your integrated iron and steel manufacturing facility is new if you commence construction or reconstruction of the affected source on or after July 13, 2001. An affected source is reconstructed if it meets the definition of reconstruction in § 63.2.

§ 63.7783 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation, standard, and operation and maintenance requirement in this subpart that applies to you by the dates specified in paragraphs (a)(1) and (2) of this section. This paragraph does not apply to the emission limitations for BOPF group: mercury (Hg); sinter plant windbox: Hg, hydrochloric acid (HCl), carbon disulfide (CS_2), carbonyl sulfide (COS); Blast Furnace casthouse: HCl, total hydrocarbon (THC), ~~,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) toxic equivalent (TEQ)dioxins and furans toxic equivalency values (D/F TEQ)~~; Blast Furnace stove: HCl, total hydrocarbon (THC), ,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) toxic equivalent (TEQ); primary emission control system for a BOPF: D/F TEQ, HCl, THC; ~~and unmeasured~~ fugitive and intermittent particulate sources.

(1) No later than May 22, 2006 for all emissions sources at an existing affected source except for a sinter cooler at an existing sinter plant.

(2) No later than January 13, 2007 for a sinter cooler at an existing sinter plant.

(b) If you have a new affected source and its initial startup date is on or before May 20, 2003, then you must comply with each emission limitation, standard, and operation and maintenance requirement in this subpart that applies to you by May 20, 2003. This paragraph does not apply to the emission limitations for mercury.

(c) If you have a new affected source and its initial startup date is after May 20, 2003, you must comply with each emission limitation, standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup. This paragraph does not apply to the emission limitations for mercury.

(d) If your integrated iron and steel manufacturing facility is not a major source and becomes a major source of HAP, the following compliance dates apply to you.

(1) Any portion of the existing integrated iron and steel manufacturing facility that becomes a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the integrated iron and steel manufacturing facility must be in compliance with this subpart no later than 2 years after it becomes a major source.

(e) You must meet the notification and schedule requirements in § 63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

(f) With regard to the mercury emission limitations, if you have a new or existing affected source, you must comply with each emission limitation for mercury that applies to you by the deadlines set forth in § 63.7791.

(g) If you have an existing affected source or a new or reconstructed affected source for which construction or reconstruction commenced on or before [INSERT ~~PROPOSAL~~ DATE OF PUBLICATION OF PROPOSAL IN THE FEDERAL REGISTER], each sinter plant windbox, BF casthouse, ~~and~~ BF stove, primary emission control system for a BOPF, and fugitive and intermittent particulate source at your facility must be in compliance with the applicable emission limits in Table 1 of this subpart through performance testing under §63.7825, [DATE~~INSERT~~ 1 YEAR AFTER PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER~~PROMULGATION DATE~~].

Emission Limitations and Standards

§ 63.7790 What emission limitations must I meet?

(a) You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.

(1) You must operate each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;

(2) For each venturi scrubber applied to meet any particulate emission limit in Table 1 to this subpart, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

(3) For each electrostatic precipitator applied to emissions from a BOPF, you must maintain the hourly average opacity of emissions exiting the control device at or below 10 percent.

(c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must submit a description of the device; test results collected in accordance with § 63.7822 verifying the performance of the device for reducing emissions of particulate matter to the atmosphere to the levels required by this subpart; a copy of the operation and maintenance plan required in § 63.7800(b); and appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s). The monitoring plan identifying the operating parameters to be monitored is subject to approval by the Administrator.

(d) For each sinter plant, you must either:

(1) Maintain the 30-day rolling average oil content of the feedstock at or below 0.02 percent; or

(2) Maintain the 30-day rolling average of volatile organic compound emissions from the windbox exhaust stream at or below 0.2 lb/ton of sinter.

§ 63.7791 How do I comply with the requirements for the control of mercury from BOPF Groups?

(a) ***Compliance deadlines.***

(1) If you have an existing affected source or a new or reconstructed affected source for which construction or reconstruction commenced on or before August 16, 2019, each BOPF Group at your facility must be in compliance with the applicable mercury emission limit in Table 1 of this subpart through performance testing under §§ 63.7825 and 63.7833, or through procurement of steel scrap pursuant to the compliance options in § 63.7791(c), (d), or (e) beginning July 13, 2021.

(2) If you have a new or reconstructed affected source for which construction or reconstruction commenced after August 16, 2019, each BOPF Group at that source must be in compliance with the applicable mercury emission limit in Table 1 of this subpart beginning July 13, 2020 or upon initial startup of your affected source, whichever is later.

(b) ***Alternative compliance demonstration.***

(1) As an alternative to demonstrating compliance with the emission limits in Table 1 by conducting performance tests pursuant to §§ 63.7825 and 63.7833(h), you may demonstrate compliance with the emission limits in Table 1 by procuring scrap pursuant to the requirements in paragraph (c), (d), or (e) of this section for each scrap provider, contract, or shipment. It is not necessary to use the same BOPF scrap compliance provision for all scrap providers, contracts, or shipments. You may procure some scrap through providers, contracts, or shipments pursuant to one BOPF scrap compliance provision and other scrap through providers, contracts, or shipments pursuant to other BOPF scrap compliance provisions.

(2) To utilize the alternative compliance options established in paragraph (b)(1) of this section, you must submit an initial certification of compliance and semiannual compliance reports consistent with the requirements of §§ 63.7840(f) and 63.7841(b)(9) through (11), and (13), and comply with the recordkeeping requirements in § 63.7842(e) and all other applicable provisions related to demonstrating compliance through participating in an approved mercury program or through the use of scrap that does not contain mercury switches.

(3) For any facility that initially elects to utilize the alternative compliance options established in paragraph (b)(1) of this section, but subsequently stops using scrap that meets the requirements of paragraph (c), (d), or (e) of this section for each scrap provider, contract,

or shipment, within 180 days of the change you must, for that BOPF Group, demonstrate compliance through performance testing pursuant to the requirements of §§ 63.7825 and 63.7833(h), and submit a revised notice of compliance status in your next semiannual compliance report described in this section. You must also comply with the requirements for conducting subsequent performance tests in §§ 63.7821(e) and 63.7840(g), and all other applicable requirements related to demonstrating compliance with the emission limits through performance testing.

(c) ***Participation in the NVMSRP.***

(1) You must obtain all post-consumer scrap that contains motor vehicle scrap from scrap providers who participate in the NVMSRP. The NVMSRP is an EPA-approved program under this section unless and until the Administrator disapproves the program (in part or in whole);

(2) You must certify in your initial notification of compliance status required by § 63.7840(f) and semiannual compliance report required by § 63.7841(a) that you purchased post-consumer steel scrap containing motor vehicle scrap according to paragraph (c)(1) of this section, and identify all your scrap providers in your semiannual compliance report;

(3) If you purchase scrap from a broker, you must certify that all scrap received from that broker was obtained from other scrap providers who participate in the NVMSRP and identify all scrap providers used by all your scrap brokers in your semiannual compliance report; and

(4) You must conduct periodic inspections or provide other means of corroboration to ensure that scrap providers and brokers participate in the NVMSRP and, therefore, are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

(d) ***Use of scrap that does not contain mercury switches.*** For BOPF scrap not complying with the requirements in paragraph (c) or (e) of this section, you must certify in your initial notification of compliance report required by § 63.7840(f) and semiannual compliance report required by § 63.7841(a) and maintain records of documentation required by § 63.7842(e) establishing that the scrap does not contain mercury switches. You may satisfy this requirement by certifying and documenting that:

(1) The scrap does not contain motor vehicle scrap; or

(2) The scrap does not contain shredded motor vehicle scrap; or

(3) The only materials from motor vehicles in the scrap are materials recovered for their specialty alloy content (including, but not limited to, chromium, nickel, molybdenum, or other alloys); therefore, based on the type of the scrap and purchase specifications, the scrap does not contain mercury switches.

(e) ***Use of an EPA-approved mercury removal program.***

(1) You must obtain all post-consumer scrap containing motor vehicle scrap from scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator;

(2) You must certify in your initial notification of compliance status required by § 63.7840(f) and semiannual compliance report required by § 63.7841(a) that you purchase post-consumer steel scrap containing motor vehicle scrap according to paragraph (e)(1) of this section and identify all your scrap providers in your semiannual compliance report;

(3) If you purchase scrap from a broker, you must certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator and identify all scrap providers used by all your scrap brokers in your semiannual compliance report; and

(4) You must conduct periodic inspections or provide other means of corroboration to ensure that scrap providers and brokers are complying with the approved mercury removal program and, therefore, are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

§ 63.7792 What fenceline monitoring requirements must I meet?

The owner or operator must conduct sampling along the facility property boundary and analyze the samples in accordance with paragraphs (a) through (g) of this section.

(a) Beginning either 1 year after promulgation of the test method for fenceline sampling of metals applicable to this subpart or [DATE TWO YEARS AFTER PUBLICATION OF THE FINAL RULE] whichever is later, the owner or operator must conduct sampling along the facility property boundary and analyze the samples in accordance with the method and paragraphs (a)(1) through (a)(3) of this section.

(1) The owner or operator must monitor for total chromium.

(2) The owner or operator must use a sampling period and sampling frequency as specified in paragraphs (a)(2)(i) through (a)(2)(iii) of this section.

(i) ***Sampling period.*** A 24-hour sampling period must be used. A sampling period is defined as the period during active collection of a sample and does not include the time required to analyze the sample.

(ii) ***Sampling frequency.*** The frequency of sample collection must be samples at least every 6 calendar days, such that the beginning of each sampling period begins no greater than approximately 144 hours (± 12 hours) from the end of the previous sample.

(3) The owner or operator must determine sample locations in accordance with paragraphs (b)(3)(i) through (b)(3)(v) of this section.

(i) The monitoring perimeter must be located between the property boundary and the process unit(s), such that the monitoring perimeter encompasses all potential sources of the target analyte(s) specified in paragraph (a)(1) of this section.

(ii) The owner or operator must place a minimum of 4 samplers around the monitoring perimeter.

(iii) To determine sampling locations, measure the length of the monitoring perimeter.

(A) Locate the point downwind of the prevailing wind direction.

(B) Divide the monitoring perimeter equally into 4 evenly spaced sampling points, with one located in accordance with (a)(3)(iii)(A) of this section.

(5) The owner or operator must follow the procedures in of the fenceline metals test method to determine the detection limit of the target analyte(s) and requirements for quality assurance samples.

(iii) ***Sunset Provision.*** When the annual rolling average Δc remains less than 0.05 $\mu g/m^3$ for 24 months in succession, a test waiver may be requested from the Administrator to remove or reduce fenceline sampling requirements. If the annual rolling average Δc exceeds 0.05 $\mu g/m^3$, the determination of 24 consecutive annual average Δc months restarts.

(b) The owner or operator must collect and record meteorological data according to the applicable requirements in paragraphs (b)(1) through (b)(3) of this section.

(1) If monitoring is conducted under paragraph (b) of this section, if a near-field source correction is used as provided in paragraph (f)(2) of this section, or if an alternative test method is used that provides time-resolved measurements, the owner or operator must use an on-site meteorological station in accordance with the metals fenceline test method applicable to this subpart. Collect and record hourly average meteorological data, including temperature, barometric pressure, wind speed and wind direction and calculate daily unit vector wind direction and daily sigma theta.

(2) For cases other than those specified in paragraph (c)(1) of this section, the owner or operator must collect and record sampling period average temperature and barometric pressure using either an on-site meteorological station in accordance with the metals fenceline test method of this part or, alternatively, using data from a National Weather Service (NWS) meteorological station provided the NWS meteorological station is within 40 kilometers (25 miles) of the facility.

(3) If an on-site meteorological station is used, the owner or operator must follow the calibration and standardization procedures for meteorological measurements in EPA-454/B-08-002.

(c) Within 45 days of completion of each sampling period, the owner or operator must determine whether the results are above or below the action level for each measured compound as follows.

(1) The owner or operator must determine the facility impact on the concentration (Δc) of each compound for each sampling period according to either paragraph (d)(1)(i) or (d)(1)(ii) of this section, as applicable.

(i) Except when near-field source correction is used as provided in paragraph (d)(1)(ii) of this section, the owner or operator must determine the highest and lowest sample results for each compound individually from the sample pool and calculate each compound's Δc as the difference in these concentrations. Co-located samples must be averaged together for the purposes of determining the concentration at a particular sampling location, and, if applicable, for determining Δc. The owner or operator must adhere to the following procedures when one or more samples for the sampling period are below the method detection limit for a particular compound:

(A) If the lowest detected value of a compound is below detection, the owner or operator must use zero as the lowest sample result when calculating Δc.

(B) If all sample results are below the method detection limit, the owner or operator must use the highest method detection limit for the sample set as the highest sample result and zero as the lowest sample result when calculating Δc.

(ii) When near-field source correction is used as provided in paragraph (g) of this section, the owner or operator must determine Δc using the calculation protocols outlined in the approved site-specific monitoring plan and in paragraph (g) of this section.

(2) The owner or operator must calculate the annual average Δc for each monitored compound based on the average of the Δc values for the 61 most recent sampling periods. The owner or operator must update this annual average value after receiving the results of each subsequent sampling period.

(3) The action level for chromium is 0.1 $\mu g/m^3$. If the annual average Δc value (rounded to 1 significant figure) for a compound is greater than the action level, the concentration is above the action level, and the owner or operator must conduct a root cause analysis and corrective action in accordance with paragraph (d) of this section.

(d) Once any action level in paragraph (c)(3) of this section has been exceeded, the owner or operator must take the following actions to bring the annual average delta c back below the action level(s).

(1) Within 5 days of updating the annual average value as required in (c)(2) and determining that any action level in paragraph (c)(3) of this section has been exceeded (*i.e.*, in no case longer than 50 days after completion of the sampling period), the owner or operator must initiate a root cause analysis to determine appropriate corrective action. A root cause analysis is an assessment conducted through a process of investigation to determine the primary underlying cause and all other contributing causes to an exceedance of the action level(s) set forth in (c)(3).

(2) The initial root cause analysis may include, but is not limited to:

(A) Visual inspection to determine the cause of the high emissions.

(B) Operator knowledge of process changes (*e.g.*, a malfunction or release event).

(3) If the initial root cause cannot be identified using the type of techniques described in paragraph (d)(2) of this section, the owner or operator must employ more frequent sampling and analysis to determine the root cause of the exceedance.

(A) The owner or operator may first employ additional monitoring points or more frequent sampling to determine the root cause of the exceedance.

(B) If the owner or operator has not determined the root cause of the exceedance within 30 days of determining that the action level has been exceeded, the owner or operator must employ the appropriate more time resolute sampling techniques (*e.g.*, continuous multi metals monitors) to locate the cause of the exceedance. If the root cause is not identified after 72 hours, either the real-time monitor must be relocated or an additional monitor must be added. Relocation or addition of extra monitors must continue after each 72-hour period of nonidentification until the owner or operator can identify the root cause of the exceedance.

(2) If the underlying primary and other contributing causes of the exceedance are deemed to be under the control of the owner or operator, the owner or operator must take appropriate corrective action as expeditiously as possible to bring annual average fenceline concentrations back below the action level(s) set forth in (c)(2)(3). At a minimum, the corrective actions taken must address the underlying primary and other contributing cause(s) determined in the root cause analysis to prevent future exceedances from the same underlying cause(s).

(3) The root cause analysis must be completed and initial corrective actions taken no later than 45 days after determining there is an exceedance of an action level.

(e) An owner or operator must develop a corrective action plan if the conditions in either paragraphs (e)(1) or (e)(2) of this section are met. The corrective action plan must describe the corrective action(s) completed to date, additional measures that the owner or operator proposes to employ to reduce annual average fenceline concentrations below the action level set forth in (c)(3), and a schedule for completion of these measures. The corrective action plan does not need to be approved by the Administrator. However, if upon review, the Administrator

disagrees with the additional measures outlined in the plan, the owner or operator must revise and resubmit the plan within 7 calendar days of receiving comments from the Administrator.

(1) The owner or operator must develop a corrective action plan if, upon completion of the root cause analysis and initial corrective actions required in paragraph (d) of this section, the Δc value for the next sampling period, for which the sampling start time begins after the completion of the initial corrective actions, is greater than the 0.1 $\mu g/m^3$. The owner or operator must submit the corrective action plan to the Administrator within 60 days after receiving the analytical results indicating that the Δc value for the sampling period following the completion of the initial corrective action is greater than 0.1 $\mu g/m^3$.

(2) The owner or operator must develop a corrective action plan if complete implementation of all corrective measures identified in the root cause analysis required by paragraph (d) of this section will require more than 45 days. The owner or operator must submit the corrective action plan to the Administrator no later than 60 days following the completion of the root cause analysis required in paragraph (d) of this section.

(f) An owner or operator may request approval from the Administrator for a site-specific monitoring plan to account for offsite upwind sources according to the requirements in paragraphs (f)(1) through (f)(4) of this section.

(1) The owner or operator must prepare and submit a site-specific monitoring plan and receive approval of the site-specific monitoring plan prior to using the near-field source alternative calculation for determining Δc provided in paragraph (f)(2) of this section. The site-specific monitoring plan must include, at a minimum, the elements specified in paragraphs (f)(1)(i) through (f)(1)(v) of this section. The procedures in Section 12 of Method 325A of appendix A of this part are not required, but may be used, if applicable, when determining near-field source contributions.

(i) Identification of the near-field source or sources.

(ii) Location of the additional monitoring stations that must be used to determine the uniform background concentration and the near-field source concentration contribution.

(iii) Identification of the fenceline monitoring locations impacted by the near-field source. If more than one near-field source is present, identify the near-field source or sources that are expected to contribute to the concentration at that monitoring location.

(iv) A description of (including sample calculations illustrating) the planned data reduction including the treatment of invalid data or data below detection limits and calculations to determine the near-field source concentration contribution for each monitoring location.

(v) A detailed description of the measurement technique, measurement location(s), the standard operation procedure, measurement frequency, recording frequency, measurement detection limit, and data quality indicators to ensure accuracy, precision, and validity of the data.

(2) When an approved site-specific monitoring plan is used, the owner or operator must determine Δc for comparison with the action level using the requirements specified in paragraphs (f)(2)(i) through (f)(2)(iii) of this section.

(i) For each monitoring location, calculate Δc_i using the following equation.

$$\Delta c_i = MFC_i - NFS_i$$

Where:

Δc_i = The fenceline concentration, corrected for background, at measurement location i, micrograms per cubic meter ($\mu g/m^3$).

MFC_i = The measured fenceline concentration at measurement location i, $\mu g/m^3$.

NFS_i = The near-field source contributing concentration at measurement location i determined using the additional measurements and calculation procedures included in the site-specific monitoring plan, $\mu g/m^3$. For monitoring locations that are not included in the site-specific monitoring plan as impacted by a near-field source, use $NFS_i = 0$ $\mu g/m^3$.

(ii) When one or more samples for the sampling period are below the method detection limit for the compound, adhere to the following procedures:

(A) If the concentration at the monitoring location(s) used to determine the near-field source contributing concentration is below the method detection limit, the owner or operator must use zero for the monitoring location concentration when calculating NFS_i for that monitoring period.

(B) If a fenceline monitoring location sample result is below the method detection limit, the owner or operator must use the method detection limit as the sample result.

(iii) Determine Δc for the monitoring period as the maximum value of Δc_i from all of the fenceline monitoring locations for that monitoring period.

(3) The site-specific monitoring plan must be submitted and approved as described in paragraphs (f)(3)(i) through (iv) of this section.

(i) The site-specific monitoring plan must be submitted to the Administrator for approval.

(ii) The site-specific monitoring plan must also be submitted to the following address: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, U.S. EPA Mailroom (E143-01), Attention: Integrated Iron and

Steel Sector Lead, 109 T.W. Alexander Drive, Research Triangle Park, NC 27711. Electronic copies in lieu of hard copies may also be submitted to *XXXXXXXX@epa.gov*.

(iii) The Administrator will approve or disapprove the plan in 90 days. The plan is considered approved if the Administrator either approves the plan in writing or fails to disapprove the plan in writing. The 90-day period begins when the Administrator receives the plan.

(iv) If the Administrator finds any deficiencies in the site-specific monitoring plan and disapproves the plan in writing, the owner or operator may revise and resubmit the site-specific monitoring plan following the requirements in paragraphs (f)(3)(i) and (f)(3)(ii) of this section. The 90-day period starts over with the resubmission of the revised monitoring plan.

(4) The approval by the Administrator of a site-specific monitoring plan will be based on the completeness, accuracy and reasonableness of the request for a site-specific monitoring plan. Factors that the Administrator will consider in reviewing the request for a site-specific monitoring plan include, but are not limited to, those described in paragraphs (f)(4)(i) through (f)(4)(v) of this section.

(i) The identification of the near-field source or sources.

(ii) The monitoring location selected to determine the uniform background concentration or an indication that no uniform background concentration monitor will be used.

(iii) The location(s) selected for additional monitoring to determine the near-field source concentration contribution.

(iv) The identification of the fenceline monitoring locations impacted by the near-field source or sources.

(v) The appropriateness of the planned data reduction and calculations to determine the near-field source concentration contribution for each monitoring location.

(vi) If more frequent monitoring is proposed, the adequacy of the description of the measurement and recording frequency proposed and the adequacy of the rationale for using the alternative monitoring frequency.

(g) The owner or operator must comply with the applicable recordkeeping and reporting requirements in § 63.7841 and § 63.7842.

(i) As outlined in § 63.7(f) of subpart A of this part, the owner or operator may submit a request for an alternative test method. At a minimum, the request must follow the requirements outlined in paragraphs (i)(1) through (i)(7) of this section.

(1) The alternative method may be used in lieu of all or a partial number of the sampling locations required under paragraph (a) of this section.

(2) The alternative method must be validated according to Method 301 in appendix A of this part or contain performance-based procedures and indicators to ensure self-validation.

(3) The method detection limit must nominally be at least an order of magnitude below the action level for the compound(s) that will be monitored with the alternative method. The alternate test method must describe the procedures used to provide field verification of the detection limit.

(4) If the alternative test method will be used to replace some or all samplers required under paragraph (a) of this section, the spatial coverage must be equal to or better than the spatial coverage provided under paragraph (a).

(5) For alternative test methods capable of real time measurements (less than a 5 minute sampling and analysis cycle), the alternative test method may allow for elimination of data points corresponding to outside emission sources for purpose of calculation of the high point for the two week average. The alternative test method approach must have wind speed, direction and stability class of the same time resolution and within the footprint of the instrument.

(6) For purposes of averaging data points to determine the Δc for the individual sampling period, all results measured under the method detection limit must use the method detection limit. For purposes of averaging data points for the individual sampling period low sample result, all results measured under the method detection limit must use zero.

~~(a) The owner or operator of an integrated iron and steel manufacturing facility shall conduct sampling along the facility property boundary and analyze the samples in accordance with Method 40 CFR Appendix B to Part 50Methods 325A and 325B of appendix A of this part and paragraphs (b) through (k) of this section.~~

~~(b) The target analyte is total chromiumbenzene.~~

~~(c)~~

~~(c) The owner or operator shall determine passive monitor locations in accordance with Section 8.2 of Method 325A of appendix A of this part.~~

~~(1) As it pertains to this subpart, known sources of VOCs, as used in Section 8.2.1.3 in Method 325A of appendix A of this part for siting passive monitors, means a wastewater treatment unit, process unit, or any emission source requiring control according to the requirements of this subpart, including marine vessel loading operations. For marine vessel loading operations, one passive monitor should be sited on the shoreline adjacent to the dock. For this subpart, an additional monitor is not required if the only emission sources within 50 meters of the monitoring boundary are equipment leak sources satisfying all of the conditions in paragraphs (c)(1)(i) through (iv) of this section.~~

~~(i) The equipment leak sources in organic HAP service within 50 meters of the monitoring boundary are limited to valves, pumps, connectors, sampling connections, and open-ended~~

lines. If compressors, pressure relief devices, or agitators in organic HAP service are present within 50 meters of the monitoring boundary, the additional passive monitoring location specified in Section 8.2.1.3 in Method 325A of appendix A of this part must be used.

(ii) All equipment leak sources in gas or light liquid service (and in organic HAP service), including valves, pumps, connectors, sampling connections and open-ended lines, must be monitored using EPA Method 21 of 40 CFR part 60, appendix A-7 no less frequently than quarterly with no provisions for skip period monitoring, or according to the provisions of § 63.11(c) Alternative Work practice for monitoring equipment for leaks. For the purpose of this provision, a leak is detected if the instrument reading equals or exceeds the applicable limits in paragraphs (e)(1)(ii)(A) through (E) of this section:

(A) For valves, pumps or connectors at an existing source, an instrument reading of 10,000 ppmv.

(B) For valves or connectors at a new source, an instrument reading of 500 ppmv.

(C) For pumps at a new source, an instrument reading of 2,000 ppmv.

(D) For sampling connections or open-ended lines, an instrument reading of 500 ppmv above background.

(E) For equipment monitored according to the Alternative Work practice for monitoring equipment for leaks, the leak definitions contained in § 63.11 (e)(6)(i) through (iii).

(iii) All equipment leak sources in organic HAP service, including sources in gas, light liquid and heavy liquid service, must be inspected using visual, audible, olfactory, or any other detection method at least monthly. A leak is detected if the inspection identifies a potential leak to the atmosphere or if there are indications of liquids dripping.

(iv) All leaks identified by the monitoring or inspections specified in paragraphs (e)(1)(ii) or (iii) of this section must be repaired no later than 15 calendar days after it is detected with no provisions for delay of repair. If a repair is not completed within 15 calendar days, the additional passive monitor specified in Section 8.2.1.3 in Method 325A of appendix A of this part must be used.

(2) The owner or operator may collect one or more background samples if the owner or operator believes that an offsite upwind source or an onsite source excluded under § 63.640(g) may influence the sampler measurements. If the owner or operator elects to collect one or more background samples, the owner or operator must develop and submit a site-specific monitoring plan for approval according to the requirements in paragraph (i) of this section. Upon approval of the site-specific monitoring plan, the background sampler(s) should be operated co-currently with the routine samplers.

(3) If there are 19 or fewer monitoring locations, the owner or operator shall collect at least one co-located duplicate sample per sampling period and at least one field blank per sampling

period. If there are 20 or more monitoring locations, the owner or operator shall collect at least two co-located duplicate samples per sampling period and at least one field blank per sampling period. The co-located duplicates may be collected at any of the perimeter sampling

(4) The owner or operator shall follow the procedure in Section 9.6 of Method 325B of appendix A of this part to determine the detection limit of benzene for each sampler used to collect samples, background samples (if the owner or operator elects to do so), co-located samples and blanks.

(d) The owner or operator shall collect and record meteorological data according to the applicable requirements in paragraphs (d)(1) through (3) of this section.

(1) If a near-field source correction is used as provided in paragraph (i)(2) of this section or if an alternative test method is used that provides time-resolved measurements, the owner or operator shall:

(i) Use an on-site meteorological station in accordance with Section 8.3 of Method 325A of appendix A of this part.

(ii) Collect and record hourly average meteorological data, including temperature, barometric pressure, wind speed and wind direction and calculate daily unit vector wind direction and daily sigma theta.

(2) For cases other than those specified in paragraph (d)(1) of this section, the owner or operator shall collect and record sampling period average temperature and barometric pressure using either an on-site meteorological station in accordance with Section 8.3.1 through 8.3.3 of Method 325A of appendix A of this part or, alternatively, using data from a United States Weather Service (USWS) meteorological station provided the USWS meteorological station is within 40 kilometers (25 miles) of the integrated iron and steel manufacturing facility.

(3) If an on-site meteorological station is used, the owner or operator shall follow the calibration and standardization procedures for meteorological measurements in EPA-454/B-08-002 (incorporated by reference – see § 63.14).

(de) The owner or operator shall use a sampling period and sampling frequency as specified in paragraphs (de)(1) through (3) of this section.

(1) ***Sampling period.*** A 614-day sampling period shall be used, unless a shorter sampling period is determined to be necessary under paragraph (g) or (i) of this section. A sampling period is defined as the period during which sampling tube is deployed at a specific sampling location with the diffusive sampling end cap in-place and does not include the time required to analyze the sample. For the purpose of this subpart, a 614-day sampling period may be no shorter than 513 calendar days and no longer than 715 calendar days, but the routine sampling period shall be 614 calendar days.

(2) ***Base sampling frequency.*** Except as provided in paragraph (ee)(3) of this section, the frequency of sample collection shall be once each contiguous 614-day sampling period, such that the beginning of the next 614-day sampling period begins immediately upon the completion of the previous 614-day sampling period.

(3) ***Alternative sampling frequency for burden reduction.*** When an individual monitor consistently achieves results at or below 0.059 $\mu g/m^3$, the owner or operator may elect to use the applicable minimum sampling frequency specified in paragraphs (e)(3)(i) through (v) of this section for that monitoring site. When calculating Δc for the monitoring period when using this alternative for burden reduction, zero shall be substituted for the sample result for the monitoring site for any period where a sample is not taken.

(i) If every sample at a monitoring site is at or below 0.9 $\mu g/m^3$ for 2 years (52 consecutive samples), every other sampling period can be skipped for that monitoring site, *i.e.*, sampling will occur approximately once per month.

(ii) If every sample at a monitoring site that is monitored at the frequency specified in paragraph (e)(3)(i) of this section is at or below 0.9 $\mu g/m^3$ for 2 years (*i.e.*, 26 consecutive "monthly" samples), five 14-day sampling periods can be skipped for that monitoring site following each period of sampling, *i.e.*, sampling will occur approximately once per quarter.

(iii) If every sample at a monitoring site that is monitored at the frequency specified in paragraph (e)(3)(ii) of this section is at or below 0.9 $\mu g/m^3$ for 2 years (*i.e.*, 8 consecutive quarterly samples), twelve 14-day sampling periods can be skipped for that monitoring site following each period of sampling, *i.e.*, sampling will occur twice a year.

(iv) If every sample at a monitoring site that is monitored at the frequency specified in paragraph (e)(3)(iii) of this section is at or below 0.9 $\mu g/m^3$ for 2 years (*i.e.*, 4 consecutive semiannual samples), only one sample per year is required for that monitoring site. For yearly sampling, samples shall occur at least 10 months but no more than 14 months apart.

(v) If at any time a sample for a monitoring site that is monitored at the frequency specified in paragraphs (e)(3)(i) through (iv) of this section returns a result that is above 0.9 $\mu g/m^3$, the sampling site must return to the original sampling requirements of contiguous 14-day sampling periods with no skip periods for one quarter (six 14-day sampling periods). If every sample collected during this quarter is at or below 0.9 $\mu g/m^3$, the owner or operator may revert back to the reduced monitoring schedule applicable for that monitoring site prior to the sample reading exceeding 0.9 $\mu g/m^3$. If any sample collected during this quarter is above 0.9 $\mu g/m^3$, that monitoring site must return to the original sampling requirements of contiguous 14-day sampling periods with no skip periods for a minimum of two years. The burden reduction requirements can be used again for that monitoring site once the requirements of paragraph (e)(3)(i) of this section are met again, *i.e.*, after 52 contiguous 14-day samples with no results above 0.9 $\mu g/m^3$.

(f) Within 45 days of completion of each sampling period, the owner or operator shall determine whether the results are above or below the action level as follows:

(1) The owner or operator shall determine the facility impact on the benzenechromium concentration (Δc) for each 14-day sampling period according to either paragraph (f)(1)(i) or (ii) of this section, as applicable.

(i) Except when near-field source correction is used as provided in paragraph (i) of this section, the owner or operator shall determine the highest and lowest sample results for benzenechromium concentrations from the sample pool and calculate Δc as the difference in these concentrations. Co-located samples must be averaged together for the purposes of determining the benzenechromium concentration for that sampling location, and, if applicable, for determining Δc. The owner or operator shall adhere to the following procedures when one or more samples for the sampling period are below the method detection limit for benzenechromium:

(A) If the lowest detected value of benzenechromium is below detection, the owner or operator shall use zero as the lowest sample result when calculating the 12-month rolling average concentration Δc.

(B) If all sample results are below the method detection limit, the owner or operator shall use the method detection limit as the highest sample result and zero as the lowest sample result when calculating Δc.

(ii) When near-field source correction is used as provided in paragraph (i) of this section, the owner or operator shall determine Δc using the calculation protocols outlined in the approved site-specific monitoring plan and in paragraph (i) of this section.

(2) The owner or operator shall calculate the annual average Δc based on the average of the 26 most recent 14-day sampling periods. The owner or operator shall update this annual average value after receiving the results of each subsequent 14-day sampling period.

(3) The action level for benzenechromium is a 12-month rolling average of 0.19 micrograms per cubic meter ($\mu g/m^3$) on an annual average basis. If the annual average Δc value for benzene is less than or equal to 9 $\mu g/m^3$, the concentration is below the action level. If any 12-month rollingthe annual average concentrationΔc value for benzenechromium is greater than 0.19 $\mu g/m^3$ for any one monitor, the concentration is above the action level, and the owner or operator shall conduct a root cause analysis and corrective action in accordance with paragraph (g) of this section.

(g) Within 5 days of determining that the action level has been exceeded for any annual average Δc and no longer than 50 days after completion of the sampling period, the owner or operator shall initiate a root cause analysis to determine the cause of such exceedance and to determine appropriate corrective action, such as those described in paragraphs (g)(1) through (4) of this section. The root cause analysis and initial corrective action analysis shall be completed and initial corrective actions taken no later than 45 days after determining there is an exceedance. Root cause analysis and corrective action may include, but is not limited to:

(1) Leak inspection using Method 21 of part 60, appendix A-7 of this chapter and repairing any leaks found.

(2) Leak inspection using optical gas imaging and repairing any leaks found.

(3) Visual inspection to determine the cause of the high benzenechromium emissions and implementing repairs to reduce the level of emissions.

(4) Employing progressively more frequent sampling, analysis and meteorology (*e.g.*, using shorter sampling periods for Methods 325A and 325B of appendix A of this part, or using active sampling techniques).

(h) If, upon completion of the corrective action analysis and corrective actions such as those described in paragraph (g) of this section, the Δc value for the next 14-day sampling period for which the sampling start time begins after the completion of the corrective actions is greater than 9 $\mu g/m^3$ or if all corrective action measures identified require more than 45 days to implement, the owner or operator shall develop a corrective action plan that describes the corrective action(s) completed to date, additional measures that the owner or operator proposes to employ to reduce fenceline concentrations below the action level, and a schedule for completion of these measures. The owner or operator shall submit the corrective action plan to the Administrator within 60 days after receiving the analytical results indicating that the Δc value for the 14-day sampling period following the completion of the initial corrective action is greater than 9 $\mu g/m^3$ or, if no initial corrective actions were identified, no later than 60 days following the completion of the corrective action analysis required in paragraph (g) of this section.

(i) An owner or operator may request approval from the Administrator for a site-specific monitoring plan to account for offsite upwind sources or onsite sources excluded under § 63.640(g) according to the requirements in paragraphs (i)(1) through (4) of this section.

(1) The owner or operator shall prepare and submit a site-specific monitoring plan and receive approval of the site-specific monitoring plan prior to using the near-field source alternative calculation for determining Δc provided in paragraph (i)(2) of this section. The site-specific monitoring plan shall include, at a minimum, the elements specified in paragraphs (i)(1)(i) through (v) of this section. The procedures in Section 12 of Method 325A of appendix A of this part are not required, but may be used, if applicable, when determining near-field source contributions.

(i) Identification of the near-field source or sources. For onsite sources, documentation that the onsite source is excluded under § 63.640(g) and identification of the specific provision in § 63.640(g) that applies to the source.

(ii) Location of the additional monitoring stations that shall be used to determine the uniform background concentration and the near-field source concentration contribution.

(iii) Identification of the fenceline monitoring locations impacted by the near-field source. If more than one near-field source is present, identify the near-field source or sources that are expected to contribute to the concentration at that monitoring location.

(iv) A description of (including sample calculations illustrating) the planned data reduction and calculations to determine the near-field source concentration contribution for each monitoring location.

(v) If more frequent monitoring or a monitoring station other than a passive diffusive tube monitoring station is proposed, provide a detailed description of the measurement methods, measurement frequency, and recording frequency for determining the uniform background or near-field source concentration contribution.

(2) When an approved site-specific monitoring plan is used, the owner or operator shall determine Δc for comparison with the 9 $\mu g/m^3$ action level using the requirements specified in paragraphs (i)(2)(i) through (iii) of this section.

(i) For each monitoring location, calculate Δc_i using the following equation.

$$\Delta c_i = MFC_i - NFS_i - UB$$

Where:

Δc_i = The fenceline concentration, corrected for background, at measurement location i, micrograms per cubic meter ($\mu g/m^3$).

MFC_i = The measured fenceline concentration at measurement location i, $\mu g/m^3$.

NFS_i = The near-field source contributing concentration at measurement location i determined using the additional measurements and calculation procedures included in the site-specific monitoring plan, $\mu g/m^3$. For monitoring locations that are not included in the site-specific monitoring plan as impacted by a near-field source, use $NFS_i = 0$ $\mu g/m^3$.

UB = The uniform background concentration determined using the additional measurements included in the site-specific monitoring plan, $\mu g/m^3$. If no additional measurements are specified in the site-specific monitoring plan for determining the uniform background concentration, use $UB = 0$ $\mu g/m^3$.

(ii) When one or more samples for the sampling period are below the method detection limit for chromiumbenzene, adhere to the following procedures:

(A) If the benzenechromium concentration at the monitoring location used for the uniform background concentration is below the method detection limit, the owner or operator shall use zero for UB for that monitoring period.

(B) If the benzenechromium concentration at the monitoring location(s) used to determine the near-field source contributing concentration is below the method detection limit, the owner or operator shall use zero for the monitoring location concentration when calculating NFS, for that monitoring period.

(C) If a fenceline monitoring location sample result is below the method detection limit, the owner or operator shall use the method detection limit as the sample result.

(iii) Determine Δc for the monitoring period as the maximum value of Δc, from all of the fenceline monitoring locations for that monitoring period.

(3) The site-specific monitoring plan shall be submitted and approved as described in paragraphs (i)(3)(i) through (iv) of this section.

(i) The site-specific monitoring plan must be submitted to the Administrator for approval.

(ii) The site-specific monitoring plan shall also be submitted to the following address: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, U.S. EPA Mailroom (D243-02), Attention: Integrated Iron and Steel Sector Lead, 109 T.W. Alexander Drive, Research Triangle Park, NC 27711. Electronic copies in lieu of hard copies may also be submitted to *refineryrtr@epa.gov*.

(iii) The Administrator shall approve or disapprove the plan in 90 days. The plan shall be considered approved if the Administrator either approves the plan in writing, or fails to disapprove the plan in writing. The 90-day period shall begin when the Administrator receives the plan.

(iv) If the Administrator finds any deficiencies in the site-specific monitoring plan and disapproves the plan in writing, the owner or operator may revise and resubmit the site-specific monitoring plan following the requirements in paragraphs (i)(3)(i) and (ii) of this section. The 90-day period starts over with the resubmission of the revised monitoring plan.

(4) The approval by the Administrator of a site-specific monitoring plan will be based on the completeness, accuracy and reasonableness of the request for a site-specific monitoring plan. Factors that the Administrator will consider in reviewing the request for a site-specific monitoring plan include, but are not limited to, those described in paragraphs (i)(4)(i) through (v) of this section.

(i) The identification of the near-field source or sources. For onsite sources, the documentation provided that the onsite source is excluded under § 63.640(g).

(ii) The monitoring location selected to determine the uniform background concentration or an indication that no uniform background concentration monitor will be used.

(iii) The location(s) selected for additional monitoring to determine the near-field source concentration contribution.

(iv) The identification of the fenceline monitoring locations impacted by the near-field source or sources.

(v) The appropriateness of the planned data reduction and calculations to determine the near-field source concentration contribution for each monitoring location.

(vi) If more frequent monitoring is proposed, the adequacy of the description of the measurement and recording frequency proposed and the adequacy of the rationale for using the alternative monitoring frequency.

(j) The owner or operator shall comply with the applicable recordkeeping and reporting requirements in § § 63.655(h) and (i).

(k) As outlined in § 63.7(f), the owner or operator may submit a request for an alternative test method. At a minimum, the request must follow the requirements outlined in paragraphs (k)(1) through (7) of this section.

(1) The alternative method may be used in lieu of all or a partial number of passive samplers required in Method 325A of appendix A of this part.

(2) The alternative method must be validated according to Method 301 in appendix A of this part or contain performance based procedures and indicators to ensure self-validation.

(3) The method detection limit must nominally be at least an order of magnitude below the action level, *i.e.*, 0.9 $\mu g/m^3$ benzene. The alternate test method must describe the procedures used to provide field verification of the detection limit.

(4) The spatial coverage must be equal to or better than the spatial coverage provided in Method 325A of appendix A of this part.

(i) For path average concentration open-path instruments, the physical path length of the measurement shall be no more than a passive sample footprint (the spacing that would be provided by the sorbent traps when following Method 325A). For example, if Method 325A requires spacing monitors A and B 610 meters (2000 feet) apart, then the physical path length limit for the measurement at that portion of the fenceline shall be no more than 610 meters (2000 feet).

(ii) For range resolved open-path instrument or approach, the instrument or approach must be able to resolve an average concentration over each passive sampler footprint within the path length of the instrument.

(iii) The extra samplers required in Sections 8.2.1.3 of Method 325A may be omitted when they fall within the path length of an open-path instrument.

~~(5) At a minimum, non-integrating alternative test methods must provide a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.~~

~~(6) For alternative test methods capable of real time measurements (less than a 5 minute sampling and analysis cycle), the alternative test method may allow for elimination of data points corresponding to outside emission sources for purpose of calculation of the high point for the two week average. The alternative test method approach must have wind speed, direction and stability class of the same time resolution and within the footprint of the instrument.~~

~~(7) For purposes of averaging data points to determine the Δc for the 14-day average high sample result, all results measured under the method detection limit must use the method detection limit. For purposes of averaging data points for the 14-day average low sample result, all results measured under the method detection limit must use zero.~~

§ 63.7793 What work practice standards must I meet?

(a) You must meet each work practice limit in Table 1 to this subpart that applies to you.

(b) For unplanned bleeder valve openings on a new and existing blast furnace, you must meet each work practice standard listed in paragraphs (b)(1) through (3) of this section.

(1) Develop and operate according to a "Slip Avoidance Plan" to minimize slips and submit it to EPA for approval;

(2) Install devices to continuously measure/monitor material levels in the furnace (i.e., stockline), at a minimum of three locations, with alarms to inform operators of static (i.e., not moving) stockline conditions which increase the likelihood of slips; and

(3) Install and ~~or~~ use instruments on the furnace to monitor temperature and pressure to help determine when a slip is likely to occur~~has occurred~~.

(c) For each large bell on a new and existing blast furnace, you must meet each work practice standard listed in paragraphs (c)(1) through (2) of this section.

(1) Maintain metal seats to minimize wear on seals and emissions; and

(2) Replace or repair large bell seals according to § 63.7833(j).

(d) For each small bell on a new and existing blast furnace, you must meet each work practice standard listed in paragraphs (d)(1) through (2) of this section.

(1) Maintain metal seats to minimize wear on seals; and

(2) You must repair or replace small bell seals prior to the time period or metal throughput limit that has been proven and documented to produce no opacity from the small bell.

(e) For each iron beaching operation, you must meet each work practice standard listed in paragraphs (e)(1) through (2) of this section.

(1) Minimize height, slope, and speed of beaching; and

(2) Use carbon dioxide shielding during beaching event; and/or use full or partial (hoods) enclosures around beached iron.

(f) For each BOPF at a new or existing shop, you must develop and operate according to a "BOPF Shop Operating Plan" to minimize fugitive emissions and detect openings and leaks and submit it to EPA for approval. Your BOPF Shop Operating Plan may include, but is not limited to, any of the items listed in paragraphs (f)(1) through (8) of this section.

(1) List all events that generate VE, including slopping and other steps company will take to reduce incidence rate. State the specific actions that operators will take when slag foaming approaches the mouth of the vessel in order to prevent slopping;

(2) Minimize hot iron pour/charge rate (minutes) and set a maximum pour rate in tons/second ;

(3) Schedule of regular inspections of BOPF shop structure for openings and leaks to the atmosphere;

(4) Optimize positioning of hot metal ladles with respect to hood face and furnace mouth;

(5) Optimize furnace tilt angle during charging and set a maximum tilt angle during charging;

(6) Keep all openings, except roof monitors, closed, especially during transfer, to extent feasible and safe. All openings shall be closed unless the opening was in the original design of the Shop;

(7) Use higher draft velocities to capture more fugitives at a given distance from hood, if possible; and

(8) Monitor opacity periodically (e.g., once per month) from all openings with EPA Method Alt-082 (camera) or with EPA Method 9.

~~(g) For each slag dumping, loading, and pit digging event for a new or existing blast furnace or BOPF slag handling, you must meet each work practice standard listed in paragraphs (g)(1) through (2) of this section.~~

~~(1) Use a water mist system over the pit areas, and apply water to maintain moist slag and reduce emissions during digging and dumping, applying. the spray after each dump of slag, each loading of slag, and during all digging activities; and~~

~~(2) If the opacity from BF pit filling; BOPF slag pit filling; BF pit digging; BOPF slag pit digging; or slag handling (either truck loading or dumping slag to slag piles) of slag dumping, loading, and pit digging eventsstill exceed the limit listed in Table 1 for 2 6-minute events in one week, subsequently install and use water fog spray systems over that ver the pitexcess emission operation area, , applying the spray after each dump of slag, each loading of slag, and during all digging activities, except on days that, due to weather conditions, applying fog spray would pose a safety risk.~~

~~to the extent feasible and safe.~~

Operation and Maintenance Requirements

§ 63.7800 What are my operation and maintenance requirements?

(a) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the requirements in § 63.7810(d).

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in § 63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (7) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (*e.g.,* pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.,* presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Operating limits for each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse, or to secondary emissions from a BOPF. You must establish the operating limits according to the requirements in paragraphs (b)(3)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate

through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure.

(ii) For each operating limit parameter selected in paragraph (b)(3)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate.

(iii) Include documentation in your plan to support your selection of the operating limits established for the capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of § 63.7830(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(4) Corrective action procedures for baghouses equipped with bag leak detection systems or continuous opacity monitoring systems (COMS). In the event a bag leak detection system alarm is triggered or emissions from a baghouse equipped with a COMS exceed an hourly average opacity of 5 percent, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repair the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

(5) Corrective action procedures for venturi scrubbers equipped with continuous parameter monitoring systems (CPMS). In the event a venturi scrubber exceeds the operating limit in § 63.7790(b)(2), you must take corrective actions consistent with your site-specific monitoring plan in accordance with § 63.7831(a).

(6) Corrective action procedures for electrostatic precipitators equipped with COMS. In the event an electrostatic precipitator exceeds the operating limit in § 63.7790(b)(3), you must

take corrective actions consistent with your site-specific monitoring plan in accordance with § 63.7831(a).

(7) Procedures for determining and recording the daily sinter plant production rate in tons per hour.

Small Bell repair or replacement period, in weeks, or mass of material throughput, in tons, and the specific begin date and end date for the chosen repair or replacement period or throughput over which there were no visible emissions observed.

Building drawings of the BF Casthouse and BOPF shop that show and list by number the openings, including doors and vents, that are part of the original design of the building.

General Compliance Requirements

§ 63.7810 What are my general requirements for complying with this subpart?

(a) On or before January 11, 2021, for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced on or before August 16, 2019, you must be in compliance with the emission limitations, standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction. After January 11, 2021, for each such source you must be in compliance with the emission limitations in this subpart at all times. For new and reconstructed sources for which construction or reconstruction commenced after August 16, 2019, you must be in compliance with the emission limitations in this subpart at all times.

(b) During the period between the compliance date specified for your affected source in § 63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) On or before January 11, 2021, for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced on or before August 16, 2019, you must develop a written startup, shutdown, and malfunction plan according to the provisions in § 63.6(e)(3). For each such source, a startup, shutdown, and malfunction plan is not required after January 11, 2021. No startup, shutdown, and malfunction plan is required for any new or reconstructed source for which construction or reconstruction commenced after August 16, 2019.

(d) On or before January 11, 2021, for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced on or before August 16, 2019, you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i). After January 11, 2021for each such source, and after July 13, 2020 for new and reconstructed sources for which

construction or reconstruction commenced after August 16, 2019, at all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

Initial Compliance Requirements

§ 63.7820 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test to demonstrate initial compliance with each emission and opacity limit in Table 1 to this subpart that applies to you. You must also conduct a performance test to demonstrate initial compliance with the 30-day rolling average operating limit for the oil content of the sinter plant feedstock in § 63.7790(d)(1) or alternative limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in § 63.7790(d)(2). You must conduct the performance tests within 180 calendar days after the compliance date that is specified in § 63.7783 for your affected source and report the results in your notification of compliance status.

(b) For each operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test or opacity observation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in § 63.7783.

(c) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, you must demonstrate initial compliance with either the proposed emission limit or the promulgated emission limit no later than November 17, 2003 or no later than 180 days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(d) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, and you chose to comply with the proposed emission limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limit by November 17, 2006, or no later than 180 days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(e) Notwithstanding the deadlines in this section, existing and new affected sources must comply with the deadlines for making the initial compliance demonstrations for the BOPF Group mercury emission limit set forth in (e)(1) through (4) in this section.

(1) If you have an existing affected BOPF Group or a new or reconstructed affected source for which construction or reconstruction commenced on or before August 16, 2019, and you are demonstrating compliance with the emission limit in Table 1 through performance testing, you must conduct the initial performance test at your BOPF Group to demonstrate compliance with the mercury emission limit in Table 1 no later than July 13, 2021.

(2) If you have a new or reconstructed affected BOPF Group for which construction or reconstruction commenced after August 16, 2019, and you are demonstrating compliance with the emission limit in Table 1 through performance testing, you must conduct the initial performance test at your BOPF Group to demonstrate compliance with the mercury emission limit in Table 1 within 180 days of July 13, 2020 or within 180 days of initial startup of your affected source, whichever is later.

(3) If you have an existing affected BOPF Group or a new or reconstructed affected source for which construction or reconstruction commenced on or before August 16, 2019, and you are demonstrating compliance with the mercury emission limit in Table 1 through the requirements in § 63.7791(c) through (e), you must certify compliance in accordance with § 63.7840(f) in your notification of compliance and in accordance with § 63.7841(b)(11) in your first semiannual compliance report after July 13, 2021.

(4) If you have a new affected BOPF Group or a new or reconstructed affected source for which construction or reconstruction commenced after August 16, 2019, and you are demonstrating compliance with the mercury emission limit in Table 1 through the requirements in § 63.7791(b) through (d), you must certify compliance in accordance with § 63.7840(f) in your initial notification of compliance and in accordance with § 63.7841(b)(11) in your first semiannual compliance report after July 13, 2021 or after initial startup of your BOPF Group, whichever is later.

~~§ 63.7821 When must I conduct subsequent performance tests?~~

~~(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable emission and opacity limits in Table 1 to this subpart at the frequencies specified in paragraphs (b) through (e) of this section.~~

~~(b) For each sinter cooler at an existing sinter plant and each emissions unit equipped with a control device other than a baghouse, you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.~~

~~(c) For each emissions unit equipped with a baghouse, you must conduct subsequent performance tests no less frequently than once during each term of your title V operating permit.~~

~~(d) For sources without a title V operating permit, you must conduct subsequent performance tests every 2.5 years.~~

~~(e) For each BOPF Group, if demonstrating compliance with the mercury emission limit in Table 1 to this subpart through performance testing under §§ 63.7825 and 63.7833, you must conduct subsequent performance tests twice per permit cycle (*i.e.,* mid-term and initial/final) for sources with title V operating permits, and every 2.5 years for sources without a title V operating permit, at the outlet of the control devices for the BOPF Group.~~ during a cast, or during a full heat cycle, as appropriate for a minimum of 18 minutes for each: BF pit dumping; BOPF slag pit dumping; BF pit digging; BOPF slag pit digging; and one slag handling (either truck loading or dumping slag to slag piles) for 15 minutes

§ 63.7821 When must I conduct subsequent performance tests?

(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable emission and opacity limits in Table 1 to this subpart at the frequencies specified in paragraphs (b) through (l) of this section.

(b) For each sinter cooler at an existing sinter plant and each emissions unit equipped with a control device other than a baghouse, you must conduct subsequent particulate matter and opacity performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

(c) For each emissions unit equipped with a baghouse, you must conduct subsequent particulate matter and opacity performance tests no less frequently than once during each term of your title V operating permit.

(d) For sources without a title V operating permit, you must conduct subsequent particulate matter and opacity performance tests every 2.5 years.

(e) For each BOPF Group, if demonstrating compliance with the mercury emission limit in Table 1 to this subpart through performance testing under §§ 63.7825 and 63.7833, you must conduct subsequent performance tests twice per permit cycle (*i.e.,* mid-term and initial/final) for sources with title V operating permits, and every 2.5 years for sources without a title V operating permit, at the outlet of the control devices for the BOPF Group.

(f) For each sinter plant windbox, you must conduct subsequent mercury, hydrogen chloride, hydrogen fluoride, carbon disulfide, carbonyl sulfide, dioxin/furan, and polycyclic aromatic hydrocarbon performance tests every 5 years.

(g) For each blast furnace stove and BOPF shop primary emission control device, you must conduct subsequent hydrogen chloride, total hydrocarbon, and dioxin/furan testing every 5 years.

(h) For each blast furnace casthouse and BOPF shop, you must conduct subsequent opacity tests two times per month during a cast, or during a full heat cycle, as appropriate.

(i) For planned bleeder valve openings on each blast furnace, you must conduct subsequent opacity tests once a week. If there are no planned bleeder valve openings in a particular week, no opacity performance tests are required for that week.

(j) For slag processing, handling and storage operations for each blast furnace or BOPF, you must conduct subsequent opacity tests once per week for a minimum of 18 minutes for each: BF pit filling~~dumping~~; BOPF slag pit filling~~dumping~~; BF pit digging; BOPF slag pit digging; and one slag handling (either truck loading or dumping slag to slag piles).

(k) For large bells on each blast furnace, you must conduct visible emissions testing on the interbell relief valve according to EPA Method 22 in appendix A-7 to part 60 of this chapter, unless specified in (k)(1) and (2) of this chapter. Testing must be conducted monthly, for 15 minutes~~in 15-minute intervals~~.

(1) If visible emissions are detected for a large bell during the monthly visible emissions testing, you must conduct EPA Method 9 opacity tests in place of EPA Method 22 testing on that bell once per month, taking 3-minute averages for 15 minutes, until the large bell seal is repaired or replaced.

(2) If the average of 3 instantaneous visible emission readings taken while the interbell relief valve is exhausting ~~a 3-minute opacity average for a large bell~~ exceeds 10 percent, you must repair or replace that bell seal within 4 months.

For small bells on each blast furnace, you must conduct visible emissions testing according to EPA Method 22 in appendix A-7 to part 60 of this chapter. Testing must be conducted monthly for 15 minutes. If visible emissions are observed, you must compare the period between the visible emissions being present and the most recent bell seal repair or replacement. If this time period or throughput is shorter or lower than the period or throughput stated in the O&M plan required by 63.7800, this new shorter period or lower limit shall be placed in the O&M plan as the work practice limit.

(l) For each blast furnace casthouse, you must conduct subsequent hydrogen chloride and total hydrocarbon testing every 5 years.

§ 63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) On or before January 11, 2021, for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced on or before August 16, 2019, you must conduct each performance test that applies to your affected source based on representative performance (*i.e.,* performance based on normal operating conditions) of the

affected source for the period being tested, according to the conditions detailed in paragraphs (b) through (i) of this section. After January 11, 2021 for each such source, and after July 13, 2020 for new and reconstructed sources for which construction or reconstruction commenced after August 16, 2019, you must conduct each performance test under conditions representative of normal operations. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(b) To determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of particulate matter according to the following test methods:

(i) EPA Method 1 in appendix A-1 to part 60 of this chapter to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) EPA Method 2 or 2F in appendix A-1 to part 60 of this chapter or EPA Method 2G in appendix A-2 to part 60 of this chapter to determine the volumetric flow rate of the stack gas.

(iii) EPA Method 3, 3A, or 3B in appendix A-2 to part 60 of this chapter to determine the dry molecular weight of the stack gas. The manual procedures (but not instrumental procedures) of voluntary consensus standard ANSI/ASME PTC 19.10-1981 - Part 10 (incorporated by reference - see § 63.14) may be used as an alternative to EPA Method 3B.

(iv) EPA Method 4 in appendix A-3 to part 60 of this chapter to determine the moisture content of the stack gas.

(v) EPA Method 5 or 5D in appendix A-3 to part 60 of this chapter or EPA Method 17 in appendix A-6 to part 60 of this chapter, as applicable, to determine the concentration of particulate matter (front half filterable catch only).

(2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) of gas during each particulate matter test run. Three valid test runs are needed to comprise a performance test.

(c) For each sinter plant windbox exhaust stream, you must complete the requirements of paragraphs (c)(1) and (2) of this section:

(1) Follow the procedures in your operation and maintenance plan for measuring and recording the sinter production rate for each test run in tons per hour; and

(2) Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows:

$$E_p = \frac{C \times Q}{P \times K} \qquad \text{(Eq. 1)}$$

Where:

E_p = Process-weighted mass emissions of particulate matter, lb/ton;

C = Concentration of particulate matter, grains per dry standard cubic foot (gr/dscf);

Q = Volumetric flow rate of stack gas, dry standard cubic foot per hour (dscf/hr);

P = Production rate of sinter during the test run, tons/hr; and

K = Conversion factor, 7,000 grains per pound (gr/lb).

(d) If you apply two or more control devices in parallel to emissions from a sinter plant discharge end or a BOPF, compute the average flow-weighted concentration for each test run using Equation 2 of this section as follows:

$$C_w = \frac{\sum_{i=1}^{n} C_i Q_i}{\sum_{i=1}^{n} Q_i} \qquad \text{(Eq. 2)}$$

Where:

C_w = Flow-weighted concentration, gr/dscf;

C_i = Concentration of particulate matter from exhaust stream “i”, gr/dscf; and

Q_i = Volumetric flow rate of effluent gas from exhaust stream “i”, dry standard cubic foot per minute (dscfm).

(e) For a control device applied to emissions from a blast furnace casthouse, sample for an integral number of furnace tapping operations sufficient to obtain at least 1 hour of sampling for each test run.

(f) For a primary emission control device applied to emissions from a BOPF with a closed hood system, sample only during the primary oxygen blow and do not sample during any subsequent reblows. Continue sampling for each run for an integral number of primary oxygen blows.

(g) For a primary emission control system applied to emissions from a BOPF with an open hood system and for a control device applied solely to secondary emissions from a BOPF, you must complete the requirements of paragraphs (g)(1) and (2) of this section:

(1) Sample only during the steel production cycle. Conduct sampling under conditions that are representative of normal operation. Record the start and end time of each steel production cycle and each period of abnormal operation; and

(2) Sample for an integral number of steel production cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(h) For a control device applied to emissions from BOPF shop ancillary operations (hot metal transfer, skimming, desulfurization, or ladle metallurgy), sample only when the operation(s) is being conducted.

(i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than three stacks associated with a process.

§ 63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?

(a) For each discharge end of a sinter plant, sinter plant cooler, blast furnace casthouse, BOPF shop, and large bell on a blast furnace, y~~Y~~ou must conduct each performance test that applies to your affected source based on representative performance (*i.e.,* performance based on normal operating conditions) of the affected source for the period being tested, according to the conditions detailed in paragraphs (b) through (d) of this section. Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.

(c) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter plant discharge end or a blast furnace casthouse:

(1) Using a certified observer, determine the opacity of emissions according to EPA Method 9 in appendix A-4 to part 60 of this chapter. Alternatively, ASTM D7520-16, (incorporated by reference, see § 63.14) may be used with the following conditions:

(i) During the digital camera opacity technique (DCOT) certification procedure outlined in Section 9.2 of ASTM D7520-16 (incorporated by reference, see § 63.14), 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 (incorporated by reference, see § 63.14).

(iii) The owner or operator must follow the recordkeeping procedures outlined in § 63.10(b)(1) for the DCOT certification, compliance report, data sheets, and all raw unaltered JPEGs used for opacity and certification determination.

(iv) The owner or operator or the DCOT vendor must have a minimum of four independent technology users apply the software to determine the visible opacity of the 300 certification plumes. For each set of 25 plumes, the user may not exceed 15-percent opacity of anyone reading and the average error must not exceed 7.5-percent opacity.

(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 (incorporated by reference, see § 63.14) and these requirements is on the facility, DCOT operator, and DCOT vendor.

(2) Obtain a minimum of 30 6-minute block averages. For a blast furnace casthouse, make observations during tapping of the furnace. Tapping begins when the furnace is opened, usually by creating a hole near the bottom of the furnace, and ends when the hole is plugged.

(3) For the blast furnace casthouse, make observations at each opening:

(i) If EPA Method 9 is used, observations should be made separately at each opening.

(ii) If ASTM D7520-16 is used, observations may be read for more than one opening at the same time.

(d) To determine compliance with the applicable opacity limit in Table 1 to this subpart for BOPF shops:

(1) For an existing BOPF shop:

(i) Using a certified observer, determine the opacity of emissions according to EPA Method 9 in appendix A-4 to part 60 of this chapter except as specified in paragraphs (d)(1)(ii) and (iii) of this section. Alternatively, ASTM D7520-16 (incorporated by reference, see § 63.14) may be used with the following conditions:

(A) During the DCOT certification procedure outlined in Section 9.2 of ASTM D7520-16 (incorporated by reference, see § 63.14), 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).

(B) 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 (incorporated by reference, see § 63.14).

(C) The owner or operator must follow the recordkeeping procedures outlined in § 63.10(b)(1) for the DCOT certification, compliance report, data sheets, and all raw unaltered JPEGs used for opacity and certification determination.

(D) The owner or operator or the DCOT vendor must have a minimum of four independent technology users apply the software to determine the visible opacity of the 300 certification plumes. For each set of 25 plumes, the user may not exceed 15-percent opacity of any one reading and the average error must not exceed 7.5-percent opacity.

(E) 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 (incorporated by reference, see § 63.14) and these requirements is on the facility, DCOT operator, and DCOT vendor.

(ii) Instead of procedures in section 2.4 of Method 9 in appendix A to part 60 of this chapter, record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles.

(iii) Instead of procedures in section 2.5 of Method 9 in appendix A to part 60 of this chapter, determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals.

(2) For a new BOPF shop housing a bottom-blown BOPF:

(i) Using a certified observer, determine the opacity of emissions according to EPA Method 9 in appendix A-4 to part 60 of this chapter. Alternatively, ASTM D7520-16 (incorporated by reference, see § 63.14) may be used with the following conditions:

(A) During the DCOT certification procedure outlined in Section 9.2 of ASTM D7520-16 (incorporated by reference, see § 63.14), 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).

(B) 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 (incorporated by reference, see § 63.14).

(C) The owner or operator must follow the recordkeeping procedures outlined in § 63.10(b)(1) for the DCOT certification, compliance report, data sheets, and all raw unaltered JPEGs used for opacity and certification determination.

(D) The owner or operator or the DCOT vendor must have a minimum of four independent technology users apply the software to determine the visible opacity of the 300 certification plumes. For each set of 25 plumes, the user may not exceed 15-percent opacity of anyone reading and the average error must not exceed 7.5-percent opacity.

(E) 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 (incorporated by reference, see § 63.14) and these requirements is on the facility, DCOT operator, and DCOT vendor.

(ii) Determine the highest and second highest sets of 6-minute block average opacities for each steel production cycle.

(3) For a new BOPF shop housing a top-blown BOPF:

(i) Determine the opacity of emissions according to the requirements for an existing BOPF shop in paragraphs (d)(1)(i) through (iii) of this section.

(ii) Determine the highest and second highest sets of 3-minute block average opacities for each steel production cycle.

(4) Opacity observations must cover the entire steel production cycle and must be made for at least three cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(5) Determine and record the starting and stopping times of the steel production cycle.

(6) Make observations at each opening:

(i) If EPA Method 9 is used, observations should be made separately at each opening.

(ii) If ASTM D7520-16 is used, observations may be read for more than one opening at the same time.

(e) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter cooler at an existing sinter plant:

(1) Using a certified observer, determine the opacity of emissions according to EPA Method 9 in appendix A-4 to part 60 of this chapter. Alternatively, ASTM D7520-16 (incorporated by reference, see § 63.14) may be used with the following conditions:

(i) During the DCOT certification procedure outlined in Section 9.2 of ASTM D7520-16 (incorporated by reference, see § 63.14), 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 (incorporated by reference, see § 63.14).

(iii) The owner or operator must follow the recordkeeping procedures outlined in § 63.10(b)(1) for the DCOT certification, compliance report, data sheets, and all raw unaltered JPEGs used for opacity and certification determination.

(iv) The owner or operator or the DCOT vendor must have a minimum of four independent technology users apply the software to determine the visible opacity of the 300 certification plumes. For each set of 25 plumes, the user may not exceed 15-percent opacity of anyone reading and the average error must not exceed 7.5-percent opacity.

(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 (incorporated by reference, see § 63.14) and these requirements is on the facility, DCOT operator, and DCOT vendor.

(2) Obtain a minimum of 30 6-minute block averages.

(3) Make visible emission observations of uncovered portions of sinter plant coolers with the line of sight generally in the direction of the center of the cooler.

(f) To determine compliance with the applicable opacity limit in Table 1 to this subpart for planned bleeder valve openings at a blast furnace:

(1) Using a certified observer, determine the opacity of emissions according to EPA Method 9 in appendix A-4 to part 60 of this chapter.

(2) Conduct opacity observations in 6-minute block averages starting as soon as event begins and ending 3 minutes after the event ends.

(g) To determine compliance with the applicable opacity limit in Table 1 to this subpart for slag processing, handling and storage operations for a blast furnace or BOPF:

(1) Using a certified observer, determine the opacity of emissions according to EPA Method 9 in appendix A-4 to part 60 of this chapter.

(2) Conduct opacity observations in 6-minute blocks for 30 minutes at each: slag dumping to BF pit; BOPF slag dumping to pit; BF pit digging, BOPF pit digging; slag dumping to a pile, slag dumping to a piece of slag handling equipment such as crusher. ~~operating piece of equipment handling slag~~.

(h) To determine compliance with the work practice trigger? applicable opacity limit in Table 1 to this subpart for large bells on a blast furnace:

(1) Using a certified observer, determine the opacity of emissions according to EPA Method 9 in appendix A-4 to part 60 of this chapter.

(2) Conduct opacity observations of 15 instantaneous interbell relief valve emissions ~~in 3-minute blocks for 15 minutes.~~

§ 63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?

(a) For each capture system subject to an operating limit in § 63.7790(b)(1), you must certify that the system operated during the performance test at the site-specific operating limits established in your operation and maintenance plan using the procedures in paragraphs (a)(1) through (4) of this section.

(1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in § 63.7830(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(b) For a venturi scrubber subject to operating limits for pressure drop and scrubber water flow rate in § 63.7790(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section. You may establish the parametric monitoring limit during the initial performance test or during any other performance test run that meets the emission limit.

(1) Using the CPMS required in § 63.7830(c), measure and record the pressure drop and scrubber water flow rate during each run of the particulate matter performance test.

(2) Compute and record the hourly average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate value in any of the three runs that meet the applicable emission limit.

(c) You may change the operating limits for a capture system or venturi scrubber if you meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) and (b) of this section for a control device or capture system.

(d) For each sinter plant subject to the operating limit for the oil content of the sinter plant feedstock in § 63.7790(d)(1), you must demonstrate initial compliance according to the procedures in paragraphs (d)(1) through (3) of this section.

(1) Sample the feedstock at least three times a day (once every 8 hours), composite the three samples each day, and analyze the composited samples using Method 9071B, “n-Hexane Extractable Material(HEM) for Sludge, Sediment, and Solid Samples,” (Revision 2, April 1998). Method 9071B is incorporated by reference (see § 63.14) and is published in EPA Publication SW-846 “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.” Record the sampling date and time, oil content values, and sinter produced (tons/day).

(2) Continue the sampling and analysis procedure for 30 consecutive days.

(3) Each day, compute and record the 30-day rolling average using that day's value and the 29 previous daily values.

(e) To demonstrate initial compliance with the alternative operating limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in § 63.7790(d)(2), follow the test methods and procedures in paragraphs (e)(1) through (5) of this section. You must conduct each performance test that applies to your affected source based on representative performance (*i.e.,* performance based on normal operating conditions) of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(1) Determine the volatile organic compound emissions according to the following test methods:

(i) EPA Method 1 in appendix A-1 to part 60 of this chapter to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) EPA Method 2 or 2F in appendix A-1 to part 60 of this chapter or EPA Method 2G in appendix A-2 to part 60 of this chapter to determine the volumetric flow rate of the stack gas.

(iii) EPA Method 3, 3A, or 3B in appendix A-2 to part 60 of this chapter to determine the dry molecular weight of the stack gas. The manual procedures (but not instrumental procedures) of voluntary consensus standard ANSI/ASME PTC 19.10-1981 - Part 10 (incorporated by reference - see § 63.14) may be used as an alternative to EPA Method 3B.

(iv) EPA Method 4 in appendix A-3 to part 60 of this chapter to determine the moisture content of the stack gas.

(v) EPA Method 25 in appendix A-7 to part 60 of this chapter to determine the mass concentration of volatile organic compound emissions (total gaseous nonmethane organics as carbon) from the sinter plant windbox exhaust stream stack.

(2) Determine volatile organic compound (VOC) emissions every 24 hours (from at least three samples taken at 8-hour intervals) using EPA Method 25 in appendix A-7 to part 60 of this chapter. Record the sampling date and time, sampling results, and sinter produced (tons/day).

(3) Compute the process-weighted mass emissions (E_v) each day using Equation 1 of this section as follows:

$$E_v = \frac{M_c \times Q}{35.31 \times 454{,}000 \times K} \qquad \text{(Eq. 1)}$$

Where:

E_v = Process-weighted mass emissions of volatile organic compounds, lb/ton;

M_c = Average concentration of total gaseous nonmethane organics as carbon by EPA Method 25 in appendix A-7 to part 60 of this chapter, milligrams per dry standard cubic meters (mg/dscm) for each day;

Q = Volumetric flow rate of stack gas, dscf/hr;

35.31 = Conversion factor (dscf/dscm);

454,000 = Conversion factor (mg/lb); and

K = Daily production rate of sinter, tons/hr.

(4) Continue the sampling and analysis procedures in paragraphs (e)(1) through (3) of this section for 30 consecutive days.

(5) Compute and record the 30-day rolling average of VOC emissions for each operating day.

(f) You may use an alternative test method to determine the oil content of the sinter plant feedstock or the volatile organic compound emissions from the sinter plant windbox exhaust stack if you have already demonstrated the equivalency of the alternative method for a specific plant and have received previous approval from the applicable permitting authority.

§ 63.7825 What test methods and other procedures must I use to demonstrate initial compliance with the emission limit for haza~~mercu~~rdous air pollutants~~y~~?

~~*Mercury*~~

(a) If demonstrating compliance with the ~~mercury~~ emission limits ~~for each BOPF Group~~unit in Table 1 to this subpart through performance testing, you must conduct a performance test to demonstrate initial compliance with the emission limit. If demonstrating compliance with the emission limit through performance testing, you must conduct each performance test that applies to your affected source based on representative performance (*i.e.,* performance based on normal operating conditions) of the affected source for the period being tested, according to the conditions detailed in paragraphs (b) through (~~l~~f) of this section. Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during

periods of malfunction. Initial compliance tests must be conducted by the deadlines in § 63.7820(e).

(1) You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(2) For sources with multiple emission units ducted to a common control device and stack, compliance testing must be performed either by conducting a single compliance test with all affected emissions units in operation or by conducting a separate compliance test on each emissions unit. Alternatively, the owner or operator may request approval from the permit authority for an alternative testing approach. If the units are tested separately, any emissions unit that is not tested initially must be tested as soon as is practicable.

Mercury

(b) To demonstrate compliance with the emission limit for mercury in Table 1 to this subpart through performance testing, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of mercury according to the following test methods:

(i) EPA Method 1 in appendix A-1 to part 60 of this chapter to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) EPA Method 2 or 2F in appendix A-1 to part 60 of this chapter or EPA Method 2G in appendix A-2 to part 60 of this chapter to determine the volumetric flow rate of the stack gas.

(iii) EPA Method 3, 3A, or 3B in appendix A-2 to part 60 of this chapter to determine the dry molecular weight of the stack gas. The manual procedures (but not instrumental procedures) of voluntary consensus standard ANSI/ASME PTC 19.10-1981 - Part 10 (incorporated by reference - see § 63.14) may be used as an alternative to EPA Method 3B.

(iv) EPA Method 4 in appendix A-3 to part 60 of this chapter to determine the moisture content of the stack gas.

(v) EPA Method 29 or 30B in appendix A-8 to part 60 of this chapter to determine the concentration of mercury from ~~each unit of~~ the ~~BOPF Group~~ exhaust stream stack of each unit. If performing measurements using EPA Method 29, you must collect a minimum sample volume of 1.7 dscm (60 dscf). Alternative test methods may be considered on a case-by-case basis per § 63.7(f).

(2) Three valid test runs are needed to comprise a performance test of each ~~BOPF Group~~ unit in Table 1 as applicable. If the performance testing results for any of the emission points yields a non-detect value, then the ~~minimum~~ method detection limit (MDL) must be used to calculate the mass emissions (lb) for that emission unit and, in turn, for calculating the sum of the emissions (in units of pounds of mercury per ton of steel scrap or pounds of mercury per ton of product sinter) for all ~~BOPF Group~~ units subject to the emission standard for determining compliance. If the resulting mercury emissions are greater than the MACT emission standard, the owner or operator may use procedures that produce lower MDL results and repeat the mercury performance testing one additional time for any emission point for which the measured result was below the MDL. If this additional testing is performed, the results from that testing must be used to determine compliance (*i.e.,* there are no additional opportunities allowed to lower the MDL).

(3) For a primary emission control device applied to emissions from a BOPF with a closed hood system, sample only during the primary oxygen blow and do not sample during any subsequent reblows. Continue sampling for each run for an integral number of primary oxygen blows.

(4) For a primary emission control system applied to emissions from a BOPF with an open hood system and for a control device applied solely to secondary emissions from a BOPF, you must complete the requirements of paragraphs (b)(4)(i) and (ii) of this section:

(i) Sample only during the steel production cycle. Conduct sampling under conditions that are representative of normal operation. Record the start and end time of each steel production cycle and each period of abnormal operation; and

(ii) Sample for an integral number of steel production cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(5) For a control device applied to emissions from BOPF shop ancillary operations (hot metal transfer, skimming, desulfurization, or ladle metallurgy), sample only when the operation(s) is being conducted.

(c) Calculate the ~~mercury~~ mass emissions, based on the average of three test run values, for each BOPF Group unit (or combination of units that are ducted to a common stack and are tested when all affected sources are operating pursuant to paragraph (a) of this section) using Equation 1 of this section as follows:

$$E = \frac{C_s \times Q \times t}{454{,}000 \times 35.31} \quad \text{(Eq. 1)}$$

Where:

E = Mass emissions of pollutant~~mercury~~, pounds (lb);

C_s = Concentration of pollutant~~mercury~~ in stack gas, mg/dscm;

454,000 = Conversion factor (mg/lb);

Q = Volumetric flow rate of stack gas, dscf/min;

35.31 = Conversion factor (dscf/dscm); and

t = Duration of test, minutes.

(d) You must install, calibrate, maintain, and operate an appropriate weight measurement device, to measure the tons of steel scrap input to the BOPF cycle simultaneous with each BOPF Group unit's stack test.

(e) You must maintain the systems for measuring weight within ±5 percent accuracy. You must describe the specific equipment used to make measurements at your facility and how that equipment is periodically calibrated. You must also explain, document, and maintain written procedures for determining the accuracy of the measurements and make these written procedures available to your permitting authority upon request. You must determine, record, and maintain a record of the accuracy of the measuring systems before the beginning of your initial compliance test and during each subsequent quarter of affected source operation.

(f) Calculate the emissions from each new and existing affected source in pounds of mercury per ton of steel scrap to determine initial compliance with the mercury emission limit in Table 1. Sum the mercury mass emissions (in pounds) from all BOPF Group units calculated using Equation 1 of this section. Divide that sum by the sum of the total amount of steel scrap charged to the BOPFs (in tons).

Acid gases (hydrogen chloride and hydrogen fluoride)

~~(g) If demonstrating compliance with the hydrogen chloride and hydrogen fluoride emission limits for each unit in Table 1 to this subpart through performance testing, you must conduct a performance test to demonstrate initial compliance with the emission limit. If demonstrating compliance with the emission limit through performance testing, you must conduct each performance test that applies to your affected source based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source for the period being tested, according to the conditions detailed in paragraphs (h) through (j) of this section. Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during periods of malfunction. Initial compliance tests must be conducted by the deadlines in § 63.7820(e).~~

~~(1) You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.~~

~~(2) For sources with multiple emission units ducted to a common control device and stack, compliance testing must be performed either by conducting a single compliance test with all affected emissions units in operation or by conducting a separate compliance test on each emissions unit. Alternatively, the owner or operator may request approval from the permit authority for an alternative testing approach. If the units are tested separately, any emissions unit that is not tested initially must be tested as soon as is practicable.~~

(~~h~~g) To demonstrate compliance with the emission limit for hydrogen chloride and hydrogen fluoride in Table 1 to this subpart through performance testing, follow the test methods and procedures in paragraphs (~~h~~g)(1), (2), and (3~~2~~) of this section.

(1) Determine the concentration of ~~total hydrocarbons~~hydrogen chloride and hydrogen flouride according to the following test methods:

(i) The methods specified in paragraphs (b)(1)(i) through (iv) of this section, and ~~EPA Method 1 in appendix A-1 to part 60 of this chapter to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.~~

~~(ii) EPA Method 2 or 2F in appendix A-1 to part 60 of this chapter or EPA Method 2G in appendix A-2 to part 60 of this chapter to determine the volumetric flow rate of the stack gas.~~

~~(iii) EPA Method 3, 3A, or 3B in appendix A-2 to part 60 of this chapter to determine the dry molecular weight of the stack gas. The manual procedures (but not instrumental procedures) of voluntary consensus standard ANSI/ASME PTC 19.10-1981 - Part 10 (incorporated by reference - see § 63.14) may be used as an alternative to EPA Method 3B.~~

~~(iv) EPA Method 4 in appendix A-3 to part 60 of this chapter to determine the moisture content of the stack gas.~~

(~~v~~ii) EPA Method 26A in appendix A-8 to part 60 of this chapter to determine the concentration of hydrogen chloride and hydrogen fluoride from the exhaust stream stack of each unit, with the following conditions; or

(A) Collect a minimum sample volume of 70 dscf (2 dscm) of gas during each run; and

(B) Both the acidic and the basic impingers must be analyzed for fluoride and the total used to determine emissions of hydrogen flouride.

(~~v~~iii) EPA Method 320 in appendix A of this part to determine the concentration of hydrogen chloride and hydrogen fluoride from the exhaust stream stack of each unit. Alternatively, ASTM D6348-12(2020), (incorporated by reference, see § 63.14) may be used with the following conditions:

(A) The test plan preparation and implementation in the Annexes to ASTM D 6348-12(2020), Sections A1 through A8 are mandatory; and

(B) In ASTM D6348-12(2020) Annex A5 (Analyte Spiking Technique), the percent (%) R must be determined for each target analyte (Equation A5.5). In order for the test data to be acceptable for a compound, %R must be 70 % ≥ R ≤ 130%. If the %R value does not meet this criterion for a target compound, the test data is not acceptable for that compound and the test must be repeated for that analyte (i.e., the sampling and/or analytical procedure should be adjusted before a retest). The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound by using the Equation 2 of this section as follows:

$$Reported\ Results = \frac{c_S}{\%R} \times 100 \quad \text{(Eq. 2)}$$

Where c_s = measured concentration in stack.

(2) At least three valid test runs are needed to comprise a performance test of each unit in Table 1. If the performance testing results for any of the emission points yields a non-detect value, then the ~~minimum detection limit (~~MDL~~)~~ must be used to calculate the mass emissions~~s~~ (lb) for that unit and, in turn, for calculating the emissions rate (lb/ton of product sinter, lb/ton of iron, or lb/ton of steel).

~~(i) Calculate the hydrogen chloride and hydrogen fluoride mass emissions in pounds, based on the average of three test run values, for each unit (or combination of units that are ducted to a common stack and are tested when all affected sources are operating pursuant to paragraph (g) of this section).~~

(~~j~~3) Calculate the emissions from each new and existing affected source in pounds of hydrogen chloride and hydrogen fluoride per ton of throughput processed (tons of product sinter, tons of iron, or tons of steel) to determine initial compliance with the emission limits in Table 1.

Carbon disulfide and carbonyl sulfide

~~(k) If demonstrating compliance with the carbon disulfide and carbonyl sulfide emission limits for each unit in Table 1 to this subpart through performance testing, you must conduct a performance test to demonstrate initial compliance with the emission limit. If demonstrating compliance with the emission limit through performance testing, you must conduct each performance test that applies to your affected source based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source for the period being tested, according to the conditions detailed in paragraphs (l) through (n) of this section. Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during periods of malfunction. Initial compliance tests must be conducted by the deadlines in § 63.7820(e).~~

~~(1) You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the~~

~~Administrator such records as may be necessary to determine the conditions of performance tests.~~

~~(2) For sources with multiple emission units ducted to a common control device and stack, compliance testing must be performed either by conducting a single compliance test with all affected emissions units in operation or by conducting a separate compliance test on each emissions unit. Alternatively, the owner or operator may request approval from the permit authority for an alternative testing approach. If the units are tested separately, any emissions unit that is not tested initially must be tested as soon as is practicable.~~

(~~l~~h) To demonstrate compliance with the emission limit for carbon disulfide and carbonyl sulfide in Table 1 to this subpart through performance testing, follow the test methods and procedures in paragraphs (~~k~~h)(1), (2), and (3~~2~~) of this section.

(1) Determine the concentration of ~~total hydrocarbons~~carbon disulfide and carbonyl sulfide according to the following test methods:

(i) The methods specified in paragraphs (b)(1)(i) through (iv) of this section, and~~EPA Method 1 in appendix A-1 to part 60 of this chapter to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.~~

~~(ii) EPA Method 2 or 2F in appendix A-1 to part 60 of this chapter or EPA Method 2G in appendix A-2 to part 60 of this chapter to determine the volumetric flow rate of the stack gas.~~

~~(iii) EPA Method 3, 3A, or 3B in appendix A-2 to part 60 of this chapter to determine the dry molecular weight of the stack gas. The manual procedures (but not instrumental procedures) of voluntary consensus standard ANSI/ASME PTC 19.10-1981 - Part 10 (incorporated by reference - see § 63.14) may be used as an alternative to EPA Method 3B.~~

~~(iv) EPA Method 4 in appendix A-3 to part 60 of this chapter to determine the moisture content of the stack gas.~~

(~~v~~ii) EPA Method 15 in appendix A-5 to part 60 of this chapter to determine the concentration of carbon disulfide and carbonyl sulfide from the exhaust stream stack of each unit; or

(~~v~~iii) EPA Method 320 in appendix A of this part to determine the concentration of carbon disulfide and carbonyl sulfide from the exhaust stream stack of each unit. Alternatively, ASTM D6348-12(2020), (incorporated by reference, see § 63.14) may be used with the following conditions:

(A) The test plan preparation and implementation in the Annexes to ASTM D 6348-12(2020), Sections A1 through A8 are mandatory; and

(B) In ASTM D6348-12(2020) Annex A5 (Analyte Spiking Technique), the percent (%) R must be determined for each target analyte (Equation A5.5). In order for the test data to be acceptable for a compound, %R must be 70 % ≥ R ≤ 130%. If the %R value does not meet this criterion for a target compound, the test data is not acceptable for that compound and the test must be repeated for that analyte (i.e., the sampling and/or analytical procedure should be adjusted before a retest). The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound by using the Equation 2 of this section.

(2) Three valid test runs at least one hour in duration are needed to comprise a performance test of each unit in Table 1. If the performance testing results for any of the emission points yields a non-detect value, then the ~~minimum detection limit (~~MDL~~)~~ must be used to calculate the mass emissions (lb) for that unit and, in turn, for calculating the emissions rate (lb/ton of product sinter).

~~(m) Calculate the carbon disulfide and carbonyl sulfide mass emissions in pounds, based on the average of three test run values, for each unit (or combination of units that are ducted to a common stack and are tested when all affected sources are operating pursuant to paragraph (k) of this section).~~

(~~n~~3) Calculate the emissions from each new and existing affected source in pounds of carbon disulfide and carbonyl sulfide per ton of product sinter to determine initial compliance with the emission limits in Table 1.

Total hydrocarbons

~~(o) If demonstrating compliance with the total hydrocarbon emission limits for each unit in Table 1 to this subpart through performance testing, you must conduct a performance test to demonstrate initial compliance with the emission limit. If demonstrating compliance with the emission limit through performance testing, you must conduct each performance test that applies to your affected source based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source for the period being tested, according to the conditions detailed in paragraphs (p) through (r) of this section. Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during periods of malfunction. Initial compliance tests must be conducted by the deadlines in § 63.7820(e).~~

~~(1) You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.~~

~~(2) For sources with multiple emission units ducted to a common control device and stack, compliance testing must be performed either by conducting a single compliance test with all~~

affected emissions units in operation or by conducting a separate compliance test on each emissions unit. Alternatively, the owner or operator may request approval from the permit authority for an alternative testing approach. If the units are tested separately, any emissions unit that is not tested initially must be tested as soon as is practicable.

(p)(i) To demonstrate compliance with the emission limit for total hydrocarbons in Table 1 to this subpart through performance testing, follow the test methods and procedures in paragraphs (p)(i)(1) through and (2)5) of this section.

(1) Determine the concentration of total hydrocarbons according to the following test methods:

(i) The methods specified in paragraphs (b)(1)(i) through (iv) of this section, andEPA Method 1 in appendix A-1 to part 60 of this chapter to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) EPA Method 2 or 2F in appendix A-1 to part 60 of this chapter or EPA Method 2G in appendix A-2 to part 60 of this chapter to determine the volumetric flow rate of the stack gas.

(iii) EPA Method 3, 3A, or 3B in appendix A-2 to part 60 of this chapter to determine the dry molecular weight of the stack gas. The manual procedures (but not instrumental procedures) of voluntary consensus standard ANSI/ASME PTC 19.10-1981 - Part 10 (incorporated by reference - see § 63.14) may be used as an alternative to EPA Method 3B.

(iv) EPA Method 4 in appendix A-3 to part 60 of this chapter to determine the moisture content of the stack gas.

(v)ii) EPA Method 25A in appendix A-7 to part 60 of this chapter to determine the concentration of total hydrocarbons as propane from the exhaust stream stack of each unit. Alternative test methods may be considered on a case-by-case basis per § 63.7(f).

(2) Three valid test runs at least one hour in duration are needed to comprise a performance test of each unit in Table 1. If the performance testing results for any of the emission points yields a non-detect value, then the minimum detection limit (MDL) must be used to calculate the mass emissions (lb) for that unit and, in turn, for calculating the emissions rate (lb/ton of iron or lb/ton of steel).

(3) For BOPF tests, the test runs must include at least one full production cycle (from scrap charge to 3 minutes after slag is emptied from the vessel) for each run, except for BOPF with closed hood systems, where sampling should be performed only during the primary oxygen blow and only for 20 heat cycles.

(4) For blast furnaces, each test run duration must be a minimum of 1 hour.

~~(q) Calculate the total hydrocarbon mass emissions in pounds, based on the average of three test run values, for each unit (or combination of units that are ducted to a common stack and are tested when all affected sources are operating pursuant to paragraph (o) of this section).~~

(~~r~~5) Calculate the emissions from each new and existing affected source in pounds of total hydrocarbons as propane per ton of throughput processed (tons of iron or tons of steel) to determine initial compliance with the emission limits in Table 1.

Dioxin/furan toxic equivalency

~~(s) If demonstrating compliance with the D/F TEQ emission limits for each unit in Table 1 to this subpart through performance testing, you must conduct a performance test to demonstrate initial compliance with the emission limit. If demonstrating compliance with the emission limit through performance testing, you must conduct each performance test that applies to your affected source based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source for the period being tested, according to the conditions detailed in paragraphs (t) and (u) of this section. Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during periods of malfunction. Initial compliance tests must be conducted by the deadlines in § 63.7820(e).~~

~~(1) You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.~~

~~(2) For sources with multiple emission units ducted to a common control device and stack, compliance testing must be performed either by conducting a single compliance test with all affected emissions units in operation or by conducting a separate compliance test on each emissions unit. Alternatively, the owner or operator may request approval from the permit authority for an alternative testing approach. If the units are tested separately, any emissions unit that is not tested initially must be tested as soon as is practicable.~~

(~~t~~i) To demonstrate compliance with the emission limit for D/F TEQ in Table 1 to this subpart through performance testing, follow the test methods and procedures in paragraphs (~~t~~i)(1) ~~and~~through (~~24~~) of this section.

(1) Determine the concentration of each dioxin and furan listed in Table 5 to this subpart according to the following test methods:

(i) The methods specified in paragraphs (b)(1)(i) through (iv) of this section, and~~EPA Method 1 in appendix A-1 to part 60 of this chapter to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.~~

~~(ii) EPA Method 2 or 2F in appendix A-1 to part 60 of this chapter or EPA Method 2G in appendix A-2 to part 60 of this chapter to determine the volumetric flow rate of the stack gas.~~

~~(iii) EPA Method 3, 3A, or 3B in appendix A-2 to part 60 of this chapter to determine the dry molecular weight of the stack gas. The manual procedures (but not instrumental procedures) of voluntary consensus standard ANSI/ASME PTC 19.10-1981 - Part 10 (incorporated by reference - see § 63.14) may be used as an alternative to EPA Method 3B.~~

~~(iv) EPA Method 4 in appendix A-3 to part 60 of this chapter to determine the moisture content of the stack gas.~~

(~~v~~ii) EPA Method 23 in appendix A-7 to part 60 of this chapter to determine the concentration of each dioxin and furan listed in Table 5 to this subpart from the exhaust stream stack of each unit. You must collect a minimum sample volume of 105 dscf (3 dscm) of gas during each test run. ~~Use high resolution mass spectrometry for sample analysis. Alternative test methods may be considered on a case-by-case basis per § 63.7(f).~~

(2) Three valid test runs are needed to comprise a performance test of each unit in Table 1. For determination of TEQ, zero may be used in subsequent calculations for values less than the estimated detection limit (EDL). For estimated maximum pollutant concentration (EMPC) results, when the value is greater than the EDL, the EMPC value must be used in determination of TEQ, when the EMPC is less than the EDL, zero may be used.~~If the performance testing results for any of the emission points yields a non-detect value, then the minimum detection limit (MDL) must be used to calculate the mass emissions (lb) for that unit and, in turn, for calculating the emissions rate (lb/ton of product sinter, lb/ton of iron, or lb/ton of steel).~~

(3) For BOPF tests, the test runs must include at least one full production cycle (from scrap charge to 3 minutes after slag is emptied from the vessel) for each run, except for BOPF with closed hood systems, where sampling should be performed only during the primary oxygen blow and only for 20 heat cycles or the collection of 105 dscf (3 dscm) sample volume, whichever is less.

(~~u~~4) Calculate the sum of the ~~2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) toxic equivalents (TEQs)~~D/F TEQ per ton of throughput processed (tons of product sinter, tons of iron, or tons of steel) to determine initial compliance with the emission limits in Table 1 using Equation 3 as follows:

$$TEQ = \frac{\sum_{i=1}^{n}(M_i \times TEF_i)}{T_r \times P} \quad \text{(Eq. 3)}$$

Where:

TEQ = sum of the 2,3,7,8-TCDD TEQs, lb/ton of throughput processed

M_i = mass of dioxin or furan cogener i during performance test run, lbs

TEF_i = 2,3,7,8-TCDD toxic equivalency factor (TEF) for cogener i, as provided in Table 5 of this subpart

n = number of cogeners included in TEQ

T_r = time of performance test run, hours

P = production rate during performance test run, tons of throughput processed per hour.

Polycyclic aromatic hydrocarbons

~~(v) If demonstrating compliance with the polycyclic aromatic hydrocarbon emission limits for each unit in Table 1 to this subpart through performance testing, you must conduct a performance test to demonstrate initial compliance with the emission limit. If demonstrating compliance with the emission limit through performance testing, you must conduct each performance test that applies to your affected source based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source for the period being tested, according to the conditions detailed in paragraphs (w) and (x) of this section. Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during periods of malfunction. Initial compliance tests must be conducted by the deadlines in § 63.7820(e).~~

~~(1) You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.~~

~~(2) For sources with multiple emission units ducted to a common control device and stack, compliance testing must be performed either by conducting a single compliance test with all affected emissions units in operation or by conducting a separate compliance test on each emissions unit. Alternatively, the owner or operator may request approval from the permit authority for an alternative testing approach. If the units are tested separately, any emissions unit that is not tested initially must be tested as soon as is practicable.~~

(~~w~~k) To demonstrate compliance with the emission limit for polycyclic aromatic hydrocarbons in Table 1 to this subpart through performance testing, follow the test methods and procedures in paragraphs (~~w~~k)(1) ~~and~~through (3~~2~~) of this section.

(1) Determine the concentration of each polycyclic aromatic hydrocarbon listed in Table 6 to this subpart according to the following test methods:

(i) The methods specified in paragraphs (b)(1)(i) through (iv) of this section, and~~EPA Method 1 in appendix A-1 to part 60 of this chapter to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.~~

~~(ii) EPA Method 2 or 2F in appendix A-1 to part 60 of this chapter or EPA Method 2G in appendix A-2 to part 60 of this chapter to determine the volumetric flow rate of the stack gas.~~

~~(iii) EPA Method 3, 3A, or 3B in appendix A-2 to part 60 of this chapter to determine the dry molecular weight of the stack gas. The manual procedures (but not instrumental procedures) of voluntary consensus standard ANSI/ASME PTC 19.10-1981 - Part 10 (incorporated by reference - see § 63.14) may be used as an alternative to EPA Method 3B.~~

~~(iv) EPA Method 4 in appendix A-3 to part 60 of this chapter to determine the moisture content of the stack gas.~~

(~~v~~ii) EPA Method 23 in appendix A-7 to part 60 of this chapter to determine the concentration of each ~~dioxin and furan~~polycyclic aromatic hydrocarbon listed in Table 5 to this subpart from the exhaust stream stack of each unit. You must collect a minimum sample volume of 105 dscf (3 dscm) of gas during each test run.~~EPA SW846 Method 0010 to determine the concentration of total hydrocarbons from the exhaust stream stack of each unit and SW846 Method 8270C or 8270D for the analytical finish. Collect a minimum sample volume of 140 dscf (4 dscm) of gas during each test run. Alternative test methods may be considered on a case-by-case basis per § 63.7(f).~~

(2) Three valid test runs are needed to comprise a performance test of each unit in Table 1. If the performance testing results for any of the emission points yields a non-detect value, then the ~~minimum detection limit (M~~EDL~~)~~ must be used to calculate the mass emissions (lb) for that unit and, in turn, for calculating the emissions rate (lb/ton of product sinter).

(~~x~~3) Calculate the sum of polycyclic aromatic hydrocarbons per ton of product sinter to determine initial compliance with the emission limits in Table 1 using Equation 4 as follows:

$$E = \frac{\sum_{i=1}^{n} M_i}{T_r \times P} \text{ (Eq. 4)}$$

Where:

E = emission rate of polycyclic aromatic hydrocarbons, lb/ton of sinter;

M_i = mass of polycyclic aromatic hydrocarbon i, as provided in Table 6 of this subpart, during performance test run, lbs

n = number of polycyclic aromatic hydrocarbons included in emissions

T_r = time of performance test run, hours

P = production rate during performance test run, tons of product sinter per hour.

§ 63.7826 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in § 63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with § 63.7824(a)(1); and

(3) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in § 63.7790(b)(2), you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with § 63.7824(b).

(b) For each existing or new sinter plant subject to the operating limit in § 63.7790(d)(1), you have demonstrated initial compliance if the 30-day rolling average of the oil content of the feedstock, measured during the initial performance test in accordance with § 63.7824(d) is no more than 0.02 percent. For each existing or new sinter plant subject to the alternative operating limit in § 63.7790(d)(2), you have demonstrated initial compliance if the 30-day rolling average of the volatile organic compound emissions from the sinter plant windbox exhaust stream, measured during the initial performance test in accordance with § 63.7824(e) is no more than 0.2 lb/ton of sinter produced.

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to § 63.7840(e).

§ 63.7827 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For a capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF, you have demonstrated initial compliance if you meet all of the conditions in paragraphs (a)(1) through (4) of this section.

(1) Prepared the capture system operation and maintenance plan according to the requirements of § 63.7800(b), including monthly inspection procedures and detailed descriptions of the operating parameter(s) selected to monitor the capture system;

(2) Certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan;

(3) Submitted a notification of compliance status according to the requirements in § 63.7840(e), including a copy of the capture system operation and maintenance plan and your certification that you will operate the capture system at the values or settings established for the operating limits in that plan; and

(4) Prepared a site-specific monitoring plan according to the requirements in § 63.7831(a).

(b) For each control device subject to operating limits in § 63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all the conditions in paragraphs (b)(1) through (3) of this section.

(1) Prepared the control device operation and maintenance plan according to the requirements of § 63.7800(b), including a preventative maintenance schedule and, as applicable, detailed descriptions of the corrective action procedures for baghouses and other control devices;

(2) Submitted a notification of compliance status according to the requirements in § 63.7840(e), including a copy of the operation and maintenance plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in § 63.7831(a).

Continuous Compliance Requirements

§ 63.7830 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in § 63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a CPMS according to the requirements in § 63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.

(1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(2) If you use a flow measurement device to monitor the operating limit parameter for a sinter plant discharge end or blast furnace casthouse, you must monitor the hourly average rate (*e.g.,* the hourly average actual volumetric flow rate through each separately ducted hood, the average hourly total volumetric flow rate at the inlet to the control device) according to the requirements in § 63.7832.

(3) If you use a flow measurement device to monitor the operating limit parameter for a capture system applied to secondary emissions from a BOPF, you must monitor the average rate for each steel production cycle (*e.g.,* the average actual volumetric flow rate through each separately ducted hood for each steel production cycle, the average total volumetric flow rate at the inlet to the control device for each steel production cycle) according to the requirements in § 63.7832.

(b) Except as provided in paragraph (b)(3) of this section, you must meet the requirements in paragraph (b)(1) or (2) of this section for each baghouse applied to meet any particulate

emission limit in Table 1 to this subpart. You must conduct inspections of each baghouse according to the requirements in paragraph (b)(4) of this section.

(1) Install, operate, and maintain a bag leak detection system according to § 63.7831(f) and monitor the relative change in particulate matter loadings according to the requirements in § 63.7832; or

(2) If you do not install and operate a bag leak detection system, you must install, operate, and maintain a COMS according to the requirements in § 63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in § 63.7832.

(3) A bag leak detection system and COMS are not required for a baghouse that meets the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) The baghouse is a positive pressure baghouse and is not equipped with exhaust gas stacks; and

(ii) The baghouse was installed before August 30, 2005.

(4) You must conduct inspections of each baghouse at the specified frequencies according to the requirements in paragraphs (b)(4)(i) through (viii) of this section.

(i) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(ii) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(iii) Check the compressed air supply for pulse-jet baghouses each day.

(iv) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(v) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.

(vi) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(vii) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(viii) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(c) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in § 63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in § 63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in § 63.7832.

(d) For each electrostatic precipitator subject to the opacity operating limit in § 63.7790(b)(3), you must install, operate, and maintain a COMS according to the requirements in § 63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in § 63.7832.

(e) For each sinter plant subject to the operating limit in § 63.7790(d), you must either:

(1) Compute and record the 30-day rolling average of the oil content of the feedstock for each operating day using the procedures in § 63.7824(d); or

(2) Compute and record the 30-day rolling average of the volatile organic compound emissions (lbs/ton of sinter) for each operating day using the procedures in § 63.7824(e).

~~Large bells must be observed monthly in 15 minute intervals, and if opacity above 0% is observed, the date must be recorded (starting the 4 month time clock)~~(f) For iron beaching operations, you must conduct opacity testing according to EPA Method 9 in appendix A-4 to part 60 of this chapter. Testing must be conducted annually. Conduct opacity observations in 6-minute blocks for 4 hours.

§ 63.7831 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each CPMS required in § 63.7830, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (a)(1) through (8) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.,* on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations);

(4) On or before January 11, 2021, for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced on or before August 16, 2019, ongoing operation and maintenance procedures in accordance with the general requirements of § 63.8(c)(1)(ii), (c)(3), (c)(4)(ii), and (c)(7) and (8). After January 11, 2021 for each such source, and after July 13, 2020 for new and reconstructed sources for

which construction or reconstruction commenced after August 16, ongoing operation and maintenance procedures in accordance with the general requirements of § 63.8(c)(1)(ii), (c)(3), (c)(4)(ii), and (c)(7) and (8);

(5) On or before January 11, 2021, for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced on or before August 16, 2019, ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d). After January 11, 2021 for each such source, and after July 13, 2020 for new and reconstructed sources for which construction or reconstruction commenced after August 16, 2019, ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d) except for the requirements related to startup, shutdown, and malfunction plans referenced in § 63.8(d)(3). The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (*i.e.,* superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under § 63.8(d)(2);

(6) On or before January 11, 2021, for each existing source, and for each new or reconstructed source for which construction or reconstruction commenced on or before August 16, 2019, ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c)(1) through (14), (e)(1), and (e)(2)(i). After January 11, 2021 for each such source, and after July 13, 2020 for new and reconstructed sources for which construction or reconstruction commenced after August 16, 2019, ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c)(1) through (14), (e)(1), and (e)(2)(i);

(7) Corrective action procedures you will follow in the event a venturi scrubber exceeds the operating limit in § 63.7790(b)(2); and

(8) Corrective action procedures you will follow in the event an electrostatic precipitator exceeds the operating limit in § 63.7790(b)(3).

(b) Unless otherwise specified, each CPMS must:

(1) Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data;

(2) Provide valid hourly data for at least 95 percent of every averaging period; and

(3) Determine and record the hourly average of all recorded readings.

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each capture system subject to an operating limit in § 63.7790(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(f) For each baghouse equipped with a bag leak detection system according to § 63.7830(b)(1), you must install, operate, and maintain the bag leak detection system according to the requirements in paragraphs (f)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The system must provide output of relative changes in particulate matter loadings.

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel.

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, “Fabric Filter Bag Leak Detection Guidance,” EPA-454/R-98-015 (incorporated by reference, see § 63.14). You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations.

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time.

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition.

(7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(g) For each venturi scrubber subject to operating limits in § 63.7790(b)(2) for pressure drop and scrubber water flow rate, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(h) For each electrostatic precipitator subject to the opacity operating limit in § 63.7790(b)(3) and each baghouse equipped with a COMS according to § 63.7830(b)(2), you must install,

operate, and maintain each COMS according to the requirements in paragraphs (h)(1) through (4) of this section.

(1) You must install, operate, and maintain each COMS according to Performance Specification 1 in 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to § 63.8 and Performance Specification 1 in appendix B to 40 CFR part 60.

(3) Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) COMS data must be reduced to 6-minute averages as specified in § 63.8(g)(2) and to hourly averages where required by this subpart.

§ 63.7832 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out-of-control periods as specified in § 63.8(c)(7), associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in § 63.7790(a) by meeting the requirements in Table 3 to this subpart.

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in § 63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitor the capture system according to the requirements in § 63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(c) For each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by meeting the requirements in paragraph (c)(1) or (2) of this section as applicable, and paragraphs (c)(3) and (4) of this section:

(1) For a baghouse equipped with a bag leak detection system, operating and maintaining each bag leak detection system according to § 63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in § 63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(2) For a baghouse equipped with a COMS, operating and maintaining each COMS and reducing the COMS data according to § 63.7831(h).

(3) Inspecting each baghouse according to the requirements in § 63.7830(b)(4) and maintaining all records needed to document conformance with these requirements.

(4) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm or when the hourly average opacity exceeded 5 percent, the corrective action(s) taken, and the date on which corrective action was completed.

(d) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in § 63.7790(b)(2), you must demonstrate continuous compliance by meeting the requirements of paragraphs (d)(1) through (4) of this section:

(1) Maintaining the hourly average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;

(2) Operating and maintaining each venturi scrubber CPMS according to § 63.7831(g) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to § 63.7831(b) and recording all information needed to document conformance with these requirements.

(4) If the hourly average pressure drop or scrubber water flow rate is below the operating limits, you must follow the corrective action procedures in paragraph (g) of this section.

(e) For each electrostatic precipitator subject to the opacity operating limit in § 63.7790(b)(3), you must demonstrate continuous compliance by meeting the requirements of paragraphs (e)(1) through (3) of this section:

(1) Maintaining the hourly average opacity of emissions no higher than 10 percent; and

(2) Operating and maintaining each COMS and reducing the COMS data according to § 63.7831(h).

(3) If the hourly average opacity of emissions exceeds 10 percent, you must follow the corrective action procedures in paragraph (g) of this section.

(f) For each new or existing sinter plant subject to the operating limit in § 63.7790(d), you must demonstrate continuous compliance by either:

(1) For the sinter plant feedstock oil content operating limit in § 63.7790(d)(1),

(i) Computing and recording the 30-day rolling average of the percent oil content for each operating day according to the performance test procedures in § 63.7824(d);

(ii) Recording the sampling date and time, oil content values, and sinter produced (tons/day); and

(iii) Maintaining the 30-day rolling average oil content of the feedstock no higher than 0.02 percent.

(2) For the volatile organic compound operating limit in § 63.7790(d)(2),

(i) Computing and recording the 30-day rolling average of the volatile organic compound emissions for each operating day according to the performance test procedures in § 63.7824(e);

(ii) Recording the sampling date and time, sampling values, and sinter produced (tons/day); and

(iii) Maintaining the 30-day rolling average of volatile organic compound emissions no higher than 0.2 lb/ton of sinter produced.

(g) If the hourly average pressure drop or water flow rate for a venturi scrubber or hourly average opacity for an electrostatic precipitator exceeds the operating limit, you must follow the procedures in paragraphs (g)(1) through (4) of this section.

(1) You must initiate corrective action to determine the cause of the exceedance within 1 hour. During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. Within 24 hours of the exceedance, you must measure and record the hourly average operating parameter value

for the emission unit on which corrective action was taken. If the hourly average parameter value meets the applicable operating limit, then the corrective action was successful and the emission unit is in compliance with the applicable operating limit.

(2) If the initial corrective action required in paragraph (g)(1) of this section was not successful, you must complete additional corrective action within the next 24 hours (48 hours from the time of the exceedance). During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. After this second 24-hour period, you must again measure and record the hourly average operating parameter value for the emission unit on which corrective action was taken. If the hourly average parameter value meets the applicable operating limit, then the corrective action was successful and the emission unit is in compliance with the applicable operating limit.

(3) For purposes of paragraphs (g)(1) and (2) of this section, in the case of an exceedance of the hourly average opacity operating limit for an electrostatic precipitator, measurements of the hourly average opacity based on visible emission observations in accordance with EPA Method 9 (in appendix A-4 to part 60) may be taken to evaluate the effectiveness of corrective action. ASTM D7520-16 (incorporated by reference, see § 63.14) may be used with the following conditions:

(i) During the DCOT certification procedure outlined in Section 9.2 of ASTM D7520-16 (incorporated by reference, see § 63.14), 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 (incorporated by reference, see § 63.14).

(iii) The owner or operator must follow the recordkeeping procedures outlined in § 63.10(b)(1) for the DCOT certification, compliance report, data sheets, and all raw unaltered JPEGs used for opacity and certification determination.

(iv) The owner or operator or the DCOT vendor must have a minimum of four independent technology users apply the software to determine the visible opacity of the 300 certification plumes. For each set of 25 plumes, the user may not exceed 15-percent opacity of anyone reading and the average error must not exceed 7.5-percent opacity.

(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 (incorporated by reference, see § 63.14) and these requirements is on the facility, DCOT operator, and DCOT vendor.

(4) If the second attempt at corrective action required in paragraph (g)(2) of this section was not successful, you must report the exceedance as a deviation in your next semiannual compliance report according to § 63.7841(b).

(h) If you are demonstrating compliance with the mercury emission limits in Table 1 of this section for your BOPF Groups through performance testing, you must conduct mercury performance tests in accordance with §§ 63.7821(e) and 63.7825 and calculate the emissions from each new and existing affected source in pounds of mercury per ton of steel scrap to determine compliance with the mercury emission limits in Table 1. Sum the mercury mass emissions (in pounds) from all BOPF Group units calculated using Equation 1 of § 63.7825. Divide that sum by the sum of the total amount of steel scrap charged to the BOPFs (in tons).

(i) If you are demonstrating compliance with the mercury emission limits in Table 1 of this section for your BOPF Groups by certifying participation in the NVMSRP or another EPA-approved mercury program, or by using scrap that does not contain mercury switches, you must obtain and certify your use of steel scrap per § 63.7791(c), (d), or (e), as applicable, and § 63.7841(b)(11) to demonstrate continuous compliance with the standard.

(j) For large bells on each blast furnace, you must demonstrate continuous compliance by repairing or replacing within 4 months any bell seal which exceeds a ~~3 minute opacity average of~~ 10 percent average of 3 instantaneous ~~for any~~ opacity readings of the interbell relief valve emissions. :

§ 63.7834 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device subject to an operating limit in § 63.7790(b), you must demonstrate continuous compliance with the operation and maintenance requirements in § 63.7800(b) by meeting the requirements of paragraphs (a)(1) through (4) of this section:

(1) Making monthly inspections of capture systems and initiating corrective action according to § 63.7800(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance according to § 63.7800(b)(2) and recording all information needed to document conformance with these requirements;

(3) Initiating and completing corrective action for a baghouse equipped with a bag leak detection system or COMS according to § 63.7800(b)(4) and recording all information needed to document conformance with these requirements, including the time you initiated

corrective action, the corrective action(s) taken, and date on which corrective action was completed.

(4) Initiating and completing corrective action for a venturi scrubber equipped with a CPMS or an electrostatic precipitator equipped with a COMS according to § 63.7833(g) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken within the first 24 hours according to § 63.7833(g)(1) and whether they were successful, the corrective action(s) taken within the second 24 hours according to § 63.7833(g)(2) and whether they were successful, and the date on which corrective action was completed.

(b) You must maintain a current copy of the operation and maintenance plan required in § 63.7800(b) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

§ 63.7835 What other requirements must I meet to demonstrate continuous compliance?

Except as provided in § 63.7833(g), you must report each instance in which you did not meet each emission limitation in § 63.7790 that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each operation and maintenance requirement in § 63.7800 that applies to you. These instances are deviations from the emission limitations and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in § 63.7841.

(a) In the event that an affected unit fails to meet an applicable standard, record the date, time, and duration of each failure.

(b) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(c) Record actions taken to minimize emissions in accordance with § 63.7810(d), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(d) For existing sources and for new or reconstructed sources which commenced construction or reconstruction on or before August 16, 2019, before January 11, 2021, consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with § 63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in § 63.6(e). After January 11, 2021 for such sources, and after July 13, 2020 for new and reconstructed sources which commence construction or reconstruction

after August 16, 2019, the exemptions for periods of startup, shutdown, and malfunction in § 63.6(e) no longer apply.

Notifications, Reports, and Records

§ 63.7840 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in § 63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003, or no later than 120 days after the source becomes subject to this subpart, whichever is later.

(c) As specified in § 63.9(b)(3), if you start your new affected source on or after May 20, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in § 63.7(b)(1). For the first mercury compliance test in the BOPF Group for anyone sequence of tests, you must include a schedule of all subsequent tests in the BOPF Group in the test series.

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance according to § 63.9(h)(2)(ii), except that for the purposes of submitting the notification of compliance status for BOPF Group mercury testing, the performance test shall be considered complete when the final unit or control device in the BOPF Group in the sequence is tested.

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that includes a performance test, you must submit the notification of compliance status, including the summary of performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to § 63.10(d)(2).

(f) The notification of compliance status required by §§ 63.9(b) and (h) and 63.7826(c) must include each applicable certification of compliance, signed by a responsible official, in paragraphs (f)(1) and (2) of this section, regarding the mercury requirements, as applicable, in § 63.7791(c) through (e).

(1) “This facility participates in and purchases scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the EPA Administrator, in accordance with § 63.7791(c) or (e)”; or

(2) “This facility complies with the requirements for scrap that does not contain mercury switches, in accordance with § 63.7791(d).”

(g) Within 60 calendar days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedures specified in paragraphs (g)(1) through (3) of this section. Where applicable, you may assert a claim of EPA system outage, in accordance with § 63.7841(e), or force majeure, in accordance with § 63.7841(f), for failure to timely comply with this requirement.

(1) Data collected using test methods supported by EPA's Electronic Reporting Tool (ERT) as listed on EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The data must be submitted in a file format generated through the use of EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on EPA's ERT website.

(2) Data collected using test methods that are not supported by EPA's ERT as listed on EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) ~~Confidential business information (CBI). If you claim some of the information submitted under paragraph (g) of this section is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of EPA's ERT or an alternate electronic file consistent with the XML schema listed on EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via EPA's CDX as described in paragraph (g) of this section.~~Reserved.

(h) Within 60 calendar days after the date of completing each continuous monitoring system (CMS) performance evaluation (as defined in § 63.2), you must submit the results of the performance evaluation following the procedures specified in paragraphs (h)(1) through (3) of this section. Where applicable, you may assert a claim of EPA system outage, in accordance with § 63.7841(e), or force majeure, in accordance with § 63.7841(f), for failure to timely comply with this requirement.

(1) Performance evaluations of CMS measuring relative accuracy test audit (RATA) pollutants that are supported by EPA's ERT as listed on EPA's ERT website at the time of the evaluation. Submit the results of the performance evaluation to the EPA via CEDRI, which can be accessed through EPA's CDX. The data must be submitted in a file format generated through the use of EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on EPA's ERT website.

(2) Performance evaluations of CMS measuring RATA pollutants that are not supported by EPA's ERT as listed on EPA's ERT website at the time of the evaluation. The results of the performance evaluation must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) ~~Confidential business information (CBI). If you claim some of the information submitted under this paragraph (h) is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of EPA's ERT or an alternate electronic file consistent with the XML schema listed on EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via EPA's CDX as described in this paragraph (h).~~Reserved

(i) Confidential business information (CBI). For notifications and reports required to be submitted to CEDRI:

(1) The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information submitted under paragraph (h) of this section, you must submit a complete file, including information claimed to be CBI, to the EPA.

(2) The file must be generated using the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website.

(3) Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

(4) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address oaqpscbi@epa.gov, and as described above, should include clear CBI markings and be flagged to the attention of the Group Leader, Measurement Policy Group. If assistance is needed with submitting large electronic files that exceed the file size limit for email

attachments, and if you do not have your own file sharing service, please email oaqpscbi@epa.gov to request a file transfer link.

(5) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Group Leader, Measurement Policy Group. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

(6) All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(7) You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described in paragraphs (g) or (h) of this section.

§ 63.7841 What reports must I submit and when?

(a) ***Compliance report due dates.*** Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.7783 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in § 63.7783.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority

has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(b) ***Compliance report contents.*** Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (13) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) For existing sources and for new or reconstructed sources for which construction or reconstruction commenced on or before August 16, 2019, before January 11, 2021, if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i). A startup, shutdown, and malfunction plan and the information in § 63.10(d)(5)(i) is not required after January 11, 2021.

(5) If there were no deviations from the continuous compliance requirements in §§ 63.7833 and 63.7834 that apply to you, a statement that there were no deviations from the emission limitations or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or continuous emission monitoring system (CEMS) was out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in § 63.7790 that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section, the information in paragraphs (b)(7)(i) and (ii) of this section, and the information in (b)(13) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the duration and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1)

through (4) of this section, the information in paragraphs (b)(8)(i) through (xi) of this section, and the information in (b)(13) of this section. This includes periods of malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date, time, and duration that each continuous monitoring was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control as specified in § 63.8(c)(7), including the information in § 63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a malfunction or during another period.

(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(9) Any deviation from the requirements in § 63.7791 and the corrective action taken. For each deviation, you must include the information in (b)(13) of this section.

(10) If there were no deviations from the requirements in § 63.7791, a statement that there were no deviations from the requirements during the reporting period.

(11) If the facility demonstrates compliance with the mercury emission limits in Table 1 through the compliance options in § 63.7791(c), (d), or (e), the report must contain the applicable statement in paragraphs (b)(11)(i) and (ii) of this section, as applicable.

(i) "This facility participates in and purchases scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the EPA Administrator, in accordance with § 63.7791(c) or (e)"; or

(ii) "This facility complies with the requirements for scrap that does not contain mercury switches, in accordance with § 63.7791(d)."

(12) For existing sources and for new or reconstructed sources which commenced construction or reconstruction on or before August 16, 2019, before January 11, 2021, for each startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan you must submit an immediate startup, shutdown and malfunction report. Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report according to paragraphs (f)(1) and (2) of this section. An immediate startup, shutdown, and malfunction report is not required after January 11, 2021.

(13) Beginning on January 11, 2021 if you failed to meet an applicable standard, the compliance report must include the start date, start time, and duration of each failure. For each failure, the compliance report must include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(14) For each unplanned bleeder valve opening for each blast furnace, you must include the information in paragraphs (b)(14)(i) through (iii) of this section.

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(i) The date and time of the event.

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(ii) The duration of the event.

(iii) Any corrective actions taken in response to the event.

(c) ***Use of CEDRI template.*** Beginning on January 11, 2021 or 180 days after the date the reporting template becomes available in CEDRI, whichever is later, submit all subsequent reports following the procedure specified in paragraph (d) of this section.

(d) ***CEDRI submission.*** If you are required to submit reports following the procedure specified in this paragraph, you must submit reports to the EPA via CEDRI, which can be accessed through EPA's CDX (*https://cdx.epa.gov/*). You must use the appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*) for this subpart. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report, you must submit a complete file, including information claimed to be CBI, to the EPA following the procedures in paragraphs (d)(1) and (2). Clearly mark the

part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address oaqpscbi@epa.gov, and as described above, should include clear CBI markings and be flagged to the attention of the Integrated Iron and Steel Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email oaqpscbi@epa.gov to request a file transfer link.

(2) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Integrated Iron and Steel Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

~~If you claim some of the information required to be submitted via CEDRI is CBI, submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate form on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via EPA's CDX as described earlier in this paragraph.~~

(e) ***CDX outage.*** If you are required to electronically submit a report through CEDRI in EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (e)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(f) ***Claim of force majeure.*** If you are required to electronically submit a report through CEDRI in EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (f)(1) through (5) of this section.

(1) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the force majeure event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

(g) ***Part 70 monitoring report.*** If you have obtained a title V operating permit for an affected source pursuant to part 70 or 71 of this chapter, you must report all deviations as defined in this subpart in the semiannual monitoring report required by § 70.6(a)(3)(iii)(A) or § 71.6(a)(3)(iii)(A) of this chapter. If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by § 70.6(a)(3)(iii)(A) or § 71.6(a)(3)(iii)(A) of this chapter, and the compliance report includes all the required information concerning deviations from any emission limitation, standard, or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

(h) For fenceline monitoring systems subject to § 63.7792 of this subpart, each owner or operator must submit Fenceline Monitoring Reports on a quarterly basis using the appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/cedri*) for this subpart and following the procedure specified in paragraph (d) of this section. The first quarterly report must be submitted once the owner or operator has obtained 12 months of data. The first quarterly report must cover the period beginning on the date one year after the promulgation of the metals fenceline method and ending on March 31, June 30, September 30 or December 31, whichever date is the first date that occurs after the owner or operator has obtained 12 months of data (*i.e.,* the first quarterly report will contain between 12 and 15 months of data). Each subsequent quarterly report must cover one of the following reporting periods: Quarter 1 from January 1 through March 31; Quarter 2 from April 1 through June 30; Quarter 3 from July 1 through September 30; and Quarter 4 from October 1 through December 31. Each quarterly report must be electronically submitted no later than 45 calendar days following the end of the reporting period.

(1) Facility name and address.

(2) Year and reporting quarter (*i.e.,* Quarter 1, Quarter 2, Quarter 3, or Quarter 4).

(3) For each sampler: The latitude and longitude location coordinates; the sampler name; and identification of the type of sampler (*e.g.,* regular monitor, extra monitor, duplicate, field blank, inactive). Coordinates shall be in decimal degrees with at least five decimal places.

(4) The beginning and ending dates for each sampling period.

(5) Individual sample results for each monitored compound, reported in units of $\mu g/m^3$, for each monitor for each sampling period that ends during the reporting period. Results below the method detection limit shall be flagged as below the detection limit and reported at the method detection limit.

(6) Data flags for each outlier determined in accordance with the fenceline metals method. For each outlier, the owner or operator must submit the individual sample result of the outlier, as well as the evidence used to conclude that the result is an outlier.

(7) The biweekly concentration difference (Δc) for each monitored compound for each sampling period and the annual average Δc for each monitored compound for each sampling period.

(8) Indication of whether the owner or operator was required to develop a corrective action plan under § 63.7792(e) of this subpart.

~~(h) For fenceline monitoring systems subject to § 63.658, each owner or operator shall submit the following information to the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) on a quarterly basis. (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The first quarterly report must be submitted once the owner or operator has obtained 12 months of data. The first quarterly report must cover the period beginning on the compliance date that is specified in Table 11 of this subpart and ending on March 31, June 30, September 30 or December 31, whichever date is the first date that occurs after the owner or operator has obtained 12 months of data (*i.e.,* the first quarterly report will contain between 12 and 15 months of data). Each subsequent quarterly report must cover one of the following reporting periods: Quarter 1 from January 1 through March 31; Quarter 2 from April 1 through June 30; Quarter 3 from July 1 through September 30; and Quarter 4 from October 1 through December 31. Each quarterly report must be electronically submitted no later than 45 calendar days following the end of the reporting period.~~

~~(1) Facility name and address.~~

~~(2) Year and reporting quarter (*i.e.,* Quarter 1, Quarter 2, Quarter 3, or Quarter 4).~~

~~(3) For the first reporting period and for any reporting period in which a passive monitor is added or moved, for each passive monitor: The latitude and longitude location coordinates; the sampler name; and identification of the type of sampler (*i.e.,* regular monitor, extra monitor, duplicate, field blank, inactive). The owner or operator shall determine the coordinates using an instrument with an accuracy of at least 3 meters. Coordinates shall be in decimal degrees with at least five decimal places.~~

~~(4) The beginning and ending dates for each sampling period.~~

~~(5) Individual sample results for benzenechromium reported in units of µg/m^3 for each monitor for each sampling period that ends during the reporting period. Results below the method detection limit shall be flagged as below the detection limit and reported at the method detection limit.~~

~~(6) Data flags that indicate each monitor that was skipped for the sampling period, if the owner or operator uses an alternative sampling frequency under § 63.658(e)(3).~~

~~(7) Data flags for each outlier determined in accordance with Section 9.2 of Method 325A of appendix A of this part. For each outlier, the owner or operator must submit the individual sample result of the outlier, as well as the evidence used to conclude that the result is an outlier.~~

~~(8) The biweekly concentration difference (Δc) for benzenechromium for each sampling period and the annual average Δc for benzenechromium for each sampling period.~~

§ 63.7842 What records must I keep?

(a) You must keep the following records:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in § 63.10(b)(2)(xiv).

(2) For existing sources and for new or reconstructed sources which commenced construction or reconstruction on or before August 16, 2019, before January 11, 2021, the records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction for a period of five years. A startup, shutdown, and malfunction plan is not required after January 11, 2021.

(3) For each failure to meet an applicable standard, a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(4) Records of the actions taken to minimize emissions in accordance with § 63.7810(d), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(5) Records of performance tests, performance evaluations, and opacity observations as required in § 63.10(b)(2)(viii).

(b) For each COMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in § 63.10(b)(2)(vi) through (xi).

(2) Monitoring data for a performance evaluation as required in § 63.6(h)(7)(i) and (ii).

(3) Previous (that is, superseded) versions of the performance evaluation plan required under § 63.8(d)(2), with the program of corrective action included in the plan.

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in § 63.6(h)(6) for visual observations.

(d) You must keep the records required in §§ 63.7823, 63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you. This includes a record of each large and small bell repair and replacement, a record of the date on which the large bell opacity has exceeded 10%, and the most current time period or throughput over which no opacity was observed from the small bell.

(e) If you are demonstrating compliance with the mercury emission limit in Table 1 through § 63.7791(c), you must keep records to demonstrate compliance with the requirements for mercury in § 63.7791(c) as applicable. If you are demonstrating compliance with the mercury emission limit in Table 1 through § 63.7791(d), you must keep records documenting compliance with § 63.7791(d) for scrap that does not contain mercury switches. If you are demonstrating compliance with the mercury emission limit in Table 1 through § 63.7791(e), you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If you purchase scrap from a broker, you must maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program.

(f) For fenceline monitoring systems subject to §63.7792 of this subpart, each owner or operator must keep the records specified in paragraphs (f)(1) through (f)(11) of this section.

(1) Coordinates of samplers, including co-located samplers and field blanks, and if applicable, the meteorological station. The owner or operator shall determine the coordinates using an instrument with an accuracy of at least 3 meters. The coordinates shall be in decimal degrees with at least five decimal places.

(2) The start and stop times and dates for each sample, as well as the sample identifying information.

(3) Sampling period average temperature and barometric pressure measurements.

(4) For each outlier determined in accordance with the procedures specified in the fenceline metals method, the sampler location and the concentration of the outlier and the evidence used to conclude that the result is an outlier.

(5) For samples that will be adjusted for uniform background, the location of and the concentration measured simultaneously by the background sampler, and the perimeter samplers to which it applies.

(6) Individual sample results, the calculated Δc for each monitored compound for each sampling period and the two samples used to determine it, whether background correction was used, and the annual average Δc for each monitored compound calculated after each sampling period.

(7) Method detection limit for each sample, including co-located samples and blanks.

(8) Documentation of the root cause analysis and any resulting corrective action taken each time an action level is exceeded, including the dates the root cause analysis was initiated and the resulting correction action(s) were taken.

(9) Any corrective action plan developed under §63.7792(e).

(10) Other records as required by the sampling method.

(11) If a near-field source correction is used as provided in §63.7792(f), or if an alternative test method is used that provides time-resolved measurements, records of hourly meteorological data, including temperature, barometric pressure, wind speed and wind direction, calculated daily unit vector wind direction and daily sigma theta, and other records specified in the site-specific monitoring plan.

(g) For each unplanned bleeder valve opening for each blast furnace, you must keep the records specified in paragraphs (g)(1) through (4) of this section. ~~(f) For fenceline monitoring systems subject to § 63.7792658, each owner or operator shall keep the records specified in paragraphs (f)(1) through (10) of this section on an ongoing basis.~~

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(1) The date and time of the event.~~(1) Coordinates of all passive monitors, including replicate samplers and field blanks, and if applicable, the meteorological station. The owner or operator shall determine the coordinates using an instrument with an accuracy of at least 3 meters. The coordinates shall be in decimal degrees with at least five decimal places.~~

(2) The duration of the event.~~(2) The start and stop times and dates for each sample, as well as the tube identifying information.~~

(3) Any corrective actions taken in response to the event.~~(3) Sampling period average temperature and barometric pressure measurements.~~

~~(4) For each outlier determined in accordance with Section 9.2 of Method 325A of appendix A of this part, the sampler location of and the concentration of the outlier and the evidence used to conclude that the result is an outlier.~~

~~(5) For samples that will be adjusted for a background, the location of and the concentration measured simultaneously by the background sampler, and the perimeter samplers to which it applies.~~

~~(6) Individual sample results, the calculated Δc for benzenechromium for each sampling period and the two samples used to determine it, whether background correction was used, and the annual average Δc calculated after each sampling period.~~

~~(7) Method detection limit for each sample, including co-located samples and blanks.~~

~~(8) Documentation of corrective action taken each time the action level was exceeded.~~

~~(9) Other records as required by Methods 325A and 325B of appendix A of this part.~~

~~(10) If a near-field source correction is used as provided in § 63.658(i), records of hourly meteorological data, including temperature, barometric pressure, wind speed and wind direction, calculated daily unit vector wind direction and daily sigma theta, and other records specified in the site-specific monitoring plan.~~

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§ 63.7843 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to § 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.7850 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

§ 63.7851 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.

(1) Approval of alternative opacity emission limits in Table 1 to this subpart under § 63.6(h)(9).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90, except for approval of an alternative method for the oil content of the sinter plant feedstock or volatile organic compound measurements for the sinter plant windbox exhaust stream stack as provided in § 63.7824(f).

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

(5) Approval of an alternative to any electronic reporting to the EPA required by this subpart.

§ 63.7852 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in § 63.2, and in this section as follows.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that

operates on tribroelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Basic oxygen process furnace means any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel. This definition includes both top and bottom blown furnaces, but does not include argon oxygen decarburization furnaces.

Basic oxygen process furnace group means the collection of BOPF shop steelmaking operating units and their control devices including the BOPF primary emission control system, BOPF secondary control system, ladle metallurgy units, and hot metal transfer, desulfurization and slag skimming units that are operating at the time of each mercury test sequence. In the case of duplicate units in the BOPF Group, the BOPF Group for purposes of this rule means only those units operating at the time of the test sequence. See related definitions in this section for "primary emissions," "primary emission control system," "secondary emissions," and "secondary emission control system."

Basic oxygen process furnace shop means the place where steelmaking operations that begin with the transfer of molten iron (hot metal) from the torpedo car and end prior to casting the molten steel, including hot metal transfer, desulfurization, slag skimming, refining in a basic oxygen process furnace, and ladle metallurgy occur.

Basic oxygen process furnace shop ancillary operations means the processes where hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy occur.

Blast furnace means a furnace used for the production of molten iron from iron ore and other iron bearing materials.

Bottom-blown furnace means any basic oxygen process furnace in which oxygen and other combustion gases are introduced into the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.

Casthouse means the building or structure that encloses the bottom portion of a blast furnace where the hot metal and slag are tapped from the furnace.

Certified observer means a visible emission observer certified to perform EPA Method 9 opacity observations.

Desulfurization means the process in which reagents such as magnesium, soda ash, and lime are injected into the hot metal, usually with dry air or nitrogen, to remove sulfur.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation (including operating limits), standard, or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Discharge end means the place where those operations conducted within the sinter plant starting at the discharge of the sintering machine's traveling grate including (but not limited to) hot sinter crushing, screening, and transfer operations occur.

Emission limitation means any emission limit, opacity limit, or operating limit.

Hot metal transfer station means the location in a basic oxygen process furnace shop where molten iron (hot metal) is transferred from a torpedo car or hot metal car used to transport hot metal from the blast furnace casthouse to a holding vessel or ladle in the basic oxygen process furnace shop. This location also is known as the reladling station or ladle transfer station.

Integrated iron and steel manufacturing facility means an establishment engaged in the production of steel from iron ore.

Iron beaching operation means pouring hot molten iron from a torpedo car onto the ground when the iron from the blast furnace cannot be charged to the basic oxygen process furnace.

Ladle metallurgy means a secondary steelmaking process that is performed typically in a ladle after initial refining in a basic oxygen process furnace to adjust or amend the chemical and/or mechanical properties of steel. This definition does not include vacuum degassing.

Mercury switch means each mercury-containing capsule or switch assembly that is part of a convenience light switch mechanism installed in a motor vehicle.

Motor vehicle means an automotive vehicle not operated on rails and usually operated with rubber tires for use on roads and highways.

Motor vehicle scrap means post-consumer scrap from discarded automotive vehicles, in whole or in part, including automobile body hulks that have been processed through a shredder. Motor vehicle scrap does not include automobile manufacturing bundles or miscellaneous vehicle parts, such as wheels and bumpers, which do not contain mercury switches.

Opening means any roof monitor, vent, door, window, hole, crack or other conduit that allows gas to escape to the atmosphere from a blast furnace casthouse or BOPF shop.

Planned bleeder valve opening means the opening of a blast furnace pressure relief safety valve that is initiated by an operator.

Post-consumer steel scrap means steel scrap that is composed of materials made of steel that were purchased by households or by commercial, industrial, and institutional facilities in their role as end-users of the product and which can no longer be used for its intended purpose.

Pre-consumer steel scrap means steel scrap that is left over from industrial or manufacturing processes and which is subsequently recycled as scrap. Other terms used to describe this scrap are new, home, run-around, prompt-industrial, and return scrap.

Primary emissions means particulate matter emissions from the basic oxygen process furnace generated during the steel production cycle which are captured and treated in the furnace's primary emission control system.

Primary emission control system means the combination of equipment used for the capture and collection of primary emissions (*e.g.,* an open hood capture system used in conjunction with an electrostatic precipitator or a closed hood system used in conjunction with a scrubber).

Primary oxygen blow means the period in the steel production cycle of a basic oxygen process furnace during which oxygen is blown through the molten iron bath by means of a lance inserted from the top of the vessel (top-blown) or through tuyeres in the bottom and/or sides of the vessel (bottom-blown).

Responsible official means responsible official as defined in § 63.2.

Scrap provider means the company or person (including a broker) who contracts directly with an integrated iron and steel manufacturing facility to provide steel scrap. Scrap processors, such as shredder operators or vehicle dismantlers, who do not sell scrap directly to an integrated iron and steel manufacturing facility are not scrap providers.

Secondary emissions means particulate matter emissions that are not controlled by a primary emission control system, including emissions that escape from open and closed hoods, lance hole openings, and gaps or tears in ductwork to the primary emission control system.

Secondary emission control system means the combination of equipment used for the capture and collection of secondary emissions from a basic oxygen process furnace.

Shredded motor vehicle scrap means post-consumer scrap from discarded automotive vehicles that has been processed through a shredder.

Sinter cooler means the apparatus used to cool the hot sinter product that is transferred from the discharge end through contact with large volumes of induced or forced draft air.

Sinter plant means the machine used to produce a fused clinker-like aggregate or sinter of fine iron-bearing materials suited for use in a blast furnace. The machine is composed of a

continuous traveling grate that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft windboxes along the length of the strand to support downdraft combustion and heat sufficient to produce a fused sinter product.

Skimming station means the locations inside a basic oxygen process furnace shop where slag is removed from the top of the molten metal bath.

Slip means when raw materials loaded in the top of the furnace fail to descend smoothly in the furnace and bind together to form a "bridge" which than "hangs" (i.e., accumulates) in one position in the furnace. When a "hang" eventually falls, or "slips," it creates a pressure surge that may opens the bleeder valves, releasing emissions in the form of a large dust cloud.

Specialty metal scrap means scrap where the only materials from motor vehicles in the scrap are materials (such as certain exhaust systems) recovered for their specialty alloy content (including, but not limited to, chromium, nickel, molybdenum, or other alloys), and, based on the nature of the scrap and purchase specifications, the scrap is not expected to contain mercury switches.

Steel production cycle means the operations conducted within the basic oxygen process furnace shop that are required to produce each batch of steel. The following operations are included: scrap charging, preheating (when done), hot metal charging, primary oxygen blowing, sampling, (vessel turndown and turnup), additional oxygen blowing (when done), tapping, and deslagging. The steel production cycle begins when the scrap is charged to the furnace and ends after the slag is emptied from the vessel into the slag pot.

Steel scrap means pre-consumer and post-consumer discarded steel that is processed by scrap providers for resale (post-consumer) or used on-site (pre-consumer or run-around scrap from within a facility or company). Post-consumer steel scrap may or may not contain motor vehicle scrap, depending on the type of scrap.

Top-blown furnace means any basic oxygen process furnace in which oxygen is introduced into the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Total hydrocarbons (THC) means the sum of organic compounds measured as carbon using EPA Method 25A (40 CFR part 60, appendix A-7).~~means all alkanes (including methane), alkenes (including ethylene), and arenes (including benzene, toluene, ethyl benzene, xylene, phenols, cresols, xylenols, dioxin, polycyclic aromatic hydrocarbons, and polyoxometalates).~~

Unplanned bleeder valve opening means the opening of a blast furnace pressure relief safety valve that is not a planned bleeder valve opening.

Windboxes means the compartments that provide for a controlled distribution of downdraft combustion air as it is drawn through the sinter bed of a sinter plant to make the fused sinter product.

Table 1 to Subpart FFFFF of Part 63 -- Emission, and Opacity, and Work Practice Limits

As required in § 63.7790(a), you must comply with each applicable emission, and opacity, and work practice limit in the following table:

Table 1 to Subpart FFFFF of Part 63 - Emission and Opacity Limits

For . . .	You must comply with each of the following . . .
1. Each windbox exhaust stream at an existing sinter plant	a. You must not cause to be discharged to the atmosphere any gases that contain particulate matter in excess of 0.4 lb/ton of product sinter;
	b. You must not cause to be discharged to the atmosphere any gases that contain mercury in excess of 0.000035 lb/ton of product sinter;
	c. You must not cause to be discharged to the atmosphere any gases that contain hydrogen chloride in excess of 0.025 lb/ton of product sinter;
	d. You must not cause to be discharged to the atmosphere any gases that contain hydrogen fluoride in excess of 0.0011 lb/ton of product sinter;
	e. You must not cause to be discharged to the atmosphere any gases that contain carbon disulfide in excess of 0.028 lb/ton of product sinter;
	f. You must not cause to be discharged to the atmosphere any gases that contain carbonyl sulfide in excess of 0.064 lb/ton of product sinter;
	g. You must not cause to be discharged to the atmosphere any gases that contain D/F TEQs in excess of 3.5E-08 lb/ton of product sinter; and
	h. You must not cause to be discharged to the atmosphere any gases that contain polycyclic aromatic hydrocarbons in excess of 0.0059 lb/ton of product sinter.
2. Each windbox exhaust stream at a new sinter plant	a. You must not cause to be discharged to the atmosphere any gases that contain particulate matter in excess of 0.3 lb/ton of product sinter;
	b. You must not cause to be discharged to the atmosphere any gases that contain mercury in excess of 0.000012 lb/ton of product sinter;
	c. You must not cause to be discharged to the atmosphere any gases that contain hydrogen chloride in excess of 0.0012 lb/ton of product sinter;

For . . .	You must comply with each of the following . . .
	d. You must not cause to be discharged to the atmosphere any gases that contain hydrogen fluoride in excess of 0.0011 lb/ton of product sinter;
	e. You must not cause to be discharged to the atmosphere any gases that contain carbon disulfide in excess of 0.028 lb/ton of product sinter;
	f. You must not cause to be discharged to the atmosphere any gases that contain carbonyl sulfide in excess of 0.030 lb/ton of product sinter;
	g. You must not cause to be discharged to the atmosphere any gases that contain D/F TEQs in excess of 3.1E-09 lb/ton of product sinter; and
	h. You must not cause to be discharged to the atmosphere any gases that contain polycyclic aromatic hydrocarbons in excess of 0.0015 lb/ton of product sinter.
3. Each discharge end at an existing sinter plant	a. You must not cause to be discharged to the atmosphere any gases that exit from one or more control devices that contain, on a flow-weighted basis, particulate matter in excess of 0.02 gr/dscf [1] [2]; and
	b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the building or structure housing the discharge end that exhibit opacity greater than 20 percent (6-minute average).
4. Each discharge end at a new sinter plant	a. You must not cause to be discharged to the atmosphere any gases that exit from one or more control devices that contain, on a flow weighted basis, particulate matter in excess of 0.01 gr/dscf; and
	b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the building or structure housing the discharge end that exhibit opacity greater than 10 percent (6-minute average).
5. Each sinter cooler at an existing sinter plant	You must not cause to be discharged to the atmosphere any emissions that exhibit opacity greater than 10 percent (6-minute average).
6. Each sinter cooler at a new sinter plant	You must not cause to be discharged to the atmosphere any gases that contain particulate matter in excess of 0.01 gr/dscf.
7. Each casthouse at an existing blast furnace	a. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf[2]; ~~and~~
	b. You must not cause to be discharged to the atmosphere any secondary emissions that exit all openings in the casthouse or

For . . .	You must comply with each of the following . . .
	structure housing the blast furnace that exhibit opacity greater than 5~~20~~ percent (6-minute average);~~.~~
	c. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain hydrogen chloride in excess of 0.0013~~059~~ lb/ton of iron;~~ and~~
	d. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain total hydrocarbons as propane in excess of 0.092~~35~~ lb/ton of iron; and~~.~~
	e. You must not cause unplanned bleeder valve openings in excess of 5 events per year.
8. Each casthouse at a new blast furnace	a. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.003 gr/dscf; and
	b. You must not cause to be discharged to the atmosphere any secondary emissions that exit all openings in the casthouse or structure housing the blast furnace that exhibit opacity greater than ~~1~~5 percent (6-minute average).
	c. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain hydrogen chloride in excess of 0.00059 lb/ton of iron;~~ and~~
	d. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain total hydrocarbons as propane in excess of 0.035 lb/ton of iron; and~~.~~
	e. You must not cause unplanned bleeder valve openings in excess of zero events per year.
9. Each BOPF at a new or existing shop	a. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with a closed hood system at a new or existing BOPF shop that contain, on a flow-weighted basis, particulate matter in excess of 0.03 gr/dscf during the primary oxygen blow [2] [3];~~ and~~
	b. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with an open hood system that contain, on a flow-weighted basis, particulate matter in excess of 0.02 gr/dscf during the steel production cycle for an existing BOPF shop [2] [3] or 0.01 gr/dscf during the steel production cycle for a new BOPF shop[3];~~ and~~
	c. You must not cause to be discharged to the atmosphere any gases that exit from a control device used solely for the collection of secondary emissions from the BOPF that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop[2] or 0.0052 gr/dscf for a new BOPF shop;~~.~~

For . . .	You must comply with each of the following . . .
	~~d. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF that contain D/F TEQ in excess of 4.7E-08 lb/ton of steel;~~
	~~d~~e. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF that contain hydrogen chloride~~HCl~~ in excess of 0.078 lb/ton of steel for existing sources and 1.9E-04 lb/ton steel for new sources;
	~~e~~f. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF that contain THC as propane in excess of 0.04 lb/ton of steel for existing sources and 0.0017 lb/ton of steel for new sources; and~~.~~
	f. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF that contain D/F TEQs in excess of 4.7E-08 lb/ton of steel.
10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop	You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop[2] or 0.003 gr/dscf for a new BOPF shop.
11. Each ladle metallurgy operation at a new or existing BOPF shop	You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop[2] or 0.004 gr/dscf for a new BOPF shop.
12. Each existing BOPF shop	You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the BOPF shop or any other building housing the BOPF or BOPF shop operation that exhibit opacity greater than 5~~2~~0 percent (~~3~~36-minute average).
13. Each new BOPF shop	a. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the BOPF shop or other building housing a bottom-blown BOPF or BOPF shop operations that exhibit opacity (for any set of 3~~6~~-minute averages) greater than 5~~10~~ percent~~, except that one 36-minute period not to exceed 20 percent may occur once per steel production cycle~~; or
	b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the BOPF shop or other building housing a top-blown BOPF or BOPF shop operations that exhibit opacity (for any set of 3-minute averages) greater than 5~~10~~ percent~~, except that one 3-minute period greater than 510 percent but less than 20 percent may occur once per steel production cycle~~.

For . . .	You must comply with each of the following . . .
14. Each BOPF Group at an existing BOPF shop	You must not cause to be discharged to the atmosphere any gases that exit from the collection of BOPF Group control devices that contain mercury in excess of 0.00026 lb/ton of steel scrap input to the BOPF.
15. Each BOPF Group at a new BOPF shop	You must not cause to be discharged to the atmosphere any gases that exit from the collection of BOPF Group control devices that contain mercury in excess of 0.000081 lb/ton of steel scrap input to the BOPF.
~~unplanned bleeder opening~~ 16. Each planned bleeder valve opening at a new or existing blast furnace	You must not cause to be discharged to the atmosphere any emissions that exhibit opacity greater than ~~5~~8 percent (6-minute average).
17. Each slag processing, handling and storage operation for a new or existing blast furnace or BOPF	You must not cause to be discharged to the atmosphere any emissions that exhibit opacity greater than 5 percent (6-minute average).
18. Each ~~new and~~ existing blast furnace stove	a. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain D/F TEQs in excess of 3.8e-10 lb/ton of iron.
	b. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain HCl in excess of 5.2~~6.0~~e-4 lb/ton of iron.
	c. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain THC in excess of 0.1~~027~~ lb/ton of iron.
19. Each new blast furnace stove	a. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain D/F TEQs in excess of 3.8e-10 lb/ton of iron.
	b. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain HCl in excess of 1.4e-4 lb/ton of iron.
	c. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain THC in excess of 0.0011 lb/ton of iron.

~~You must not cause to be discharged to the atmosphere any emissions that exhibit opacity greater than 0 percent (6-minute average).~~ [1] This limit applies if the cooler is vented to the same control device as the discharge end.

[2] This concentration limit (gr/dscf) for a control device does not apply to discharges inside a building or structure housing the discharge end at an existing sinter plant, inside a casthouse at

an existing blast furnace, or inside an existing BOPF shop if the control device was installed before August 30, 2005.

[3] This limit applies to control devices operated in parallel for a single BOPF during the oxygen blow.

Table 2 to Subpart FFFFF of Part 63 - Initial Compliance With Emission and Opacity Limits

As required in § 63.7826(a)(1), you must demonstrate initial compliance with the emission and opacity limits according to the following table:

For . . .	You have demonstrated initial compliance if . . .
1. Each windbox exhaust stream at an existing sinter plant	a. The process-weighted mass rate of particulate matter from a windbox exhaust stream, measured according to the performance test procedures in § 63.7822(c), did not exceed 0.4 lb/ton of product sinter; b. The process-weighted mass rate of mercury from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.000035 lb/ton of product sinter; c. The process-weighted mass rate of hydrogen chloride from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.025 lb/ton of product sinter; d. The process-weighted mass rate of hydrogen fluoride from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.0011 lb/ton of product sinter; e. The process-weighted mass rate of carbon disulfide from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.028 lb/ton of product sinter; f. The process-weighted mass rate of carbonyl sulfide from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.064 lb/ton of product sinter; g. The process-weighted mass rate of D/F TEQs from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 3.5E-08 lb/ton of product sinter; and h. The process-weighted mass rate of polycyclic aromatic hydrocarbons from a windbox exhaust stream, measured

For . . .	You have demonstrated initial compliance if . . .
	according to the performance test procedures in § 63.7825, did not exceed 0.0059 lb/ton of product sinter.
2. Each windbox exhaust stream at a new sinter plant	a. The process-weighted mass rate of particulate matter from a windbox exhaust stream, measured according to the performance test procedures in § 63.7822(c), did not exceed 0.3 lb/ton of product sinter;.
	b. The process-weighted mass rate of mercury from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.000012 lb/ton of product sinter;
	c. The process-weighted mass rate of hydrogen chloride from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.0012 lb/ton of product sinter;
	d. The process-weighted mass rate of hydrogen fluoride from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.0011 lb/ton of product sinter;
	e. The process-weighted mass rate of carbon disulfide from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.028 lb/ton of product sinter;
	f. The process-weighted mass rate of carbonyl sulfide from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.030 lb/ton of product sinter;
	g. The process-weighted mass rate of D/F TEQs from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 3.1E-09 lb/ton of product sinter; and
	h. The process-weighted mass rate of polycyclic aromatic hydrocarbons from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.0015 lb/ton of product sinter.
3. Each discharge end at an existing sinter plant	a. The flow-weighted average concentration of particulate matter from one or more control devices applied to emissions from a discharge end, measured according to the performance test procedures in § 63.7822(d), did not exceed 0.02 gr/dscf; and
	b. The opacity of secondary emissions from each discharge end, determined according to the performance test procedures in § 63.7823(c), did not exceed 20 percent (6-minute average).
4. Each discharge end at a new sinter plant	a. The flow-weighted average concentration of particulate matter from one or more control devices applied to emissions from a

For . . .	You have demonstrated initial compliance if . . .
	discharge end, measured according to the performance test procedures in § 63.7822(d), did not exceed 0.01 gr/dscf; and
	b. The opacity of secondary emissions from each discharge end, determined according to the performance test procedures in § 63.7823(c), did not exceed 10 percent (6-minute average).
5. Each sinter cooler at an existing sinter plant	The opacity of emissions, determined according to the performance test procedures in § 63.7823(e), did not exceed 10 percent (6-minute average).
6. Each sinter cooler at a new sinter plant	The average concentration of particulate matter, measured according to the performance test procedures in § 63.7822(b), did not exceed 0.01 gr/dscf.~~.~~
7. Each casthouse at an existing blast furnace	a. The average concentration of particulate matter from a control device applied to emissions from a casthouse, measured according to the performance test procedures in § 63.7822(e), did not exceed 0.01 gr/dscf;~~ and~~
	b. The opacity of secondary emissions from each casthouse, determined according to the performance test procedures in § 63.7823(c), did not exceed 5~~20~~ percent (6-minute average).~~.~~
	c. The process-weighted mass rate of hydrogen chloride from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.00130~~59~~ lb/ton of iron;
	d. The process-weighted mass rate of total hydrocarbons from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.0923~~5~~ lb/ton of iron; and~~ and~~
	~~e. The process-weighted mass rate of D/F TEQs from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 3.8e-10 lb/ton of iron.~~
	e. The number of unplanned bleeder valve openings in one year, as reported according to the specifications in § 63.7841(b)(14), did not exceed 5 events.
8. Each casthouse at a new blast furnace	a. The average concentration of particulate matter from a control device applied to emissions from a casthouse, measured according to the performance test procedures in § 63.7822(e), did not exceed 0.003 gr/dscf; and
	b. The opacity of secondary emissions from each casthouse, determined according to the performance test procedures in § 63.7823(c), did not exceed ~~1~~5 percent (6-minute average).
	c. The process-weighted mass rate of hydrogen chloride from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.00059 lb/ton of iron;

For . . .	You have demonstrated initial compliance if . . .
	d. The process-weighted mass rate of total hydrocarbons from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.035 lb/ton of iron; and
	e. The number of unplanned bleeder valve openings in one year, as reported according to the specifications in § 63.7841(b)(14), did not exceed zero events.
9. Each BOPF at a new or existing BOPF shop	a. The average concentration of particulate matter from a primary emission control system applied to emissions from a BOPF with a closed hood system, measured according to the performance test procedures in § 63.7822(f), did not exceed 0.03 gr/dscf for a new or existing BOPF shop;
	b. The average concentration of particulate matter from a primary emission control system applied to emissions from a BOPF with an open hood system, measured according to the performance test procedures in § 63.7822(g), did not exceed 0.02 gr/dscf for an existing BOPF shop or 0.01 gr/dscf for a new BOPF shop; ~~and~~
	c. The average concentration of particulate matter from a control device applied solely to secondary emissions from a BOPF, measured according to the performance test procedures in § 63.7822(g), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop.
	d. The process-weighted mass rate of hydrogen chloride from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.078 lb/ton of steel~~iron~~ for an existing BOPF shop or 0.00019 lb/ton of steel~~iron~~ for a new BOPF shop;
	e. The process-weighted mass rate of total hydrocarbons from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.04 lb/ton of steel for an existing BOPF shop or 0.0017 lb/ton of steel for a new BOPF shop~~iron~~; and
	f. The process-weighted mass rate of D/F TEQs from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 4.7e-08 lb/ton of steel~~iron~~.
10. Each hot metal transfer skimming, and desulfurization at a new or existing BOPF shop	The average concentration of particulate matter from a control device applied to emissions from hot metal transfer, skimming, or desulfurization, measured according to the performance test procedures in § 63.7822(h), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.003 gr/dscf for a new BOPF shop.
11. Each ladle metallurgy operation at a new or existing BOPF shop	The average concentration of particulate matter from a control device applied to emissions from a ladle metallurgy operation, measured according to the performance test procedures in §

For . . .	You have demonstrated initial compliance if . . .
	63.7822(h), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop.
12. Each existing BOPF shop	The opacity of secondary emissions from each BOPF shop, determined according to the performance test procedures in § 63.7823(d), did not exceed 520 percent (336-minute average).
13. Each new BOPF shop	a. The opacity of the highest set of 36-minute averages from each BOPF shop housing a bottom-blown BOPF, determined according to the performance test procedures in § 63.7823(d), did not exceed 520 percent ~~and the second highest set of 6-minute averages did not exceed 10 percent~~; or
	b. The opacity of the highest set of 336-minute averages from each BOPF shop housing a top-blown BOPF, determined according to the performance test procedures in § 63.7823(d), did not exceed 520 percent ~~and the second highest set of 3-minute averages did not exceed 10 percent~~.
14. Each BOPF Group at an existing BOPF shop	If demonstrating compliance through performance testing, the average emissions of mercury from the collection of BOPF Group control devices applied to the emissions from the BOPF Group, measured according to the performance test procedures in § 63.7825, did not exceed 0.00026 lb/ton steel scrap input to the BOPF.
15. Each BOPF Group at a new BOPF shop	If demonstrating compliance through performance testing, the average emissions of mercury from the collection of BOPF Group control devices applied to the emissions from the BOPF Group, measured according to the performance test procedures in § 63.7825, did not exceed 0.000081 lb/ton steel scrap input to the BOPF.
16. Each planned bleeder valve opening at a new or existing blast furnace	The opacity of emissions, determined according to the performance test procedures in § 63.7823(f), did not exceed 58 percent (6-minute average).
17. Each slag processing, handling and storage operation for a new or existing blast furnace or BOPF	The opacity of emissions, determined according to the performance test procedures in § 63.7823(g), did not exceed 5 percent (6-minute average).
18. Each ~~new and~~ existing blast furnace stove	a. The process-weighted mass rate of D/F TEQs from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 3.8e-10 lb/ton of iron.
	b. The process-weighted mass rate of HCl from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 5.2~~6.0~~e-4 lb/ton of iron.

For . . .	You have demonstrated initial compliance if . . .
	c. The process-weighted mass rate of THC from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.1~~0~~27 lb/ton of iron.
19. Each new blast furnace stove	a. The process-weighted mass rate of D/F TEQs from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 3.8e-10 lb/ton of iron.
	b. The process-weighted mass rate of HCl from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 1.4e-4 lb/ton of iron.
	c. The process-weighted mass rate of THC from a windbox exhaust stream, measured according to the performance test procedures in § 63.7825, did not exceed 0.0011 lb/ton of iron.

Table 3 to Subpart FFFFF of Part 63 - Continuous Compliance With Emission and Opacity Limits

As required in § 63.7833(a), you must demonstrate continuous compliance with the emission and opacity limits according to the following table:

For . . .	You must demonstrate continuous compliance by . . .
1. Each windbox exhaust stream at an existing sinter plant	a. Maintaining emissions of particulate matter at or below 0.4 lb/ton of product sinter; ~~and~~
	b. Conducting subsequent performance tests at the frequencies specified in § 63.7821;~~.~~
	c. Maintaining emissions of mercury at or below 0.000035 lb/ton of product sinter;
	d. Maintaining emissions of hydrogen chloride at or below 0.025 lb/ton of product sinter;
	e. Maintaining emissions of hydrogen fluoride at or below 0.0011 lb/ton of product sinter;
	f. Maintaining emissions of carbon disulfide at or below 0.028 lb/ton of product sinter;
	g. Maintaining emissions of carbonyl sulfide at or below 0.064 lb/ton of product sinter;
	h. Maintaining emissions of D/F TEQs at or below 3.5E-08 lb/ton of product sinter; and
	i. Maintaining emissions of polycyclic aromatic hydrocarbons at or below 0.0059 lb/ton of product sinter.
2. Each windbox exhaust stream at a new sinter plant	a. Maintaining emissions of particulate matter at or below 0.3 lb/ton of product sinter; ~~and~~

For . . .	You must demonstrate continuous compliance by . . .
	b. Conducting subsequent performance tests at the frequencies specified in § 63.7821;~~.~~
	c. Maintaining emissions of mercury at or below 0.000012 lb/ton of product sinter;
	d. Maintaining emissions of hydrogen chloride at or below 0.0012 lb/ton of product sinter;
	e. Maintaining emissions of hydrogen fluoride at or below 0.0011 lb/ton of product sinter;
	f. Maintaining emissions of carbon disulfide at or below 0.028 lb/ton of product sinter;
	g. Maintaining emissions of carbonyl sulfide at or below 0.030 lb/ton of product sinter;
	h. Maintaining emissions of D/F TEQs at or below 3.1E-09 lb/ton of product sinter; and
	i. Maintaining emissions of polycyclic aromatic hydrocarbons at or below 0.0015 lb/ton of product sinter.
3. Each discharge end at an existing sinter plant	a. Maintaining emissions of particulate matter from one or more control devices at or below 0.02 gr/dscf; and
	b. Maintaining the opacity of secondary emissions that exit any opening in the building or structure housing the discharge end at or below 20 percent (6-minute average); and
	c. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
4. Each discharge end at a new sinter plant	a. Maintaining emissions of particulate matter from one or more control devices at or below 0.01 gr/dscf; and
	b. Maintaining the opacity of secondary emissions that exit any opening in the building or structure housing the discharge end at or below 10 percent (6-minute average); and
	c. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
5. Each sinter cooler at an existing sinter plant	a. Maintaining the opacity of emissions that exit any sinter cooler at or below 10 percent (6-minute average); and
	b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
6. Each sinter cooler at a new sinter plant	a. Maintaining emissions of particulate matter at or below 0.1 gr/dscf; and
	b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
7. Each casthouse at an existing blast furnace	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf; ~~and~~

For . . .	You must demonstrate continuous compliance by . . .
	b. Maintaining the opacity of secondary emissions that exit all openings in the casthouse or structure housing the casthouse at or below 5~~20~~ percent (6-minute average); ~~and~~
	c. Conducting subsequent performance tests at the frequencies specified in § 63.7821;~~.~~
	d. Maintaining emissions of hydrogen chloride at or below 0.0013 lb/ton of iron;
	e. Maintaining emissions of total hydrocarbons at or below 0.092 lb/ton of iron; and
	f. Maintaining unplanned bleeder valve openings at or below 5 events per year.
	~~d. Maintaining emissions of hydrogen chloride at or below 0.00059 lb/ton of iron;~~
	~~e. Maintaining emissions of total hydrocarbons at or below 0.035 lb/ton of iron; and~~
8. Each casthouse at a new blast furnace	a. Maintaining emissions of particulate matter from a control device at or below 0.003 gr/dscf;~~ and~~
	b. Maintaining the opacity of secondary emissions that exit all openings in the casthouse or structure housing the casthouse at or below ~~1~~5 percent (6-minute average);~~ and~~
	c. Conducting subsequent performance tests at the frequencies specified in § 63.7821;~~.~~
	d. Maintaining emissions of hydrogen chloride at or below 0.00059 lb/ton of iron;
	e. Maintaining emissions of total hydrocarbons at or below 0.035 lb/ton of iron; and
	f. Maintaining unplanned bleeder valve openings at zero events per year.
	~~d. Maintaining emissions of hydrogen chloride at or below 0.00059 lb/ton of iron;~~
	~~e. Maintaining emissions of total hydrocarbons at or below 0.035 lb/ton of iron; and~~
	~~f. Maintaining emissions of D/F TEQs at or below 3.8e-10 lb/ton of iron.~~
9. Each BOPF at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from the primary control system for a BOPF with a closed hood system at or below 0.03 gr/dscf;~~ and~~
	b. Maintaining emissions of particulate matter from the primary control system for a BOPF with an open hood system at or below

For . . .	You must demonstrate continuous compliance by . . .
	0.02 gr/dscf for an existing BOPF shop or 0.01 gr/dscf for a new BOPF shop; ~~and~~
	c. Maintaining emissions of particulate matter from a control device applied solely to secondary emissions from a BOPF at or below 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop; ~~and~~
	d. Conducting subsequent performance tests at the frequencies specified in § 63.7821; ~~.~~
	e. Maintaining emissions of hydrogen chloride from a primary emission control system for a BOPF at or below 0.078 lb/ton of steel for existing sources and 1.9E-04 lb/ton steel for new sources;
	f. Maintaining emissions of THC from a primary emission control system for a BOPF at or below 0.04 lb/ton of steel for existing sources and 0.0017 lb/ton of steel for new sources; and~~.~~
	g. Maintaining emissions of D/F TEQs from a primary emission control system for a BOPF at or below 4.7E-08 lb/ton of steel.~~;~~
10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf at an existing BOPF or 0.003 gr/dscf for a new BOPF; and
	b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
11. Each ladle metallurgy operation at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf at an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop; and
	b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
12. Each existing BOPF shop	a. Maintaining the opacity of secondary emissions that exit any opening in the BOPF shop or other building housing the BOPF shop or shop operation at or below 5~~20~~ percent (3-minute average); and
	b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
13. Each new BOPF shop	a. Maintaining the opacity (for any set of 3~~6~~-minute averages) of secondary emissions that exit any opening in the BOPF shop or other building housing a bottom-blown BOPF or shop operation at or below 5~~10~~ percent, ~~except that one 36-minute period greater than 510 percent but no more than 20 percent may occur once per steel production cycle~~; and
	b. Maintaining the opacity (for any set of 3-minute averages) of secondary emissions that exit any opening in the BOPF shop or other building housing a top-blown BOPF or shop operation at or

For . . .	You must demonstrate continuous compliance by . . .
	below 5~~10~~ percent,~~ except that one 3-minute period greater than 5~~10~~ percent but less than 20 percent may occur once per steel production cycle~~; and
	c. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
14. Each BOPF Group at an existing BOPF shop	a. Maintaining emissions of mercury from the collection of BOPF Group control devices at or below 0.00026 lb/ton steel scrap input to the BOPF; and
	b. If demonstrating compliance through performance testing, conducting subsequent performance tests at the frequencies specified in § 63.7821; and
	c. If demonstrating compliance through § 63.7791(c), (d), or (e), maintaining records pursuant to § 63.7842(e).
15. Each BOPF Group at a new BOPF shop	a. Maintaining emissions of mercury from the collection of BOPF Group control devices at or below 0.000081 lb/ton steel scrap input to the BOPF; and
	b. If demonstrating compliance through performance testing, conducting subsequent performance tests at the frequencies specified in § 63.7821; and
	c. If demonstrating compliance through § 63.7791(c), (d), or (e), maintaining records pursuant to § 63.7842(e).
16. Each planned bleeder valve opening at a new or existing blast furnace	a. Maintaining the opacity of emissions that exit any bleeder valve as a result of a planned opening at or below 5~~10~~ percent (6-minute average); and
	b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
17. Each slag processing, handling and storage operation for a new or existing blast furnace or BOPF	a. Maintaining the opacity of emissions that exit any slag processing, handling or storage operation at or below 5~~10~~ percent (6-minute average); and
	b. Conducting subsequent performance tests at the frequencies specified in § 63.7821.
18. Each ~~new and~~ existing blast furnace stove	a. Maintaining emissions of D/F TEQs at or below 3.8e-10 lb/ton of iron;~~.~~
	b. Maintaining emissions of HCl at or below 5.2~~6.0~~e-4 lb/ton of iron;~~.~~
	c. Maintaining emissions of THC at or below 0.1~~027~~ lb/ton of iron; and~~.~~
	d. Conducting subsequent performance tests at the frequencies specified in § 63.7821.

For . . .	You must demonstrate continuous compliance by . . .
19. Each new blast furnace stove	a. Maintaining emissions of D/F TEQs at or below 3.8e-10 lb/ton of iron; b. Maintaining emissions of HCl at or below 1.4e-4 lb/ton of iron; c. Maintaining emissions of THC at or below 0.0011 lb/ton of iron; and d. Conducting subsequent performance tests at the frequencies specified in § 63.7821.

Table 4 to Subpart FFFFF of Part 63 - Applicability of General Provisions to Subpart FFFFF

As required in § 63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to Subpart FFFFF	Explanation
§ 63.1	Applicability	Yes	
§ 63.2	Definitions	Yes	
§ 63.3	Units and Abbreviations	Yes	
§ 63.4	Prohibited Activities	Yes	
§ 63.5	Construction/Reconstruction	Yes	
§ 63.6(a), (b), (c), (d), (e)(1)(iii), (f)(2)-(3), (g), (h)(2)(ii)-(h)(9)	Compliance with Standards and Maintenance Requirements	Yes	
§ 63.6(e)(1)(i)	General Duty to Minimize Emissions	No, for new or reconstructed sources which commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	See § 63.7810(d) for general duty requirement.
§ 63.6(e)(1)(ii)	Requirement to Correct Malfunctions ASAP	No, for new or reconstructed sources which	

Citation	Subject	Applies to Subpart FFFFF	Explanation
		commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes, on or before January 11, 2021 and No thereafter	
§ 63.6(e)(3)	SSM Plan Requirements	No, for new or reconstructed sources which commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	See § 63.7810(c)
§ 63.6(f)(1)	Compliance except during SSM	No	See § 63.7810(a).
§ 63.6(h)(1)	Compliance except during SSM	No	See § 63.7810(a).
§ 63.6(h)(2)(i)	Determining Compliance with Opacity and VE Standards	No	Subpart FFFFF specifies methods and procedures for determining compliance with opacity emission and operating limits.
§ 63.6(i)	Extension of Compliance with Emission Standards	Yes	
§ 63.6(j)	Exemption from Compliance with Emission Standards	Yes	
§ 63.7(a)(1)-(2)	Applicability and Performance Test Dates	No	Subpart FFFFF and specifies performance test applicability and dates.

Citation	Subject	Applies to Subpart FFFFF	Explanation
§ 63.7(a)(3), (b)-(d), (e)(2)-(4), (f)-(h)	Performance Testing Requirements	Yes	
§ 63.7(e)(1)	Performance Testing	No, for new or reconstructed sources which commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	See §§ 63.7822(a), 63.7823(a), and 63.7825(a).
§ 63.8(a)(1)-(3), (b), (c)(1)(ii), (c)(2)-(3), (c)(4)(i)-(ii), (c)(5)-(6), (c)(7)-(8), (d)(1)-(2), (e), (f)(1)-(5), (g)(1)-(4)	Monitoring Requirements	Yes	CMS requirements in § 63.8(c)(4)(i)-(ii), (c)(5)-(6), (d)(1)-(2), and (e) apply only to COMS.
§ 63.8(a)(4)	Additional Monitoring Requirements for Control Devices in § 63.11	No	Subpart FFFFF does not require flares.
§ 63.8(c)(1)(i)	General Duty to Minimize Emissions and CMS Operation	No, for new or reconstructed sources which commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	
§ 63.8(c)(1)(iii)	Requirement to Develop SSM Plan for CMS	No, for new or reconstructed sources which commenced	

Citation	Subject	Applies to Subpart FFFFF	Explanation
		construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	
§ 63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart FFFFF specifies requirements for operation of CMS.
§ 63.8(d)(3)	Written procedures for CMS	No, for new or reconstructed sources which commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	See § 63.7842(b)(3).
§ 63.8(f)(6)	RATA Alternative	No	
§ 63.8(g)(5)	Data Reduction	No	Subpart FFFFF specifies data reduction requirements.
§ 63.9	Notification Requirements	Yes	Additional notifications for CMS in § 63.9(g) apply only to COMS.
§ 63.10(a), (b)(1), (b)(2)(x), (b)(2)(xiv), (b)(3), (c)(1)-(6), (c)(9)-(14), (d)(1)-(4), (e)(1)-(2), (e)(4), (f)	Recordkeeping and Reporting Requirements	Yes	Additional records for CMS in § 63.10(c)(1)-(6), (9)-(14), and reports in § 63.10(d)(1)-(2) apply only to COMS.
§ 63.10(b)(2)(i)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns	No, for new or reconstructed sources which	

Citation	Subject	Applies to Subpart FFFFF	Explanation
		commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	
§ 63.10(b)(2)(ii)	Recordkeeping of Failures to Meet a Standard	No, for new or reconstructed sources which commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	See § 63.7842(a)(2)-(4) for recordkeeping of (1) date, time, and duration of failure to meet the standard; (2) listing of affected source or equipment, and an estimate of the quantity of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and correct the failure.
§ 63.10(b)(2)(iii)	Maintenance Records	Yes	
§ 63.10(b)(2)(iv)	Actions Taken to Minimize Emissions During SSM	No, for new or reconstructed sources which commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	See § 63.7842(a)(4) for records of actions taken to minimize emissions.
§ 63.10(b)(2)(v)	Actions Taken to Minimize Emissions During SSM	No, for new or reconstructed sources which commenced construction or reconstruction after	See § 63.7842(a)(4) for records of actions taken to minimize emissions.

Citation	Subject	Applies to Subpart FFFFF	Explanation
		August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	
§ 63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions	Yes	
§ 63.10(b)(2)(vii)-(ix)	Other CMS Requirements	Yes	
§ 63.10(b)(2)(xiii)	CMS Records for RATA Alternative	No	
§ 63.10(c)(7)-(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS	No	Subpart FFFFF specifies record requirements; see § 63.7842.
§ 63.10(c)(15)	Use of SSM Plan	No, for new or reconstructed sources which commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	
§ 63.10(d)(5)(i)	Periodic SSM Reports	No, for new or reconstructed sources which commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	See § 63.7841(b)(4) for malfunction reporting requirements.
§ 63.10(d)(5)(ii)	Immediate SSM Reports	No, for new or reconstructed	

Citation	Subject	Applies to Subpart FFFFF	Explanation
		sources which commenced construction or reconstruction after August 16, 2019. For all other affected sources, Yes on or before January 11, 2021 and No thereafter	
§ 63.10(e)(3)	Excess Emission Reports	No	Subpart FFFFF specifies reporting requirements; see § 63.7841.
§ 63.11	Control Device Requirements	No	Subpart FFFFF does not require flares.
§ 63.12	State Authority and Delegations	Yes	
§ 63.13-§ 63.16	Addresses, Incorporations by Reference, Availability of Information and Confidentiality, Performance Track Provisions	Yes	

Table 5 to Subpart FFFFF of Part 63 - Toxic Equivalency Factors

As stated in § 63.7825(u), you must demonstrate compliance with each dioxin/furan emission limit that applies to you by calculating the sum of the 2,3,7,8-TCDD TEQs using the 2005 World Health Organization (WHO) toxicity equivalence factors (TEF). ~~TEFs~~ presented in the following table:

For each dioxin/furan congener . . .	You must calculate its 2,3,7,8-TCDD TEQ using the following TEF . . .
2,3,7,8-tetrachlorodibenzo-p-dioxin	1
1,2,3,7,8-pentachlorodibenzo-p-dioxin	1
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	0.01

For each dioxin/furan congener . . .	You must calculate its 2,3,7,8-TCDD TEQ using the following TEF . . .
Octachlorodibenzo-p-dioxin	0.0003
2,3,7,8-tetrachlorodibenzofuran	0.1
1,2,3,7,8-pentachlorodibenzofuran	0.03
2,3,4,7,8-pentachlorodibenzofuran	0.3
1,2,3,4,7,8-hexachlorodibenzofuran	0.1
1,2,3,6,7,8-hexachlorodibenzofuran	0.1
1,2,3,7,8,9-hexachlorodibenzofuran	0.1
2,3,4,6,7,8-hexachlorodibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorodibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorodibenzofuran	0.01
Octachlorodibenzofuran	0.0003

Table 6 to Subpart FFFFF of Part 63 - List of Polycyclic Aromatic Hydrocarbons

As stated in § 63.7825(x), you must demonstrate compliance with each polycyclic aromatic hydrocarbon emission limit that applies to you by calculating the sum of the emissions of each polycyclic aromatic hydrocarbon in the following table:

Pollutant Name	CAS No.
Acenaphthene	83-32-9
Acenaphthylene	208-96-8
Anthracene	120-12-7
Benz[a]anthracene	56-55-3
Benzo[a]pyrene	50-32-8
Benzo[b]fluoranthene	205-99-2
Benzo[g,h,i]perylene	191-24-2
Benzo[k]fluoranthene	207-08-9
Chrysene	218-01-9
Dibenz[a,h]anthracene	53-70-3
Fluoranthene	206-44-0
Fluorene	86-73-7
Indeno (1,2,3-cd) pyrene	193-39-5
Naphthalene	91-20-3
Phenanthrene	85-01-8
Perylene	198-55-0

Pollutant Name	CAS No.
Pyrene	129-00-0