

**§ 63.8530**

[80 FR 65520, Oct. 26, 2015, as amended at 85 FR 73915, Nov. 19, 2020]

**Subpart KKKKK—National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing**

SOURCE: 80 FR 65543, Oct. 26, 2015, unless otherwise noted.

**WHAT THIS SUBPART COVERS**

**§ 63.8530 What is the purpose of this subpart?**

This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from clay ceramics manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.

**§ 63.8535 Am I subject to this subpart?**

You are subject to this subpart if you own or operate a clay ceramics manufacturing facility that is, is located at, or is part of a major source of HAP emissions according to the criteria in paragraphs (a) and (b) of this section.

(a) A clay ceramics manufacturing facility is a plant site that manufactures pressed floor tile, pressed wall tile, other pressed tile, or sanitaryware (*e.g.*, sinks and toilets). Clay ceramics manufacturing facilities typically process clay, shale, and various additives; form the processed materials into tile or sanitaryware shapes; and dry and fire the ceramic products. Glazes are applied to many tile and sanitaryware products. A plant site that manufactures refractory products, as defined in § 63.9824, or brick and structural clay products (BSCP), as defined in § 63.8515, is not a clay ceramics manufacturing facility.

(b) A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

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**§ 63.8540 What parts of my plant does this subpart cover?**

(a) This subpart applies to each existing, new, or reconstructed affected source at a clay ceramics manufacturing facility.

(b) Each existing, new, or reconstructed ceramic tile roller kiln, sanitaryware tunnel kiln, sanitaryware shuttle kiln, ceramic tile glaze line using glaze spraying, sanitaryware glaze spray booth, ceramic tile spray dryer, and floor tile press dryer is an affected source.

(c) Process units not subject to the requirements of this subpart are listed in paragraphs (c)(1) through (9) of this section.

(1) Tunnel, roller or shuttle kilns that are used exclusively for refiring.

(2) Tunnel, roller or shuttle kilns that are used exclusively for setting glazes on previously fired products.

(3) Glaze spray operations that are used exclusively with those kilns listed in paragraphs (c)(1) and (2) of this section.

(4) Process units listed in paragraphs (c)(1) through (3) of this section that are permitted to, but do not, process first-fire ware, until such time as they begin to process first-fire ware.

(5) Glaze spray operations that on average use wet glazes containing less than 0.1 (weight) percent metal HAP (dry weight basis) per spray booth over an entire calendar year.

(6) Raw material processing and handling.

(7) Wall tile press dryers.

(8) Sanitaryware ware dryers.

(9) Sources covered by subparts JJJJJ and SSSSS of this part.

(d) A source is a new affected source if construction of the affected source began after December 18, 2014, and you met the applicability criteria at the time you began construction.

(e) An affected source is reconstructed if you meet the criteria as defined in § 63.2.

(f) An affected source is existing if it is not new or reconstructed.

**§ 63.8545 When do I have to comply with this subpart?**

(a) You must comply with this subpart no later than the compliance dates in Table 8 to this subpart.

(b) You must meet the notification requirements in § 63.8630 according to the schedule in § 63.8630 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limitations in this subpart.

EMISSION LIMITATIONS AND WORK  
PRACTICE STANDARDS

**§ 63.8555 What emission limitations and work practice standards must I meet?**

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

(b) You must meet each operating limit in Table 2 to this subpart that applies to you.

(c) You must meet each work practice standard in Table 3 to this subpart that applies to you.

**§ 63.8560 What are my options for meeting the emission limitations and work practice standards?**

(a) To meet the emission limitations in Tables 1 and 2 to this subpart, you must use one or more of the options listed in paragraphs (a)(1) and (2) of this section.

(1) *Emissions control system.* Use an emissions capture and collection system and an air pollution control device (APCD) and demonstrate that the resulting emissions meet the emission limits in Table 1 to this subpart, and that the capture and collection system and APCD meet the applicable operating limits in Table 2 to this subpart.

(2) *Process changes.* Use low-HAP raw materials or implement manufacturing process changes and demonstrate that the resulting emissions or emissions reductions meet the emission limits in Table 1 to this subpart.

(b) To meet the work practice standards for affected sanitaryware shuttle kilns, you must comply with the requirements listed in Table 3 to this subpart.

(c) To meet the work practice standards for affected sources during periods of startup and shutdown, you must comply with the requirements listed in Table 3 to this subpart.

GENERAL COMPLIANCE REQUIREMENTS

**§ 63.8570 What are my general requirements for complying with this subpart?**

(a) You must be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods that you are approved for and in compliance with the alternative standard for routine control device maintenance as specified in paragraph (d) of this section, and except during periods of start-up and shutdown, at which time you must comply with the applicable work practice standard specified in Table 3 to this subpart.

(b) 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. During the period between the compliance date specified for your affected source in § 63.8545 and the date upon which continuous monitoring systems (CMS) (*e.g.*, continuous parameter monitoring systems) have been installed and verified 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) For each affected source that is subject to the emission limits specified in Table 1 to this subpart, you must prepare and implement a written operation, maintenance, and monitoring (OM&M) plan according to the requirements in § 63.8575.

(d) If you own or operate an affected source that is subject to the emission

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limits specified in Table 1 to this subpart and must perform routine maintenance on the control device for that affected source, you may bypass the source control device and continue operating the affected source subject to the alternative standard established in this paragraph upon approval by the Administrator and provided you satisfy the conditions listed in paragraphs (d)(1) through (5) of this section.

(1) You must request to use the routine control device maintenance alternative standard from the Administrator no later than 120 calendar days before the compliance date specified in § 63.8545. Your request must justify the need for the routine maintenance on the control device and the time required to accomplish the maintenance activities, describe the maintenance activities and the frequency of the maintenance activities, explain why the maintenance cannot be accomplished during source shutdowns, provide information stating whether the continued operation of the affected source will result in fewer emissions than shutting the source down while the maintenance is performed, describe how you plan to comply with paragraph (b) of this section during the maintenance, and provide any other documentation required by the Administrator.

(2) The routine control device maintenance must not exceed 4 percent of the annual operating uptime for each affected source.

(3) The request for the routine control device maintenance alternative standard, if approved by the Administrator, must be incorporated by reference in and attached to the affected source's title V permit.

(4) You must minimize HAP emissions during the period when the affected source is operating and the control device is offline by complying with the applicable standard in Table 3 to this subpart.

(5) You must minimize the time period during which the affected source is operating and the control device is offline.

(e) If you own or operate an affected kiln that is subject to the work practice standard specified in Table 3 to this subpart, you must be in compli-

ance with that work practice standard at all times, except during periods of natural gas curtailment or other periods when natural gas is not available.

(f) You must be in compliance with the provisions of subpart A of this part, except as noted in Table 9 to this subpart.

**§ 63.8575 What do I need to know about operation, maintenance, and monitoring plans?**

(a) For each affected source that is subject to the emission limits specified in Table 1 to this subpart, you must prepare, implement, and revise as necessary an OM&M plan that includes the information in paragraph (b) of this section. Your OM&M plan must be available for inspection by the delegated authority upon request.

(b) Your OM&M plan must include, as a minimum, the information in paragraphs (b)(1) through (13) of this section.

(1) Each process and APCD to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.

(2) A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.

(3) The limits for each parameter that represent continuous compliance with the emission limitations in § 63.8555. The limits must be based on values of the monitored parameters recorded during performance tests.

(4) Procedures for the proper operation and routine and long-term maintenance of each APCD, including a maintenance and inspection schedule that is consistent with the manufacturer's recommendations.

(5) Procedures for installing the CMS 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 APCD).

(6) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.

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(7) Continuous monitoring system performance evaluation procedures and acceptance criteria (*e.g.*, calibrations).

(8) Procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in §§ 63.8600 and 63.8(c)(1), (3), (7), and (8).

(9) Continuous monitoring system data quality assurance procedures consistent with the requirements in § 63.8(d)(1) and (2). 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 in § 63.8(d)(2) 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).

(10) Continuous monitoring system recordkeeping and reporting procedures consistent with the requirements in §§ 63.8635 and 63.8640.

(11) Procedures for responding to operating parameter deviations, including the procedures in paragraphs (b)(11)(i) through (iii) of this section.

(i) Procedures for determining the cause of the operating parameter deviation.

(ii) Actions necessary for correcting the deviation and returning the operating parameters to the allowable limits.

(iii) Procedures for recording the times that the deviation began and ended, and corrective actions were initiated and completed.

(12) Procedures for keeping records to document compliance.

(13) If you operate an affected source and you plan to take the source control device out of service for routine maintenance, as specified in § 63.8570(d), the procedures specified in paragraphs (b)(13)(i) and (ii) of this section.

(i) Procedures for minimizing HAP emissions from the affected source during periods of routine maintenance of

the source control device when the affected source is operating and the control device is offline.

(ii) Procedures for minimizing the duration of any period of routine maintenance on the source control device when the affected source is operating and the control device is offline.

(c) Changes to the operating limits in your OM&M plan require a new performance test. If you are revising an operating limit parameter value, you must meet the requirements in paragraphs (c)(1) and (2) of this section.

(1) Submit a notification of performance test to the Administrator as specified in § 63.7(b).

(2) After completing the performance test to demonstrate that compliance with the emission limits can be achieved at the revised operating limit parameter value, you must submit the performance test results and the revised operating limits as part of the Notification of Compliance Status required under § 63.9(h).

(d) If you are revising the inspection and maintenance procedures in your OM&M plan, you do not need to conduct a new performance test.

### TESTING AND INITIAL COMPLIANCE REQUIREMENTS

#### § 63.8585 By what date must I conduct performance tests?

For each affected source that is subject to the emission limits specified in Table 1 to this subpart, you must conduct performance tests within 180 calendar days after the compliance date that is specified for your source in § 63.8545 and according to the provisions in § 63.7(a)(2).

#### § 63.8590 When must I conduct subsequent performance tests?

(a) For each affected source that is subject to the emission limits specified in Table 1 to this subpart, you must conduct a performance test before renewing your 40 CFR part 70 operating permit or at least every 5 years following the initial performance test.

(b) You must conduct a performance test when you want to change the parameter value for any operating limit specified in your OM&M plan.

**§ 63.8595 How do I conduct performance tests and establish operating limits?**

(a) You must conduct each performance test in Table 4 to this subpart that applies to you.

(b) Before conducting the performance test, you must install and calibrate all monitoring equipment.

(c) Each performance test must be conducted according to the requirements in §63.7 and under the specific conditions in Table 4 to this subpart. Stacks to be tested at sanitaryware manufacturing facilities shall be limited to products of combustion (POC) stacks and not include cooling stacks.

(d) Performance tests shall be conducted under such conditions as the Administrator specifies to you based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process informa-

tion 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.

(e) You must conduct at least three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(f) You must use the data gathered during the performance test and the equations in paragraphs (f)(1) through (4) of this section to determine compliance with the emission limitations.

(1) To determine compliance with the production-based particulate matter (PM) and mercury (Hg) emission limits for ceramic tile roller kilns and sanitaryware tunnel kilns in Table 1 to this subpart, you must calculate your mass emissions per unit of production for each test run using Equation 1:

$$MP = \frac{ER}{P} \quad (\text{Eq. 1})$$

Where:

MP = mass per unit of production, kilograms (pounds) of pollutant per megagram (ton) of throughput

ER = mass emission rate of pollutant (PM or Hg) during each performance test run, kilograms (pounds) per hour

P = production rate during each performance test run, megagrams (tons) of throughput per hour.

(2) To determine compliance with the PM emission limits for ceramic tile glaze lines with glaze spraying and sanitaryware glaze spray booths in Table 1 to this subpart, you must calculate your mass emissions per unit of first-fire glaze sprayed (dry weight basis) for each test run using Equation 2:

$$MG = \frac{ER}{G} \quad (\text{Eq. 2})$$

Where:

MG = mass per unit of glaze application, kilograms (pounds) of PM per megagram (ton) of first-fire glaze sprayed (dry weight basis)

ER = mass emission rate of PM during each performance test run, kilograms (pounds) per hour

G = glaze application rate during each performance test run, megagrams (tons) of first-fire glaze sprayed per hour (dry weight basis).

(3) To determine compliance with the dioxin/furan emission limits for tunnel and roller kilns, ceramic tile spray dryers, and floor tile press dryers in

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Table 1 to this subpart, you must calculate the sum of the 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-

TCDD) toxic equivalents (TEQs) for each test run using Equation 3:

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

Where:

TEQ = sum of the 2,3,7,8-TCDD TEQs, nanograms per kilogram of throughput processed.

M<sub>i</sub> = mass of dioxin or furan congener i during performance test run, nanograms

TEF<sub>i</sub> = 2,3,7,8-TCDD toxic equivalency factor (TEF) for congener i, as provided in Table 5 to this subpart

n = number of congeners included in TEQ

T<sub>r</sub> = time of performance test run, hours

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

(4) To determine compliance with the health-based standard for acid gas HAP for clay ceramics manufacturing facilities in Table 1 to this subpart, you must:

(i) Calculate the HCl-equivalent emissions for HF and HCl for each tunnel or roller kiln at your facility using Equation 4:

$$E_i = E_{HCl} + \left[ E_{HF} \left( \frac{RfC_{HCl}}{RfC_{HF}} \right) \right] \quad (\text{Eq. 4})$$

Where:

E<sub>i</sub> = HCl-equivalent emissions for kiln i, kilograms (pounds) per hour

E<sub>HCl</sub> = emissions of HCl, kilograms (pounds) per hour

E<sub>HF</sub> = emissions of HF, kilograms (pounds) per hour

RfC<sub>HCl</sub> = reference concentration for HCl, 20 micrograms per cubic meter

RfC<sub>HF</sub> = reference concentration for HF, 14 micrograms per cubic meter

(ii) If you have multiple tunnel or roller kilns at your facility, sum the HCl-equivalent values for all tunnel or roller kilns at the facility using Equation 5:

$$E_{total} = \sum_{i=1}^n E_i \quad (\text{Eq. 5})$$

Where:

E<sub>total</sub> = HCl-equivalent emissions for total of all kilns at facility, kilograms (pounds) per hour

E<sub>i</sub> = HCl-equivalent emissions for kiln i, kilograms (pounds) per hour

n = number of tunnel kilns at facility

(iii) Compare this value to the health-based standard in Table 1 to this subpart.

(g) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you as specified in paragraph (g)(1) of this section and in Table 4 to this subpart.

(1)(i) If you do not have an APCD installed on your tunnel or roller kiln, you must calculate the maximum po-

tential HCl-equivalent emissions for HF and HCl for each tunnel or roller kiln at your facility using Equation 6:

$$E_{\max i} = (Cap_i) \left[ (MP_{iHCl}) + (MP_{iHF}) \left( \frac{RfC_{HCl}}{RfC_{HF}} \right) \right] \quad (\text{Eq. 6})$$

Where:

$E_{\max i}$  = maximum potential HCl-equivalent emissions for kiln i, kilograms (pounds) per hour

$Cap_i$  = design capacity for kiln i, megagrams (tons) of throughput per hour

$MP_{iHCl}$  = mass of HCl per unit of production for kiln i, kilograms (pounds) of HCl per megagram (ton) of throughput

$MP_{iHF}$  = mass of HF per unit of production for kiln i, kilograms (pounds) of HF per megagram (ton) of throughput

$RfC_{HCl}$  = reference concentration for HCl, 20 micrograms per cubic meter

$RfC_{HF}$  = reference concentration for HF, 14 micrograms per cubic meter

(ii) If you have multiple tunnel or roller kilns at your facility, sum the maximum potential HCl-equivalent values for all tunnel or roller kilns at the facility using Equation 7:

$$E_{\max total} = \sum_{i=1}^n E_{\max i} \quad (\text{Eq. 7})$$

Where:

$E_{\max total}$  = maximum potential HCl-equivalent emissions for total of all kilns at facility, kilograms (pounds) per hour

$E_{\max i}$  = maximum potential HCl-equivalent emissions for kiln i, kilograms (pounds) per hour

n = number of kilns at facility

(iii) If you have a single tunnel or roller kiln at your facility and the total facility maximum potential HCl-equivalent emissions ( $E_{\max total}$ ) are

greater than the HCl-equivalent limit in Table 1 to this subpart, you must determine the maximum process rate for the kiln using Equation 8 that would ensure the total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit. The maximum process rate would become your operating limit for process rate and must be included in your OM&M plan.

$$P_{\max i} = \frac{HCl - eq}{\left[ (MP_{iHCl}) + (MP_{iHF}) \left( \frac{RfC_{HCl}}{RfC_{HF}} \right) \right]} \quad (\text{Eq. 8})$$

Where:

$P_{\max i}$  = maximum process rate for kiln i, megagrams (tons) per hour

HCl-eq = HCl-equivalent limit in Table 1 to this subpart, 62 kilograms (140 pounds) per hour

$MP_{iHCl}$  = mass of HCl per unit of production for kiln i, kilograms (pounds) of HCl per megagram (ton) of throughput

$MP_{iHF}$  = mass of HF per unit of production for kiln i, kilograms (pounds) of HF per megagram (ton) of throughput

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RfC<sub>HCl</sub> = reference concentration for HCl, 20 micrograms per cubic meter  
 RfC<sub>HF</sub> = reference concentration for HF, 14 micrograms per cubic meter

(iv) If you have multiple tunnel or roller kilns at your facility and the total facility maximum potential HCl-equivalent emissions ( $E_{\text{max total}}$ ) are greater than the HCl-equivalent limit in Table 1 to this subpart, you must determine the combination of maximum process rates that would ensure that total facility maximum potential HCl-equivalent remains at or below the HCl-equivalent limit. The maximum process rates would become your operating limits for process rate and must be included in your OM&M plan.

(2) [Reserved]

(h)(1) As an alternative to meeting the requirements of § 63.8555 for PM or mercury, if you have more than one existing source in any subcategories located at your facility, you may demonstrate compliance by emissions averaging, if your averaged emissions are no higher than the applicable emission limit, according to the procedures in this section. You may not include new or reconstructed sources in an emissions average.

(2) For a group of two or more existing sources in the same subcategory that each vent to a separate stack, you may average PM or mercury emissions among existing units to demonstrate compliance with the limits in Table 1 to this subpart as specified in para-

graph (h)(2)(i) through (iv) of this section, if you satisfy the requirements in paragraphs (h)(3) and (4) of this section.

(i) You may average across existing sources in the same kiln type and size category (*e.g.*, roller or tunnel kilns, large or small kilns) and the same subcategory (*e.g.*, sanitaryware manual or spray machine or robot glaze application) where applicable;

(ii) You may not include a unit in the emissions average if the unit shares a common stack with units in other subcategories;

(iii) You may not include spray dryers or press dryers in the emissions average; and

(iv) You may not average between different types of pollutants.

(3) The averaged emissions rate from the existing sources participating in the emissions averaging option must not exceed the limits in Table 1 to this subpart at all times the affected units are subject to numeric emission limits following the compliance date specified in § 63.8545.

(4)(i) You must demonstrate initial compliance using the maximum process rate and the results of the initial performance tests.

(ii) You must use Equation 9 of this section to demonstrate that the PM or mercury emissions from all existing units participating in the emissions averaging option for that pollutant do not exceed the emission limits in Table 1 to this subpart.

$$ER_i = \sum_{i=1}^n (E_i \times P_{\text{max } i}) \div \sum_{i=1}^n P_{\text{max } i} \text{ (Eq. 9)}$$

Where:

ER<sub>i</sub> = Average weighted emissions for PM or mercury, in units of kilograms (pounds) per megagram (ton) of fired product for existing floor tile roller kilns and wall tile roller kilns, greenware fired for existing first-fired sanitaryware tunnel kilns, and first-fire glaze sprayed (dry weight basis) for existing tile glaze lines with glaze spraying and average weighted emissions for PM, in units of kilograms (pounds) per megagram (ton) of first-fire glaze sprayed (dry weight basis)

for existing sanitaryware manual, spray machine, or robot glaze applications.

E<sub>i</sub> = Emission rate (as determined during the initial compliance demonstration) of PM or mercury from unit i, in units of kilograms (pounds) per megagram (ton). Determine the emission rate for PM or mercury by performance testing according to Table 4 to this subpart using the applicable equation in paragraph (f) of this section.

P<sub>max i</sub> = Maximum process rate for unit i, in units of megagrams per hour (tons per hour).



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n = Number of units participating in the emissions averaging option.

(5) You must develop and submit upon request to the applicable Administrator for review and approval, an implementation plan for emissions averaging according to the following procedures and requirements in paragraphs (h)(5)(i) through (iv) of this section.

(i) If requested, you must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emissions averaging option.

(ii) You must include the information contained in paragraphs (h)(5)(ii)(A) through (D) of this section in your implementation plan for all emission sources included in an emissions average:

(A) The identification of all existing sources in the averaging group, including for each either the applicable HAP emissions level or the control technology installed and the date on which you are requesting emissions averaging to commence;

(B) The specific control technology or pollution prevention measure to be used for each source in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple sources, the owner or operator must identify each source;

(C) The test plan for the measurement of emissions in accordance with the requirements in this section; and

(D) The operating parameters to be monitored for each control system or device consistent with § 63.8555 and Table 2 to this subpart, and a description of how the operating limits will be determined.

(iii) If submitted upon request, the Administrator shall review and approve or disapprove the plan according to the following criteria:

(A) Whether the content of the plan includes all of the information specified in paragraph (h)(5)(ii) of this section; and

(B) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(iv) The applicable Administrator shall not approve an emissions aver-

aging implementation plan containing any of the following provisions:

(A) Any averaging between emissions of differing pollutants or between differing sources; or

(B) The inclusion of any emission source other than an existing unit in the same subcategories.

(i) For each affected source that is subject to the emission limits specified in Table 1 to this subpart and is equipped with an APCD that is not addressed in Table 2 to this subpart or that is using process changes as a means of meeting the emission limits in Table 1 to this subpart, you must meet the requirements in § 63.8(f) and paragraphs (i)(1) and (2) of this section.

(1) Submit a request for approval of alternative monitoring procedures to the Administrator no later than the notification of intent to conduct a performance test. The request must contain the information specified in paragraphs (i)(1)(i) through (iv) of this section.

(i) A description of the alternative APCD or process changes.

(ii) The type of monitoring device or procedure that will be used.

(iii) The operating parameters that will be monitored.

(iv) The frequency that the operating parameter values will be determined and recorded to establish continuous compliance with the operating limits.

(2) Establish site-specific operating limits during the performance test based on the information included in the approved alternative monitoring procedures request and, as applicable, as specified in Table 4 to this subpart.

[80 FR 65543, Oct. 26, 2015, as amended at 84 FR 58606, Nov. 1, 2019]

**§ 63.8600 What are my monitoring installation, operation, and maintenance requirements?**

(a) You must install, operate, and maintain each CMS according to your OM&M plan and the requirements in paragraphs (a)(1) through (5) of this section.

(1) Conduct a performance evaluation of each CMS according to your OM&M plan.

(2) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. To

have a valid hour of data, you must have at least three of four equally spaced data values (or at least 75 percent if you collect more than four data values per hour) for that hour (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by the routine control device maintenance alternative standard as specified in § 63.8570(d)).

(3) Determine and record the 3-hour block averages of all recorded readings, calculated after every 3 hours of operation as the average of the previous 3 operating hours. To calculate the average for each 3-hour average period, you must have at least 75 percent of the recorded readings for that period (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by the routine control device maintenance alternative standard as specified in § 63.8570(d)).

(4) Record the results of each inspection, calibration, and validation check.

(5) At all times, maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(b) For each liquid flow measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (b)(1) through (3) of this section.

(1) Locate the flow sensor in a position that provides a representative flowrate.

(2) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the liquid flowrate.

(3) At least semiannually, conduct a flow sensor calibration check.

(c) For each pressure measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (c)(1) through (7) of this section.

(1) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum measurement sensitivity of 0.5 inch of

water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(4) Check the pressure tap daily to ensure that it is not plugged.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Any time the sensor exceeds the manufacturer's specified maximum operating pressure range, conduct calibration checks or install a new pressure sensor.

(7) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(d) For each pH measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (d)(1) through (4) of this section.

(1) Locate the pH sensor in a position that provides a representative measurement of pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter's calibration at one point daily.

(4) At least monthly, inspect all components for integrity and all electrical connections for continuity.

(e) For each bag leak detection system, you must meet the requirements in paragraphs (e)(1) through (11) of this section.

(1) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the EPA-454/R-98-015, "Fabric Filter Bag Leak Detection Guidance," (incorporated by reference, see § 63.14). Other types of bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

(2) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(3) The bag leak detection system sensor must provide an output of relative PM loadings.

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(4) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(5) The bag leak detection system must be equipped with an audible alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(6) For positive pressure fabric filter systems, a bag leak detector must be installed in each baghouse compartment or cell.

(7) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

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

(9) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the "Fabric Filter Bag Leak Detection Guidance," (incorporated by reference, see §63.14).

(10) Following initial adjustment of the system, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted except as detailed in your OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition, as defined in section 5.2 of the "Fabric Filter Bag Leak Detection Guidance," (incorporated by reference, see §63.14). Record each adjustment.

(11) Record the results of each inspection, calibration, and validation check.

(f) For each lime, chemical, or carbon feed rate measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (f)(1) and (2) of this section.

(1) Locate the measurement device in a position that provides a representative feed rate measurement.

(2) At least semiannually, conduct a calibration check.

(g) For each temperature measurement device, you must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (g)(1) through (3) of this section.

(1) Locate the measurement device in a position that provides a representative temperature.

(2) Use a measurement device with a minimum sensitivity of 1 percent of the temperature being measured.

(3) At least semiannually, conduct a calibration check.

(h) Requests for approval of alternate monitoring procedures must meet the requirements in §§63.8595(h) and 63.8(f).

**§ 63.8605 How do I demonstrate initial compliance with the emission limitations and work practice standards?**

(a) You must demonstrate initial compliance with each emission limitation and work practice standard that applies to you according to Table 6 to this subpart.

(b) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in §63.8595 and Table 4 to this subpart.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.8630(c).

[80 FR 65543, Oct. 26, 2015, as amended at 80 FR 75817, Dec. 4, 2015]

**CONTINUOUS COMPLIANCE REQUIREMENTS**

**§ 63.8615 How do I monitor and collect data to demonstrate continuous compliance?**

(a) You must monitor and collect data according to this section.

(b) Except for periods of monitor malfunctions, 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 that the affected source is operating. This includes periods of startup, shutdown, malfunction, and routine control device maintenance as specified in

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§ 63.8570(d) when the affected source is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities for purposes of calculating data averages. You must use all the valid data collected during all other periods in assessing compliance. Any averaging period for which you do not have valid monitoring data and such data are required constitutes a deviation from the monitoring requirements.

### § 63.8620 How do I demonstrate continuous compliance with the emission limitations and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1, 2, and 3 to this subpart that applies to you according to the methods specified in Table 7 to this subpart.

(b) For each affected source that is subject to the emission limits specified in Table 1 to this subpart and is equipped with an APCD that is not addressed in Table 2 to this subpart, or that is using process changes as a means of meeting the emission limits in Table 1 to this subpart, you must demonstrate continuous compliance with each emission limit in Table 1 to this subpart, and each operating limit established as required in § 63.8595(h)(2) according to the methods specified in your approved alternative monitoring procedures request, as described in §§ 63.8595(h)(1) and 63.8(f).

(c) You must report each instance in which you did not meet each emission limit and operating limit in this subpart that applies to you. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in § 63.8635(c)(8).

(d) [Reserved]

(e)(1) *Visible emissions testing.* You must demonstrate continuous compliance with the operating limits in Table 2 to this subpart for visible emissions (VE) from tunnel or roller kilns that are uncontrolled or equipped with DIFF, DLS/FF, or other dry control de-

vice by monitoring VE at each kiln stack according to the requirements in paragraphs (e)(1)(i) through (iii) of this section.

(i) Perform daily VE observations of each kiln stack according to the procedures of Method 22 of 40 CFR part 60, appendix A-7. You must conduct the Method 22 test while the affected source is operating under normal conditions. The duration of each Method 22 test must be at least 15 minutes.

(ii) If VE are observed during any daily test conducted using Method 22 of 40 CFR part 60, appendix A-7, you must promptly initiate and complete corrective actions according to your OM&M plan. If no VE are observed in 30 consecutive daily Method 22 tests for any kiln stack, you may decrease the frequency of Method 22 testing from daily to weekly for that kiln stack. If VE are observed during any weekly test, you must promptly initiate and complete corrective actions according to your OM&M plan, resume Method 22 testing of that kiln stack on a daily basis, and maintain that schedule until no VE are observed in 30 consecutive daily tests, at which time you may again decrease the frequency of Method 22 testing to a weekly basis.

(iii) If VE are observed during any test conducted using Method 22 of 40 CFR part 60, appendix A-7, you must report these deviations by following the requirements in § 63.8635.

(2) *Alternative to VE testing.* You must demonstrate continuous compliance with the operating limits in Table 2 to this subpart for kiln temperature profile for tunnel or roller kilns that are uncontrolled or equipped with DIFF, DLS/FF, or other dry control device by maintaining the kiln operating temperature within the range of acceptable temperatures (*i.e.*, temperature profile) established for each kiln and product. For any incidence where the kiln is operating outside of its acceptable temperature range (*i.e.*, exceeds its temperature profile) for the product being fired, you must record the incident as a deviation, and perform the necessary corrective action in accordance with your OM&M plan to return the kiln to the acceptable operating temperature for the product being fired. To confirm the kiln has returned to the acceptable

temperature range, you will monitor VE at the kiln stack according to the requirements in paragraphs (e)(2)(i) through (iii) of this section.

(i) Perform VE observations at the stack of each kiln operating outside of its temperature profile according to the procedures of Method 22 of 40 CFR part 60, appendix A-7. The duration of each Method 22 test must be at least 15 minutes.

(ii) If VE are observed during any test conducted using Method 22 of 40 CFR part 60, appendix A-7, you must continue to perform corrective action until VE are no longer observed.

(iii) If VE are observed during any test conducted using Method 22 of 40 CFR part 60, appendix A-7, you must report these deviations by following the requirements in § 63.8635.

(f) Following the compliance date, you must demonstrate compliance with the emissions averaging provision under this subpart on a continuous basis by meeting the requirements of paragraphs (f)(1) through (3) of this section.

(1)(i) After the initial compliance demonstration described in § 63.8595(h)(4), you must demonstrate compliance on a monthly basis determined at the end of every month (12 times per year) according to paragraph (f)(1)(ii) of this section. The first monthly period begins on the compliance date specified in § 63.8545.

(ii) For each calendar month, you must use Equation 10 of this section to calculate the average weighted emission rate for that month.

$$ER_i = \sum_{i=1}^n (E_i \times P_{month\ i}) \div \sum_{i=1}^n P_{month\ i} \text{ (Eq. 10)}$$

Where:

$ER_i$  = Average weighted emissions for PM or mercury, in units of kilograms (pounds) per megagram (ton) of fired product for existing floor tile roller kilns and wall tile roller kilns, greenware fired for existing first-fired sanitaryware tunnel kilns, and first-fire glaze sprayed (dry weight basis) for existing tile glaze lines with glaze spraying and average weighted emissions for PM, in units of kilograms (pounds) per megagram (ton) of first-fire glaze sprayed (dry weight basis) for existing sanitaryware manual, spray machine, or robot glaze applications, for that calendar month.

$E_i$  = Emission rate (as determined during the most recent compliance demonstration) of PM or mercury from unit  $i$ , in units of kilograms (pounds) per megagram (ton). Determine the emission rate for PM or mercury by performance testing accord-

ing to Table 4 to this subpart using the applicable equation in § 63.8595(f).

$P_{month\ i}$  = The process rate for that calendar month for unit  $i$ , in units of megagrams (tons).

$n$  = Number of units participating in the emissions averaging option.

(2) Until 12 monthly weighted average emission rates have been accumulated, calculate and report only the average weighted emission rate determined under paragraph (f)(1)(ii) of this section for each calendar month. After 12 monthly weighted average emission rates have been accumulated, for each subsequent calendar month, use Equation 11 of this section to calculate the 12-month rolling average of the monthly weighted average emission rates for the current calendar month and the previous 11 calendar months.

$$E_{avg} = \sum_{i=1}^n ER_i \div 12 \text{ (Eq. 11)}$$

Where:

$E_{avg}$  = 12-month rolling average emission rate for PM or mercury, in units of kilograms

(pounds) per megagram (ton) of fired product for existing floor tile roller kilns and wall tile roller kilns, greenware fired for existing first-fired sanitaryware tunnel kilns, and first-fire glaze sprayed (dry weight basis) for existing tile glaze lines with glaze spraying and average weighted emissions for PM, in units of kilograms (pounds) per megagram (ton) of first-fire glaze sprayed (dry weight basis) for existing sanitaryware manual, spray machine, or robot glaze applications.

ER<sub>i</sub> = Monthly weighted average, for calendar month “i,” in units of kilograms (pounds) per megagram (ton), as calculated by paragraph (f)(1)(ii) of this section.

(3) For each existing unit participating in the emissions averaging option, you must comply with the continuous compliance requirements in Table 7 to this subpart.

(g) Any instance where you fail to comply with the continuous monitoring requirements in paragraphs (f)(1) through (3) of this section is a deviation.

[80 FR 65543, Oct. 26, 2015, as amended at 84 FR 58607, Nov. 1, 2019]

#### NOTIFICATIONS, REPORTS, AND RECORDS

##### § 63.8630 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(f)(4), and 63.9 (b) through (e), (g)(1), and (h) that apply to you, by the dates specified.

(b) You must submit all of the notifications specified in Table 9 to this subpart that apply to you, by the dates specified.

(c) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 6 to this subpart, your Notification of Compliance Status as specified in Table 9 to this subpart must include the information in paragraphs (c)(1) through (4) of this section.

(1) The requirements in § 63.9(h)(2)(i).

(2) The operating limit parameter values established for each affected source with supporting documentation and a description of the procedure used to establish the values.

(3) For each APCD that includes a fabric filter, if a bag leak detection system is used, analysis and supporting documentation demonstrating con-

formance with EPA guidance and specifications for bag leak detection systems in § 63.8600(e).

(4) Identification of whether you plan to demonstrate compliance by emissions averaging. If you plan to demonstrate compliance by emissions averaging, report the emissions level that was being achieved or the control technology employed on December 28, 2015.

(d) If you own or operate an affected kiln that is subject to the work practice standard specified in Item 1 of Table 3 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected kiln, your notification of alternative fuel use must include the information specified in paragraphs (d)(1) through (5) of this section.

(1) Company name and address.

(2) Identification of the affected kiln.

(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

[80 FR 65543, Oct. 26, 2015, as amended at 84 FR 58608, Nov. 1, 2019]

##### § 63.8635 What reports must I submit and when?

(a) You must submit each report in Table 10 to this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 10 to this subpart and as specified in paragraphs (b)(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 § 63.8545 and ending on either June 30 or December 31. This reporting period must be at least 6 months, but less than 12 months. For example, if your compliance date is March 1, then the first semiannual reporting period would begin on March 1 and end on December 31.

(2) The first compliance report must be postmarked or delivered no later

than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(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 for compliance periods ending on June 30 and December 31, respectively.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 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 the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information in paragraphs (c)(1) through (9) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

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

(4) A description of control device maintenance performed while the control device was offline and the affected source controlled by the control device

was operating, including the information specified in paragraphs (c)(4)(i) through (iii) of this section.

(i) The date and time when the control device was shut down and restarted.

(ii) Identification of the affected source that was operating and the number of hours that the affected source operated while the control device was offline.

(iii) A statement of whether or not the control device maintenance was included in your approved routine control device maintenance request developed as specified in §63.8570(d). If the control device maintenance was included in your approved routine control device maintenance request, then you must report the information in paragraphs (c)(4)(iii)(A) through (C) of this section.

(A) The total amount of time that the affected source controlled by the control device operated during the current semiannual compliance period and during the previous semiannual compliance period.

(B) The amount of time that each affected source controlled by the control device operated while the control device was offline for maintenance covered under the routine control device maintenance alternative standard during the current semiannual compliance period and during the previous semiannual compliance period.

(C) Based on the information recorded under paragraphs (c)(4)(iii)(A) and (B) of this section, compute the annual percent of affected source operating uptime during which the control device was offline for routine maintenance using Equation 12 of this section.

$$RM = \frac{DT_p + DT_c}{SU_p + SU_c} (100) \text{ (Eq. 12)}$$

Where:

RM = Annual percentage of affected source uptime during which control device was offline for routine control device maintenance.

DT<sub>p</sub> = Control device downtime claimed under the routine control device maintenance

alternative standard for the previous semiannual compliance period.

DT<sub>c</sub> = Control device downtime claimed under the routine control device maintenance alternative standard for the current semiannual compliance period.

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$SU_p$  = Affected source uptime for the previous semiannual compliance period.

$SU_c$  = Affected source uptime for the current semiannual compliance period.

(5) If there are no deviations from any emission limitations (emission limits or operating limits) or work practice standards that apply to you, the compliance report must contain a statement that there were no deviations from the emission limitations or work practice standards during the reporting period.

(6) If there were no periods during which the CMS was out-of-control as specified in your OM&M plan, the compliance report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(7) The first compliance report must contain the startup production rate for each ceramic tile roller kiln, floor tile press dryer, ceramic tile spray dryer, and sanitaryware tunnel kiln; the minimum APCD inlet temperature for each APCD; and the temperature profile for each ceramic tile roller kiln, floor tile press dryer, ceramic tile spray dryer, and sanitaryware tunnel kiln without an APCD.

(8) For each deviation that occurs at an affected source, report such events in the compliance report by including the information in paragraphs (c)(8)(i) through (iii) of this section.

(i) The date, time, and duration of the deviation.

(ii) A list of the affected sources or equipment for which the deviation occurred.

(iii) 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.

(9) If you plan to demonstrate compliance by emissions averaging, certify the emissions level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification of compliance status in § 63.8630(c)(4), including all necessary documentation to support this certification, such as inputs to Equations 9 through 11 of this subpart.

(d) For each deviation from an emission limitation (emission limit or oper-

ating limit) occurring at an affected source where you are using a CMS to comply with the emission limitations in this subpart, you must include the information in paragraphs (c)(1) through (4) and (c)(8), and paragraphs (d)(1) through (11) of this section. This includes periods of startup, shutdown, and routine control device maintenance.

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

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the pertinent information in your OM&M plan.

(4) Whether each deviation occurred during routine control device maintenance covered in your approved routine control device maintenance alternative standard or during another period, and the cause of each deviation (including unknown cause, if applicable).

(5) A description of any corrective action taken to return the affected unit to its normal or usual manner of operation.

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

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

(8) A brief description of the process units.

(9) A brief description of the CMS.

(10) The date of the latest CMS certification or audit.

(11) A description of any changes in CMS, processes, or control equipment since the last reporting period.

(e) If you have obtained a title V operating permit according to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR



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71.6(a)(3)(iii)(A). If you submit a compliance report according to Table 8 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), then submitting the compliance report will satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submitting a compliance report will not otherwise affect any obligation you may have to report deviations from permit requirements to the permitting authority.

(f) If you own or operate an affected kiln that is subject to the work practice standard specified in Item 1 of Table 3 to this subpart, and you use a fuel other than natural gas or equivalent to fire the affected kiln, you must submit a report of alternative fuel use within 10 working days after terminating the use of the alternative fuel. The report must include the information in paragraphs (f)(1) through (6) of this section.

- (1) Company name and address.
- (2) Identification of the affected kiln.
- (3) Reason for using the alternative fuel.
- (4) Type of alternative fuel used to fire the affected kiln.
- (5) Dates that the use of the alternative fuel started and ended.
- (6) Amount of alternative fuel used.

(g) Within 60 calendar days after the date of completing each performance test (as defined in §63.2) required by this subpart, you must submit the results of the performance test following the procedure specified in either paragraph (g)(1) or (g)(2) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronicreporting-air-emissions/electronicreporting-tool-ert>) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) Performance test

data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (g)(1).

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

[80 FR 65543, Oct. 26, 2015, as amended at 84 FR 58608, Nov. 1, 2019]

**§ 63.8640 What records must I keep?**

(a) You must keep the records listed in paragraphs (a)(1) through (3) of this section.

(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) Records of performance tests as required in §63.10(b)(2)(viii).

(3) Records relating to control device maintenance and documentation of your approved routine control device maintenance request, if you request to use the alternative standard under §63.8570(d).

(b) You must keep the records required in Table 7 to this subpart to show continuous compliance with each

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emission limitation and work practice standard that applies to you.

(c) You must also maintain the records listed in paragraphs (c)(1) through (11) of this section.

(1) For each bag leak detection system, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken.

(2) For each deviation, record the information in paragraphs (c)(2)(i) through (iv) of this section.

(i) The date, time, and duration of the deviation.

(ii) A list of the affected sources or equipment.

(iii) 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.

(iv) Actions taken to minimize emissions in accordance with § 63.8570(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(3) For each affected source, records of production rates on a ton throughput processed basis.

(4) Records for any approved alternative monitoring or test procedures.

(5) Records of maintenance and inspections performed on the APCD.

(6) Current copies of your OM&M plan, including any revisions, with records documenting conformance.

(7) Logs of the information required in paragraphs (c)(7)(i) through (iii) of this section to document proper operation of your sanitaryware shuttle kiln.

(i) Records of the firing time and temperature cycle for each sanitaryware shuttle kiln. If all shuttle kilns use the same time and temperature cycles, one copy may be maintained for each kiln. Reference numbers must be assigned to use in log sheets.

(ii) For each sanitaryware shuttle kiln, a log that details the time and temperature protocol reference number, and an indication of whether the appropriate time and temperature cycle was fired.

(iii) For each sanitaryware shuttle kiln, a log of the actual tonnage of

greenware fired in the shuttle kiln and an indication of whether the tonnage was below the maximum tonnage for that specific kiln.

(8) Logs of the maintenance procedures used to demonstrate compliance with the maintenance requirements of the sanitaryware shuttle kiln work practice standards specified in Table 3 to this subpart.

(9) For periods of startup and shutdown, records of the following information:

(i) The date, time, and duration of each startup and/or shutdown period, recording the periods when the affected source was subject to the standard applicable to startup and shutdown.

(ii) For periods of startup, the production rate and exhaust temperature prior to the time the exhaust reaches the minimum APCD inlet temperature (for ceramic tile roller kilns, floor tile press dryers, ceramic tile spray dryers, and sanitaryware tunnel kilns with an APCD) or the temperature profile is attained (for ceramic tile roller kilns, floor tile press dryers, ceramic tile spray dryers, and sanitaryware tunnel kilns with no APCD).

(iii) For periods of shutdown, the production rate and exhaust temperature after the time the exhaust falls below the minimum APCD inlet temperature (for ceramic tile roller kilns, floor tile press dryers, ceramic tile spray dryers, and sanitaryware tunnel kilns with an APCD) or the temperature profile is no longer maintained (for ceramic tile roller kilns, floor tile press dryers, ceramic tile spray dryers, and sanitaryware tunnel kilns with no APCD).

(10) All site-specific parameters, temperature profiles, and procedures required to be established or developed according to the applicable work practice standards in Table 3 to this subpart.

(11) If you elect to average emissions consistent with § 63.8595(h), you must additionally keep a copy of the emissions averaging implementation plan required in § 63.8595(h)(5), all calculations required under § 63.8595(h), including monthly records of process rate, as

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applicable, and monitoring records consistent with § 63.8620(f).

[80 FR 65543, Oct. 26, 2015, as amended at 84 FR 58609, Nov. 1, 2019]

**§ 63.8645 In what form and for 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 onsite 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 may keep the records offsite for the remaining 3 years.

**OTHER REQUIREMENTS AND INFORMATION**

**§ 63.8655 What parts of the General Provisions apply to me?**

Table 11 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.16 apply to you.

**§ 63.8660 Who implements and enforces this subpart?**

(a) This subpart can be implemented and enforced by us, the 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, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if implementation and enforcement of 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 cannot be delegated to state, local, or tribal

agencies are as specified in paragraphs (c)(1) through (6) of this section.

(1) Approval of alternatives to the applicability requirements in §§ 63.8535 and 63.8540, the compliance date requirements in § 63.8545, and the non-opacity emission limitations in § 63.8555.

(2) Approval of major changes to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major changes to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major changes 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.

(6) Approval of a routine control device maintenance request under § 63.8570(d).

**§ 63.8665 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:

*Air pollution control device (APCD)* means any equipment that reduces the quantity of a pollutant that is emitted to the air.

*Bag leak detection system* means an instrument that is capable of monitoring PM loadings in the exhaust of a fabric filter in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light-scattering, light-transmittance, or other effects to monitor relative PM loadings.

*Clay ceramics manufacturing facility* means a plant site that manufactures pressed floor tile, pressed wall tile, other pressed tile, or sanitaryware (e.g., sinks and toilets). Clay ceramics manufacturing facilities typically process clay, shale, and various additives, form the processed materials into tile or sanitaryware shapes, and dry and fire the ceramic products. Glazes are applied to many tile and sanitaryware products. A plant site that manufactures refractory products, as defined in § 63.9824, or brick and

structural clay products (BSCP), as defined in § 63.8515, is not a clay ceramics manufacturing facility.

*Cooling stack* means a stack (release point) installed on the cooling zone of a tunnel kiln to release air used to cool down the fired product from its maximum temperature to room temperature. A cooling stack does not release any air from the firing zone of the tunnel kiln.

*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 any operating limit) or work practice standard; or

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart for any affected source required to obtain such a permit.

*Dioxin/furan* means, for purposes of this subpart, the sum of the 2,3,7,8-TCDD toxic equivalents calculated using Equation 3 of this subpart.

*Dry lime injection fabric filter (DIFF)* means an APCD that includes continuous injection of hydrated lime or other sorbent into a duct or reaction chamber followed by a fabric filter.

*Dry lime scrubber/fabric filter (DLS/FF)* means an APCD that includes continuous injection of humidified hydrated lime or other sorbent into a reaction chamber followed by a fabric filter. These systems typically include recirculation of some of the sorbent.

*Emission limitation* means any emission limit or operating limit.

*Emissions averaging sources* means, for purposes of the emissions averaging provisions of § 63.8595(h), the collection of all existing ceramic tile roller kilns, sanitaryware tunnel kilns, ceramic tile glaze lines using glaze spraying, and sanitaryware glaze spray booths, within a kiln type and size category and within a subcategory.

*Fabric filter* means an APCD used to capture PM by filtering a gas stream through filter media; also known as a baghouse.

*Fired product* means clay ceramic or sanitaryware products that have gone through the firing process via kilns.

*Glaze* means a coating of colored, opaque, or transparent material applied to ceramic products before firing.

*Glaze line* means a production line for glazing ceramic products, which includes glaze spraying (typically comprised of one or more glaze spray booths) and other types of glazing operations (e.g., dipping, flooding, centrifugal disc glazing, curtain coating).

*Glaze spray booth* means a type of equipment used for spraying glaze on ceramic products.

*Glaze spray operation* means any type of glaze application that uses glaze spraying, including glaze lines and glaze spray booths.

*Greenware* means clay ceramic or sanitaryware products that have not gone through the firing process via kilns.

*Initial startup* means the time at which the kiln first reaches a level of production that is equal to 75 percent of the kiln design capacity or 12 months after the affected source begins firing clay ceramics, whichever is earlier.

*Kiln design capacity* means the maximum amount of clay ceramics, in Mg (tons), that a kiln is designed to produce in one year divided by the number of hours in a year (8,760 hours), taking into account the void space in the product, the push rate for the kiln, and the stacking pattern, if applicable. If a kiln is modified to increase the capacity, the design capacity is considered to be the capacity following modifications.

*Minimum APCD inlet temperature* means the minimum temperature that kiln exhaust can be vented to the APCD that ensures the long-term integrity of the APCD.

*Particulate matter (PM)* means, for purposes of this subpart, emissions of filterable PM that serve as a measure of total particulate emissions, as measured by Method 5 (40 CFR part 60, appendix A-3) or Method 29 (40 CFR part 60, appendix A-8), and as a surrogate for non-mercury metal HAP contained in the particulates including, but not

limited to, antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium.

*Period of natural gas curtailment or supply interruption* means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.

*Plant site* means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof.

*Products of combustion (POC) stack* means a stack (release point) installed on the front end of the firing zone of a tunnel kiln to release air used to heat the greenware from room temperature to its maximum temperature.

*Responsible official* means responsible official as defined in 40 CFR 70.2.

*Roller kiln* means a continuous kiln similar to a tunnel kiln except that the unfired ceramic product travels through the kiln in a single layer on rollers. In the clay ceramics source category, roller kilns are used at ceramic tile manufacturing plants.

*Shuttle kiln* means a batch firing kiln that is designed with a removable superstructure that is tilted or raised

using hydraulic struts to allow entrance and egress. In the clay ceramics source category, shuttle kilns are used at sanitaryware manufacturing plants.

*Spray dryer* means a drying chamber used to form a free-flowing powder from a slurry of ceramic mix and water, to improve handling and compaction. In the clay ceramics source category, spray dryers are used at ceramic tile manufacturing plants.

*Startup* means the setting in operation of an affected source and starting the production process.

*Startup production rate* means the kiln, press dryer or spray dryer production rate required to bring the process unit to the proper operating temperature during startup.

*Tunnel kiln* means any continuous kiln that is not a roller kiln that is used to fire clay ceramics. In the clay ceramics source category, tunnel kilns are used at sanitaryware manufacturing plants.

*Wet scrubber (WS)* means an APCD that uses water, which may include caustic additives or other chemicals, as the sorbent. Wet scrubbers may use any of various design mechanisms to increase the contact between exhaust gases and the sorbent.

*Work practice standard* means any design, equipment, work practice, operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

[80 FR 65543, Oct. 26, 2015, as amended at 84 FR 58609, Nov. 1, 2019]

TABLES TO SUBPART KKKKK OF PART 63

TABLE 1 TO SUBPART KKKKK OF PART 63—EMISSION LIMITS

As stated in § 63.8555, you must meet each emission limit in the following table that applies to you:

For each . . .	You must meet the following emission limits . . .
1. Collection of all tunnel or roller kilns at facility.	HF and HCl emissions must not exceed 62 kilograms per hour (kg/hr) (140 pounds per hour (lb/hr)) HCl equivalent, under the health-based standard, as determined using Equations 4 and 5 of this subpart.
2. Existing floor tile roller kiln ...	a. PM emissions must not exceed 0.063 kilogram per megagram (kg/Mg) (0.13 pound per ton (lb/ton)) of fired product. b. Hg emissions must not exceed 6.3 E–05 kg/Mg (1.3 E–04 lb/ton) of fired product. c. Dioxin/furan emissions must not exceed 2.8 nanograms per kilogram (ng/kg) of fired product.
3. Existing wall tile roller kiln ....	a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product. b. Hg emissions must not exceed 1.1 E–04 kg/Mg (2.1 E–04 lb/ton) of fired product. c. Dioxin/furan emissions must not exceed 0.22 ng/kg of fired product.
4. Existing first-fire sanitaryware tunnel kiln.	a. PM emissions must not exceed 0.17 kg/Mg (0.34 lb/ton) of greenware fired.

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For each . . .	You must meet the following emission limits . . .
5. Existing tile glaze line with glaze spraying.	b. Hg emissions must not exceed 1.3 E-04 kg/Mg (2.6 E-04 lb/ton) of greenware fired. c. Dioxin/furan emissions must not exceed 3.3 ng/kg of greenware fired. a. PM emissions must not exceed 0.93 kg/Mg (1.9 lb/ton) of first-fire glaze sprayed (dry weight basis).
6. Existing sanitaryware manual glaze application.	b. Hg emissions must not exceed 8.0 E-05 kg/Mg (1.6 E-04 lb/ton) of first-fire glaze sprayed (dry weight basis). PM emissions must not exceed 18 kg/Mg (35 lb/ton) of first-fire glaze sprayed (dry weight basis).
7. Existing sanitaryware spray machine glaze application.	PM emissions must not exceed 6.2 kg/Mg (13 lb/ton) of first-fire glaze sprayed (dry weight basis).
8. Existing sanitaryware robot glaze application.	PM emissions must not exceed 4.5 kg/Mg (8.9 lb/ton) of first-fire glaze sprayed (dry weight basis).
9. Existing floor tile spray dryer	Dioxin/furan emissions must not exceed 19 ng/kg of throughput processed.
10. Existing wall tile spray dryer	Dioxin/furan emissions must not exceed 0.058 ng/kg of throughput processed.
11. Existing floor tile press dryer.	Dioxin/furan emissions must not exceed 0.024 ng/kg of throughput processed.
12. New or reconstructed floor tile roller kiln.	a. PM emissions must not exceed 0.019 kg/Mg (0.037 lb/ton) of fired product. b. Hg emissions must not exceed 2.0 E-05 kg/Mg (3.9 E-05 lb/ton) of fired product. c. Dioxin/furan emissions must not exceed 1.3 ng/kg of fired product.
13. New or reconstructed wall tile roller kiln.	a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product. b. Hg emissions must not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product. c. Dioxin/furan emissions must not exceed 0.22 ng/kg of fired product.
14. New or reconstructed first-fire sanitaryware tunnel kiln.	a. PM emissions must not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired. b. Hg emissions must not exceed 6.1 E-05 kg/Mg (1.3 E-04 lb/ton) of greenware fired. c. Dioxin/furan emissions must not exceed 0.99 ng/kg of greenware fired.
15. New or reconstructed tile glaze line with glaze spraying.	a. PM emissions must not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis). b. Hg emissions must not exceed 8.0 E-05 kg/Mg (1.6 E-04 lb/ton) of first-fire glaze sprayed (dry weight basis).
16. New or reconstructed sanitaryware manual glaze application.	PM emissions must not exceed 2.0 kg/Mg (3.9 lb/ton) of first-fire glaze sprayed (dry weight basis).
17. New or reconstructed sanitaryware spray machine glaze application.	PM emissions must not exceed 1.6 kg/Mg (3.2 lb/ton) of first-fire glaze sprayed (dry weight basis).
18. New or reconstructed sanitaryware robot glaze application.	PM emissions must not exceed 1.2 kg/Mg (2.3 lb/ton) of first-fire glaze sprayed (dry weight basis).
19. New or reconstructed floor tile spray dryer.	Dioxin/furan emissions must not exceed 0.071 ng/kg of throughput processed.
20. New or reconstructed wall tile spray dryer.	Dioxin/furan emissions must not exceed 0.058 ng/kg of throughput processed.
21. New or reconstructed floor tile press dryer.	Dioxin/furan emissions must not exceed 0.024 ng/kg of throughput processed.
22. Collection of emissions averaging sources.	PM emissions must not exceed the applicable emission limit, under the emissions averaging option, as determined using Equations 9 through 11 of this subpart.
23. Collection of emissions averaging sources.	Hg emissions must not exceed the applicable emission limit, under the emissions averaging option, as determined using Equations 9 through 11 of this subpart.

[84 FR 58609, Nov. 1, 2019]

TABLE 2 TO SUBPART KKKKK OF PART 63—OPERATING LIMITS

As stated in §63.8555, you must meet each operating limit in the following table that applies to you:

For each . . .	You must . . .	Or you must . . .
1. Tunnel or roller kiln equipped with a DIFF or DLS/FF.	a. If you use a bag leak detection system, initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with your OM&M plan; operate and maintain the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; and	i. Maintain no VE from the DIFF or DLS/FF stack; or ii. Maintain your kiln operating temperature within the range of acceptable temperatures ( <i>i.e.</i> , temperature profile established for each kiln and product.

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For each . . .	You must . . .	Or you must . . .
2. Tunnel or roller kiln equipped with a WS.	<p>b. Maintain free-flowing lime in the feed hopper or silo and to the APCD at all times for continuous injection systems; maintain the feeder setting (on a per ton of throughput basis) at or above the level established during the performance test for continuous injection systems in which compliance was demonstrated.</p> <p>a. Maintain the average scrubber liquid pH for each 3-hour block period at or above the average scrubber liquid pH established during the HF/HCl performance test in which compliance was demonstrated; and</p> <p>b. Maintain the average scrubber liquid flow rate for each 3-hour block period at or above the highest average scrubber liquid flow rate established during the HF/HCl and PM performance tests in which compliance was demonstrated.</p>	
3. Tunnel or roller kiln equipped with an ACI system.	<p>Maintain the 3-hour block average carbon flow rate at or above the highest average carbon flow rate established during the Hg and dioxin/furan performance tests in which compliance was demonstrated.</p>	
4. Tunnel or roller kiln intending to comply with dioxin/furan emission limit without an ACI system.	<p>Maintain the average operating temperature for each 12-hour block period at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.</p>	<p>i. Maintain your kiln operating temperature within the range of acceptable temperatures (<i>i.e.</i>, temperature profile established for each kiln and product.</p>
5. Tunnel or roller kiln with no add-on control.	<p>a. Maintain no VE from the stack; and</p> <p>b. Maintain the kiln process rate at or below the kiln process rate determined according to § 63.8595(g)(1) if your total facility maximum potential HCl-equivalent emissions are greater than the HCl-equivalent limit in Table 1 to this subpart; and</p> <p>c. Maintain the average operating temperature for each 12-hour block period at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.</p>	<p>i. Maintain no VE from the FF stack.</p>
6. Glaze spray operation equipped with a FF.	<p>a. If you use a bag leak detection system, initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with your OM&amp;M plan; operate and maintain the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period.</p>	
7. Glaze spray operation equipped with a WS.	<p>a. Maintain the average scrubber pressure drop for each 3-hour block period at or above the average pressure drop established during the PM performance test in which compliance was demonstrated; and</p> <p>b. Maintain the average scrubber liquid flow rate for each 3-hour block period at or above the average scrubber liquid flow rate established during the PM performance test in which compliance was demonstrated.</p>	
8. Glaze spray operation equipped with a water curtain.	<p>a. Conduct daily inspections to verify the presence of water flow to the wet control system; and</p> <p>b. Conduct annual inspections of the interior of the control equipment (if applicable) to determine the structural integrity and condition of the control equipment.</p>	
9. Glaze spray operation equipped with baffles.	<p>Conduct an annual visual inspection of the baffles to confirm the baffles are in place.</p>	
10. Spray dryer .....	<p>Maintain the average operating temperature for each 4-hour block period at or above the average temperature established during the dioxin/furan performance test in which compliance was demonstrated.</p>	

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**Pt. 63, Subpt. KKKKK, Table 3**

For each . . .	You must . . .	Or you must . . .
11. Floor tile press dryer	Maintain the average operating temperature for each 4-hour block period at or below the average temperature established during the dioxin/furan performance test in which compliance was demonstrated..	

[84 FR 58610, Nov. 1, 2019]

**TABLE 3 TO SUBPART KKKKK OF PART 63—WORK PRACTICE STANDARDS**

As stated in §63.8555, you must comply with each work practice standard in the following table that applies to you:

For each . . .	You must . . .	According to one of the following requirements . . .
1. Existing, new, or reconstructed sanitaryware shuttle kiln.	a. Minimize HAP emissions ....	<ul style="list-style-type: none"> <li>i. Use natural gas, or equivalent, as the kiln fuel, except during periods of natural gas curtailment or supply interruption, as defined in §63.8665; and</li> <li>ii. Develop and use a designed firing time and temperature cycle for each sanitaryware shuttle kiln. You must either program the time and temperature cycle into your kiln or track each step on a log sheet; and</li> <li>iii. Label each sanitaryware shuttle kiln with the maximum load (in tons) of greenware that can be fired in the kiln during a single firing cycle; and</li> <li>iv. For each firing load, document the total tonnage of greenware placed in the kiln to ensure that it is not greater than the maximum load identified in item 1.a.iii; and</li> <li>v. Develop and follow maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles; and</li> <li>vi. Develop and maintain records for each sanitaryware shuttle kiln, as specified in §63.8640.</li> </ul>
2. Existing, new or reconstructed ceramic tile roller kiln, sanitaryware tunnel kiln, floor tile press dryer or ceramic tile spray dryer during periods of startup.	a. Minimize HAP emissions ....	<ul style="list-style-type: none"> <li>i. Establish the startup production rate for each kiln or dryer; the minimum APCD inlet temperature for each APCD; and temperature profile for each kiln or dryer with no APCD and include them in your first compliance report, as specified in §63.8635(c)(7); and</li> <li>ii. After initial loading of the kiln or dryer, remain at or below the startup production rate for the kiln or dryer until the kiln or dryer exhaust reaches the minimum APCD inlet temperature for a kiln or dryer with an APCD or until the kiln or dryer temperature profile is attained for a kiln or dryer with no APCD; and</li> <li>iii. If your kiln or dryer has an APCD, begin venting the exhaust from the kiln or dryer through the APCD by the time the kiln or dryer exhaust temperature reaches the minimum APCD inlet temperature.</li> </ul>
3. Existing, new or reconstructed ceramic tile roller kiln, sanitaryware tunnel kiln, floor tile press dryer or ceramic tile spray dryer during periods of shutdown.	a. Minimize HAP emissions ....	<ul style="list-style-type: none"> <li>i. Do not load the kiln or dryer once the kiln or dryer exhaust temperature falls below the minimum APCD inlet temperature if the kiln or dryer is controlled by an APCD or when the kiln or dryer temperature profile is no longer maintained for an uncontrolled kiln or dryer; and</li> <li>ii. If your kiln or dryer has an APCD, continue to vent the exhaust from the kiln or dryer through the APCD until the kiln or dryer exhaust temperature falls below the minimum inlet temperature for the APCD.</li> </ul>
4. Existing, new or reconstructed ceramic tile roller kiln, sanitaryware tunnel kiln, floor tile press dryer or ceramic tile spray dryer during periods of routine control device maintenance.	a. Minimize HAP emissions ....	<ul style="list-style-type: none"> <li>i. Develop and use a temperature profile for each kiln or dryer; and</li> <li>ii. Develop and follow maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices and controls that regulate air-to-fuel ratios; and</li> <li>iii. Develop and maintain records for each kiln or dryer, as specified in §63.8640(a)(3).</li> </ul>



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TABLE 4 TO SUBPART KKKKK OF PART 63—REQUIREMENTS FOR PERFORMANCE TESTS

As stated in §63.8595, you must conduct each performance test in the following table that applies to you:

For each . . .	You must . . .	Using . . .	According to the following requirements . . .
1. Tunnel or roller kiln ...	<p>a. Select locations of sampling ports and the number of traverse points.</p> <p>b. Determine velocities and volumetric flow rate.</p> <p>c. Conduct gas molecular weight analysis.</p> <p>d. Measure moisture content of the stack gas.</p> <p>e. Measure HF and HCl emissions.</p>	<p>Method 1 or 1A of 40 CFR part 60, appendix A–1.</p> <p>Method 2 of 40 CFR part 60, appendix A–1.</p> <p>Method 3 of 40 CFR part 60, appendix A–2.</p> <p>Method 4 of 40 CFR part 60, appendix A–3.</p> <p>i. Method 26A of 40 CFR part 60, appendix A–8; or</p> <p>ii. Method 320 of appendix A of this part.</p>	<p>Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for all affected sources.</p> <p>You may use Method 2A, 2C, 2D, or 2F of 40 CFR part 60, appendix A–1, or Method 2G of 40 CFR part 60, appendix A–2, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A–1.</p> <p>You may use Method 3A or 3B of 40 CFR part 60, appendix A–2, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A–2. ANSI/ASME PTC 19.10–1981 (incorporated by reference, see §63.14) may be used as an alternative to the manual procedures (but not the instrumental procedures) in Methods 3A and 3B.</p> <p>You may use Method 26 of 40 CFR part 60, appendix A–8, as an alternative to using Method 26A of 40 CFR part 60, appendix A–8, when no acid PM (e.g., HF or HCl dissolved in water droplets emitted by sources controlled by a WS) is present. ASTM D6735–01 (Reapproved 2009) (incorporated by reference, see §63.14) may be used as an alternative to Methods 26 and 26A.</p> <p>When using Method 320 of appendix A of this part, you must follow the analyte spiking procedures of section 13 of Method 320 of appendix A of this part, unless you can demonstrate that the complete spiking procedure has been conducted at a similar source. ASTM D6348–03 (Reapproved 2010) (incorporated by reference, see §63.14) may be used as an alternative to Method 320 if the test plan preparation and implementation in Annexes A1–A8 are mandatory and the %R in Annex A5 is determined for each target analyte.</p>
	<p>f. Measure PM emissions.</p> <p>g. Measure Hg emissions.</p> <p>h. Measure dioxin/furan emissions.</p>	<p>i. Method 5 of 40 CFR part 60, appendix A–3; or</p> <p>ii. Method 29 of 40 CFR part 60, appendix A–8.</p> <p>Method 29 of 40 CFR part 60, appendix A–8.</p> <p>Method 23 of 40 CFR part 60, appendix A–7.</p>	<p>ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see §63.14) may be used as an alternative to Method 29 (portion for Hg only).</p>
2. Glaze spray operation	<p>a. Select locations of sampling ports and the number of traverse points.</p> <p>b. Determine velocities and volumetric flow rate.</p>	<p>Method 1 or 1A of 40 CFR part 60, appendix A–1.</p> <p>Method 2 of 40 CFR part 60, appendix A–1.</p>	<p>Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for all affected sources.</p> <p>You may use Method 2A, 2C, 2D, or 2F of 40 CFR part 60, appendix A–1, or Method 2G of 40 CFR part 60, appendix A–2, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A–1.</p>

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For each . . .	You must . . .	Using . . .	According to the following requirements . . .
3. Spray dryer or floor tile press dryer.	c. Conduct gas molecular weight analysis.	Method 3 of 40 CFR part 60, appendix A-2.	You may use Method 3A or 3B of 40 CFR part 60, appendix A-2, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A-2. ANSI/ASME PTC 19.10-1981 (incorporated by reference, see §63.14) may be used as an alternative to the manual procedures (but not the instrumental procedures) in Methods 3A and 3B.  ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14) may be used as an alternative to Method 29 (portion for Hg only).  Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for all affected sources.
	d. Measure moisture content of the stack gas.	Method 4 of 40 CFR part 60, appendix A-3.	
	e. Measure PM emissions.	Method 5 of 40 CFR part 60, appendix A-3.	
	f. Measure Hg emissions (tile glaze spray operations only).	Method 29 of 40 CFR part 60, appendix A-8.	
	a. Select locations of sampling ports and the number of traverse points.	Method 1 or 1A of 40 CFR part 60, appendix A-1.	
4. Tunnel or roller kiln with no add-on control.	b. Determine velocities and volumetric flow rate.	Method 2 of 40 CFR part 60, appendix A-1.	You may use Method 2A, 2C, 2D, or 2F of 40 CFR part 60, appendix A-1, or Method 2G of 40 CFR part 60, appendix A-2, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A-1.
	c. Conduct gas molecular weight analysis.	Method 3 of 40 CFR part 60, appendix A-2.	You may use Method 3A or 3B of 40 CFR part 60, appendix A-2, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A-2. ANSI/ASME PTC 19.10-1981 (incorporated by reference, see §63.14) may be used as an alternative to the manual procedures (but not the instrumental procedures) in Methods 3A and 3B.
	d. Measure moisture content of the stack gas.	Method 4 of 40 CFR part 60, appendix A-3.	
	e. Measure dioxin/furan emissions.	Method 23 of 40 CFR part 60, appendix A-7.	
	a. Establish the operating limit(s) for kiln process rate if the total facility maximum potential HCl-equivalent emissions are greater than the HCl-equivalent limit in Table 1 to this subpart.	HCl-equivalent limit in Table 1 to this subpart and emissions and production data from the HF/HCl/Cl <sub>2</sub> performance test.	Using the procedures in §63.8595(g)(1), you must determine the maximum process rate(s) for your kiln(s) that would ensure total facility maximum potential HCl-equivalent emissions remain at or below the HCl-equivalent limit in Table 1 to this subpart. The maximum process rate(s) would become your site-specific process rate operating limit(s).
b. Establish the operating limit for kiln operating temperature.	i. Data from the kiln operating temperature measurement device during the dioxin/furan performance test.	(1) You must continuously measure the kiln operating temperature during three 4-hour test runs and, from a 12-hour block of time consisting of 1-hour increments, calculate the following two values: (a) The standard deviation of the 12 1-hour temperature measurements (refer to Note 1). (b) 1 percent of the 12-hour block average. (2) You must decide which of the two values would provide the greatest variability (i.e., the highest value), and then add this value to the 12-hour block average measured during the compliance testing. The result is the maximum temperature at which your kiln may operate during normal operations.	

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For each . . .	You must . . .	Using . . .	According to the following requirements . . .
5. Tunnel or roller kiln that is complying with PM and/or Hg production-based emission limits.	Determine the production rate during each PM/Hg test run in order to determine compliance with PM and/or Hg production-based emission limits.	Production data collected during the PM/Hg performance tests (e.g., the number of ceramic pieces and weight per piece in the kiln during a test run divided by the amount of time to fire a piece).	You must measure and record the production rate, on a ton of throughput processed basis, of the affected kiln for each of the three test runs.
6. Tunnel or roller kiln equipped with a DIFF or DLS/FF.	Establish the operating limit for the lime feeder setting.	Data from the lime feeder during the HF/HCl performance test.	For continuous lime injection systems, you must ensure that lime in the feed hopper or silo and to the APCD is free-flowing at all times during the performance test and record the feeder setting, on a per ton of throughput basis, for the three test runs. If the feed rate setting varies during the three test runs, determine and record the average feed rate from the three test runs. The average of the three test runs establishes your minimum site-specific feed rate operating limit.
7. Tunnel or roller kiln equipped with a WS.	a. Establish the operating limit for the average scrubber liquid pH.	Data from the pH measurement device during the HF/HCl performance test.	You must continuously measure the scrubber liquid pH, determine and record the block average pH values for the three test runs, and determine and record the 3-hour block average of the recorded pH measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid pH operating limit.
	b. Establish the operating limit for the average scrubber liquid flow rate.	Data from the flow rate measurement device during the HF/HCl and PM performance tests.	You must continuously measure the scrubber liquid flow rate, determine and record the block average flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid flow rate operating level. If different average wet scrubber liquid flow rate values are measured during the HF/HCl and PM tests, the highest of the average values become your site-specific operating limit.
8. Tunnel or roller kiln equipped with an ACI system.	Establish the operating limit for the average carbon flow rate.	Data from the carbon flow rate measurement conducted during the Hg and dioxin/furan performance tests.	You must measure the carbon flow rate during each test run, determine and record the block average carbon flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded carbon flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific activated carbon flow rate operating limit.
9. Tunnel or roller kiln intending to comply with dioxin/furan emission limit without an ACI system.	a. Establish the operating limit for kiln operating temperature.	i. Data from the kiln operating temperature measurement device during the dioxin/furan performance test.	(1) You must continuously measure the kiln operating temperature during three 4-hour test runs and, from a 12-hour block of time consisting of 1-hour increments, calculate the following two values: (a) The standard deviation of the 12 1-hour temperature measurements (refer to Note 1). (b) 1 percent of the 12-hour block average (2) You must decide which of the two values would provide the greatest variability (i.e., the highest value), and then add this value to the 12-hour block average measured during the compliance testing. The result is the maximum temperature at which your kiln may operate during normal operations.

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For each . . .	You must . . .	Using . . .	According to the following requirements . . .
10. Glaze spray operation equipped with a WS.	a. Establish the operating limit for the average scrubber pressure drop.	Data from the pressure drop measurement device during the PM performance test.	You must continuously measure the scrubber pressure drop, determine and record the block average pressure drop values for the three test runs, and determine and record the 3-hour block average of the recorded pressure drop measurements for the three test runs. The average of the three test runs establishes your minimum site-specific pressure drop operating limit.
	b. Establish the operating limit for the average scrubber liquid flow rate.	Data from the flow rate measurement device during the PM performance test.	You must continuously measure the scrubber liquid flow rate, determine and record the block average flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific liquid flow rate operating limit.
11. Spray dryer .....	Establish the operating limit for operating temperature.	Data from the temperature measurement device during the dioxin/furan performance test.	You must continuously measure the operating temperature, determine and record the block average temperature values for the three test runs, and determine and record the 4-hour block average of the recorded temperature measurements for the three test runs. The average of the three test runs establishes your minimum site-specific operating limit.
12. Floor tile press dryer	Establish the operating limit for operating temperature.	Data from the temperature measurement device during the dioxin/furan performance test.	You must continuously measure the operating temperature, determine and record the block average temperature values for the three test runs, and determine and record the 4-hour block average of the recorded temperature measurements for the three test runs. The average of the three test runs establishes your maximum site-specific operating limit.

Note 1: The standard deviation of the 12 1-hour temperature measurements is calculated as follows:

$$\sigma = \sqrt{\frac{1}{N} \times \sum_{i=1}^N (x_i - \mu)^2} \quad (\text{Eq. 13})$$

Where:

σ = standard deviation

x<sub>i</sub> = each 1-hour temperature measurement

μ = mean of all 12 1-hour measurements

N = 12 measurements

[84 FR 58611, Nov. 1, 2019]

TABLE 5 TO SUBPART KKKKK OF PART 63—TOXIC EQUIVALENCY FACTORS

As stated in §63.8595(f)(3), you must demonstrate initial 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 TEFs 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

For each dioxin/furan congener . . .	You must calculate its 2,3,7,8-TCDD TEQ using the following TEF . . .
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
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 KKKKK OF PART 63—INITIAL COMPLIANCE WITH EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS

As stated in §63.8605, you must demonstrate initial compliance with each emission limitation and work practice standard that applies to you according to the following table:

For each . . .	For the following . . .	You have demonstrated initial compliance if . . .
1. Collection of all tunnel or roller kilns at the facility.	a. HF, HCl, and Cl <sub>2</sub> emissions must not exceed 62 kg/hr (140 lb/hr) HCl equivalent.	i. You measure HF and HCl emissions for each kiln using Method 26 or 26A of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6735-01 (Reapproved 2009) (incorporated by reference, see §63.14); or Method 320 of appendix A of this part or its alternative, ASTM D6348-03 (Reapproved 2010) (incorporated by reference, see §63.14); and ii. You calculate the HCl-equivalent emissions for HF for each kiln using Equation 4 to this subpart; and iii. You sum the HCl-equivalent values for all kilns at the facility using Equation 5 to this subpart; and iv. The facility total HCl-equivalent does not exceed 62 kg/hr (140 lb/hr).
2. Existing floor tile roller kiln ...	a. PM emissions must not exceed 0.063 kg/Mg (0.13 lb/ton) of fired product.  b. Hg emissions must not exceed 6.3 E-05 kg/Mg (1.3 E-04 lb/ton) of fired product.  c. Dioxin/furan emissions must not exceed 2.8 ng/kg of fired product.	i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in §63.8595(f)(1), do not exceed 0.063 kg/Mg (0.13 lb/ton) of fired product; and ii. You establish and have a record of the applicable operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.063 kg/Mg (0.13 lb/ton) of fired product.  i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §63.14), over the period of the initial performance test, do not exceed 6.3 E-05 kg/Mg (1.3 E-04 lb/ton) of fired product; and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 6.3 E-05 kg/Mg (1.3 E-04 lb/ton) of fired product.  i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 2.8 ng/kg of fired product; and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 2.8 ng/kg of fired product.

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For each . . .	For the following . . .	You have demonstrated initial compliance if . . .
3. Existing wall tile roller kiln ....	<p>a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.</p> <p>b. Hg emissions must not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product.</p> <p>c. Dioxin/furan emissions must not exceed 0.22 ng/kg of fired product.</p>	<p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in § 63.8595(f)(1), do not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.</p> <p>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see § 63.14), over the period of the initial performance test, do not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product.</p> <p>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 0.22 ng/kg of fired product; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.22 ng/kg of fired product.</p>
4. Existing first-fire sanitaryware tunnel kiln.	<p>a. PM emissions must not exceed 0.17 kg/Mg (0.34 lb/ton) of greenware fired.</p> <p>b. Hg emissions must not exceed 1.3 E-04 kg/Mg (2.6 E-04 lb/ton) of greenware fired.</p> <p>c. Dioxin/furan emissions must not exceed 3.3 ng/kg of greenware fired.</p>	<p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in § 63.8595(f)(1), do not exceed 0.17 kg/Mg (0.34 lb/ton) of greenware fired; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.17 kg/Mg (0.34 lb/ton) of greenware fired.</p> <p>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see § 63.14), over the period of the initial performance test, do not exceed 1.3 E-04 kg/Mg (2.6 E-04 lb/ton) of greenware fired; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 1.3 E-04 kg/Mg (2.6 E-04 lb/ton) of greenware fired.</p> <p>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 3.3 ng/kg of greenware fired; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 3.3 ng/kg of greenware fired.</p>
5. Existing tile glaze line with glaze spraying.	<p>a. PM emissions must not exceed 0.93 kg/Mg (1.9 lb/ton) of first-fire glaze sprayed (dry weight basis).</p> <p>b. Hg emissions must not exceed 8.0 E-05 kg/Mg (1.6 E-04 lb/ton) of first-fire glaze sprayed (dry weight basis).</p>	<p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in § 63.8595(f)(2), do not exceed 0.93 kg/Mg (1.9 lb/ton) of first-fire glaze sprayed (dry weight basis); and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.93 kg/Mg (1.9 lb/ton) of first-fire glaze sprayed (dry weight basis).</p> <p>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see § 63.14), over the period of the initial performance test, do not exceed 8.0 E-05 kg/Mg (1.6 E-04 lb/ton) of first-fire glaze sprayed (dry weight basis); and</p>

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For each . . .	For the following . . .	You have demonstrated initial compliance if . . .
6. Existing sanitaryware manual glaze application.	a. PM emissions must not exceed 18 kg/Mg (35 lb/ton) of first-fire glaze sprayed (dry weight basis).	<ul style="list-style-type: none"> <li>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 8.0 E–05 kg/Mg (1.6 E–04 lb/ton) of first-fire glaze sprayed (dry weight basis).</li> <li>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in § 63.8595(f)(2), do not exceed 18 kg/Mg (35 lb/ton) of first-fire glaze sprayed (dry weight basis); and</li> <li>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 18 kg/Mg (35 lb/ton) of first-fire glaze sprayed (dry weight basis).</li> </ul>
7. Existing sanitaryware spray machine glaze application.	a. PM emissions must not exceed 6.2 kg/Mg (13 lb/ton) of first-fire glaze sprayed (dry weight basis).	<ul style="list-style-type: none"> <li>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in § 63.8595(f)(2), do not exceed 6.2 kg/Mg (13 lb/ton) of first-fire glaze sprayed (dry weight basis); and</li> <li>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 6.2 kg/Mg (13 lb/ton) of first-fire glaze sprayed (dry weight basis).</li> </ul>
8. Existing sanitaryware robot glaze application.	a. PM emissions must not exceed 4.5 kg/Mg (8.9 lb/ton) of first-fire glaze sprayed (dry weight basis).	<ul style="list-style-type: none"> <li>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in § 63.8595(f)(2), do not exceed 4.5 kg/Mg (8.9 lb/ton) of first-fire glaze sprayed (dry weight basis); and</li> <li>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 4.5 kg/Mg (8.9 lb/ton) of first-fire glaze sprayed (dry weight basis).</li> </ul>
9. Existing floor tile spray dryer	a. Dioxin/furan emissions must not exceed 19 ng/kg of throughput processed.	<ul style="list-style-type: none"> <li>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 19 ng/kg of throughput processed; and</li> <li>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 19 ng/kg of throughput processed.</li> </ul>
10. Existing wall tile spray dryer.	a. Dioxin/furan emissions must not exceed 0.058 ng/kg of throughput processed.	<ul style="list-style-type: none"> <li>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 0.058 ng/kg of throughput processed; and</li> <li>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.058 ng/kg of throughput processed.</li> </ul>
11. Existing floor tile press dryer.	a. Dioxin/furan emissions must not exceed 0.024 ng/kg of throughput processed.	<ul style="list-style-type: none"> <li>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed 0.024 ng/kg of throughput processed; and</li> <li>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.024 ng/kg of throughput processed.</li> </ul>
12. New or reconstructed floor tile roller kiln.	<ul style="list-style-type: none"> <li>a. PM emissions must not exceed 0.019 kg/Mg (0.037 lb/ton) of fired product.</li> <li>b. Hg emissions must not exceed 2.0 E–05 kg/Mg (3.9 E–05 lb/ton) of fired product.</li> </ul>	<ul style="list-style-type: none"> <li>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3 or Method 29 of 40 CFR part 60, appendix A–8, over the period of the initial performance test, according to the calculations in § 63.8595(f)(1), do not exceed 0.019 kg/Mg (0.037 lb/ton) of fired product; and</li> <li>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.019 kg/Mg (0.037 lb/ton) of fired product.</li> <li>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see § 63.14), over the period of the initial performance test, do not exceed 2.0 E–05 kg/Mg (3.9 E–05 lb/ton) of fired product; and</li> </ul>

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For each . . .	For the following . . .	You have demonstrated initial compliance if . . .
13. New or reconstructed wall tile roller kiln.	<p>c. Dioxin/furan emissions must not exceed 1.3 ng/kg of fired product.</p> <p>a. PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.</p> <p>b. Hg emissions must not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product.</p>	<p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 2.0 E-05 kg/Mg (3.9 E-05 lb/ton) of fired product.</p> <p>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 1.3 ng/kg of fired product; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 1.3 ng/kg of fired product.</p> <p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in § 63.8595(f)(1), do not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product.</p> <p>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see § 63.14), over the period of the initial performance test, do not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 1.1 E-04 kg/Mg (2.1 E-04 lb/ton) of fired product.</p>
14. New or reconstructed first-fire sanitaryware tunnel kiln.	<p>a. PM emissions must not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.</p> <p>b. Hg emissions must not exceed 6.1 E-05 kg/Mg (1.3 E-04 lb/ton) of greenware fired.</p>	<p>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 0.22 ng/kg of fired product; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.22 ng/kg of fired product.</p> <p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3 or Method 29 of 40 CFR part 60, appendix A-8, over the period of the initial performance test, according to the calculations in § 63.8595(f)(1), do not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed 0.048 kg/Mg (0.095 lb/ton) of greenware fired.</p> <p>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A-8 or its alternative, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see § 63.14), over the period of the initial performance test, do not exceed 6.1 E-05 kg/Mg (1.3 E-04 lb/ton) of greenware fired; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed 6.1 E-05 kg/Mg (1.3 E-04 lb/ton) of greenware fired.</p>
15. New or reconstructed tile glaze line with glaze spraying.	<p>c. Dioxin/furan emissions must not exceed 0.99 ng/kg of greenware fired.</p> <p>a. PM emissions must not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis).</p>	<p>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A-7, over the period of the initial performance test, do not exceed 0.99 ng/kg of greenware fired; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed 0.99 ng/kg of greenware fired.</p> <p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A-3, over the period of the initial performance test, according to the calculations in § 63.8595(f)(2), do not exceed 0.31 kg/Mg (0.61 lb/ton) of first-fire glaze sprayed (dry weight basis); and</p>



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For each . . .	For the following . . .	You have demonstrated initial compliance if . . .
16. New or reconstructed sanitaryware manual glaze application.	<p>b. Hg emissions must not exceed <math>8.0 \text{ E-05 kg/Mg}</math> (<math>1.6 \text{ E-04 lb/ton}</math>) of first-fire glaze sprayed (dry weight basis).</p> <p>a. PM emissions must not exceed <math>2.0 \text{ kg/Mg}</math> (<math>3.9 \text{ lb/ton}</math>) of first-fire glaze sprayed (dry weight basis).</p>	<p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed <math>0.31 \text{ kg/Mg}</math> (<math>0.61 \text{ lb/ton}</math>) of first-fire glaze sprayed (dry weight basis).</p> <p>i. The Hg emissions measured using Method 29 of 40 CFR part 60, appendix A–8 or its alternative, ASTM D6784–02 (Reapproved 2008) (incorporated by reference, see § 63.14), over the period of the initial performance test, do not exceed <math>8.0 \text{ E-05 kg/Mg}</math> (<math>1.6 \text{ E-04 lb/ton}</math>) of first-fire glaze sprayed (dry weight basis); and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which Hg emissions did not exceed <math>8.0 \text{ E-05 kg/Mg}</math> (<math>1.6 \text{ E-04 lb/ton}</math>) of first-fire glaze sprayed (dry weight basis).</p> <p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in § 63.8595(f)(2), do not exceed <math>2.0 \text{ kg/Mg}</math> (<math>3.9 \text{ lb/ton}</math>) of first-fire glaze sprayed (dry weight basis); and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed <math>2.0 \text{ kg/Mg}</math> (<math>3.9 \text{ lb/ton}</math>) of first-fire glaze sprayed (dry weight basis).</p>
17. New or reconstructed sanitaryware spray machine glaze application.	<p>a. PM emissions must not exceed <math>1.6 \text{ kg/Mg}</math> (<math>3.2 \text{ lb/ton}</math>) of first-fire glaze sprayed (dry weight basis).</p>	<p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in § 63.8595(f)(2), do not exceed <math>1.6 \text{ kg/Mg}</math> (<math>3.2 \text{ lb/ton}</math>) of first-fire glaze sprayed (dry weight basis); and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed <math>1.6 \text{ kg/Mg}</math> (<math>3.2 \text{ lb/ton}</math>) of first-fire glaze sprayed (dry weight basis).</p>
18. New or reconstructed sanitaryware robot glaze application.	<p>a. PM emissions must not exceed <math>1.2 \text{ kg/Mg}</math> (<math>2.3 \text{ lb/ton}</math>) of first-fire glaze sprayed (dry weight basis).</p>	<p>i. The PM emissions measured using Method 5 of 40 CFR part 60, appendix A–3, over the period of the initial performance test, according to the calculations in § 63.8595(f)(2), do not exceed <math>1.2 \text{ kg/Mg}</math> (<math>2.3 \text{ lb/ton}</math>) of first-fire glaze sprayed (dry weight basis); and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which PM emissions did not exceed <math>1.2 \text{ kg/Mg}</math> (<math>2.3 \text{ lb/ton}</math>) of first-fire glaze sprayed (dry weight basis).</p>
19. New or reconstructed floor tile spray dryer.	<p>a. Dioxin/furan emissions must not exceed <math>0.071 \text{ ng/kg}</math> of throughput processed.</p>	<p>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed <math>0.071 \text{ ng/kg}</math> of throughput processed; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed <math>0.071 \text{ ng/kg}</math> of throughput processed.</p>
20. New or reconstructed wall tile spray dryer.	<p>a. Dioxin/furan emissions must not exceed <math>0.058 \text{ ng/kg}</math> of throughput processed.</p>	<p>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed <math>0.058 \text{ ng/kg}</math> of throughput processed; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed <math>0.058 \text{ ng/kg}</math> of throughput processed.</p>
21. New or reconstructed floor tile press dryer.	<p>a. Dioxin/furan emissions must not exceed <math>0.024 \text{ ng/kg}</math> of throughput processed.</p>	<p>i. The dioxin/furan emissions measured using Method 23 of 40 CFR part 60, appendix A–7, over the period of the initial performance test, do not exceed <math>0.024 \text{ ng/kg}</math> of throughput processed; and</p> <p>ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the period of the initial performance test during which dioxin/furan emissions did not exceed <math>0.024 \text{ ng/kg}</math> of throughput processed.</p>

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For each . . .	For the following . . .	You have demonstrated initial compliance if . . .
22. Existing, new, or reconstructed sanitaryware shuttle kiln.	a. Minimize HAP emissions ....	i. Use natural gas, or equivalent, as the kiln fuel; and ii. Develop a designed firing time and temperature cycle for the sanitaryware shuttle kiln. You must either program the time and temperature cycle into your kiln or track each step on a log sheet; and iii. Label each sanitaryware shuttle kiln with the maximum load (in tons) of greenware that can be fired in the kiln during a single firing cycle; and iv. Develop maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles.

[84 FR 58614, Nov. 1, 2019]

TABLE 7 TO SUBPART KKKKK OF PART 63—CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS

As stated in § 63.8620, you must demonstrate continuous compliance with each emission limitation and work practice standard that applies to you according to the following table:

For each . . .	For the following . . .	You must demonstrate continuous compliance by . . .	Or by . . .
1. Tunnel or roller kiln equipped with a DIFF or DLS/FF.	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 1 of Table 2 to this subpart for kilns equipped with DIFF or DLS/FF.	i. If you use a bag leak detection system, as prescribed in § 63.8450(e), initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with your OM&M plan; operating and maintaining the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted; if corrective action is required, each alarm is counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time is counted as the actual amount of time taken by you to initiate corrective action; and ii. Verifying that lime is free-flowing via a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system, or other system; recording all monitor or sensor output, and if lime is found not to be free flowing, promptly initiating and completing corrective actions in accordance with your OM&M plan; recording the feeder setting once each shift of operation to verify that the feeder setting is being maintained at or above the level established during the HF/HCl performance test in which compliance was demonstrated.	(1) Performing VE observations of the DIFF or DLS/FF stack at the frequency specified in § 63.8620(e) using Method 22 of 40 CFR part 60, appendix A-7; and maintaining no VE from the DIFF or DLS/FF stack; or (2) Maintaining your kiln operating temperature within the range of acceptable temperatures ( <i>i.e.</i> , temperature profile for each kiln and product; for any incidence where the kiln is operating outside of its acceptable temperature range ( <i>i.e.</i> , exceeds its temperature profile) for the product being fired, performing VE observations of the DIFF or DLS/FF stack as specified in § 63.8620(e) using Method 22 of 40 CFR part 60, appendix A-7; and observing no VE from the DIFF or DLS/FF stack.
2. Tunnel or roller kiln equipped with a WS.	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 2 of Table 2 to this subpart for kilns equipped with WS.	i. Collecting the scrubber liquid pH data according to § 63.8600(a); reducing the scrubber liquid pH data to 3-hour block averages according to § 63.8600(a); maintaining the average scrubber liquid pH for each 3-hour block period at or above the average scrubber liquid pH established during the HF/HCl performance test in which compliance was demonstrated; and	

For each . . .	For the following . . .	You must demonstrate continuous compliance by . . .	Or by . . .
3. Tunnel or roller kiln equipped with an ACI system.	Each emission limit in Table 1 to this subpart and each operating limit in Item 3 of Table 2 to this subpart for kilns equipped with ACI system.	<p>ii. Collecting the scrubber liquid flow rate data according to § 63.8600(a); reducing the scrubber liquid flow rate data to 3-hour block averages according to § 63.8600(a); maintaining the average scrubber liquid flow rate for each 3-hour block period at or above the highest average scrubber liquid flow rate established during the HF/HCl and PM performance tests in which compliance was demonstrated.</p> <p>Collecting the carbon flow rate data according to § 63.8600(a); reducing the carbon flow rate data to 3-hour block averages according to § 63.8600(a); maintaining the average carbon flow rate for each 3-hour block period at or above the highest average carbon flow rate established during the Hg and dioxin/furan performance tests in which compliance was demonstrated.</p>	<p>Collecting the operating temperature data according to § 63.8600(a); reducing the operating temperature data to a 12-hour block average; and maintaining the average operating temperature for each 12-hour block period at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.</p>
4. Tunnel or roller kiln intending to comply with dioxin/furan emission limit without an ACI system.	Each emission limit in Table 1 to this subpart and each operating limit in Item 4 of Table 2 to this subpart for kilns intending to comply with dioxin/furan emission limit without an ACI system.	Collecting the operating temperature data according to § 63.8600(a); and maintaining the operating temperature at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.	Collecting the operating temperature data according to § 63.8600(a); reducing the operating temperature data to a 12-hour block average; and maintaining the average operating temperature for each 12-hour block period at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.
5. Tunnel or roller kiln with no add-on control.	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 5 of Table 2 to this subpart for tunnel or roller kilns with no add-on control.	<p>i. Performing VE observations of the stack at the frequency specified in § 63.8620(e) using Method 22 of 40 CFR part 60, appendix A–7; and maintaining no VE from the stack; and</p> <p>ii. If your last calculated total facility maximum potential HCl-equivalent was not at or below the health-based standard in Table 1 to this subpart, collecting the kiln process rate data according to § 63.8600(a); reducing the kiln process rate data to 3-hour block averages according to § 63.8600(a); maintaining the average kiln process rate for each 3-hour block period at or below the kiln process rate determined according to § 63.8595(g)(1); and</p> <p>iii. Collecting the operating temperature data according to § 63.8600(a); and maintaining the operating temperature at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.</p>	<p>(1) Maintaining your kiln operating temperature within the range of acceptable temperatures (<i>i.e.</i>, temperature profile established for each kiln and product for any incidence where the kiln is operating outside of its acceptable temperature range (<i>i.e.</i>, exceeds its temperature profile) for the product being fired, performing VE observations of the DIFF or DLS/FF stack as specified in § 63.8620(e) using Method 22 of 40 CFR part 60, appendix A–7; and observing no VE from the DIFF or DLS/FF stack.</p> <p>(1) Collecting the operating temperature data according to § 63.8600(a); reducing the operating temperature data to a 12-hour block average; and maintaining the average operating temperature for each 12-hour block period at or below the highest operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.</p>

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For each . . .	For the following . . .	You must demonstrate continuous compliance by . . .	Or by . . .
6. Glaze spray operation equipped with a FF.	Each emission limit in Table 1 to this subpart and each operating limit in Item 6 of Table 2 to this subpart for glaze spray operations equipped with a FF.	If you use a bag leak detection system, initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with your OM&M plan; operating and maintaining the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted; if corrective action is required, each alarm is counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time is counted as the actual amount of time taken by you to initiate corrective action.	Performing VE observations of the FF stack at the frequency specified in §63.8620(e) using Method 22 of 40 CFR part 60, appendix A-7; and maintaining no VE from the FF stack.
7. Glaze spray operation equipped with a WS.	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 7 of Table 2 to this subpart for kilns equipped with WS.	i. Collecting the scrubber pressure drop data according to §63.8600(a); reducing the scrubber pressure drop data to 3-hour block averages according to §63.8600(a); maintaining the average scrubber pressure drop for each 3-hour block period at or above the average pressure drop established during the PM performance test in which compliance was demonstrated; and ii. Collecting the scrubber liquid flow rate data according to §63.8600(a); reducing the scrubber liquid flow rate data to 3-hour block averages according to §63.8600(a); maintaining the average scrubber liquid flow rate for each 3-hour block period at or above the average scrubber liquid flow rate established during the PM performance test in which compliance was demonstrated.	
8. Glaze spray operation equipped with a water curtain.	a. Each emission limit in Table 1 to this subpart and each operating limit in Item 8 of Table 2 to this subpart for kilns equipped with a water curtain.	i. Conducting daily inspections to verify the presence of water flow to the wet control system; and  ii. Conducting annual inspections of the interior of the control equipment (if applicable) to determine the structural integrity and condition of the control equipment; and iii. Recording as deviations any observations of particulates or other impurities getting into the glaze that has been sprayed onto a piece of ware and completing corrective actions in accordance with your OM&M plan.	
9. Glaze spray operation equipped with baffles.	Each emission limit in Table 1 to this subpart and each operating limit in Item 9 of Table 2 to this subpart for kilns equipped with baffles.	Conducting an annual visual inspection of the baffles to confirm the baffles are in place.	

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For each . . .	For the following . . .	You must demonstrate continuous compliance by . . .	Or by . . .
10. Spray dryer .....	Each emission limit in Table 1 to this subpart and each operating limit in Item 10 of Table 2 to this subpart for spray dryers.	Collecting the operating temperature data according to §63.8600(a); reducing the operating temperature data to 4-hour block averages according to §63.8600(a); maintaining the average operating temperature for each 4-hour block period at or above the average operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.	
11. Floor tile press dryer.	Each emission limit in Table 1 to this subpart and each operating limit in Item 11 of Table 2 to this subpart for floor tile press dryers.	Collecting the operating temperature data according to §63.8600(a); reducing the operating temperature data to 4-hour block averages according to §63.8600(a); maintaining the average operating temperature for each 4-hour block period at or below the average operating temperature established during the dioxin/furan performance test in which compliance was demonstrated.	
12. Sanitaryware shuttle kiln.	a. Minimize HAP emissions.	<ul style="list-style-type: none"> <li>i. Maintaining records documenting your use of natural gas, or an equivalent fuel, as the kiln fuel at all times except during periods of natural gas curtailment or supply interruption; and</li> <li>ii. If you intend to use an alternative fuel, submitting a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.8665; and</li> <li>iii. Submitting a report of alternative fuel use within 10 working days after terminating the use of the alternative fuel, as specified in §63.8635(g); and</li> <li>iv. Using a designed firing time and temperature cycle for each sanitaryware shuttle kiln; and</li> <li>v. For each firing load, documenting the total tonnage of greenware placed in the kiln to ensure that it is not greater than the maximum load identified in Item 1.a.iii of Table 3 to this subpart; and</li> <li>vi. Following maintenance procedures for each kiln that, at a minimum, specify the frequency of inspection and maintenance of temperature monitoring devices, controls that regulate air-to-fuel ratios, and controls that regulate firing cycles; and</li> <li>vii. Developing and maintaining records for each sanitaryware shuttle kiln, as specified in §63.8640.</li> </ul>	

[84 FR 58619, Nov. 1, 2019]

TABLE 8 TO SUBPART KKKKK OF PART 63—COMPLIANCE DATES

As stated in §63.8545, you must meet each compliance date in the following table that applies to you:

If you have a(n) . . .	Then you must . . .	No later than . . .
1. New or reconstructed affected source and the initial startup of your affected source is after December 18, 2014, but before December 28, 2015.	Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart.	December 28, 2015.

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If you have a(n) . . .	Then you must . . .	No later than . . .
2. New or reconstructed affected source and the initial startup of your affected source is after December 28, 2015.	Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart.	Initial startup of your affected source.
3. Existing affected source .....	Comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 to this subpart.	December 26, 2018.
4. Existing area source that increases its emissions or its potential to emit such that it becomes a major source of HAP by adding a new affected source or by reconstructing.	Be in compliance with this subpart .....	Initial startup of your affected source as a major source.
5. New area source ( <i>i.e.</i> , an area source for which construction or reconstruction commenced after December 18, 2014) that increases its emissions or its potential to emit such that it becomes a major source of HAP.	Be in compliance with this subpart .....	Initial startup of your affected source as a major source.

**TABLE 9 TO SUBPART KKKKK OF PART 63—DEADLINES FOR SUBMITTING NOTIFICATIONS**

As stated in §63.8630, you must submit each notification that applies to you according to the following table:

If you . . .	You must . . .	No later than . . .	As specified in . . .
1. Start up your affected source before December 28, 2015.	Submit an Initial Notification ..	June 22, 2016, or no later than 120 days after the source becomes subject to this subpart, whichever is later.	§ 63.9(b)(2).
2. Start up your new or reconstructed affected source on or after December 28, 2015.	Submit an Initial Notification ..	120 calendar days after you become subject to this subpart.	§ 63.9(b)(2).
3. Are required to conduct a performance test.	Submit a notification of intent to conduct a performance test.	60 calendar days before the performance test is scheduled to begin.	§ 63.7(b)(1).
4. Are required to conduct a compliance demonstration that includes a performance test according to the requirements in Table 4 to this subpart.	Submit a Notification of Compliance Status, including the performance test results.	60 calendar days following the completion of the performance test, by the close of business.	§ 63.9(h) and § 63.10(d)(2).
5. Are required to conduct a compliance demonstration required in Table 6 to this subpart that does not include a performance test ( <i>i.e.</i> , compliance demonstrations for the work practice standards).	Submit a Notification of Compliance Status.	30 calendar days following the completion of the compliance demonstrations, by the close of business.	§ 63.9(h).
6. Request to use the routine control device maintenance alternative standard according to § 63.8570(d).	Submit your request .....	120 calendar days before the compliance date specified in § 63.8545.	
7. Own or operate an affected kiln that is subject to the work practice standard specified in Item 1 of Table 3 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected kiln.	Submit a notification of alternative fuel use.	48 hours following the declaration of a period of natural gas curtailment or supply interruption, as defined in § 63.8665.	

[80 FR 65543, Oct. 26, 2015, as amended at 85 FR 73915, Nov. 19, 2020]

**TABLE 10 TO SUBPART KKKKK OF PART 63—REQUIREMENTS FOR REPORTS**

As stated in §63.8635, you must submit each report that applies to you according to the following table:

You must submit . . .	The report must contain . . .	You must submit the report . . .
1. A compliance report .....	<p>a. If there are no deviations from any emission limitations or work practice standards that apply to you, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period. If there were no periods during which the CMS was out-of-control as specified in your OM&amp;M plan, a statement that there were no periods during which the CMS was out-of-control during the reporting period.</p> <p>b. If you have a deviation from any emission limitation (emission limit, operating limit) during the reporting period, the report must contain the information in § 63.8635(c)(8). If there were periods during which the CMS was out-of-control, as specified in your OM&amp;M plan, the report must contain the information in § 63.8635(d).</p>	<p>Semiannually according to the requirements in § 63.8635(b).</p> <p>Semiannually according to the requirements in § 63.8635(b).</p>
2. A report of alternative fuel use .....	The information in § 63.8635(g) .....	If you are subject to the work practice standards specified in Table 3 to this subpart, and you use an alternative fuel to fire an affected kiln, by letter within 10 working days after terminating the use of the alternative fuel.

TABLE 11 TO SUBPART KKKKK OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART KKKKK

As stated in § 63.8655, you must comply with the General Provisions in §§ 63.1 through 63.16 that apply to you according to the following table:

Citation	Subject	Brief description	Applies to subpart KKKKK?
§ 63.1 .....	Applicability .....	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications.	Yes.
§ 63.2 .....	Definitions .....	Definitions for part 63 standards .....	Yes.
§ 63.3 .....	Units and Abbreviations.	Units and abbreviations for part 63 standards.	Yes.
§ 63.4 .....	Prohibited Activities	Compliance date; circumvention; severability.	Yes.
§ 63.5 .....	Construction/Reconstruction.	Applicability; applications; approvals .....	Yes.
§ 63.6(a) .....	Applicability .....	General Provisions (GP) apply unless compliance extension; GP apply to area sources that become major.	Yes.
§ 63.6(b)(1)–(4) .....	Compliance Dates for New and Reconstructed sources.	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f).	Yes.
§ 63.6(b)(5) .....	Notification .....	Must notify if commenced construction or reconstruction after proposal.	Yes.
§ 63.6(b)(6) .....	[Reserved].		
§ 63.6(b)(7) .....	Compliance Dates for New and Reconstructed Area Sources That Become Major.	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were area sources.	Yes.
§ 63.6(c)(1)–(2) .....	Compliance Dates for Existing Sources.	Comply according to date in subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 days of effective date unless compliance extension.	Yes.
§ 63.6(c)(3)–(4) .....	[Reserved] .....		No.
§ 63.6(c)(5) .....	Compliance Dates for Existing Area Sources That Become Major.	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years).	Yes.

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Citation	Subject	Brief description	Applies to subpart KKKKK?
§ 63.6(d)	[Reserved]		No.
§ 63.6(e)(1)(i)	Operation & Maintenance.	General Duty to minimize emissions	No. See §63.8570(b) for general duty requirement.
§ 63.6(e)(1)(ii)	Operation & Maintenance.	Requirement to correct malfunctions ASAP.	No.
§ 63.6(e)(1)(iii)	Operation & Maintenance.	Operation and maintenance requirements enforceable independent of emissions limitations.	Yes.
§ 63.6(e)(2)	[Reserved]		No.
§ 63.6(e)(3)	Startup, Shutdown, and Malfunction Plan (SSMP).	Requirement for startup, shutdown, and malfunction (SSM) and SSMP; content of SSMP.	No.
§ 63.6(f)(1)	Compliance Except During SSM.	You must comply with emission standards at all times except during SSM.	No.
§ 63.6(f)(2)–(3)	Methods for Determining Compliance.	Compliance based on performance test, operation and maintenance plans, records, inspection.	Yes.
§ 63.6(g)	Alternative Standard	Procedures for getting an alternative standard.	Yes.
§ 63.6(h)	Opacity/VE Standards.	Requirements for opacity and VE standards.	No, not applicable.
§ 63.6(i)	Compliance Extension.	Procedures and criteria for Administrator to grant compliance extension.	Yes.
§ 63.6(j)	Presidential Compliance Exemption.	President may exempt source category ...	Yes.
§ 63.7(a)(1)–(2)	Performance Test Dates.	Dates for conducting initial performance testing and other compliance demonstrations for emission limits and work practice standards; must conduct 180 days after first subject to rule.	Yes.
§ 63.7(a)(3)	Section 114 Authority.	Administrator may require a performance test under CAA section 114 at any time.	Yes.
§ 63.7(a)(4)	Notification of Delay in Performance Testing Due To Force Majeure.	Must notify Administrator of delay in performance testing due to force majeure.	Yes.
§ 63.7(b)(1)	Notification of Performance Test.	Must notify Administrator 60 days before the test.	Yes.
§ 63.7(b)(2)	Notification of Rescheduling.	Must notify Administrator 5 days before scheduled date of rescheduled date.	Yes.
§ 63.7(c)	Quality Assurance (QA)/Test Plan.	Requirements; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing.	Yes.
§ 63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§ 63.7(e)(1)	Conditions for Conducting Performance Tests.	Performance tests must be conducted under representative conditions.	No, § 63.8595 specifies requirements.
		Cannot conduct performance tests during SSM; not a violation to exceed standard during SSM.	Yes.
§ 63.7(e)(2)–(3)	Conditions for Conducting Performance Tests.	Must conduct according to subpart and EPA test methods unless Administrator approves alternative; must have at least three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used.	Yes.
§ 63.7(e)(4)	Testing under Section 114.	Administrator's authority to require testing under section 114 of the Act.	Yes.
§ 63.7(f)	Alternative Test Method.	Procedures by which Administrator can grant approval to use an alternative test method.	Yes.
§ 63.7(g)	Performance Test Data Analysis.	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the notification of compliance status.	Yes.
§ 63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test.	Yes.
§ 63.8(a)(1)	Applicability of Monitoring Requirements.	Subject to all monitoring requirements in subpart.	Yes.



Citation	Subject	Brief description	Applies to subpart KKKKK?
§ 63.8(a)(2) .....	Performance Specifications.	Performance Specifications in appendix B of 40 CFR part 60 apply.	Yes.
§ 63.8(a)(3) .....	[Reserved]		No.
§ 63.8(a)(4) .....	Monitoring with Flares.	Requirements for flares in § 63.11 apply	No, not applicable.
§ 63.8(b)(1) .....	Monitoring .....	Must conduct monitoring according to standard unless Administrator approves alternative.	Yes.
§ 63.8(b)(2)–(3) .....	Multiple Effluents and Multiple Monitoring Systems.	Specific requirements for installing and reporting on monitoring systems.	Yes.
§ 63.8(c)(1) .....	Monitoring System Operation and Maintenance.	Maintenance consistent with good air pollution control practices.	Yes.
§ 63.8(c)(1)(i) .....	Routine and Predictable SSM.	Reporting requirements for SSM when action is described in SSMP.	No.
§ 63.8(c)(1)(ii) .....	SSM not in SSMP ...	Reporting requirements for SSM when action is not described in SSMP.	Yes.
§ 63.8(c)(1)(iii) .....	Compliance with Operation and Maintenance Requirements.	How Administrator determines if source complying with operation and maintenance requirements.	No.
§ 63.8(c)(2)–(3) .....	Monitoring System Installation.	Must install to get representative emission and parameter measurements.	Yes.
§ 63.8(c)(4) .....	CMS Requirements	Requirements for CMS .....	No, § 63.8600 specifies requirements.
§ 63.8(c)(5) .....	Continuous Opacity Monitoring System (COMS) Minimum Procedures.	COMS minimum procedures .....	No, not applicable.
§ 63.8(c)(6) .....	CMS Requirements	Zero and high level calibration check requirements.	Yes.
§ 63.8(c)(7)–(8) .....	CMS Requirements	Out-of-control periods .....	Yes.
§ 63.8(d)(1) and (2) ...	CMS Quality Control	Requirements for CMS quality control .....	Yes.
§ 63.8(d)(3) .....	CMS Quality Control	Written procedures for CMS .....	No, § 63.8575(b)(9) specifies requirements.
§ 63.8(e) .....	CMS Performance Evaluation.	Requirements for CMS performance evaluation.	Yes.
§ 63.8(f)(1)–(5) .....	Alternative Monitoring Method.	Procedures for Administrator to approve alternative monitoring.	Yes.
§ 63.8(f)(6) .....	Alternative to Relative Accuracy Test.	Procedures for Administrator to approve alternative relative accuracy test for continuous emission monitoring systems (CEMS).	No, not applicable.
§ 63.8(g) .....	Data Reduction .....	COMS and CEMS data reduction requirements.	No, not applicable.
§ 63.9(a) .....	Notification Requirements.	Applicability; State delegation .....	Yes.
§ 63.9(b) .....	Initial Notifications ...	Requirements for initial notifications .....	Yes.
§ 63.9(c) .....	Request for Compliance Extension.	Can request if cannot comply by date or if installed BACT/LAER.	Yes.
§ 63.9(d) .....	Notification of Special Compliance Requirements for New Source.	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date.	Yes.
§ 63.9(e) .....	Notification of Performance Test.	Notify Administrator 60 days prior .....	Yes.
§ 63.9(f) .....	Notification of VE/Opacity Test.	Notify Administrator 30 days prior .....	No, not applicable.
§ 63.9(g)(1) .....	Additional Notifications When Using CMS.	Notification of performance evaluation .....	Yes.
§ 63.9(g)(2)–(3) .....	Additional Notifications When Using CMS.	Notification of COMS data use; notification that relative accuracy alternative criterion were exceeded.	No, not applicable.
§ 63.9(h) .....	Notification of Compliance Status.	Contents; submittal requirements .....	Yes.
§ 63.9(i) .....	Adjustment of Submittal Deadlines.	Procedures for Administrator to approve change in when notifications must be submitted.	Yes.
§ 63.9(j) .....	Change in Previous Information.	Must submit within 15 days after the change.	Yes.
§ 63.9(k) .....	Electronic reporting procedures.	Electronic reporting procedures for notifications per § 63.9(j).	Yes.

**Environmental Protection Agency**

**§ 63.8680**

Citation	Subject	Brief description	Applies to subpart KKKKK?
§ 63.10(a)	Recordkeeping/Reporting.	Applicability; general information	Yes.
§ 63.10(b)(1)	General Recordkeeping Requirements.	General requirements	Yes.
§ 63.10(b)(2)(i)	Records Related to SSM.	Recordkeeping of occurrence and duration of startups and shutdowns.	No.
§ 63.10(b)(2)(ii)	Records Related to SSM.	Recordkeeping of failures to meet a standard.	No. See § 63.8640(c)(2) for recordkeeping of (1) date, time and duration; (2) listing of affected source or equipment, and an estimate of the volume of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and correct the failure.
§ 63.10(b)(2)(iii)	Records Related to SSM.	Maintenance records	Yes.
§ 63.10(b)(2)(iv)–(v)	Records Related to SSM.	Actions taken to minimize emissions during SSM.	No.
§ 63.10(b)(2)(vi)–(xii) and (xiv)	CMS Records	Records when CMS is malfunctioning, inoperative or out-of-control.	Yes.
§ 63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test.	No, not applicable.
§ 63.10(b)(3)	Records	Applicability Determinations	Yes.
§ 63.10(c)(1)–(15)	Records	Additional records for CMS	No, §§ 63.8575 and 63.8640 specify requirements.
§ 63.10(d)(1) and (2)	General Reporting Requirements.	Requirements for reporting; performance test results reporting.	Yes.
§ 63.10(d)(3)	Reporting Opacity or VE Observations.	Requirements for reporting opacity and VE.	No, not applicable.
§ 63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension.	Yes.
§ 63.10(d)(5)	SSM Reports	Contents and submission	No. See § 63.8635(c)(8) for malfunction reporting requirements.
§ 63.10(e)(1)–(3)	Additional CMS Reports.	Requirements for CMS reporting	No, §§ 63.8575 and 63.8635 specify requirements.
§ 63.10(e)(4)	Reporting COMS data.	Requirements for reporting COMS data with performance test data.	No, not applicable.
§ 63.10(f)	Waiver for Recordkeeping/Reporting.	Procedures for Administrator to waive	Yes.
§ 63.11	Flares	Requirement for flares	No, not applicable.
§ 63.12	Delegation	State authority to enforce standards	Yes.
§ 63.13	Addresses	Addresses for reports, notifications, requests.	Yes.
§ 63.14	Incorporation by Reference.	Materials incorporated by reference	Yes.
§ 63.15	Availability of Information.	Information availability; confidential information.	Yes.
§ 63.16	Performance Track Provisions.	Requirements for Performance Track member facilities.	Yes.

[80 FR 65543, Oct. 26, 2015, as amended at 85 FR 73915, Nov. 19, 2020]

**Subpart LLLLL—National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing**

SOURCE: 68 FR 24577, May 7, 2003, unless otherwise noted.

**WHAT THIS SUBPART COVERS**

**§ 63.8680 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for existing and

new asphalt processing and asphalt roofing manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.