

The EPA Administrator, Gina McCarthy, signed the following notice on 7/14/2016, and EPA is submitting it for publication in the Federal Register (FR). While we have taken steps to ensure the accuracy of this Internet version of the rule, it is not the official version of the rule for purposes of compliance. Please refer to the official version in a forthcoming FR publication, which will appear on the Government Printing Office's FDSys website (<http://gpo.gov/fdsys/search/home.action>) and on Regulations.gov (<http://www.regulations.gov>) in Docket No. EPA-HQ-OAR-2011-0817. Once the official version of this document is published in the FR, this version will be removed from the Internet and replaced with a link to the official version.

6560-50-P

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 63**

[EPA-HQ-OAR-2011-0817; FRL-XXXX-XX-OAR]

RIN 2060-AS98

**National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Direct final rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is taking direct final action to amend the National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry. This direct final rule provides, for a period of 1 year, an additional compliance alternative for sources that would otherwise be required to use an HCl CEMS to demonstrate compliance with the HCl emissions limit. This compliance alternative is needed due to the current unavailability of a calibration gas used for quality assurance purposes. This direct final rule also restores regulatory text requiring the reporting of clinker production and kiln feed rates that was deleted inadvertently.

**DATES:** This rule is effective on [Insert date 90 days after date of publication in the Federal Register] without further notice,

unless the EPA receives significant adverse comment by **[Insert date 30 days after date of publication in the Federal Register]**.

If the EPA receives significant adverse comment, we will publish a timely withdrawal in the **Federal Register** informing the public that the rule will not take effect.

**ADDRESSES:** Submit your comments, identified by Docket ID No.

EPA-HQ-OAR-2011-0817, to the Federal eRulemaking Portal:

<http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the Web, Cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

**FOR FURTHER INFORMATION CONTACT:** Ms. Sharon Nizich, Sector Policies and Programs Division (D243-02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, 27711; telephone number: (919) 541-2825; fax number: (919) 541-5450; and email address: nizich.sharon@epa.gov.

**SUPPLEMENTARY INFORMATION:**

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

**I. General Information**

- A. Why is the EPA using a direct final rule?
- B. Does this direct final rule apply to me?
- C. What should I consider as I prepare my comments for the EPA?

**II. What are the amendments made by this direct final rule?**

**III. Statutory and Executive Order Reviews**

- A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review
- B. Paperwork Reduction Act (PRA)
- C. Regulatory Flexibility Act (RFA)
- D. Unfunded Mandates Reform Act (UMRA)
- E. Executive Order 13132: Federalism
- F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
- G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
- H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
- I. National Technology Transfer and Advancement Act (NTTAA)
- J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- K. Congressional Review Act (CRA)

**I. General Information**

A. Why is the EPA using a direct final rule?

The EPA is publishing this direct final rule without a prior proposed rule because we view this as a noncontroversial action and do not anticipate significant adverse comment. However, in the "Proposed Rules" section of this **Federal Register**, we are publishing a separate document that will serve as the proposed rule to amend the National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry, if EPA receives significant adverse comments on this direct final rule. We will not institute a second comment period on this action. Any parties interested in commenting must do so at this time. For further information about commenting on this rule, see the **ADDRESSES** section of this document.

If the EPA receives significant adverse comment on all or a distinct portion of this direct final rule, we will publish a timely withdrawal in the **Federal Register** informing the public that some or all of this direct final rule will not take effect. We would address all public comments in any subsequent final rule based on the proposed rule.

B. Does this direct final rule apply to me?

Categories and entities potentially regulated by this direct final rule include:

Category	NAICS Code <sup>1</sup>
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Portland cement manufacturing facilities	327310
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<sup>1</sup> North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this direct final rule. To determine whether your facility is affected, you should examine the applicability criteria in 40 CFR 63.1340. If you have questions regarding the applicability of any aspect of this action to a particular entity, consult either the air permitting authority for the entity or your EPA Regional representative as listed in 40 CFR 63.13.

C. What should I consider as I prepare my comments for the EPA?

Do not submit information containing CBI to the EPA through <http://www.regulations.gov> or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on a disk or CD-ROM that you mail to the EPA, mark the outside of the disk or CD-ROM as CBI and then identify electronically within the disk or CD-ROM the specific information that is claimed as CBI. In addition to one complete version of the comments that includes information claimed as CBI, a copy of the comments that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

Send or deliver information identified as CBI only to the following address: OAQPS Document Control Officer (C404-02), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA-HQ-OAR-2011-0817.

**II. What are the amendments made by this direct final rule?**

In response to a concern raised by a stakeholder regarding the availability of calibration gases for HCl continuous monitoring compliance, this direct final rule amends 40 CFR 63.1349(b)(6) of the performance testing requirements for HCl by adding an alternative method for performance testing. Under the current rule, the owner or operator of a kiln subject to the emission limits for HCl in 40 CFR 63.1343 may demonstrate compliance by one of the following methods:

- An owner or operator of a kiln may demonstrate compliance by operating a continuous emissions monitoring system (CEMS) meeting the requirements of performance specification 15 (PS-15), PS-18, or any other PS for HCl CEMS in appendix B to part 60, with compliance based on a 30-kiln operating day rolling average.
- If the kiln is controlled using a wet scrubber, tray tower, or dry scrubber, the owner or operator, as an alternative to using a CEMS, may demonstrate compliance with the HCl limit using one of two options, described below.

Under both options, a performance test must be conducted by the owner or operator using Method 321. Under the first option, while conducting the Method 321 performance test (note Method 321 is the HCl stack testing performance method required by this rule), the owner or operator simultaneously measures a control device parameter and establishes a site-specific parameter limit that will be continuously monitored to determine compliance. If the kiln is controlled using a wet scrubber or tray tower, the owner or operator would monitor the pressure drop across the scrubber and/or liquid flow rate and pH during the HCl performance test. If the kiln is controlled using a dry scrubber, the sorbent injection rate would be monitored during the performance test. Under the second option, the owner or operator may establish sulfur dioxide (SO<sub>2</sub>) as the operating parameter by measuring SO<sub>2</sub> emissions using a CEMS simultaneously with the Method 321 test and establishing the site-specific SO<sub>2</sub> limit that will be continuously monitored to determine compliance with the HCl limit.

The current rule requires that if a source chooses to monitor HCl emissions using a CEMS, they must do so in accordance with PS-15, PS-18, or any other PS for HCl CEMS in appendix B to part 60 of this chapter. (See 40 CFR part 60 appendix B.) Quality assurance procedures for HCl CEMS require that they be capable of reading HCl concentrations that span a

range of possible emission levels below as well as above expected HCl emission concentrations. These quality assurance procedures require the use of National Institute of Standards and Technology (NIST)-traceable calibration gases for HCl.

Following our decision to create PS-18 and Procedure 6 for HCl continuous monitoring in 2012, the EPA worked with NIST and commercial gas vendors on development of NIST-traceable HCl gas standards to support the PS-18 and Portland Cement Maximum Achievable Control Technology (MACT) rulemaking. While some of the low HCl concentration (< 10 parts per million, or ppm) NIST-traceable gases have been available on a limited basis since 2013, the full range of HCl concentrations required to support all HCl emissions monitoring technologies (including integrated path that requires concentrations 100 times higher) are not widely available at this time.

The approach used by NIST in 2013 was to certify the Research Gas Material (RGM) cylinders as primary gas standards. These cylinders contain HCl gas and are provided to NIST by vendors for NIST certification, and subsequently used by the vendors as transfer standards to prepare the Gas Manufacturer Intermediate Standards (GMIS). The GMIS cylinders are then used to produce NIST-traceable gas cylinders that are sold

commercially.<sup>1</sup> The initial approach used by NIST to certify the RGM cylinders was not viable in the long term as the instrumentation used by NIST largely depleted the HCl RGM gas volume, leaving little gas in the cylinder for the vendors to use in preparing GMIS materials. Because of this concern, NIST initiated development of an improved RGM certification procedure. The development of both the initial and more recently improved approach has been hampered by the challenges presented in handling HCl gas. HCl gas is extremely reactive and difficult to handle in both gas cylinders and analytically. As such, it has taken considerable time for NIST to optimize the new analytical equipment and approach to achieve the necessary uncertainty requirements (e.g., <1 percent uncertainty).

In addition, the commercial establishment of NIST-traceable gases is dependent on collaboration between NIST and the specialty gas vendors. There are a limited number of vendors providing the stable, accurate, low and high concentration cylinder gases to NIST to certify as RGMs. NIST is now receiving a regular supply of candidate RGM cylinders from these vendors and is beginning work on higher concentration HCl gas standards needed to support integrated path HCl monitors (IP-CEMS). Once

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<sup>1</sup> EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards, U.S. Environmental Protection Agency Office of Research and Development, EPA/600/R-12/531, May 2012.

the RGMS are available, the specialty gas vendors must complete a series of procedures to establish the certainty of their products which adds to the time to achieve wide commercial availability.

As a result, the EPA is providing, for a period of 1 year, an additional compliance alternative for sources that would otherwise be required to use an HCl CEMS. In this alternative, the HCl CEMS is still required to be installed and operated, but actual compliance with the HCl emissions limit is determined by a three run stack test. The HCl CEMS will still provide a continuous readout of HCl emissions, but because the CEMS will not be calibrated with the required NIST-traceable calibration gases, the HCl measurement is not considered to be sufficiently accurate on an absolute basis for compliance, but would be sufficient to indicate any relative change in HCl emissions occurring subsequent to the compliance test. Therefore, the HCl CEMS under this alternative would function as a continuous parameter monitor system (CPMS) as in the case of the particulate matter (PM) CPMS requirement (see 78 FR 10014-10015, 10019-10020, February 12, 2013). Based on conversations with gas vendors and NIST, we anticipate that NIST-traceable calibration gases for HCl will be available in sufficient quantities within one year of this notice (see J.Ryan, memo to S. Johnson, Docket ID No. EPA-HQ-OAR-2011-0817, Status of NIST-Traceable Hydrogen

Chloride (HCl) Calibration Gases for use with HCl Continuous Emissions Monitoring Systems (CEMS) under 40 CFR 63, Subpart LLL, June 22, 2016). Thus, this alternative will expire on **[insert date 365 days after date of publication in the Federal Register]** and owner/operators must have in place one of the original HCl compliance demonstration alternatives (we anticipate HCl CEMS operated monitoring equipment according to 40 CFR 63.1350(1)) by this date.

Under this new, temporary alternative, the owner or operator would demonstrate initial compliance by conducting a performance test using Method 321 and would monitor compliance with an operating parameter limit through use of an HCl CPMS. For the HCl CPMS, the owner operator would use the average HCl CPMS indicated output, typically displayed as parts per million volume, wet basis HCl recorded at in-stack oxygen concentration during the HCl performance test to establish the operating limit. To determine continuous compliance with the operating limit, the owner or operator would record the indicated HCl CPMS output data for all periods when the process is operating and use all the HCl CPMS data, except data obtained during times of monitor malfunctions. Thus, continuous compliance with the operating limit would be demonstrated by using all valid hourly average data collected by the HCl CPMS for all operating hours to calculate the arithmetic average operating parameter in units

of the operating limit (indicated ppm) on a 30-kiln operating day rolling average basis, updated at the end of each new kiln operating day. An exceedance of the kiln 30-day operating limit would trigger evaluation of the control system operation and resetting the operating limit based on a new correlation with performance testing. For kilns with inline raw mills, performance testing and monitoring HCl to establish the site specific operating limit must be conducted during both raw mill on and raw mill off conditions.

As is the case for the PM CPMS requirements (see 40 CFR 63.1349(b)(1)(i)), this alternative includes a scaling factor of 75 percent of the emission standard as a benchmark (2.25 parts per million volume, dry basis @ 7-percent oxygen). Sources that choose this option will conduct a Method 321 test to determine compliance with the HCl emissions standard and during this testing will also monitor their HCl CPMS output in indicated ppm to determine where their HCl CPMS output would intersect 75 percent of their allowed HCl emissions, and set their operating level at that ppm output. This scaling procedure alleviates re-testing concerns for sources that operate well below the emission limit and provides greater operational flexibility while assuring continuous compliance with the HCl emission standard. For sources whose Method 321 compliance tests place them at or above 75 percent of the emission standard, their

operating limit is determined by the average of three Method 321 test runs (for sources with no inline raw mill) or the time weighted average of six Method 321 test runs (for kilns with inline raw mills). We believe that by adopting a scaling factor as well as the use of 30 days of averaged HCl CPMS measurements, the parametric limit in no way imposes a stringency level higher than the level of the HCl emissions standard and will avoid triggering unnecessary retests for many facilities, especially for the lower-emitting sources.

In addition to adding the interim testing and monitoring provisions for HCl, we are restoring a recordkeeping regulatory provision that was deleted inadvertently during one of the recent rule revisions. The provision in question is the former 40 CFR 63.1355(e). This provision relates to the recordkeeping requirements for clinker production and kiln feed rates. This requirement was added in the 2010 final amendments and was not removed or revised in subsequent amendments to the rule. This rulemaking restores this provision in the regulatory text to ensure that the regulated community has a clear understanding of the applicable compliance requirements.

### **III. Statutory and Executive Order Reviews**

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

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

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

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulation (40 CFR part 63, subpart RRR) and has assigned OMB control number 2060-0416. This action does not change the information collection requirements.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. This action does not create any new requirements or burdens and no costs are associated with this direct final action.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments.

The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

E. Executive Order 13132: Federalism

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

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

This action does not have tribal implications, as specified in Executive Order 13175. It will neither impose substantial direct compliance costs on federally recognized tribal governments, nor preempt tribal law. The EPA is aware of one tribally owned Portland cement facility currently subject to 40 CFR part 63, subpart LLL that will be subject to this direct final rule. However, the provisions of this direct final rule are not expected to impose new or substantial direct compliance costs on Tribal governments since the provisions in this direct final rule are adding an alternative to the HCl monitoring provisions, adding an option which provides operational flexibility. Thus, Executive Order 13175 does not apply to this action.

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

The EPA interprets Executive Order 13045 as applying to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

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

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

I. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

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

The EPA believes that this action does **not** have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, or indigenous peoples, as specified in Executive

Order 12898 (59 FR 7629, February 16, 1994). This action does not affect the level of protection provided to human health or the environment.

K. Congressional Review Act (CRA)

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

**National Emission Standards for Hazardous Air Pollutants for the  
Portland Cement Manufacturing Industry**

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**List of Subjects in 40 CFR Part 63**

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

Dated: \_\_\_\_\_.

\_\_\_\_\_  
Gina McCarthy,  
Administrator.

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

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

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

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

**Subpart LLL–National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry**

2. Section 63.1349 is amended by adding paragraph (b)(6)(v) to read as follows:

**§ 63.1349 Performance testing requirements.**

\* \* \* \* \*

(b) \* \* \*

\* \* \* \* \*

(6) \* \* \*

\* \* \* \* \*

(v) As an alternative to paragraph (b)(6)(ii) of this section, the owner or operator may demonstrate initial compliance by conducting a performance test using Method 321 of appendix A to this part. You must also monitor continuous performance through use of an HCl CPMS according to paragraphs

(b)(6)(v)(A) through (H) of this section. For kilns with inline raw mills, compliance testing and monitoring HCl to establish the site specific operating limit must be conducted during both raw mill on and raw mill off conditions.

(A) For your HCl CPMS, you must establish a 30 kiln operating day site-specific operating limit. If your HCl performance test demonstrates your HCl emission levels to be less than 75 percent of your emission limit (2.25 ppmvd @7% O<sub>2</sub>), you must use the time weighted average HCl CPMS indicated value recorded during the HCl compliance test (typically measured as ppmvw HCl at stack O<sub>2</sub> concentration, but a dry, oxygen corrected value would also suffice), your HCl instrument zero output value, and the time weighted average HCl result of your compliance test to establish your operating limit. If your HCl compliance test demonstrates your HCl emission levels to be at or above 75 percent of your emission limit (2.25 ppmvd @7% O<sub>2</sub>), you must use the time weighted average HCl CPMS indicated value recorded during the HCl compliance test as your operating limit. You must use the HCl CPMS indicated signal data to demonstrate continuous compliance with your operating limit.

(1) Your HCl CPMS must provide a ppm HCl concentration output and the establishment of its relationship to manual reference method measurements must be determined in units of indicated ppm. **NOTE:** The instrument signal may be in ppmvw or

ppmvd and the signal may be a measurement of HCl at in-stack concentration or a corrected oxygen concentration. Once the relationship between the indicated output of the HCl CPMS and the reference method test results is established, the HCl CPMS instrument measurement basis (ppmvw or ppmvd, or oxygen correction basis) must not be altered. Likewise, any setting that impacts the HCl CPMS indicated HCl response must remain fixed after the site-specific operating limit is set.

(2) Your HCl CPMS operating range must be capable of reading HCl concentrations from zero to a level equivalent to 125 percent of the highest expected value during mill off operation. If your HCl CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading an indicated HCl concentration from zero to 10 ppm.

(3) During the initial performance test of a kiln with an inline raw mill, or any such subsequent performance test that demonstrates compliance with the HCl limit, record and average the indicated ppm HCl output values from the HCl CPMS for each of the six periods corresponding to the compliance test runs (e.g., average each of your HCl CPMS output values for six corresponding Method 321 test runs). With the average values of the six test runs, calculate the average of the three mill on test runs and the average of the three mill off test runs.

Calculate the time weighted result using the average of the three mill on tests and the average of the three mill off tests and the previous annual ratio of mill on/mill off operations. Kilns without an inline raw mill will conduct three compliance tests and calculate the average monitor output values corresponding to these three test runs and not use time weighted values to determine their site specific operating limit.

(B) Determine your operating limit as specified in paragraphs (b)(6)(i) or (iii) of this section. If your HCl performance test demonstrates your HCl emission levels to be below 75 percent of your emission limit, kilns with inline raw mills will use the time weighted average indicated HCl ppm concentration CPMS value recorded during the HCl compliance test, the zero value output from your HCl CPMS, and the time weighted average HCl result of your compliance test to establish your operating limit. Kilns without inline raw mills will not use a time weighted average value to establish their operating limit. If your time weighted HCl compliance test demonstrates your HCl emission levels to be at or above 75 percent of your emission limit, you will use the time weighted HCl CPMS indicated ppm value recorded during the HCl compliance test to establish your operating limit. Kilns without inline raw mills will not use time weighted compliance test results to make this determination. You must verify an existing operating limit or

establish a new operating limit for each kiln, after each repeated performance test.

(C) If the average of your three Method 321 compliance test runs (for kilns without an inline raw mill) or the time weighted average of your six Method 321 compliance test runs (for an kiln with an inline raw mill) is below 75 percent of your HCl emission limit, you must calculate an operating limit by establishing a relationship of the average HCl CPMS indicated ppm to the Method 321 test average HCl concentration using the HCl CPMS instrument zero, the average HCl CPMS indicated values corresponding to the three (for kilns without inline raw mills) or time weighted HCl CPMS indicated values corresponding to the six (for kilns with inline raw mills) compliance test runs, and the average HCl concentration (for kilns without raw mills) or average time weighted HCl concentration (for kilns with inline raw mills) from the Method 321 compliance test with the procedures in paragraphs (b)(6)(v)(C)(1) through (5) of this section.

(1) Determine your HCl CPMS instrument zero output with one of the following procedures:

(i) Zero point data for in situ instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench.

(ii) If neither of the steps in paragraphs (b)(6)(v)(C)(1)(i) through (ii) of this section are possible, you must use a zero output value provided by the manufacturer.

(2) If your facility does not have an inline raw mill you will determine your HCl CPMS indicated average in HCl ppm, and the average of your corresponding three HCl compliance test runs, using equation 11a.

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n X_i, \bar{y} = \frac{1}{n} \sum_{i=1}^n Y_i \quad (\text{Eq. 11a})$$

Where:

$X_i$  = The HCl CPMS data points for the three (or six) runs constituting the performance test;

$Y_i$  = The HCl concentration value for the three (or six) runs constituting the performance test; and

$n$  = The number of data points.

(3) You will determine your HCl CPMS indicated average in HCl ppm, and the average of your corresponding HCl compliance test runs, using equation 11b. If you have an inline raw mill, use this same equation to calculate a second three-test average for your mill off CPMS and compliance test data.

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n X_i, \bar{y} = \frac{1}{n} \sum_{i=1}^n Y_i \quad (\text{Eq. 11b})$$

Where:

$X_i$  = The HCl CPMS data points for the three runs constituting the mill on OR mill off performance test;

$Y_i$  = The HCl concentration value for the three runs constituting the mill on OR mill off performance test; and

$n$  = The number of data points.

(4) With your instrument zero expressed in ppm, your average HCl CPMS ppm value, and your HCl compliance test average, determine a relationship of performance test HCl (as ppmvd @7% O<sub>2</sub>) concentration per HCl CPMS indicated ppm with Equation 11c.

$$R = \frac{Y_1}{(X_1 - z)}$$

(Eq. 11c)

Where:

$R$  = The relative performance test concentration per indicated ppm for your HCl CPMS;

$Y_1$  = The average HCl concentration as ppmvd @7% O<sub>2</sub> during the performance test;

$X_1$  = The average indicated ppm output from your HCl CPMS; and

$z$  = The ppm of your instrument zero determined from

(b)(6)(v)(C)(1).

(5) Determine your source specific 30 kiln operating day operating limit using the HCl CPMS indicated value from Equation 11c in Equation 11d, below. This sets your operating limit at the HCl CPMS output value corresponding to 75 percent of your emission limit.

$$O_1 = z + \frac{0.75(L)}{R}$$

(Eq. 11d)

Where:

$O_1$  = The operating limit for your HCl CPMS on a 30 kiln operating day average, as indicated ppm;

$L$  = 3 ppmvd @ 7%  $O_2$ ;

$z$  = Your instrument zero, determined from (b)(6)(v)(C)(1); and

$R$  = The relative performance test concentration per indicated ppm for your HCl CPMS, from Equation 11c.

(D) If the average of your HCl compliance test runs is at or above 75 percent of your HCl emission limit (2.25 ppmvd@7%  $O_2$ ) you must determine your operating limit by averaging the HCl CPMS output corresponding to your HCl performance test runs that demonstrate compliance with the emission limit using Equation 11e.

$$O_h = \frac{1}{n} \sum_{i=1}^n X_i$$

(Eq. 11e)

Where:

$O_h$  = Your site specific HCl CPMS operating limit, in indicated ppm.

$X_i$  = The HCl CPMS data points for all runs  $i$ .

$n$  = The number of data points.

(E) To determine continuous compliance with the operating limit, you must record the HCl CPMS indicated output data for all periods when the process is operating and use all the HCl CPMS data for calculations when the source is not out of control. You must demonstrate continuous compliance with the operating limit by using all quality-assured hourly average data collected by the HCl CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (ppmvw) on a 30 kiln operating day rolling average basis, updated at the end of each new kiln operating day. Use Equation 11f to determine the 30 kiln operating day average.

$$30\text{kiln operating day parameter average} = \frac{\sum_{i=1}^n Hp_{vi}}{n} \quad (\text{Eq. 11f})$$

Where:

30 kiln operating day parameter average = The average indicated value for the CPMS parameter over the previous 30 days of kiln operation;

$Hpv_i$  = The hourly parameter value for hour  $i$ ; and

$n$  = The number of valid hourly parameter values collected over 30 kiln operating days.

(F) If you exceed the 30 kiln operating day operating limit, you must evaluate the control system operation and re-set the operating limit.

(G) The owner or operator of a kiln with an inline raw mill and subject to limitations on HCl emissions must demonstrate initial compliance by conducting separate performance tests while the raw mill is on and while the raw mill is off. Using the fraction of time the raw mill is on calculate your HCl CPMS limit as a weighted average of the HCl CPMS indicated values measured during raw mill on and raw mill off compliance testing using Equation 11g.

$$R = (b * t) + (a * (1 - t)) \quad (\text{Eq. 11g})$$

Where:

$R$  = HCl CPMS operating limit;

$b$  = Average indicated HCl CPMS value during mill on operations, ppm;

$t$  = Fraction of operating time with mill on;

$a$  = Average indicated HCl CPMS value during mill off operations ppm; and

$(1-t)$  = Fraction of operating time with mill off.

(H) Paragraph 63.1349(b)(6)(v) of this section expires on ([Insert date 365 days after date of publication in the Federal Register] at which time the owner or operator must demonstrate compliance with paragraphs 63.1349(b)(6)(i), (ii), or (iii).

\* \* \* \* \*

3. Section 63.1350 is amended by adding paragraph (1)(4) to read as follows:

**§ 63.1350 Monitoring requirements.**

\* \* \* \* \*

(1) \* \* \*

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(4) If you monitor continuous performance through the use of an HCl CPMS according to paragraphs (b)(6)(v)(A) through (H) of this section, for any exceedance of the 30 kiln operating day HCl CPMS average value from the established operating limit, you must:

(i) Within 48 hours of the exceedance, visually inspect the APCD;

(ii) If inspection of the APCD identifies the cause of the exceedance, take corrective action as soon as possible and return the HCl CPMS measurement to within the established value; and

(iii) Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct an HCl emissions compliance test to determine compliance with the HCl emissions limit and to verify or reestablish the HCl CPMS operating limit within 45 days. You are not required to conduct additional testing for any exceedances that occur between the time of the original exceedance and the HCl emissions compliance test required under this paragraph.

(iv) HCl CPMS exceedances leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a presumptive violation of this subpart.

\* \* \* \* \*

4. Section 63.1355 is amended by adding paragraph (e) to read as follows:

**§ 63.1355 Recordkeeping requirements.**

\* \* \* \* \*

(e) You must keep records of the daily clinker production rates and kiln feed rates.

\* \* \* \* \*