

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP)

FOR THE PORTLAND CEMENT MANUFACTURING INDUSTRY SUBPART LLL

Rule Guidance for RTR (*April 2020 version*)

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PURPOSE AND GOALS FOR GUIDANCE

This document is intended for the use by EPA staff, State and Local regulatory agencies and their staff, and industry plant managers. The discussion in this document is intended solely as guidance. It does not impose legally binding requirements on the United States Environmental Protection Agency, state regulators, or the regulated industry. As new issues emerge on Subpart LLL, this guidance will be updated at <https://www.epa.gov/stationary-sources-air-pollution/national-emission-standards-hazardous-air-pollutants-neshap-8> and a notice will be sent to industry and regulatory contacts for distribution.

POLICY AND TECHNICAL CONTACTS

- Sector Policies and Programs Division, Measurement Policy Group (MPG), Technical Contacts:
 - Theresa Lowe, (919) 541-4786, for questions on Electronic Reporting Tool (ERT) or both Theresa or Gerri Garwood, (919) 541-2406 for technical questions associated with determination of Organic HAP operating limits.
 - Ketan Patel, (919) 541-9736 for questions associated with electronic reporting using the Compliance and Emissions Data Reporting Interface (CEDRI).
- Regulatory Contact: Minerals and Manufacturing Group (MMG), Brian Storey, (919) 541-1103
- Office of Enforcement and Compliance Assurance Contact: Sara Ayres (312) 353-6266

TABLE OF EQUATION LIST AND DESCRIPTION in 40 CFR Part 63 Subpart LLL

Equation No.	Calculated Value is:	Description
1	Alternative PM emissions limit – PM_{alt}	Alternative PM emission limit calculation for existing kilns that combine the clinker cooler exhaust and/or alkali bypass and/or coal mill exhaust with the kiln exhaust and send the combined exhaust to the PM control device as a single stream.
2	Alternative PM emissions limit – PM_{alt}	Alternative PM emission limit for new kilns that combine kiln exhaust, clinker cooler gas and/or coal mill and alkali bypass exhaust
3	PM CPMS instrument average – ; average PM compliance test runs -\bar{y}	PM CPMS instrument average calculation in milliamps or digital equivalent; average of three PM compliance test runs calculation; if you have an inline raw mill, this will be 3 runs mill on and 3 runs mill off.(63.1349(b)(1)(vi) and (ix))
4	Relationship of lb/ton-clinker per milliamp or digital signal value for your PM CPMS to the compliance test - R	With instrument zero expressed in milliamps or a digital value, 3 run average PM CPMS and 3 run PM compliance average, determine the relationship of lb/ton-clinker per milliamp or digital signal value for each condition if applicable
5	Source Specific PM 30-day rolling average operating limit - O_i	Determine 30-day rolling average operating limit using calculated value from equation 4 in equation 5. This sets your operating limit at PM CPMS output value corresponding to 75% of your emission limit
6	Site specific PM operating limit - O_h	If the average of your 3 PM compliance test is at or above the 75% of PM emission limit, determine the operating limit by averaging the PM CPMS milliamp or digital equivalent output corresponding to the 3 PM performance test runs.
7	30 kiln operating day average – $30_{kilnoperatingday}$	Determine continuous operating compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter is units of the operating limit on a 30 operating day rolling average.
8	Combined hourly emission rate of PM - E_{Cm}	Determine combined hourly emission rate of PM from kiln and bypass stack and/or inline coal mill, lb/ton kiln clinker production

TABLE OF EQUATION LIST AND DESCRIPTION in 40 CFR Part 63 Subpart LLL (Continued)		
9	Kiln -specific THC limit - C_{ks}	If kiln gases are diverted through an alkali bypass or to a coal mill and exhausted through a separate stack, determine kiln specific THC limit.
10	30-day rolling emission rate of mercury, lb/MM tons clinker	Calculate the 30-day rolling average using concentration of mercury, volumetric flow rate, number of kiln operating hour and production data from the 30 days of clinker production.
11	Kiln -specific HCl limit - C_{ks}	If kiln gases are diverted through an alkali bypass or to a coal mill and exhausted through a separate stack, determine kiln specific HCl limit.
11a	HCl CPMS instrument average - \bar{x}; average HCl compliance test runs - \bar{y}	If your facility does not have an inline raw mill, HCl CPMS instrument average calculation in ppm; average of three PM compliance test runs calculation
11b	HCl CPMS instrument average - \bar{x}; average HCl compliance test runs - \bar{y}	If your facility has an inline raw mill, HCl CPMS instrument average calculation in ppm; average of three PM compliance test runs calculation; use this equation for both operating conditions – mill on and mill off (2, 3-test averages)
11c	Relationship of HCl performance test concentration to the HCl CPMS - R	With instrument zero expressed in ppm, 3 run average HCl CPMS ppm value and 3 run HCl compliance average, determine the relationship of the performance test HCl (as ppm@7% O ₂) concentration per HCl CPMS
11d	Source Specific HCl 30-day rolling average operating limit - O_i	Determine 30-day rolling average operating limit using calculated value from equation 11c in equation 5. This sets your operating limit at HCl CPMS output value corresponding to 75% of your emission limit
11e	Site specific HCl operating limit - O_h	If the average of your 3 HCl compliance test is at or above the 75% of HCl emission limit (2.25 ppmvd@7% O ₂), determine the operating limit by averaging the HCl CPMS output corresponding to the 3 HCl performance test runs.
11f	30 kiln operating day average - $30_{\text{kilnoperatingday}}$	Determine continuous operating compliance by using all quality-assured hourly average data collected by the HCl CPMS for all operating hours to calculate the arithmetic average operating parameter is units of the operating limit on a 30 operating day rolling average.

TABLE OF EQUATION LIST AND DESCRIPTION in 40 CFR Part 63 Subpart LLL
(Continued)

11g	HCl CPMS operating limit using weight averaging -R	Determine compliance by using the fraction of time the raw mill is on and raw mill is off, calculate the HCl CPMS limit as a weighted average of the HCl CPMS indicated values measured during raw mill on and raw mill off compliance testing.
12	THC CEMS average – \bar{x}; average total organic HAP compliance test runs -\bar{y}	THC CEMS average calculation in ppmvw; average of three total organic HAP compliance test runs calculation
13	30-day operating limit for THC CEMs, ppmvw as propane	Determine operating limit in units of ppmvw TCH, as propane
14	Site specific THC operating limit, ppmvw as propane	If average of 3 oHAP performance test runs are $\leq 75\%$ of OHAP emission limit, determine operating limit by averaging the THC CEMS output values corresponding to the 3 oHAPs test runs that demonstrate compliance with the emission limit
15	Operating limit of THC, ppmvw as propane	Calculate this limit as a weighted average if the THC levels measured during raw mill on and mill off compliance testing
16	30-kiln operating day average	Calculate the arithmetic average operating parameter in units of the operating limit (ppmvw) on a 30 operating day rolling average basis
17	Operating limit as SO₂, ppmvw	Calculate this limit as a weighted average of the SO ₂ levels measured during raw mill on and raw mill off compliance testing
18	SO₂ CEMS average – \bar{x}; average HCl compliance test runs -\bar{y}	SO ₂ CEMS average calculation in ppmvw; average of three HCl compliance test runs calculation
19	Relationship of HCl performance test concentration to the SO₂ – R	With instrument zero expressed in ppmv, 3 run average SO ₂ CEMS ppmv value and 3 run HCl compliance average (as ppm@7% O ₂), determine the relationship of the performance test HCl (as ppm@7% O ₂) concentration per SO ₂ ppm

TABLE OF EQUATION LIST AND DESCRIPTION in 40 CFR Part 63 Subpart LLL (Continued)		
20	Source specific 30-day rolling average operating limit	This sets the operating limit at the SO ₂ CEMS ppm value corresponding to 75% of HCl emission limit.
21	30 kiln operating day	Demonstrate continuous compliance by using all quality-assured hourly average data collected by SO ₂ CEMS for all operating hours to calculate the arithmetic average operating parameter
22	Normalized stack gas result for mercury CEMS	All hourly average values exceeding the span value measured by the Hg CEMS during the week following the above span linearity challenge when the CEMS response exceeds ± 20 percent of the certified value of the reference gas.
23	Normalized stack gas result for HCl CEMS	All hourly average values above the span during the 24-hr period preceding or following the above span calibration for reporting based on the HCl CEMS response to the reference gas.

INDIVIDUAL SECTION GUIDANCE

Section 63.1343(b) Table 1 – Dioxin/Furan Factors (updated July 2016)

Table 1 of Section 63.1343(b) lists the emission limits for dioxin/furans. The units of the emission limit are ng/dscm @7% O₂. The TEQ is developed by determining the mass of each congener measured during the performance test, then multiplying each congener by the toxic equivalent factor, or TEF. After the TEQ is developed per congener, they are added to obtain the total TEQ's. The TEF's have been re-evaluated in 2005 by the World Health Organization-IPCS using a different scale of magnitude¹, but Subpart LLL standards were developed based on TEF's developed in 1989 as referenced in the TEQ definition section of the rule (Section 63.1341). Laboratories calculating the TEQ's should be using these 1989 TEFs.

Section 63.1346(g)(3) – Startup and Shutdown Work Practices

This section states that all air pollution control devices must be turned on and operating prior to combustion of any fuels. This requirement is intended for air pollution control devices that are used to reduce HAP and is not intended for non-HAP pollutants regulated under other standards (since the subpart LLL standards apply only to HAP emissions). Thus, air pollution control devices for NO_x or SO_x control, for example, are not be covered under this subsection (unless these devices are used to demonstrate compliance with HAP emission standards (e.g. SO_x

¹ Van den Berg, Martin, et. Al. The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds. Toxicol. Sci. 2006,Oct 93(2): 223-241

control device used for purposes of parametric monitoring of the HCl standard) (see 78 FR 10011/1 (Feb. 13, 2013)).

Section 63.1349(b)(1)(vi) – Testing with mill on and mill off

This section states that for each performance test, one must conduct at least three separate test runs each while the mill is on and three runs while the mill is off. This requirement only applies to kilns with inline raw mills, as inline raw mills are considered part of the kiln and can affect kiln PM emissions. It specifically would not apply to a kiln that does not have an inline raw mill or to a clinker cooler, as in these cases the raw mill is a separate source from the kiln and has no effect on kiln or clinker cooler PM emissions. Note that if the exhaust streams of a kiln with an inline raw mill and a clinker cooler are comingled, then the comingled exhaust stream would need to be tested with raw mill off and raw mill on.

Section 63.1349(b)(6)(v)(C)(1)(i) – Performance Testing Requirements (updated August 30, 2016)

In the recently published Direct Final Rule [EPA–HQ–OAR–2011–0817; FRL–9949–46–OAR], 81 FR 48356, July 25, 2016, the EPA issued amended National Emissions Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry. Specifically, this rulemaking provides a one-year allowance for the use of HCl CPMS instrumentation for continuous monitoring of HCl emissions.

This guidance seeks to clarify procedures for the establishment of a zero point related to setting the site specific operating limit. Zero point data for extractive instruments should be obtained by flooding the extractive probe with a zero air cylinder gas for a minimum of two minutes and observing a stable instrument response determined at the point where the instrument output changes less than 0.1 ppm in 30 seconds. As listed in provision 63.1349(b)(6)(v)(C)(1)(ii), if you are unable to perform this procedure, you must use a zero output value provided by the manufacturer.

Section 63.1349(b)(7) – Total Organic HAP Testing and Setting the THC Operating Limit

A source with an in line raw mill must do an initial performance test for each of two conditions: one with the raw mill on and one with the raw mill off. Below is a step by step example for setting a THC operating limit when a facility has an in line raw mill.

Organic HAP Test. Use Method 320, Method 18, or ASTM D6348-03 or a combination of the methods. Method 320 and ASTM D6348-03 both employ an FTIR instrument that can detect a number of organic HAP simultaneously; however, interferences in some spectra exist such that Method 18 may be necessary to target individual HAP and conduct GC analysis of the sample.

THC CEMS. At the same time as the organic HAP test, a THC CEMS must be in operation. See 63.1349 (b)(7)(ii). The CEMS measurement scale must be capable of reading THC concentrations from zero to a level equivalent to two times your highest THC emissions average determined during the performance test. See 63.1349(b) (7) (v).

Performance testing and THC monitoring must be conducted both while the raw mill is on and while the raw mill is off. See 63.1349 (b)(7) (iii). When testing is complete, you must calculate both a weighted average organic HAP emission test result and a weighted average THC value using the fraction of the time the raw mill is on and the fraction of the time that the raw mill is off. See 63.1349 (b)(7) (iii). The fractions of raw mill on/off are determined based on historical representative averages. The operating limit will be calculated using these weighted averages.

WEIGHTED AVERAGING

Organic HAP Averaging

The following is an example of how to weight the average to determine both whether the facility is in compliance, and whether scaling would be allowed.

3 run average organic HAP measurement with mill off = 5.6 ppmvd

3 run average organic HAP measurement with mill on = 7.7 ppmvd

Percent operating time with mill on = 90%

Percent operating time with mill off = 10%

Time weighted organic HAP emission = $(y*t)+(x*(1-t))$

Where:

y = Average organic HAP value during mill on operations, ppmvd

t = Percentage of operating time with mill on

x = Average organic HAP value during mill off operations, ppmvd

(1-t) = Percentage of operating time with mill off

So in the above example we have: $(7.7 * 0.9) + (5.6 * 0.1)$, therefore the time weighted organic HAP concentration would be $(6.93 + 0.56)$ or 7.49 ppmvd.

THC Continuous Monitoring Averaging

As specified in Section 63.1349(b)(7)(ii), at the same time that you are conducting the performance test for total organic HAP, you must also determine a site-specific THC emissions limit by operating a THC CEMS in accordance with the requirements of §63.1350(j). The duration of the performance test must be at least 3 hours and the average THC concentration (as calculated from the 1-minute averages) during the 3-hour test period must be calculated. It is permissible to extend the testing time of the organic HAP performance test beyond 3 hours if you believe extended testing is required to adequately capture THC variability over time.

You must establish your THC operating limit and determine compliance with it according to paragraphs (b)(7)(vii) through (viii) of Section 63.1349. (Please note the final rule lists it as (a)(7)(vii) through (viii), but that was a typographical error and will be corrected through a technical correction). Note that there are two different procedures to establish the THC limit depending on the measured level of organic HAP. If the measured weighted average organic HAP level is 9 ppmvd or above, you establish the THC operating limit as the weighted average of the raw mill on/off measured THC levels. Continuing with the example stated above,

3 run average organic THC measurement with mill off = 30 ppmvw

3 run average organic THC measurement with mill on = 40 ppmvw

Percent operating time with mill on = 90%

Percent operating time with mill off = 10%

Time weighted organic HAP emission = $(y*t) + (x*(1-t))$

Where:

y = Average organic THC value during mill on operations, ppmvw

t = Fraction of operating time with mill on.

x = Average organic THC value during mill off operations, ppmvw

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

So in the above example we have: $(40 * 0.9) + (30 * 0.1)$, therefore the time weighted THC operating limit would be $(36 + 3)$ or 39 ppmvw

If the measured weighted average organic HAP is less than 9 ppmvd section 63.1349(b)(7)(iv) provides a scaling option for setting the THC site-specific parametric operating limit. The scaling procedure estimates the expected THC emission level that would occur if the measured organic HAP level was exactly 9 ppmvd (versus the 7.49 ppmvd level in the example above).

This is calculated by using the following formula which is found under 63.1349(b)(7)(vii)(B):

$$T = \left(\frac{9}{Y_1}\right) * X_1$$

Where:

T = the 30-day operating limit for a parametric THC instrument, ppmvw

Y₁ = the average organic HAP concentration from performance testing, ppmvd and

X₁ = the average parametric THC concentration during performance testing, ppmvw

So, in the above example we have: T = (9/7.49) * 39, therefore T = 47 ppmvw.

PM CPMS scaling

Section 63.1349(b) (1)(i)(A) states: “Your PM CPMS must provide a 4-20 milliamp output and the establishment of its relationship to manual reference method measurements must be determined in units of milliamps.”

We note that many new CEMs no longer use an analog signal output (such as 4-20 milliamp) but make use of a digital signal output instead. Conversion of a digital signal to analog, then transporting that signal down a stack to an analog display that reads the analog signal, then reconverting that back to a digital signal before sending that signal to the Data Acquisition Handling System, requires the installation of equipment and unnecessary complexity which EPA did not intend. This guidance is directed at demonstrating the equivalency of each signal output and providing a means of compliance with the rule when a source uses an instrument equipped only with a digital signal output.

It is important to understand that any digital or analog value from an instrument output uses some percentage of the output scale available to the instrument, between 0 and 100% of the output range. Think of this in terms of some fraction of the scale between zero and 100.

The range of any digital signal from zero to 100% covers the range of the digital increments available to the signal. This depends on how many “bits” the digital signal is composed of, and the granularity of the signal value increases proportional to the number of bits carried. An eight-bit digital signal has 2⁸, or 256 signal increments, a twelve-bit signal as 2¹² or 4096 signal increments, a sixteen-bit digital signal as 2¹⁶ or 65536 signal increments and so on. In this

manner, fifty percent of a digital scale is represented by a value at half of the digital signal increments.

The range of a 4-20 milliamp signal is just that, from 4 to 20 milliamps; or a range of 16 milliamps between a zero value (4) and full (100%) scale (20). Fifty percent of a 4-20 milliamp signal is represented by a value of 12 milliamps $((20 - 4) / 2) + 4$. In this manner a zero to full scale response of a 4 to 20 milliamp signal involves increasing a 4 milliamp reading a total of 16 milliamps until one reaches 20 milliamps. So, a 100% rise in signal on a 4 to 20 milliamp output equates to $100 / 16$ or 6.25% of full scale *per milliamp*.

What remains constant about any output signal is that no matter how many increments one is able to divide the signal into, one is always able to determine what percent of output range is indicated by the value of the signal increment itself.

Using this information, it is possible to identify the percent of scale that would be representative of 75% of the emission limit on a digital output system in much the same manner the rule prescribes determination of this number on a 4-20 milliamp signal output.

For example, let's take a digital signal output from a PM CPMS instrument that reads zero when the instrument is not exposed to any particulate matter in the flue gas; this value is equivalent to the instrument zero value in 63.1349(1)(iii)(C) Equation 4, or "z":

$$R = \frac{Y_1}{(X_1 - z)} \quad (\text{Eq. 4})$$

Where:

R = The relative lb/ton-clinker per milliamp for your PM CPMS.

Y_1 = The three run average lb/ton-clinker PM concentration.

X_1 = The three run average milliamp output from your PM CPMS.

z = The milliamp equivalent of your instrument zero determined from (b)(1)(iii)(A).

In this example the zero bit from a digital signal is equivalent to a 4 milliamp zero signal, with a value of $z = 0$.

The value of X_1 for this equation would be obtained by monitoring the average digital signal output rather than the average milliamp signal output from the PM CPMS during the PM performance test. For the purposes of this example we set this value at the 1268th signal increment above zero on a 12-bit system (where 4096 increments are possible). This equates to $1268 / 4096$ or 30.957% of the instrument scale. Note that this would represent 8.953 milliamps if the instrument had an analog output.

The value of Y_1 in this equation remains the three run average lb/ton-clinker PM concentration determined by the compliance test. For the purposes of this example we will assume that this value was determined to be 0.04 lb/ton-clinker.

To solve for R with a digital signal output in Equation 4 we would use

$$R = 0.04 / ((1268) - 0)$$

Therefore $R = 0.04 / 1268$ or

$$R = 0.00003154574 \text{ lb-ton clinker per increment (rather than per milliamp)}$$

Carrying this value of R forward we can determine our source specific 30-day rolling average operating limit at 75% of the emission limit using the procedures in 63.1349(1)(iii)(D) as follows:

(D) Determine your source specific 30-day rolling average operating limit using the lb/ton-clinker per milliamp value from Equation 4 in Equation 5, below. This sets your operating limit at the PM CPMS output value corresponding to 75 percent of your emission limit.

$$O_1 = z + \frac{0.75(L)}{R} \quad (\text{Eq. 5})$$

This gives us the following:

$$O_1 = 0 + (0.75 * 0.07 \text{ lb/ton clinker}) / 0.00003154574 \quad \text{OR}$$

$$O_1 = 0.0525 / 0.00003154574 \quad \text{OR}$$

$$O_1 = 1664.25 \text{ digital signal increments OR}$$

40.63 % of the instrument scale.

If the instrument used an analog output we could calculate the milliamp value by multiplying 16 (the amount of analog milliamp increments) by the percent of scale above, so $16 * 0.4063 = 6.500$ and then we would add 4 (to represent our zero of four milliamps plus the percent scale) which places the 75% operating limit for an analog output signal at 10.5 milliamps on the 4-20 milliamp scale.

75% scaling for PM Performance Test

Note that the intent of Section 63.1349(b)(1)(i) and (vi) was for the operator to use a time weighted average for when the mill is on and the mill is off (as in all mill on/mill off situations). This weighted average would be calculated the same way as the weighted average developed and discussed above under the paragraph, "THC Continuous monitoring averaging". However, note that the units for averaging PM CPMS output are in milliamp, not ppmv.

PM Averaging

Example of calculating weighted average as specified in Section 63.1349(b)(1)(vi),

3 run average PM measurement with mill off = 0.03 lb/ton of clinker

3 run average PM measurement with mill on = 0.01 lb/ton of clinker

Percent operating time with mill on = 90%

Percent operating time with mill off = 10%

Time weighted PM emission = $(y*t)+(x*(1-t))$

Where:

y = Average PM value during mill on operations, lb/ton of clinker

t = Fraction of operating time with mill on.

x = Average PM value during mill off operations, lb/ton of clinker

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

So in the above example we have: $(0.01 * 0.9) + (0.03 * 0.1)$, therefore the time weighted PM operating limit would be $(0.009 + 0.003)$ or 0.012 lb/ton of clinker.

SO₂ SCALING GUIDANCE

Section 63.1349(b)(6)(iii) Choosing to Monitor SO₂ Emissions as Alternative to Section 63.1349(b)(6)(B)

As noted above, the rule allows use of SO₂ parametric monitoring to demonstrate continuous compliance with the HCl standard. Monitoring of SO₂ using a CEMS and setting an SO₂ operating limit must be done when the mill is on and the mill is off. As in the example above for organic HAP scaling, a weighted average should be calculated.

In addition, please note that the rule places no restriction on the amount of sorbent injection used as long as the SO₂ limit is met. However, if the SO₂ control device is used intermittently, then an HCl monitor as described in 63.1349(b)(6)(i)(B) would be required, since the rule requires continuous monitoring if the source opts to demonstrate compliance using SO₂ parametric monitoring. See section 63.1350(l).

SEMI-ANNUAL SUMMARY REPORTING OF TEMPERATURE AVERAGES (updated September 2017)

After a new analysis EPA conducted of the language in Section 63.1354(b)(9)(vi), D/F temperature averages reporting is not required by this provision. Therefore, reporting these averages is not required in CEDRI. Please note however, that the requirement to report any exceedance of the D/F temperature limit in the semiannual report per Section 63.1354(b)(9)(i) is still in force.

For facilities who wish to continue reporting these averages, the guidance on developing the reports will remain in this guidance document as follows:

According to Section 63.1350(g)(4), a source must calculate the rolling three-hour average temperature using the average of 180 successive, one-minute average temperatures. To record these averages, the source would need to record the initial three-hour average derived from these 180 successive one-minute average temperatures. For each hour, the previous 180 successive, one-minute average temperatures should be recorded. For instance, at the beginning of each hour of minutes the source would include the previous two hours (or 120 minutes) and the current hour (60 minutes), which totals 180 minutes, and then report those values, so that for each day, there would be 24 discrete values recorded. Thus, this translates to a maximum of 4320 values in a 6-month report (24/day x 30/month x 6 months).

CEDRI UPDATES (updated February 2020)

Section 63.1354(b)(9) – Assessing LLL reports in CEDRI

This section will provide steps to access both the semi-annual summary report and performance testing reports. The CEDRI industry user interface pages have been updated at the end of calendar year 2019, so the steps to access the reports have also changed. Below we will provide the steps to access the previously mentioned Part 63 LLL reports.

Summary Report (Section 63.1354(b)(9))

The summary report is currently available in two formats: 1) Web form option and 2) Spreadsheet Template option. Note, the web form option will be discontinued in September 2020. In this help guide, we will provide the necessary steps to access the Summary Report (spreadsheet template option) and provide a link to the available job aides that could further assist in navigation and use of CEDRI. The Summary Report submitted semiannually is entered via the 63.1354(b)(9) Summary Report web form (will be discontinued in September 2020) or by using the spreadsheet template found in CEDRI once the Part 63 subpart LLL 63.1354(b)(9) report is searched and selected. This section will cover ‘Accessing the 63.1354(b)(9) Summary Report (spreadsheet template option).’

Accessing the 63.1354(b)(9) Summary Report (spreadsheet template option)

1. Navigate to CDX website: <https://cdx.epa.gov/>.

2. Enter your User ID and Password on the CDX home page.
3. Click on the 'Preparer' or 'Certifier' role link under the Services panel as shown in Figure 1. This will bring you into CEDRI.

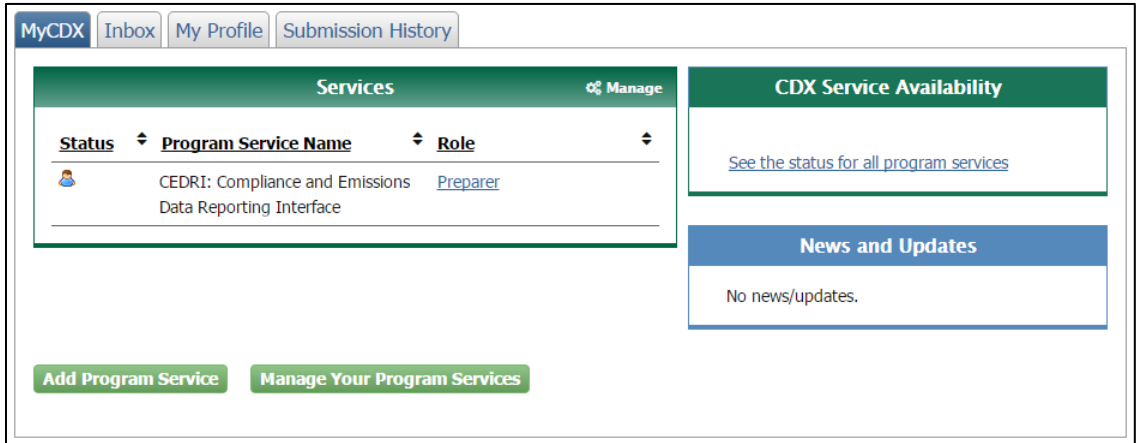
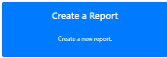


Figure 1. My CDX (Preparer)

4. Once in CEDRI, the My CEDRI dashboard will display. Click on the  button to create a new report.

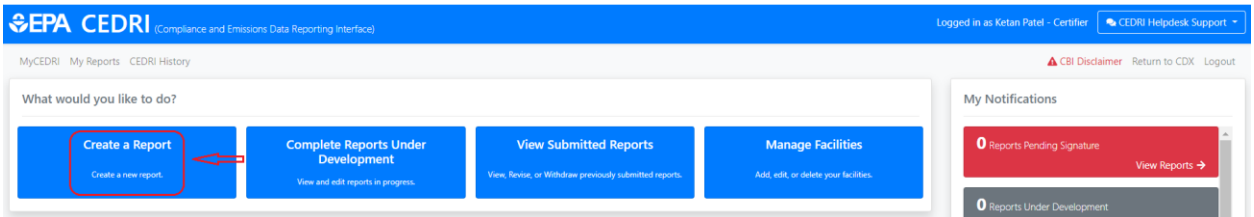
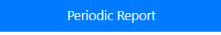


Figure 2. My CEDRI dashboard with Create a Report button

5. The 'Select Report Type' modal will display. Select the  button.

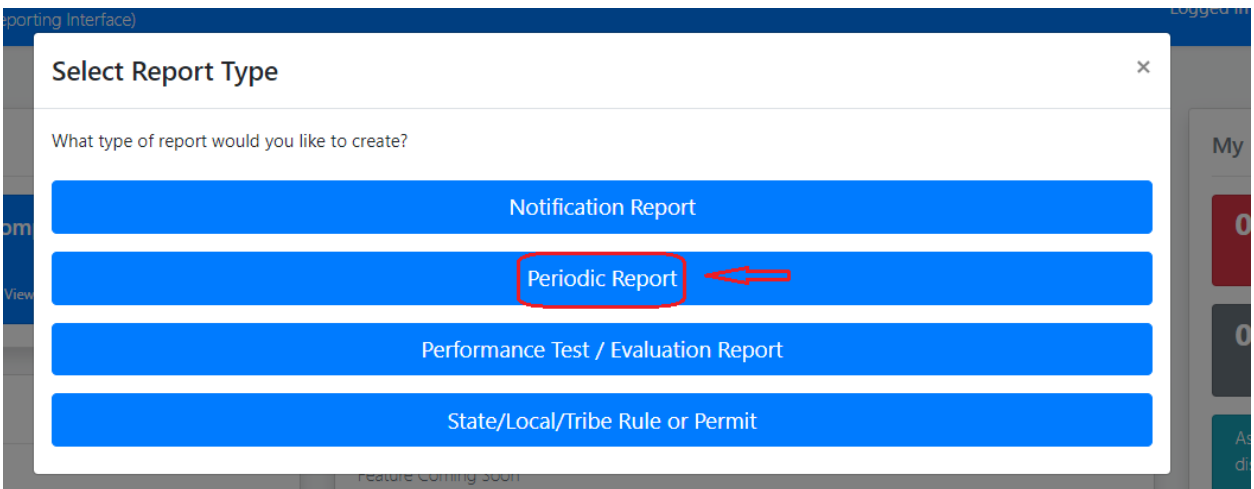


Figure 3. Select Report Type modal: Select Periodic Report

6. Follow the three-step process: to select the report, upload the report and notify Certifier (if using Preparer role) or Sign and submit (if using Certifier role).

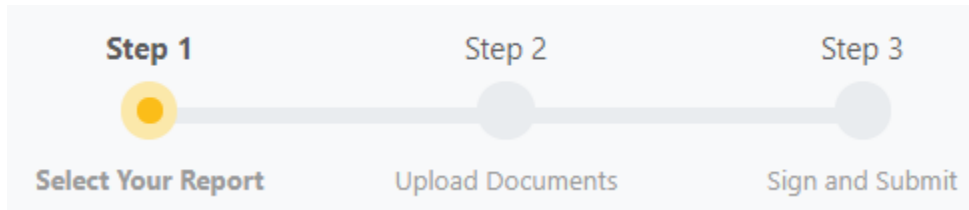


Figure 4. Progress bar: Steps to Select Report(s), Upload Documents, and Sign and Submit (for Certifier role)

- a. Step 1: Select the Report – use one or more of the Search criteria to find the 63.1354(b)(9) Summary Report. For this example, the Part and Subpart filters are used. For Part, select ‘Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories’ and for the Subpart, select ‘Subpart LLL – LLL Portland Cement Manufacturing Industry.’ Click on the [Search for Reports](#) button.

The screenshot shows the search interface with the following criteria: Sectors (Select options), Source Categories (Select options), Report Type (Notification and Periodic Report, Periodic Report), Parts (Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories), and Subparts (Subpart LLL - Portland Cement Manufacturing Industry). A 'Search for Reports' button is highlighted with a red box. The interface also shows '2 Results (10 Required)' and 'Reset Search' and 'Search for Reports' buttons at the bottom.

Figure 4a. Search for Reports using Part and Subpart

Search Results table will display. Two report format options will be displayed for the 63.1354(b)(9) Summary Report. Click on the [Add](#) button for your report choice.

[← Return to My Reports](#)
[Save and Return to My Reports](#)
[Next: Upload Documents >](#)

Search for Report(s) to Create

Search Criteria

Report Type

- Periodic Report
- Notification and Periodic Report

Subpart

- Subpart LLL - Portland Cement Manufacturing Industry

Part

- Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories

[New Search](#)

Search Results

Select the report(s) you want to create.

Sector	Source Category	Report Type	Part	Subpart	Available Reports	Action
Mineral Processing	Cement Manufacturing	Periodic Report	Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories	Subpart LLL - Portland Cement Manufacturing Industry	63.1354(b)(9) Summary Report (Spreadsheet Template option)	Add
Mineral Processing	Cement Manufacturing	Periodic Report	Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories	Subpart LLL - Portland Cement Manufacturing Industry	63.1354(b)(9) Summary Report (Web Form option)	Add

Figure 4b. Search Results display

The screen will refresh with the ‘Selected Report(s)’ table displayed.

Selected Report(s)

Selected Report(s)

Below you will find the selected reports you have created.


Sector	Source Category	Report Type	Part	Subpart	Report Name	Action
Mineral Processing	Cement Manufacturing	Periodic Report	Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories	Subpart LLL - Portland Cement Manufacturing Industry	63.1354(b)(9) Summary Report	Delete

Figure 4c. Selected Reports display

Click on the [Next: Upload Documents >](#) button to move to the next step.

[← Return to My Reports](#)
[Save and Return to My Reports](#)
[Next: Upload Documents >](#)

Figure 4d. Next Step: Upload Documents

b. Step 2: Upload Documents page will display. In the Information table, a link to download the report template is available. Once the report template is filled out and ready for upload, there are three ways to upload the report: 1) click on the  button to upload report; 2) click anywhere in the file upload box and the browse window will display to upload report; and 3) drag and drop report in the file upload box.

Step 2: Upload Documents


For each report selected, either upload the required documents or complete the required web form. In the Selected Reports table click 'View' to navigate between reports or 'Remove' to remove the reports from the submission workflow. [Read More](#)

63.1354(b)(9) Summary Report

Information	
Report	63.1354(b)(9) Summary Report - Part 63 Subpart LLL - Portland Cement Manufacturing Industry Edit Report Name
Date Updated	Feb 20 2020 04:11:00 PM
Status	Under Development
Report Template	Click Here to Download Report Template

Upload	
File Upload *	<input type="text" value="Click browse or drop file here..."/>  

Figure 4e. Step 2: Upload Documents

Once report is added, click on  button.






Upload	
File Upload *	<input type="text" value="SemiAnnual_63_1354_b_9_Summary Report 63 LLL.zip"/>  

Figure 4f. Add and Upload Document

Once report has been uploaded, the display will replace the  button with a  button. Note, you have the ability to replace report in this step by clicking on the  button and following steps to add new report.


Upload	
Spreadsheet Upload *	<input type="text" value="SemiAnnual_63_1354_b_9_Summary Report 63 LLL.zip"/> 

Figure 4f. Ability to Remove Report

Click on the **Next: Sign and Submit >** button to move to the next step (This appears for the Certifier role).

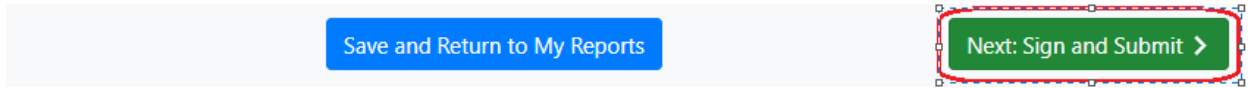


Figure 4g. Next Step: Sign and Submit

c. Step 3: Sign and Submit – In the 'Select Facility Submitting Your Report' section click the **Select** button to review and confirm the facility. Select only one facility if report contains more than one facility. You may add additional Preparers to the submission to review the report and document contents. You MUST add a facility to your submission before you can add or remove any Preparers.

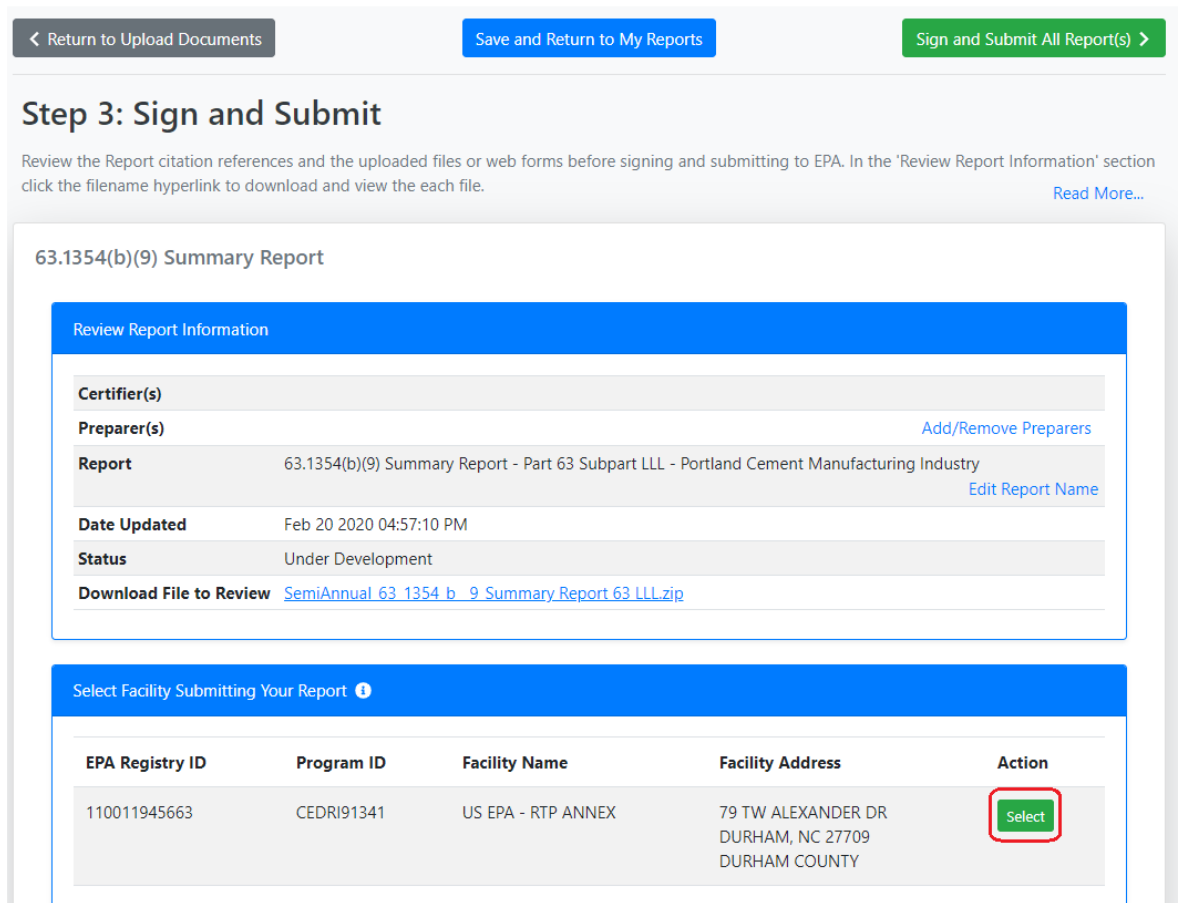


Figure 4h. Step 3: Sign and Submit

New 'Add Submitting Facility' modal will display. Click on the **Continue** button. Alert message will pop up and leave the screen notifying you the action was successful.

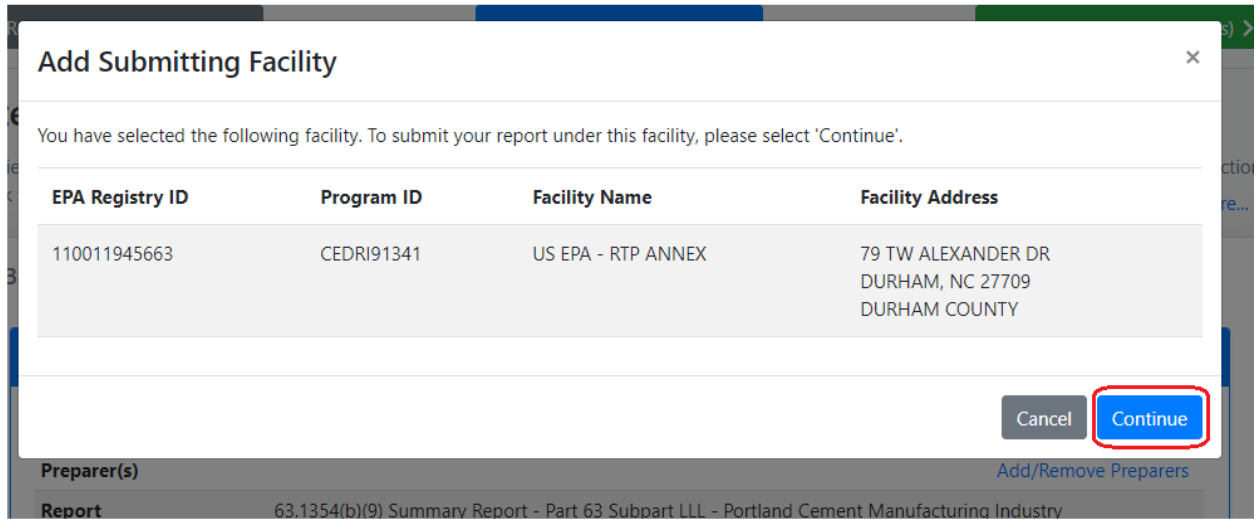


Figure 4i. Add Submitting Facility

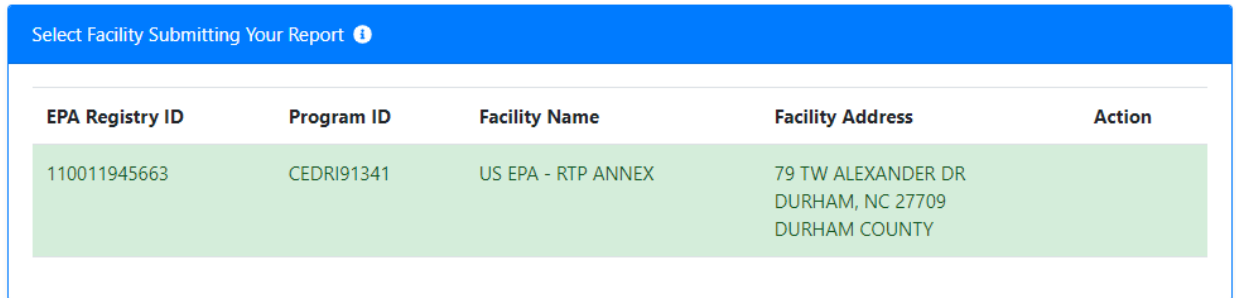


Figure 4j. Select Facility Submitting Your Report display

Click [Sign and Submit All Report\(s\) >](#) button to complete the submission.

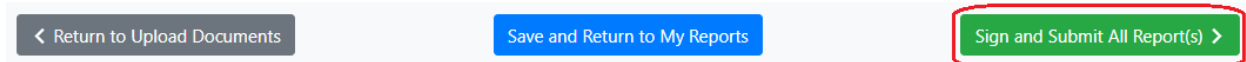


Figure 4k. Sign and Submit All Report(s)

A new modal will display to 'Please Confirm' submission. Click on the [I Confirm](#) button after reading message.

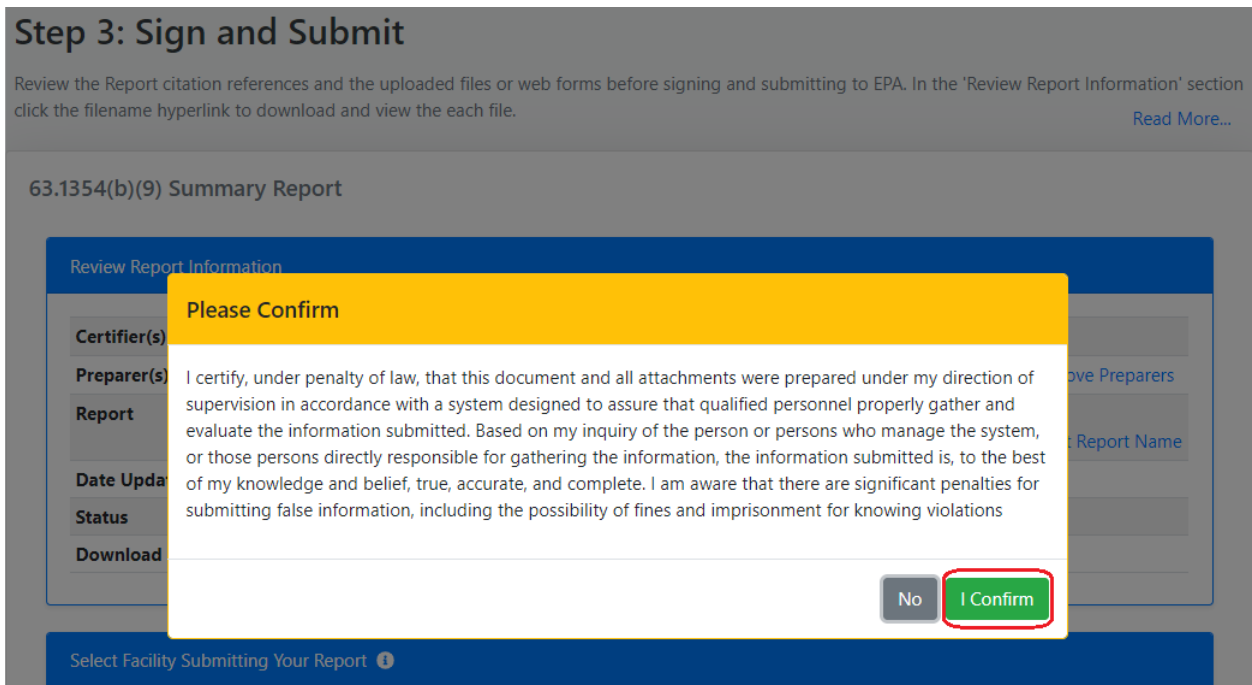


Figure 4l. Please Confirm

A new eSignature Widget modal will display. Follow the necessary steps to complete esignature.



Figure 4m. eSignature Widget

- Assess to Job Aides related to the new CEDRI interface can be found [here](#).

PERFORMANCE TEST REPORTS

Provisions regarding performance test reporting are found in 63.1354(b)(11)(i)(C). Note that a summary report is due twice a year, but a performance test for any given pollutant can be performed at any time during the year. The performance test results must be entered within 60 days after the date of completing the test. If a summary report is due during this time period, then the test report and summary report may be submitted together. The performance test file needs to be created using the ERT. Once this file is created, a PKG.zip file will contain a .xml file and another zip file that contains the .accdb file. This complete PKG.zip file will be uploaded into CEDRI. Please note that the performance test data can be entered into CEDRI via an upload of the ERT data using the '63.1354(d)(11)(i)(C) Relative Accuracy Test Audit Data and Performance Test Data' report type. Below we will cover 'Accessing the 63.1354(d)(11)(i)(C) Relative Accuracy Test Audit Data and Performance Test Data' report.

Accessing the 63.1354(d)(11)(i)(C) Relative Accuracy Test Audit Data and Performance Test Data

Follow the first four steps found in the section, ‘Assessing the 63.1354(b)(9) Summary Report (spreadsheet template option).’

5. The ‘Select Report Type’ modal will display. Select the **Performance Test / Evaluation Report** button.

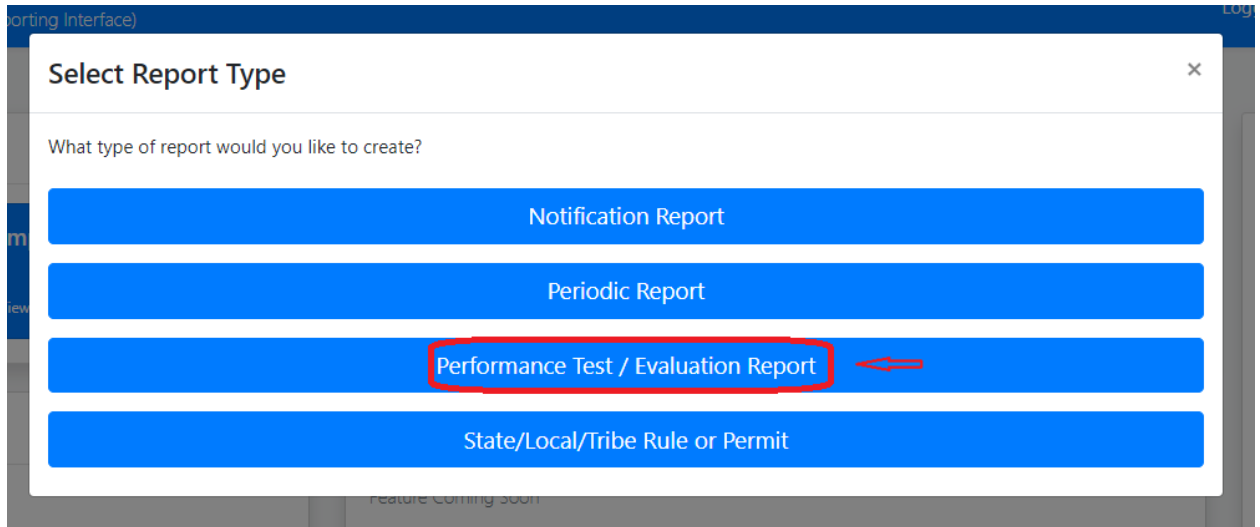


Figure 5. Select Report Type modal: Select Performance Test/ Evaluation Report

6. Follow the three-step process: upload the report, select your report, and notify Certifier (if using Preparer role) or Sign and submit (if using Certifier role).

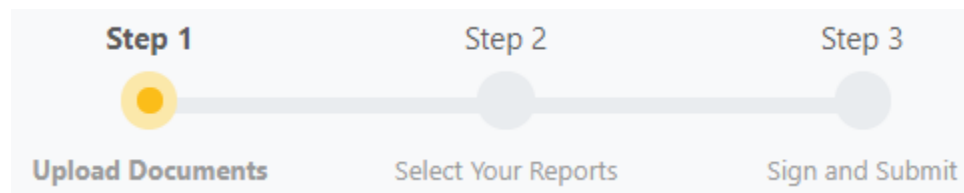


Figure 6. Progress bar: Steps to Upload Documents, Select Your Reports, and Sign and Submit (for Certifier role)

- a. Step 1: Upload Documents page will display. Once the 63.1354(d)(11)(i)(C) Relative Accuracy Test Audit Data and Performance Test Data’ report is ready for upload, there are three ways to upload the report: 1) click on the **Browse** button to upload report; 2) click anywhere in the file upload box and the browse window will display to upload report; and 3) drag and drop report in the file upload box.

Step 1: Upload Documents

Upload your ERT in the 'Upload' section below. Use the 'Browse' button to locate your ERT file, and the 'Upload' button to load it to CEDRI. Click '[Create ERT ZIP File Using EPA's Electronic Reporting Tool](#)' to visit the ERT website for the latest ERT. [Read More...](#)

ERT Performance Report

Information	
Date Updated	Feb 21 2020 12:42:56 PM
Status	Under Development

Upload	
File Upload *	<input type="text" value="Click browse or drop file here..."/> <input type="button" value="Browse"/> <input type="button" value="Upload"/>

Figure 6a. Step 1: Upload Documents

Once report is added, click on button.

Upload	
File Upload *	<input type="text" value="ERT -2019_02-12-2020_16-44_PKG.zip"/> <input type="button" value="Browse"/> <input type="button" value="Upload"/>

Figure 6b. Add and Upload Document

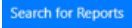
Once report has been uploaded, the display will replace the button with a button. Note, you have the ability to replace report in this step by clicking on the button and following steps to add new report.

Upload	
File Upload *	<input type="text" value="ERT -2019_02-12-2020_16-44_PKG.zip"/> <input type="button" value="Remove"/>

Figure 6c Ability to Remove Report

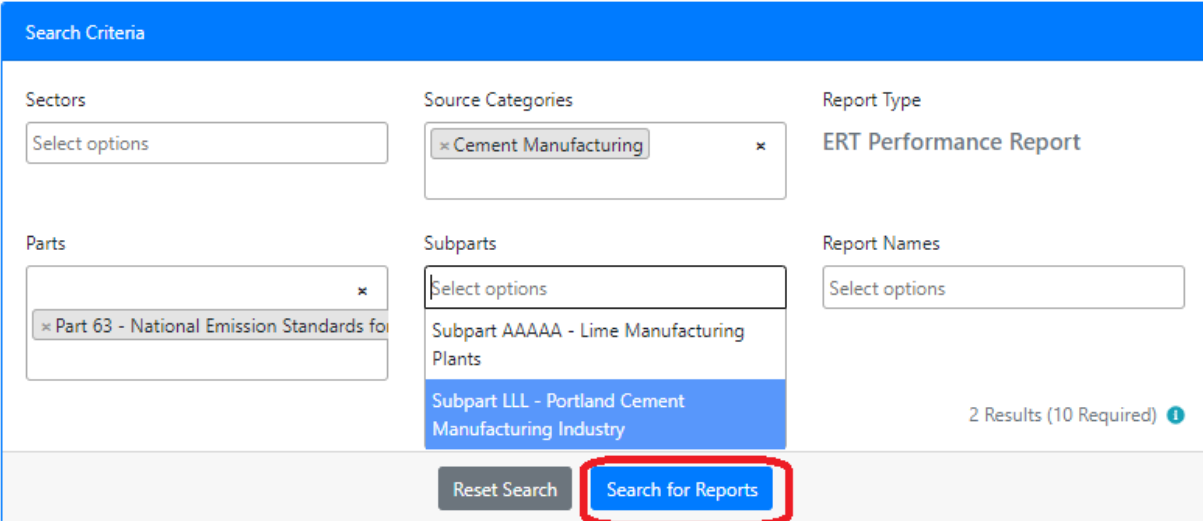
Click on the button to move to the next step.

Figure 6d. Next Step: Select Your Reports

- b. Step 2: Select Your Reports – use one or more of the Search criteria to find the 63.1354(d)(11)(i)(C) Relative Accuracy Test Audit Data and Performance Test Data Report. For this example, the Source Categories, Part and Subpart filters are used. For Source Categories, select Cement Manufacturing, for Part, select ‘Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories’ and for the Subpart, select ‘Subpart LLL – LLL Portland Cement Manufacturing Industry’ will be one of the two options available. Click on the  button.

Search for Report(s) to Create

Need help finding your report?




The screenshot shows a 'Search Criteria' form with the following fields and values:

- Sectors:** Select options
- Source Categories:** Cement Manufacturing
- Report Type:** ERT Performance Report
- Parts:** Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories
- Subparts:** Subpart LLL - Portland Cement Manufacturing Industry (highlighted in blue)
- Report Names:** Select options

At the bottom right, it indicates '2 Results (10 Required)'. The 'Search for Reports' button is highlighted with a red box.

Figure 6e. Search for Reports using Source Categories, Part and Subpart (in this example)

Search Results table will display. Two reports will display: 1) 63.1354(d)(11)(i)(C) Relative Accuracy Test Audit Data and Performance Test Data Report for Subpart LLL Portland Cement and 2) Performance Test (optional for federal reporting) for subpart AAAAA Lime Manufacturing. Click on the  button for your report choice.

Search Criteria

Source Category

- Cement Manufacturing

Report Type

- ERT Performance Report

Part

- Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories

[New Search](#)

Search Results

Select the report(s) you want to create.

Sector	Source Category	Report Type	Part	Subpart	Available Reports	Action
Mineral Processing	Cement Manufacturing	ERT Performance Report	Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories	Subpart LLL - Portland Cement Manufacturing Industry	63.1354(b)(11)(i)(C) Relative Accuracy Test Audit Data and Performance Test Data	Add
Mineral Processing	Cement Manufacturing	ERT Performance Report	Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories	Subpart AAAAA - Lime Manufacturing Plants	Performance Test Report (Optional for Federal Reporting)	Add

Figure 6f. Search Results display

The ‘Selected Part(s) and Subpart(s)’ table will display. In this step you will be able to associate the Part/Subpart and reports that should be associated with the 63.1354(d)(11)(i)(C) Relative Accuracy Test Audit Data and Performance Test Data Report uploaded in the previous step. In this case, only the Part 63, subpart LLL report will be associated with the uploaded report. Note, you have the ability to delete any report associations in this step by clicking on the [Delete](#) button and following steps to add any new report associations.

Selected Part(s) and Subpart(s)

Selected Part(s) and Subpart(s)

Below you will find the part(s) and subpart(s) you have added to the selected report.

Sector	Source Category	Report Type	Part	Subpart	Report Name	Action
Mineral Processing	Cement Manufacturing	ERT Performance Report	Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories	Subpart LLL - Portland Cement Manufacturing Industry	63.1354(b)(11)(i)(C) Relative Accuracy Test Audit Data and Performance Test Data	Delete

Figure 6g. Ability to Delete Report

Click on the [Next: Sign and Submit >](#) button to move to the next step (This appears for the Certifier role).

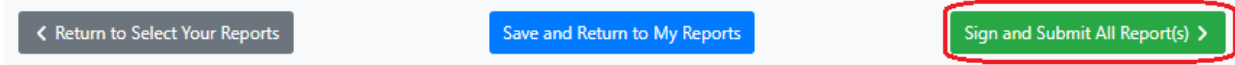


Figure 6h. Next Step: Sign and Submit All Report(s)

c. Step 3: Sign and Submit – In the 'Select Facility Submitting Your Report' section click the [Select](#) button to review and confirm the facility. Select only one facility if report contains more than one facility. You may add additional Preparers to the submission to review the report and document contents. You MUST add a facility to your submission before you can add or remove any Preparers.

Step 3: Sign and Submit

Review the Report citation reference and the uploaded file before signing and submitting to EPA. In the 'Review Report Information' section click the filename hyperlink to download and view the ERT file. [Read More](#)

63.1354(b)(11)(i)(C) Relative Accuracy Test Audit Data and Performance Test Data

Review Report Information	
Certifier(s)	
Preparer(s)	Add/Remove Preparers
Report	63.1354(b)(11)(i)(C) Relative Accuracy Test Audit Data and Performance Test Data - Part 63 Subpart LLL - Portland Cement Manufacturing Industry Edit Report Name
Date Updated	Feb 24 2020 01:17:23 PM
Status	Under Development
Download File to Review	ERT -2019 02-12-2020 16-44 PKG.zip

Select Facility Submitting Your Report ⓘ				
EPA Registry ID	Program ID	Facility Name	Facility Address	Action
110011945663	CEDRI91341	US EPA - RTP ANNEX	79 TW ALEXANDER DR DURHAM, NC 27709 DURHAM COUNTY	Select

Figure 6i. Step 3: Select Facility Submitting your Report

New 'Add Submitting Facility' modal will display. Click on the [Continue](#) button. Alert message will pop up and leave the screen notifying you the action was successful.

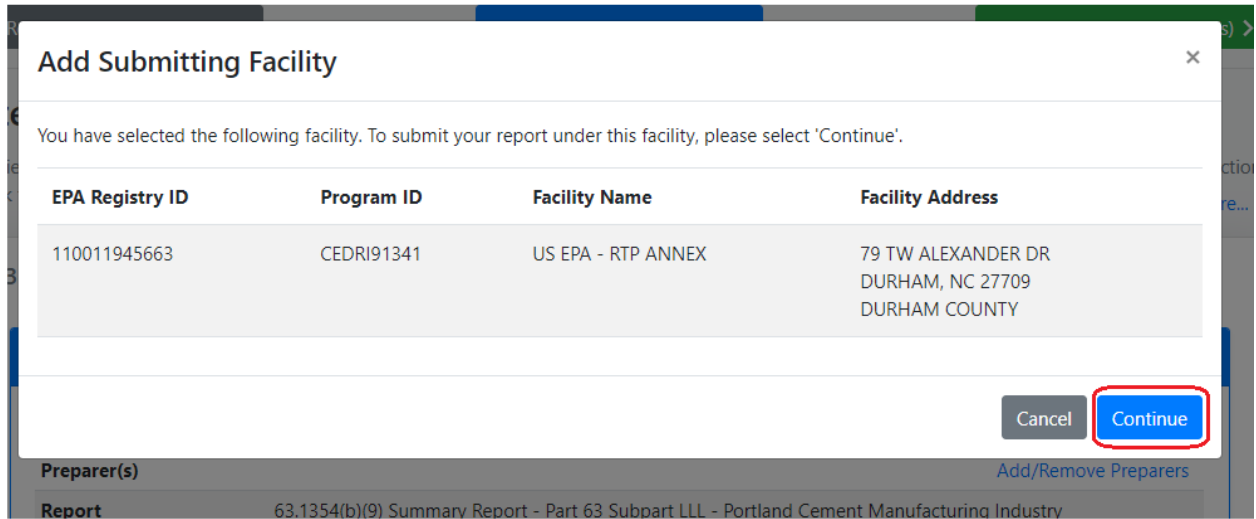


Figure 6j. Add Submitting Facility

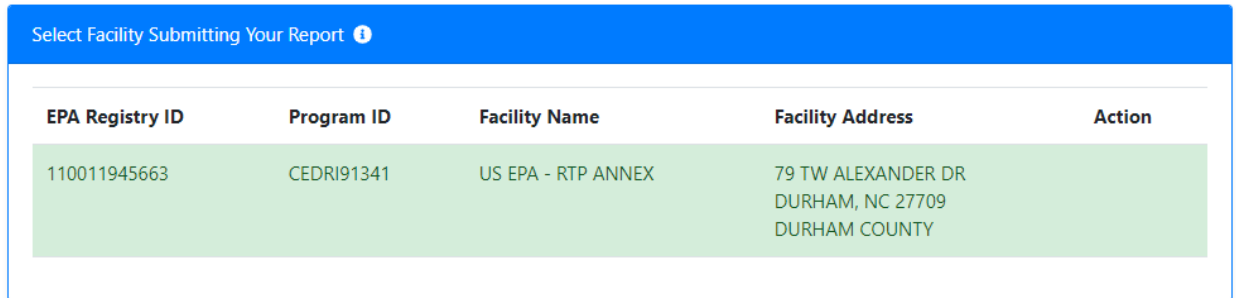


Figure 6k. Select Facility Submitting Your Report display

Click [Sign and Submit All Report\(s\) >](#) button to complete the submission.

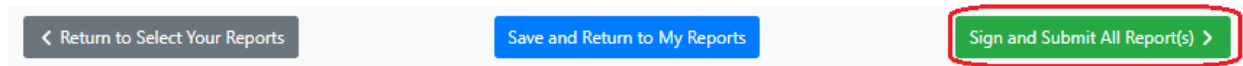


Figure 6l. Sign and Submit All Report(s)

A new modal will display to 'Please Confirm' submission. Click on the [I Confirm](#) button after reading message.

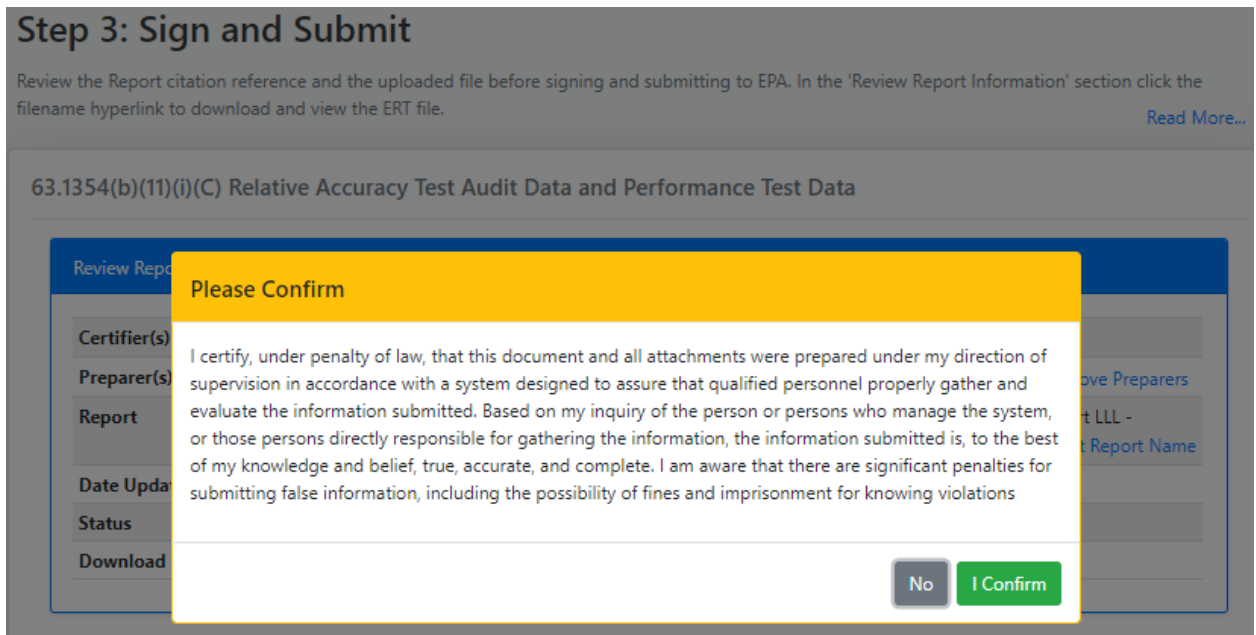


Figure 6m. Please Confirm

A new eSignature Widget modal will display. Follow the necessary steps to complete esignature.



Figure 6n. eSignature Widget

7. Assess to Job Aides related to the new CEDRI interface can be found [here](#).