SMALL ENTITY COMPLIANCE GUIDE

FOR

LIME MANUFACTURING PLANTS

National Emission Standards for Hazardous Air Pollutants (NESHAP):
Lime Manufacturing Plants
40 CFR Part 63, Subpart AAAAA

U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Research Triangle Park, NC
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NOTICE

This guide was prepared pursuant to section 212 of the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. 104-121 as amended by Pub. L. Number 110-28. THIS DOCUMENT IS NOT INTENDED, NOR CAN IT BE RELIED UPON, TO CREATE ANY RIGHTS ENFORCEABLE BY ANY PARTY IN LITIGATION WITH THE UNITED STATES. Final authority rests with the regulation at 40 Code of Federal Regulations (CFR) part 63 subpart AAAAA, and this guide is not intended to replace, and may not cover all parts of, the regulation.

The statements in this document are intended solely as guidance to aid you in complying with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Lime Manufacturing Plants, 40 CFR Part 63, Subpart AAAAA. The final rule was published on July 16, 2024, in the Federal Register (89 57738). The U.S. Environmental Protection Agency (EPA) may decide to revise this guide without public notice to reflect changes in EPA's approach to implementing Lime Manufacturing NESHAP or to clarify and update text. To determine whether EPA has revised this guide and/or to obtain copies, contact EPA's Asbestos and Small Business Ombudsman (ASBO) Program at *abso@epa.gov* or through the toll-free Asbestos and Small Business Hotline at 800-368-5888.

The full text of the rule and additional information are available online at:

https://www.epa.gov/stationary-sources-air-pollution/lime-manufacturing-plants-national-emission-standards-hazardous

The website for EPA’s Compliance Assistance Centers can be found online at:

https://www.epa.gov/compliance/compliance-assistance-centers/

ABOUT THIS GUIDE

The U.S. Environmental Protection Agency (EPA) published this document as a compliance guide for small entities, as required by the Small Business Regulatory Enforcement Fairness Act (SBREFA). The guide is designed to help small businesses determine if and how they are affected by the amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Lime Manufacturing Plants (LMP), commonly, and throughout this document, referred to as the "LMP NESHAP." **Note that this guide covers recent rule requirements promulgated on July 16, 2024. It does not cover rule requirements originally published on January 5, 2023, and July 24, 2020, however where the July 16, 2024, amendments relate to requirements from previous rulemakings, those requirements are included. To understand all requirements, please refer to 40 CFR subpart AAAAA.**

Who should use this guide?

If you own or operate a lime manufacturing plant, then you should use this guide. This guide will help you determine if and how your facility is affected by the LMP NESHAP.

How do I use this guide?

This guide is organized into four major sections:

SECTION 1: INTRODUCTION presents the rule that was published on July 16, 2024, that affects owners and operators of lime manufacturing plants. The section presents an overview of the rule, identifies the types of affected sources, and presents the status of the rule.

SECTION 2: SUMMARY OF THE LMP NESHAP summarizes the requirements of the LMP NESHAP.

SECTION 3: HOW TO COMPLY helps you determine your subcategory, which is based on your lime manufacturing plant's design type and product and whether it is new or existing. The section also describes the tasks you must complete to demonstrate compliance with the LMP NESHAP.

SECTION 4: OTHER INFORMATION provides compliance assistance resources and tells you where to obtain additional information on the rule.

This guide is intended to summarize rule requirements and provide some examples and clarifications where the EPA anticipates that small entities will have questions about rule requirements. Throughout this guide, citations to the actual regulatory text are referenced for both the LMP NESHAP and the applicable overarching requirements from the General Provisions. You can use the Electronic Code of Federal Regulations (e-CFR) to find the appropriate sections of regulatory language cited in this guide.

- To access the e-CFR regulatory text for the Lime Manufacturing Production NESHAP go to: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-AAAAA?toc=1

- To access the e-CFR regulatory text for the General Provisions go to: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A?toc=1

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LIST OF ACRONYMS

CAA	Clean Air Act
CFR	Code of Federal Regulations
DB	dead burned dolomitic lime
D/F	dioxin/furans
DL	dolomitic lime
DSI	dry sorbent injection
EPA	Environmental Protection Agency
ESP	electrostatic precipitator
FF	fabric filter
FR	Federal Register
g/dscm	grams of pollutant per dry standard cubic meter of air
HAP	hazardous air pollutant(s)
HCl	hydrogen chloride
lb/MMton	pounds of pollutant per million tons of lime produced at the kiln
lb/tsf	pounds of pollutant per ton of stone feed
MACT	maximum achievable control technology
NESHAP	national emission standards for hazardous air pollutants
PM	particulate matter
ppmvd	parts per million by volume, dry
PR	preheater rotary kiln
PSH	process stone handling
QL	quick lime
RDL	representative detection level
RTR	residual risk and technology review
SR	straight rotary kiln
SSM	startup, shutdown, and malfunction
TEF	toxicity equivalence factors
tpy	tons of pollutant per year
VK	vertical kiln

1.0 INTRODUCTION

1.1 Background on Lime Manufacturing Products NESHAP

Section 112(d)(2) of the Clean Air Act (CAA) requires the EPA to set emissions standards for hazardous air pollutants (HAP) emitted by major stationary sources which reflect the maximum degree of emission reductions of HAP achievable after consideration of cost, energy requirements and non-air quality health and environmental impacts. These standards are commonly referred to as maximum achievable control technology (MACT) standards.

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Lime Manufacturing Plants (LMP) was initially promulgated on January 5, 2004 (69 FR 394). The standards are codified in Title 40, Part 63, Subpart AAAAA of the Code of Federal Regulations (40 CFR part 63, subpart AAAAA).

The standards were amended in July 2020, when the EPA finalized the Residual Risk and Technology Review (2020 RTR) as required by CAA § 112(d)(6). In that action, the EPA found that the risks associated with HAP emissions from lime manufacturing were acceptable and provided an ample margin of safety to protect public health. However, as a result of *Louisiana Environmental Action Network v. EPA* (also known as the LEAN decision[1]), the court held that EPA has an obligation to address all listed HAP under CAA § 112(b)[2] when the Agency conducts the 8-year technology review, precipitating the need to review the Lime Manufacturing NESHAP, and revise as necessary.

On January 5, 2023, the EPA proposed amendments based on the LEAN decision and identified four previously unregulated pollutants: hydrogen chloride (HCl), mercury, organic HAP, and dioxin/furans (D/F). After receiving public comments on the proposal, the EPA re-evaluated the estimated cost of controls and determined there was a significant impact on small businesses in the source category. A small business panel was convened in August 2023 to provide advice and recommendations to the EPA regarding the proposed amendments to the Lime Manufacturing NESHAP.

On February 9, 2024, the EPA published a supplemental proposal which included some of regulatory flexibilities identified during the small business panel. On July 16, 2024, the final amendments were published in the Federal Register (89 FR 57738).

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[1] *Louisiana Environmental Action Network v. EPA*, 955 F.3d 1088 (D.C. Cir. 2020).

[2] *Desert Citizens against Pollution v. EPA*, 699 F3d 524, 527 (D.C. Cir. 2012)("[W]e have read subparagraphs (1) and (3) of 40 CFR 112(d) to require the regulation of all HAPs listed in 40 CFR 112(b)(1)), citing Nat'l Lime Ass'n v. EPA, 233 F.3d 625, 633–34 (D.C.Cir. 2000) and Sierra Club v. EPA, 479 F.3d 875, 883 (D.C.Cir. 2007).

2.0 SUMMARY OF THE 2024 FINAL AMMENDMENTS

2.1 Who Is Affected by this Rule?

The EPA has identified 34 major sources of HAP subject to the 2024 final amendments to the Lime Manufacturing NESHAP currently operating in the United States. LMPs are engaged in the manufacture of lime products (calcium oxide, calcium oxide with magnesium oxide, or dead burned dolomite) by calcination of limestone, dolomite, shells, or other calcareous substances. Categories and entities potentially regulated by this rule are shown in the table below:

Table 1: NESHAP and Industrial Source Categories Potentially Regulated Under Subpart AAAAA

Source Category and NESHAP	NAICS Code[3]
Lime Manufacturing	32741, 33111, 3314

2.2 Am I Subject to this Rule?

You are subject to the Lime Manufacturing NESHAP if you own or operate a LMP that is a major source, or is located at, or is part of, a major source of hazardous air pollutant (HAP) emissions, unless the LMP is located at a kraft pulp mill, soda pulp mill, sulfite pulp mill, beet sugar manufacturing plant, or only processes sludge containing calcium carbonate from water softening processes. This rule applies to each existing or new lime kiln(s) and their associated cooler(s) and processed stone handling (PSH) operations system(s) located at a LMP that is a major source of HAP. PSH operations systems begin at the process stone storage bin(s) or open storage pile(s) and end where the process stone is fed into the kiln. Man-made process stone storage bins (but not open process stone storage piles), conveying system transfer points, bulk loading or unloading systems, screening operations, surge bins, bucket elevators, and belt conveyors are all included as part of the PSH operations systems.

A "major source" HAP facility emits or has the potential to emit 10 or more tons per year of any single HAP or 25 or more tons per year of any combination of HAP. The list of HAP is available on the EPA website at https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modification#Clean%20Air%20Act. Facilities that are not major sources of HAP are classified as "area" sources.

Reminder: You must estimate the emissions from all HAP-emitting processes at your facility, including fugitive sources of HAP, to determine whether your source is classified as a major or area source of HAP.

LMPs located at pulp and paper mills or at sugar beet factories are not subject to the Lime Manufacturing NESHAP. Pulp and paper mills are subject to the NESHAP for combustion sources at kraft, soda, and sulfite pulp and paper mills (40 CFR Part 63 Subpart MM). Lime

[3] North American Industry Classification System (NAICS).

manufacturing operations at sugar beet processing plants are not subject to the Lime Manufacturing NESHAP because beet sugar lime kiln exhaust is typically routed through a series of gas washers to clean the exhaust gas prior to process use. Other LMP that are part of multiple operations, such as, but not limited to, those at steel mills and magnesia production facilities, are subject to the Lime Manufacturing NESHAP.

2.3 Summary of Requirements

The following is a summary of the requirements of the 2024 final amendments to the Lime Manufacturing NESHAP. They include the following:

- HCl, Mercury, Organic HAP, and D/F emission limitations
- Demonstration of initial and continued compliance
- Recordkeeping and reporting

2.3.1 Emission Limitations

Tables 1 presents the emission limits included in the 2024 Lime Manufacturing NESHAP final rule.

Table 1: Summary of Emission Limits for New and Existing Sources, 2024 Final Rule

Pollutant	Kiln Type[4]	Lime Produced[5]	New Source Limit	Existing Source Limit	Unit of Measure
Hydrogen Chloride	SR	QL	0.015	0.52	lb/ton Lime produced
	SR	DL, DB	1.7	2.3	lb/ton Lime produced
	PR	QL	0.096	0.096	lb/ton Lime produced
	PR	DL, DB	0.39	0.39	lb/ton Lime produced
	VK	QL	0.021	0.021	lb/ton Lime produced
	VK	DL, DB	0.39	0.39	lb/ton Lime produced
Mercury	All	All	27	34	lb/MMton Lime produced

[4] Straight rotary kiln (SR), preheater rotary kiln (PR), vertical kiln (VK).

[5] Dolomitic lime (DL), quick lime (QL), dead burned dolomitic lime (DB).

Organic HAP[6]	All	All	2.6	2.6	ppmvd at 7 percent O_2
Dioxin/Furan	All	All	0.037	0.037	ng/dscm (TEQ[7]) at 7 percent O_2

In addition, the 2024 final amendments to the Lime Manufacturing NESHAP included provisions for facilities to use emissions averaging for HCl and mercury emissions, under certain conditions. If a facility is using emissions averaging for either HCl emission limits or mercury emission limits, you must meet the emissions limits in the following table.

Table 2: Emissions Averaging Emission Limits

Pollutant	Kiln Type	Lime Produced	Existing Source Limit	Unit of Measure
Hydrogen Chloride	SR	DL, DB	2.1	lb/ton Lime produced
	SR	QL	0.47	lb/ton Lime produced
	PR	DL, DB	0.36	lb/ton Lime produced
	PR	QL	0.087	lb/ton Lime produced
	VK	DL, DB	0.36	lb/ton Lime produced
	VK	QL	0.019	lb/ton Lime produced
Mercury	All	All	31	lb/MMton Lime produced

The tasks to be completed to demonstrate compliance with these requirements are outlined in Section 3 of this compliance guide.

[6] Organic HAP includes formaldehyde, acetaldehyde, toluene, benzene, xylenes (a mixture of o, m, and p isomers), styrene, ethyl benzene, and naphthalene.

[7] Determined using the toxic equivalency factors listed in Table 2 of Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin and Dioxin-Like Compounds (incorporated by reference, see § 63.14). When calculating TEQ, zero may be used for congeners that are below the estimated detection level (EDL).

2.4 When Do I Need to Comply?

Appendix A provides sample notification forms. Notification forms are not required to be submitted electronically. Forms must be submitted in accordance with § 63.9.

2.4.1 Initial Notification of Applicability: (§63.9(b)(2))

If subject to the requirements of the 2024 final amendments to the Lime Manufacturing NESHAP, the following apply:

- If initial startup was before the effective date of the rule (September 16, 2024), then submit the initial notification of applicability no later than 120 days after the effective date (January 14, 2025). (§63.7083)
- If initial startup is on or after September 16, 2024, then within 120 days after becoming subject to the subpart (§63.7130)

2.4.2 Compliance Dates (§63.7083)

If subject to the requirements of the 2024 final amendments to the Lime Manufacturing NESHAP, the following apply:

- Affected sources commencing construction or reconstruction after July 16, 2024, must comply with the HCl, mercury, total organic HAP, D/F emission limitations by July 16, 2024, or the date of initial startup, whichever is later.

- Affected sources commencing construction or reconstruction on or before January 5, 2023, must comply with the HCL, mercury, total organic HAP, and D/F emission limitations by July 16, 2027.

*2.4.3 Notification of Intent **(§63.7130(d))***

If your source must conduct a performance test, a Notification of Intent must be submitted at least 60 days before the performance test is scheduled to begin. (§63.7130(d)).

2.4.4 Initial Notification of Compliance Status (§63.7130(e))

You may be required to submit any of the below notification forms. See Section 3.3 for more details.

- If your source is required to conduct initial compliance demonstrations that includes a performance test, you must submit a Notification of Compliance Status form including all performance test results, before the close of business on the 60th day following the completion of all performance tests. (§63.7130(e)).

- If your source is required to conduct initial compliance demonstrations that does not include a performance test (i.e., compliance demonstrations for the work practice standards), you must submit a Notification of Compliance Status form before the close of

business on the 30th day following the completion of the initial compliance demonstrations. (§63.7130(e)).

Table 2 below summarizes the dates for conducting initial compliance demonstrations and submitting initial notifications and compliance reports.

Table 2: Summary of Submittal Dates for Demonstrating Compliance

Subcategory	Submit Initial Notification of Applicability by…	Submit Initial Notification of Compliance Status by…	Demonstrate Compliance with Standards by…	Prepare Compliance Report by…
Existing sources	January 14, 2015	Within 60 days following completion of all performance tests and 30 days following completion of all other compliance demonstrations	July 16, 2027	1st report submitted by January 1, 2028. Semiannual reports submitted January 31 or July 31 (first date after semiannual reporting period[a]).
New sources constructed after July 16, 2024	Within 120 days after becoming subject to subpart	Within 60 days following completion of all performance tests and 30 days following completion of all other compliance demonstrations	Within 180 days after startup	1st report submitted by January 31 or July 31 that is at least 1 year after the compliance date. Semiannual reports submitted January 31 or July 31 (first date after semiannual reporting period[a]).

[a] The semiannual reporting periods are from January 1 through June 30 and from July 1 through December 31.

3.0 HOW TO COMPLY

3.1 Determine Subcategory

To determine your subcategory by kiln type, the 2024 final amendments to the Lime Manufacturing NESHAP included the following kiln subcategories:

- Straight rotary kiln (SR)
- Preheater rotary kiln (PR)
- Vertical kiln (VK)

In addition, the amendments include subcategorization by lime produced, and include the following subcategories:

- Dolomitic lime (DL)
- Quick lime (QL)
- Dead burned dolomitic lime (DB)

3.2 New vs. Existing Sources

You are a new source for purposes of the emissions limits for HCl, organic HAP, mercury, and D/F, if you began construction or reconstruction of your lime kiln(s) after January 5, 2023, and met the applicability criteria in §63.7081. You are an existing source if you are not a new source.

3.3 Initial Notifications

You must submit an initial Notification of Applicability and an initial Notification of Compliance Status.

See sample notification forms in Appendix A.

3.3.1 Notification of Applicability

Submit a complete Notification of Applicability signed by a responsible official within 120 days of becoming subject to the rule.

The Notification of Applicability must contain the following information:

- ✓ The name and address of the owner or operator.
- ✓ The address (i.e., physical location) of the affected source.
- ✓ An identification of the relevant standard, or other requirement, that is the basis of the notification (i.e., 40 CFR part 63 subpart AAAAA) and the source's compliance date.
- ✓ Anticipated date compliance will be achieved.
- ✓ A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted.
- ✓ A statement of whether the affected source is a major source or an area source.

3.3.2 Notification of Compliance Status

Submit the Notification of Compliance Status within 60 days of completing the performance test and within 30 days of completing all other initial compliance demonstrations. The Notification of Compliance Status is your certification that your facility complies with all the rule requirements. Note that in accordance with § 63.7(b), you must provide notification of your intent to conduct a performance test at least 60 calendar days in advance to the Administrator or their designee.

You must keep a copy of each notification and report that you submit to comply with this rule, and all documentation supporting any initial Notification of Applicability or Notification of Compliance Status that you submitted.

Table 3 outlines the certifications and other requirements included in the Notification of Compliance Status, as applicable, which must be signed by a responsible official to certify its accuracy.

Table 3: Notification of Compliance Status: Certifications and Other Requirements

If…	…then you must include the following in the Notification of Compliance Status…
You are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to subpart AAAAA	The methods that were used to determine compliance.
	The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods.
	The methods used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods.
	The type and quantity of each hazardous air pollutant emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard.
	A description of the air pollution control device (APCD) (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method)
	A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standards or other requirements.

3.4 Startup/Shutdown

Startup means the beginning of kiln operation. Startup begins when a shutdown kiln begins firing fuel in the main burner. Startup ends when the lime kiln first generates on-specification lime product or 12 hours following first discharge from the kiln, whichever is earlier. Table 4 details the relevant limits that apply during startup or shutdown.

Table 4: Startup and Shutdown Emission Limits for Kilns and Coolers

For . . .	You must meet the following emission limit	You have demonstrated compliance, if after following the requirements in §63.7112 ...
All new and existing lime kilns and their associated coolers equipped with an FF or an ESP during each startup	Emissions must not exceed 15 percent opacity (based on startup period block average)	Installed, maintained, calibrated, and operated a COMS as required by 40 CFR part 63, subpart A, General Provisions and according to PS-1 of appendix B to part 60 of this chapter, except as specified in §63.7113(g)(2);
		Collected the COMS data at a frequency of at least once every 15 seconds, determining block averages for each

		startup period and demonstrating for each startup block period the average opacity does not exceed 15 percent.
All existing lime kilns and their associated coolers that have a wet scrubber during each startup	See item 2.b of Table 3 of subpart AAAAA for emission limit.	See item 1 of Table 6 of subpart AAAAA for requirements for demonstrating compliance.
All new and existing lime kilns and their associated coolers equipped with an FF or an ESP during shutdown	Emissions must not exceed 15 percent opacity (based on 6-minute average opacity for any 6-minute block period does not exceed 15 percent).	Installed, maintained, calibrated, and operated a COMS as required by 40 CFR part 63, subpart A, General Provisions and according to PS-1 of appendix B to part 60 of this chapter, except as specified in §63.7113(g)(2);
		Collecting the COMS data at a frequency of at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating for each 6-minute block period the average opacity does not exceed 15 percent.
All existing lime kilns and their associated coolers that have a wet scrubber during shutdown	See item 2.b of Table 3 of subpart AAAAA for emission limit	See item 1 of Table 6 of subpart AAAAA for requirements for demonstrating compliance
All new and existing lime kilns that use dry sorbent injection or carbon injection during startup and shutdown		When a lime kiln is in startup or shutdown (as defined in § 63.7143), the operating limits for sorbent and/or carbon injection do not apply in table 3 of subpart AAAAA, and the lime kiln operator shall ensure that sorbent or carbon injection is in operation until the unit is no longer in startup or shutdown. During startup and shutdown, the control device shall be operated in accordance with manufacturer's recommendations or by a

		site-specific operating procedure for startup and shutdown events.
All new and existing lime kilns that use a thermal oxidizer during startup and shutdown		When a lime kiln is in startup or shutdown (as defined in § 63.7143), the temperature limits for a thermal oxidizer in table of subpart AAAAA do not apply and the lime kiln operator shall ensure that the thermal oxidizer is in operation until the unit is no longer in startup or shutdown. During startup and shutdown, the control device shall be operated in accordance with manufacturer's recommendations or by a site-specific operating procedure for startup and shutdown events.

3.5 Emission Limits

3.5.1 By What Date Must I Conduct Performance Tests and Other Compliance Demonstrations?

For each affected source that is subject to the emission limits, you must demonstrate compliance by conducting an initial or ongoing performance test according to the following schedule.

Initial compliance with HCl, mercury, organic HAP, and D/F emission limits:

Affected sources that commenced construction or reconstruction before July 16, 2024, must demonstrate initial compliance with the emission limitations no later than July 16, 2027, or within 180 calendar days after startup of the source, whichever is later.

Affected sources that commence construction or reconstruction after July 16, 2024, must demonstrate compliance with the emission limitations no later than July 16, 2024, or within 180 calendar days after startup of the source, whichever is later.

Subsequent Performance Tests:

You must conduct subsequent performance tests within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter. (§ 63.7111)

Performance Test Methodologies:

Table 5 summarizes the requirements for each performance test.

Table 5: Requirements for Performance Tests

For…	You must…	Using…	According to the following requirements…
Each lime kiln	Measure hydrogen chloride	Method 320 or 321 of appendix A of this part or ASTM 6348-12e1 (Note 1)	The test duration must be at least one hour. HCl must be used for the analyte spiking. For a positive pressure FF or ESP, determine the number of sampling points per the stratification check procedures of section 8.1.2 of Method 7E using the sample points determined using the procedures of Section 8 of EPA Method 5D.
Each lime kiln	Measure mercury	Method 29 or 30B Appendix A to part 60 of this chapter or ASTM D6784-16	For Method 29 and ASTM D6784-16 the test duration must be at least two hours and the sample volume must be at least 1.70 dscm (60 dscf). For Method 30B, the test duration must be at least one hour and the sample volume at least 100 liters. For a positive pressure FF or ESP, use the procedures of Section 8 of EPA Method 5D for sampling points.
Each lime kiln	Measure total organic HAP[2]	Method 18 and/or 320 in appendix A to part 60 of this chapter and/or ASTM D6348-12e1[1]	The test duration must be at least 1 hour. For EPA Method 320 and ASTM D6348-12e1, for a positive pressure FF or ESP, determine the number of sampling points per the stratification check procedures of section 8.1.2 of Method 7E using the sample points determined using the procedures of Section 8 of EPA Method 5D.
Each lime kiln	Measure dioxins/furans	Method 23 in Appendix A to part 60 of this chapter	The test duration must be at least 3 hours and the must be at least 3 dscm (106 dscf). For a positive pressure FF or ESP, use the procedures of Section 8 of EPA Method 5D for sampling points. When calculating TEQ, zero may be used for congeners that are below the EDL.

Each lime kiln equipped with dry sorbent injection	Establish the operating limit for the dry sorbent flow rate during the HCl performance test	Data for the dry sorbent flow rate device during the HCl performance test	The flow monitor must meet the criteria in §63.7113(h); you must collect the dry sorbent flow rate data during the period of the HCl performance test and determine the operating limit according to §63.7112(j).
Each lime kiln equipped with a thermal oxidizer	Establish the operating limit for the combustion chamber temperature during the total organic HAP and D/F performance test(s)	Data for the temperature device during the total organic HAP and dioxin/furan performance test(s)	The temperature device must meet the criteria in §63.7113(i); you must collect the temperature data during the period of the total organic HAP and D/F performance test(s) and determine the operating limit according to §63.7112(j).
Each lime kiln equipped with activated carbon injection	Establish the operating limit for the combustion chamber temperature during the total organic HAP, D/F, and mercury performance test(s)	Data for the activated carbon flow rate device during the total organic HAP, dioxin/furan, and mercury performance test(s)	The flow monitor must meet the criteria in §63.7113(h); you must collect the activated carbon flow rate data during the period of the total organic HAP, D/F, and mercury performance test(s)and determine the operating limit according to §63.7112(j).

[1] When using ASTM D6348-12e1 (1) the test plan preparation and implementation in the Annexes to ASTM D6348-12e1, sections A1 through A8 are mandatory, (2) In ASTM D6348-12e1 Annex A5 (Analyte Spiking Technique), the percent (%) R must be determined for each target analyte (Equation A5.5). In order for the test data to be acceptable for a compound, %R must be 70 % ≥ R ≤ 130%. If the %R value does not meet this criterion for a target compound, the test data is not acceptable for that compound and the test must be repeated for that analyte (i.e., the sampling and/or analytical procedure should be adjusted before a retest). The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound according to: Reported Results = ((Measured Concentration in Stack))/(%R) x 100.

[2] Total Organic HAP is the sum of the concentrations of compounds of formaldehyde, acetaldehyde, toluene, benzene, m-xylene, p-xylene, o-xylene, styrene, ethyl benzene, and naphthalene.

Additional general requirements include the following:

- At all times, operate and maintain the affected source in a manner consistent with good air pollution control practice for minimizing emissions.
- Develop and follow a site-specific test plan.
- Develop and follow a site-specific operation, maintenance, and monitoring (OM&M) plan.

- Establish operating limits during the performance test.
- Monitor and collect data to demonstrate compliance with the operating limits.
- Conduct performance evaluations of your continuous monitoring system(s).

The emission rate of mercury and HCl from each lime kiln (and each lime cooler as applicable) must be computed for each run using the following equation:

$$E = \frac{(C_k Q_k + C_c Q_c)}{KP}$$

Where:

E = Emission rate of mercury, pounds per thousand tons (lb/MMton) of lime produced or HCl pounds per ton (lb/ton) of lime produced.

Ck = Concentration in the kiln effluent of mercury, micrograms/dry standard cubic feet (µg/dscf) or HCl, parts per million by volume on a dry basis (ppmvd).

Qk = Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour (dscf/hr).

Cc = Concentration in the cooler effluent of mercury, µg/dscf or HCl, ppmvd. This value is zero if there is not a separate cooler exhaust to the atmosphere.

Qc = Volumetric flow rate of cooler effluent gas, dscf/hr. This value is zero if there is not a separate cooler exhaust to the atmosphere.

P = Lime production rate, tons per hour (ton/hr).

K = Conversion factor, for mercury, 4.4x108 micrograms per pound (µg/lb) for HCL 1.09x107 ppmvd HCl per lb/dscf HCl.

The concentration of organic HAP and dioxins/furans shall be correct to 7 percent oxygen using the following equation:

$$C_{7\%} = C_{unc} * \frac{13.9}{(20.9 - C_{O2})}$$

Where:

$C_{7\%}$ = concentration of organic HAP concentration, ppmv on a dry basis or dioxins/furans in ng/dscm corrected to 7 percent oxygen.

C_{unc} = uncorrected organic HAP concentration, ppmv as propane on a dry basis basis or dioxins/furans in ng/dscm.

C_{O2} = concentration of oxygen (percent).

3.5.2 Develop and Follow a Site-specific Test Plan (§63.7(c))

You must develop a site-specific test plan before conducting a required performance test. You do not have to submit the site-specific test plan to the EPA Administrator or delegated authority unless it is requested. You must keep a copy of the site-specific test plan as a record.

The site-specific test plan must include:

- Test program summary.
- Test Schedule.
- Data quality objectives (pretest expectations of precision, accuracy, and completeness).
- Internal and external quality assurance program

3.5.3 Develop and Follow a Site-specific Operation, Maintenance, and Monitoring Plan (§63.7100(d))

You must prepare and implement for each LMP, a written operations, maintenance, and monitoring (OM&M) plan. You must submit the plan to the applicable permitting authority for review and approval as part of the application for a 40 CFR part 70 or 40 CFR part 71 permit. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, you must comply with the provisions of the submitted plan. Each plan must contain the following information:

- Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable, for each emission unit.
- A monitoring schedule for each emission unit.
- Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating limits in Tables 1, 2 and 3 of Subpart AAAAA, respectively. On and after the relevant compliance date for your source as specified in § 63.7083, your OM&M plan must address periods of startup and shutdown.
- Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance, including:
    - Calibration and certification of accuracy of each monitoring device;

  - Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems;
  - Prior to the relevant compliance date for your source as specified in § 63.7083, ongoing operation and maintenance procedures in accordance with the general requirements of §§ 63.8(c)(1)(i) and (ii), (3), and (4)(ii). On and after the relevant compliance date for your source as specified in § 63.7083(e), ongoing operation and maintenance procedures in accordance with the general requirements above and §§ 63.8(c)(1)(ii), (3), and (4)(ii); and (iv) Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d).
- Procedures for monitoring process and control device parameters.
- Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in Table 3 to this subpart, including: Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date the corrective action was completed.
- A maintenance schedule for each emission unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- Prior to the relevant compliance date for your source as specified in § 63.7083, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3).
- Changes to the operating limits in your OM&M plan require a new performance test, but not necessarily changes to the inspection and maintenance procedures.

3.5.4 Conduct Initial and Ongoing Performance Tests

You must conduct an initial performance test to demonstrate initial compliance and to establish operating parameters that you will follow until the next performance test. Conduct a minimum of three separate test runs for each performance stack test. Conduct performance stack tests at representative operating conditions and record the process information that is necessary to document operating conditions during the test.

3.5.5 Establish Operating Limits during the Performance Test

During the performance test, you must establish operating limits for your air pollution control device. Table 6 establishes the operating limits.

Table 6: Operating Limits

As required in §63.7090(b), you must meet each operating limit in the following table that applies to you, except for kilns and coolers during startup and shutdown (See Table 2 for operating limits during startup and shutdown)

For . . .	You must . . .
Each lime kiln equipped with a wet scrubber	Maintain the 3-hour block exhaust gas stream pressure drop across the wet scrubber greater than or equal to the greater of the pressure drop operating limit established during the most recent performance test for PM and HCl; and
	Maintain the 3-hour block scrubbing liquid flow rate greater than or equal to the greater of the flow rate operating limit established during the most recent performance test for PM and HCl.
Each PSH operation subject to a PM limit which uses a wet scrubber	Maintain the 3-hour block average exhaust gas stream pressure drop across the wet scrubber greater than or equal to the greater of the pressure drop operating limit established during the performance test for PM and HCl; and maintain the 3-hour block average scrubbing liquid flow rate greater than or equal to the greater of the flow rate operating limit established during the performance test for PM and HCl.
All affected sources	Prepare a written OM&M plan; the plan must include the items listed in §63.7100(d) and the corrective actions to be taken when required in Table 6 to this subpart.
Each emission unit equipped with an add-on air pollution control device	Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to an FF; and Operate each capture/collection system according to the procedures and requirements in the OM&M plan.
Each lime kiln equipped with dry sorbent injection	Maintain the 3-hour block dry sorbent flow rate greater than or equal to the flow rate operating limit established during the most recent performance test for HCl.
Each lime kiln equipped with a thermal oxidizer	Maintain the 3-hour block average combustion chamber temperature greater or equal to the greater of the combustion chamber operating limit established in the most recent performance test for total organic HAP and dioxin/furans.
Each lime kiln equipped with	Maintain the 3-hour block activated carbon injection flow rate greater than or equal to the greater of the flow rate operating limit established during the most recent performance test for total organic HAP, D/F, and mercury.

activated carbon injection	

3.5.6 Collect Data to Demonstrate Continuous Compliance with the Emission Limits

If you elect to comply with either the HCl emission limit or the mercury emission limit in table 2 using emissions averaging in accordance with an implementation plan approved under the provisions in §63.7114(c), you must comply with the following:

- For lime kilns included in the emissions averaging group that are equipped with dry sorbent injection (DSI) or activated carbon injection (ACI) systems, you must comply with the requirements in §63.7113(h).

- For kilns included in the emissions averaging group that use a control device or method other than DSI or ACI, you must comply with your site-specific monitoring plan of this section.in accordance with the requirements of §63.7100(d).

- Calculate the monthly production-weighted average emission rate using the HCl or mercury emission rate determined during the last performance test and the actual production data for each kiln included in the emissions averaging option, as shown in the following equation:

$$E_g = \frac{\sum_{k=1}^{n}(E_k X P_k)}{\sum_{k=1}^{n}(P_k)} \text{ (Equation 1)}$$

Where:

E_g = Monthly production-weighted average emission rate for month "g" for the group of kilns,

E_k = Average emission rate for kilns "k", as determined during the last compliance stack test,

P_k = Total monthly production of lime produced for kilns "k", and

n = Number of kilns in the averaging group.

- Until 12 monthly weighted average emission rates have been accumulated, the monthly weighted average emissions rate, calculated as shown in the equation above, must not exceed the emission limit in table 2 to this document in any calendar month.

- After 12 monthly weighted average emission rates have been accumulated, for each subsequent calendar month, you must use the equation below to calculate the 12-month rolling average of the monthly weighted average emission rates for the current month and the previous 11 months. The 12-month rolling weighted average emissions rate for the kilns included in the group must not exceed the emission limits in table 2.

$$E_{avg} = \frac{\sum_{i=1}^{12} E_i}{12} \qquad \text{(Equation 2)}$$

Where:

E_{avg} = 12-month rolling average emission rate.

E_i = Monthly weighted average for month "i" calculated as shown in equation 1

- For those kilns that produce multiple types of lime in the HCl subcategory (*e.g.*, high calcium quick lime and dolomitic quick lime) you must establish a kiln-specific emission limit using equation 3.

$$EL_K = \left(P_{QL}\ x\ EL_{QL}\right) + \left(P_{DL}\ x\ EL_{DL}\right) \qquad \text{(Equation 3)}$$

Where,

EL_K = kiln-specific allowable emission limit, lb/yr

P_{QL} = Actual 12-month production of high calcium quick lime, ton lime produced/yr

EL_{QL} =Emission limit for high calcium quick lime taken from Table 2, lb HCl/ton lime produced

P_{DL} = Actual 12-month production of dolomitic quick lime, ton lime produced/yr

EL_{DL} = Emission limit for dolomitic quick lime taken from Table 2, lb HCl/ton lime produced

- For those kilns that produce multiple types of lime in the HCl subcategory, after the close of each calendar month compliance with the kiln-specific emission limit developed in §63.7121(g) would be calculated using the following equation:

$$E_K = (P_{QL}\ x\ TER_{QL}) + (P_{DL}\ x\ TER_{DL}) \qquad \text{(Equation 4)}$$

Where,

E_K = Average emission rate for kiln "k", as determined during the last compliance stack test, lb HCl/ton production

P_{QL} = Actual 12-month production of high calcium quick lime, ton lime produced/yr

E_{QL} = Average emission rate for kiln "k" while producing high calcium quick lime, as determined during the last compliance stack test

P_{DL} = Actual 12-month production of dolomitic quick lime, ton lime produced/yr

E_{DL} = Average emission rate for kiln "k" while producing dolomitic quick lime, as determined during the last compliance stack test, lb HCl/ton production

- For those kilns that produce multiple types of lime in the HCl subcategory, compliance using the emissions averaging provisions is demonstrated when E_K, as determined using equation 10, is less than E_{LK}, as determined using equation 3.

You must operate the monitoring system(s) and collect data at all times while the kiln is operating. Use all the data collected in assessing the operation of the control device and associated control system. However, you may not use data to demonstrate compliance recorded during:

- Monitoring system malfunctions or out-of-control periods (see definitions)
- Repairs associated with monitoring system malfunctions or out-of-control periods.
- Maintenance periods
- Required monitoring system quality assurance or quality control activities, including calibration checks, and required zero and span adjustments.

You must make monitoring system repairs due to monitoring system malfunctions or out-of-control periods and return the monitoring system to operation as quickly as possible. Failure to collect required data is a deviation of the monitoring requirements. (See definition of deviation at §63.7143.)

Out of Control Periods

A CMS is out of control if:

A. The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the CD specification in the applicable performance specification or relevant standard; or

B. The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; or

C. The continuous opacity monitoring system (COMS) CD exceeds two times the limit in the applicable performance specification in the relevant standard.

Malfunction

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

3.6 What Records Must I Keep and for How Long?

Refer to Section 3.3 for information on the initial Notification of Applicability and an initial Notification of Compliance Status. This section addresses the remaining recordkeeping requirements.

3.6.1 General Requirements for Records

Records can be kept in physical/hard copy form or digital copies. You must be able to make these copies available upon request. This section describes generally the records you must keep.

- 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).
- Prior to the relevant compliance date for your source as specified in §63.7083(e), the records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. On and after the relevant compliance date for your source as specified in §63.7083(e), the records in paragraphs below:

  - You must keep records for each startup period of the date, the time startup began, the time began producing on-specification lime product, and the time discharge from the kiln began for any affected source that is subject to a standard during startup that differs from the standard applicable at other times.
  - You must keep records of the date, time, cause and duration of each malfunction (as defined in 40 CFR 63.2) that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time, cause, and duration of the monitoring malfunction; the record must list the affected source or equipment; if there was a failure to meet a particulate matter emissions limit, an estimate of the volume of each regulated pollutant emitted over the limit, and a description of the method used to estimate the emissions.
- Records of performance tests, performance evaluations, and opacity and VE observations as required in §63.10(b)(2)(viii).
- You must keep the records in §63.6(h)(6) for VE observations.
- You must keep the records required by Tables 6 and 7 to Subpart AAAAA to show continuous compliance with each emission limitation that applies to you.
- You must keep the records which document the basis for the initial applicability determination as required under §63.7081.

3.6.2 Emission Limits Recordkeeping

You will need to keep records related to emission limits, test plans, monitoring plans/data, operating limits and fuel type/amount.

Site-specific Test Plan:

Prepare the site-specific test plan before conducting a required performance test (see specific plan requirements in Section 3.5.2). Keep a copy of the site-specific test plan as a record. Submit the site-specific test plan if requested by the EPA or a delegated authority.

Site-specific OM&M Plan:

Prepare the site-specific OM&M plan (§ 63.7100(d)). Your OM&M plan must be submitted to the applicable permitting authority for review and approval as part of your part 70 or part 71 permit. Any subsequent changes to your plan must be submitted for review and approval. You must comply with your OM&M plan pending approval. Your OM&M plan must contain the following information:

- Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable, for each emission unit.
- A monitoring schedule for each emission unit.
- Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating

limits in Tables 1, 2 and 3 of subpart AAAAA, respectively. On and after the relevant compliance date for your source as specified in §63.7083(e), your OM&M plan must address periods of startup and shutdown.

- Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance, including:
    - Calibration and certification of accuracy of each monitoring device;
    - Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems;
    - Prior to the relevant compliance date for your source as specified in §63.7083(e), ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(i) and (ii), (3), and (4)(ii). On and after the relevant compliance date for your source as specified in §63.7083(e), ongoing operation and maintenance procedures in accordance with the general requirements of paragraph (c) of this section and §§63.8(c)(1)(ii), (3), and (4)(ii); and
    - Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d).
- Procedures for monitoring process and control device parameters.
- Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in Table 3 of subpart AAAAA, including:
    - Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and
    - Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date the corrective action was completed.
- A maintenance schedule for each emission unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

3.7 Other Notifications and Reports

Refer to Section 3.3 for information on the initial Notification of Applicability and an initial Notification of Compliance Status. This section addresses the remaining reporting and notification requirements.

3.7.1 Compliance Report

For each affected source subject to the emission limits and work practice standards in LMP NESHAP, you must submit, by July 31 and January 31 of each year, a semiannual Compliance Report for the previous semiannual reporting period (January 1 through June 30 or July 1 through December 31).

The first Compliance Report must cover the period beginning on the compliance date that is specified for your affected source and ending on either June 30 or December 31. The first reporting period must be at least 6 months, but less than 12 months.

For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, if the permitting authority has established dates for submitting semiannual reports, you may submit the first and subsequent Compliance Reports according to the dates the permitting authority has established instead of the dates in the LMP NESHAP.

The report must contain:

1. The company name and address.

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

3. The date of the report and the beginning and ending dates of the reporting period.

4. Prior to the relevant compliance date for your source as specified in §63.7083(e), if you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i).

5. If there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and VE limit) that apply to you, the compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.

6. If there were no periods during which the continuous monitoring systems (CMS) were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMS were out-of-control during the reporting period.

7. For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) that occurs at an affected source where you are not using a CMS to comply with the emission limitations in this subpart, the compliance report must contain the information specified in paragraphs (1) through (4) and (8) and (10) of this section. The deviations must be reported in accordance with the requirements in §63.10(d) prior to the relevant compliance date for your source as specified in §63.7083(e) and the requirements in §63.10(d)(1)-(4) beginning on the relevant compliance date for your source as specified in §63.7083(e).

8. The total operating time of each emission unit during the reporting period.

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

10. An estimate of the quantity of each regulated pollutant emitted over non-opacity or VE emission limit, and a description of the method used to estimate the emissions.

For eah deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) occurring at an affected source where you are using a CMS to comply with the emission limitation in this subpart, you must include the information specified in paragraphs (1) through (4) and (12) through (22) of this section, except that beginning on the relevant compliance date for your source as specified in §63.7083(e), the semiannual compliance report must also include the information included in paragraph (23) of this section. This includes periods of startup, shutdown, and malfunction.

11. The date and time that each malfunction started and stopped.

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

13. The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

14. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

15. A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.

16. 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.

17. 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 emission unit operating time during that reporting period.

18. A brief description of the process units.

19. A brief description of the CMS.

20. The date of the latest CMS certification or audit.

21. A description of any changes in CMS, processes, or controls since the last reporting period.

22. An estimate of the quantity of each regulated pollutant emitted over a non-opacity or VE emission limit, and a description of the method used to estimate the emissions.

23. Each facility that has obtained a title V operating permit pursuant to part 70 or part 71 of this chapter must report all deviations as defined in this subpart in the semiannual monitoring report required by §§70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of this chapter. If you submit a compliance report specified in Table 8 to the subpart along with, or as part of, the semiannual monitoring report required by §§70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A) of the chapter, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be

deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report.

3.7.2 Stack Test Performance Data Reporting

If your lime kiln is subject to stack testing, you must:

- Submit the results of the performance tests within 60 days of completing each performance test electronically by using the Compliance and Emissions Data Reporting Interface (CEDRI) which can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).

- Submit performance test data in the format generated through the use of appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*) for this subpart.

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

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

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

For any performance test conducted using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, you must submit the results on paper to the Administrator at the appropriate address listed in §63.13 (A list of EPA Reginal Offices can be found at the following website: https://www.epa.gov/aboutepa/regional-and-geographic-offices. Addresses

of State and Local air pollution control agencies can be found at the following website: https://www.epa.gov/lmop/list-state-agencies).

If your kiln experiences any deviations, you must submit a semiannual Compliance Report. See Section 3.6 for details of the semiannual Compliance Report.

4.0 OTHER INFORMATION

4.1 Compliance Assistance Resources

The EPA believes that through awareness, education, and reasonable options, both public and private members of the regulated community will be proactive in efforts to comply with pollution control regulations. Compliance assistance providers help regulated communities and businesses understand and comply with environmental laws through one-to-one counseling, online resource centers, fact sheets, guides, and training. Assistance providers include EPA regional office staff; state, local and tribal governments; federal and state small business and pollution prevention technical assistance extension agents, consultants, and trade associations.

Find out what laws apply to you, what you need to do to comply, and tools and resources that can help you and your constituents comply with environmental regulations by visiting the following websites:

EPA's Small Business Compliance Policy: https://www.govinfo.gov/content/pkg/FR-2000-04-11/pdf/00-8955.pdf

EPA Compliance Assistance: https://www.epa.gov/compliance/compliance-assistance-centers/

State-by-State Resource Locator: http://www.envcap.org/statetools/

National Small Business Environmental Assistance Programs: https://nationalsbeap.org/

EPA Small Business Gateway: https://www.epa.gov/resources-small-businesses/

EPA Hazardous Air Pollutants: https://www.epa.gov/haps

EPA Pollutants and Sources: https://www3.epa.gov/airtoxics/pollsour.html

EPA Asbestos and Small Business Ombudsman: https://www.epa.gov/resources-small-businesses/asbestos-small-business-ombudsman/

EPA Small Business Compliance and Enforcement: https://www.epa.gov/compliance/small-business-compliance/ and https://www.epa.gov/enforcement/small-businesses-and-enforcement/

EPA Compliance Incentives and Auditing: https://www.epa.gov/compliance/epas-audit-policy/

4.2 What Other Resources are Available?

State and local contacts can be found at the National Association of Clean Air Agencies (NACAA) web site (https://www.4cleanair.org/), the Association of Air Pollution Control

Agencies (AAPCA) web site (https://cleanairact.org), or at the EPA Regional offices (https://www.epa.gov/aboutepa/, https://www.epa.gov/resources-small-businesses/regional-small-business-coordinators, and https://www.epa.gov/resources-small-businesses/regional-small-business-liaisons).

4.3 For More Information

The full text of the Federal Register containing the rule and additional information are available online at: https://www.epa.gov/stationary-sources-air-pollution/lime-manufacturing-plants-national-emission-standards-hazardous.

A link to the current LMP NESHAP and General Provisions in the e-CFR is available online. Other background information is also available in the rulemaking docket (Docket ID: EPA-HQ-OAR-2017-0015 FRL-5948.1-02-OAR) either electronically at https://www.regulations.gov, the EPA's electronic public docket and comment system, or in hardcopy at the EPA Docket Center's Public Reading Room.

Appendix A

Sample Notifications for 40 CFR Part 63, Subpart AAAAA

Initial Notification of Applicability

This is a sample form for the initial Notification of Applicability that can be used by facilities at their discretion to meet the requirements in the Lime Manufacturing NESHAP.

Applicable Rule: 40 CFR Part 63, Subpart AAAAA – National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing

1. Print or type the following general information for each Lime Manufacturing facility:

   Owner/Operator/Title:_____
   Street Address:_____
   City:_____ State:_____ Zip Code:_____
   Plant Name:_____
   Plant Contact/Title:_____
   Plant Contact Phone Number (optional): _____
   Plant Address (if different than owner/operator's)
   Street Address: _____
   City:_____ State:_____ Zip Code:_____

2. Provide the following information as appropriate:

- The affected source's compliance date:_____
- A brief description of the nature, size, design, and method of operation of the affected source:
  _____
  _____
  _____
- An identification of the types of emission points within the affected source:
  _____
  _____
  _____
- A statement of whether the affected source is a major source or an area source:
  _____
  _____
  _____

Application for Approval of Construction or Reconstruction

This is a sample form for the Application for Approval of Construction or Reconstruction that can be used by facilities at their discretion to meet the requirements in the Lime Manufacturing NESHAP.

Applicable Rule: 40 CFR Part 63, Subpart AAAAA – National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing

1. Print or type the following general information for each Lime Manufacturing facility:

   Owner/Operator/Title:_____
   Street Address:_____
   City:_____ State:_____ Zip Code:_____
   Plant Name:_____
   Plant Contact/Title:_____
   Plant Contact Phone Number (optional): _____
   Plant Address (if different than owner/operator's)
   Street Address: _____
   City:_____ State:_____ Zip Code:_____

2. In addition to the information requested above, please include the following information in each application for approval of construction or reconstruction:

- Notification that you intend to construct a new major affected source or make any physical change or operational change to a major affected source that may meet or has been determined to meet the criteria for a "reconstruction," as defined in §63.2 of the NESHAP General Provisions (40 CFR part 63, subpart AAAAA):

  _____
  _____
  _____

- The expected date of the beginning of actual construction or reconstruction:_____
- The expected completion date of the construction or reconstruction:_____
- The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified in subpart AAAAA, or, if actual emissions data are not yet available, an estimate of the type and quantity of hazardous air pollutants expected to be emitted by the source in units and averaging times specified in subpart AAAAA. Include operating parameters, such as flow rate, to the extent that they demonstrate performance and compliance:

  _____
  _____

3. In addition to the information requested above, please include the following information in each application for approval of construction:

- Technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source:

- An identification of each type of emission point for each hazardous air pollutant that is emitted (or could reasonably be anticipated to be emitted):

- A description of the planned air pollution control system (equipment or method) for each emission point, including each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device:

- A description of the method to be used for the control of emissions, including an estimated control efficiency (percent) for that method:

- Calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations:

4. In addition to the information requested above, please include the following information in each application for approval of reconstruction:

- A brief description of the affected source and the components that are to be replaced:

- A description of present and proposed emission control systems (i.e., equipment or methods), including each control device for each hazardous air pollutant, the estimated control efficiency (percent) for each control device, and calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations:

_____
_____
_____

5. If, in the application for approval of reconstruction, you designate the affected source as a reconstructed source and declare that there are economic or technical limitations to prevent the source from complying with the standards or other requirements, you must submit the following information:

- An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source:_____
- The estimated life of the affected source after the replacements:_____
- A discussion of any economic or technical limitations that the source may have in complying with the standards or other requirements after the proposed replacements, including sufficient detail to demonstrate to the Administrator's satisfaction that the technical or economic limitations affect source's ability to comply with the standard and how they do so:

_____
_____
_____

Initial Notification of Compliance Status

This is a sample form for the initial Notification of Compliance Status that can be used by facilities at their discretion to meet the requirements in the Lime Manufacturing NESHAP.

Applicable Rule: 40 CFR Part 63, Subpart AAAAA – National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing

1. Print or type the following general information for each Lime Manufacturing facility:

   Owner/Operator/Title:_____
   Street Address:_____
   City:_____ State:_____ Zip Code:_____
   Plant Name:_____
   Plant Contact/Title:_____
   Plant Contact Phone Number (optional): _____
   Plant Address (if different than owner/operator's)
   Street Address: _____
   City:_____ State:_____ Zip Code:_____

2. Provide the following information, as appropriate:

- The methods that were used to determine compliance:
  _____
  _____
  _____
- The results of any performance tests, opacity or visible emission observations, continuous monitoring system performance evaluations, and/or other monitoring procedures or methods that were conducted (please attach the results to this notification).
- The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods:
  _____
  _____
  _____
- The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants specified in subpart AAAAA), reported in units and averaging times and in accordance with the test methods specified in subpart AAAAA:
  _____
  _____
  _____

- An analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification):

  _____

  _____

  _____

- A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method):

  _____

  _____

  _____

- The operating limit parameter values established for each affected source with supporting documentation and a description of the procedure used to establish the values:

  _____

  _____

  _____

- For each control device that includes a fabric filter, if a bag leak detection system is used, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in §63.7143 of subpart AAAAA (please attach the analysis and supporting documentation to this notification).
- A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the standard or other requirements:

  _____

  _____

  _____

- A signature from the responsible official certifying the accuracy of this notification:

  _____

Compliance Report

This is a sample form for the Compliance Report that can be used by facilities at their discretion to meet the requirements in the Lime Manufacturing NESHAP.

Applicable Rule: 40 CFR Part 63, Subpart AAAAA – National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing

1. Print or type the following general information for each Lime Manufacturing facility:

   Owner/Operator/Title:_____
   Street Address:_____
   City:_____ State:_____ Zip Code:_____
   Plant Name:_____
   Plant Contact/Title:_____
   Plant Contact Phone Number (optional): _____
   Plant Address (if different than owner/operator's)
   Street Address: _____
   City:_____ State:_____ Zip Code:_____

2. Include a 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. Provide the following information, as appropriate:

- Date of report and beginning and ending dates of the reporting period:

  _____

- A description of control device maintenance performed while the control device was offline and the kiln controlled by the control device was operating:

  _____
  _____
  _____

- The date and time when the control device was shut down and restarted:

  _____
  _____

- Identification of the kiln that was operating and the number of hours that the kiln operated while the control device was offline:

_____

_____

- A statement of whether or not the control device maintenance was included in your approved routine control device maintenance request:

_____

_____

_____

4. If the control device maintenance was included in your approved routine control device maintenance request, provide the following information:

- The total amount of time that the kiln controlled by the control device operated during the current semiannual compliance period and during the previous semiannual compliance period:

_____

_____

- The amount of time that each kiln 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:

_____

_____

5. Based on the information provided in item 4 above, compute the annual percent of kiln operating uptime during which the control device was offline for routine maintenance, using §63.7113 of subpart AAAAA, and provide the results below:

_____

_____

6. In addition to the information requested above, please include the following information in the compliance report:

- If there are no deviations from any emission limits or operating limits in subpart AAAAA, a statement that there were no deviations from the emission limits or operating limits during the reporting period:

_____

_____

_____

- If there were no periods during which the continuous monitoring system was out-of-control as specified in your OM&M plan, a statement that there were no periods during which the

continuous monitoring system was out-of-control during the reporting period:

_____
_____
_____

7. For each deviation that occurs at an affected source, include the following information:

- The date, time, and duration of the deviation:

  _____

- A list of the affected sources or equipment for which the deviation occurred:

  _____
  _____
  _____

- 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:

  _____
  _____
  _____

8. For each deviation from an emission limit or operating limit occurring at an affected source where you are using a continuous monitoring system to comply with the emission limit or operating limit in subpart AAAAA, include the information in items 1 through 5 and 7 above along with the information listed below:

- The total operating time of each affected source during the reporting period:

  _____
  _____
  _____

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

  _____
  _____
  _____

- The date, time, and duration that each continuous monitoring system was out-of-control, including the pertinent information in your OM&M plan:

  _____
  _____
  _____

- 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):

  _____
  _____
  _____

- A description of any corrective action taken to return the affected unit to its normal or usual manner of operation:

  _____
  _____
  _____

- A breakdown of the total duration of the deviations during the reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes:

  _____
  _____
  _____

- A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during that reporting period:

  _____
  _____
  _____

- A brief description of the process units:

  _____
  _____
  _____

- A brief description of the continuous monitoring system:

  _____
  _____
  _____

- The date of the latest continuous monitoring system certification or audit:

  _____

- A description of any changes in continuous monitoring systems, processes, or control equipment since the last reporting period:

  _____
  _____
  _____