



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

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FEB 28 2014

Mr. Karl Brooks
Regional Administrator
U.S. EPA, Region VII
11201 Renner Boulevard
Lenexa, KS 66219

Dear Mr. Brooks:

The Missouri Department of Natural Resources requests that the U.S. Environmental Protection Agency (EPA) amend the Missouri State Plan for Designated Facilities and Pollutants to include the following plan and rule actions for existing commercial and industrial solid waste incinerators pursuant to section 111(d)/129 of the Clean Air Act (CAA):

- Section 111(d)/129 State Plan for Commercial and Industrial Solid Waste Incinerators in Missouri
- 10 CSR 10-6.161 Commercial and Industrial Solid Waste Incinerators

The state plan was developed pursuant to sections 111(d) and 129 of the CAA and demonstrates that Missouri has the legal authority and legal mechanisms necessary to implement the requirements of 40 CFR 60, Subpart DDDD – Emissions Guidelines and Compliance Times of Commercial and Industrial Solid Waste Incinerations Units promulgated by EPA on February 7, 2013 (78 FR 9112). The rule action incorporates the regulatory requirements of 40 CFR 60, Subpart DDDD. Incorporation of this federal regulation into the state rule shifts enforcement authority for existing commercial and industrial solid waste incineration units from EPA to the state of Missouri.

The Missouri Air Conservation Commission adopted the plan and rule on November 21, 2013. The commission has full legal authority to develop rules and state plans pursuant to Section 643.050 of the Missouri Air Conservation Law. The state followed all applicable administrative procedures in proposing and adopting the rule and plan actions.

Enclosed are the required submittal elements for the plan as per 40 CFR 60, Subpart B, Adoption and Submittal of State Plans for Designated Facilities. It should be noted that the adopted version of the plan was updated to include the Code of State Regulations version of the rule.

Mr. Karl Brooks
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An exact duplicate of this submittal is also being provided as an electronic attachment in an email to the Region VII Missouri coordinator.

A searchable pdf version of the state plan and rule will be provided to the EPA Regional Office. In addition, a searchable pdf version of the state plan will be posted on the department's website at <http://www.dnr.mo.gov/env/apcp/sips.htm> under "Section 111(d) Plans" subheading and a searchable pdf version of the rule is available on the Code of State Regulations website at <http://www.sos.mo.gov/adrules/csr/current/10csr/10c10-6a.pdf>.

Thank you for your attention to this matter. If you have any questions regarding this submittal, please contact Wendy Vit, with the Department's Air Pollution Control Program at P.O. Box 176, Jefferson City, MO 65102 or by phone at (573) 751-7840 or email at wendy.vit@dnr.mo.gov.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Original signed by Kyra L. Moore

Kyra L. Moore
Director

KLM:abc

Enclosures:

- Copy of rule published in CSR
- Copy of plan as adopted
- Copy of commission signature pages certifying Missouri Air Conservation Commission adoption of rule and plan
- Copy of public hearing web notices for rule and plan
- Copy of public hearing transcript introductory statements for rule and plan
- Copy of technical support documentation for rule (if applicable)
- Copy of MO Reg proposed rulemaking
- Copy of MO Reg order of rulemaking with comments/responses
- Copy of public comments and responses for plan

c: Missouri Air Conservation Commission
Project #2013-CISWI-6



(5) Test Methods. The testing references for Missouri ambient air quality data are as specified in 10 CSR 10-6.040 Reference Methods.

AUTHORITY: section 643.050, RSMo Supp. 2013. Original rule filed May 11, 1984, effective Oct. 11, 1984. Amended: Filed Jan. 5, 1988, effective April 28, 1988. Amended: Filed March 13, 2002, effective Nov. 30, 2002. Amended: Filed Sept. 24, 2009, effective May 30, 2010. Amended: Filed May 7, 2013, effective Dec. 30, 2013.*

**Original authority: 643.050, RSMo 1965, amended 1972, 1992, 1993, 1995, 2011.*

10 CSR 10-6.140 Restriction of Emissions Credit for Reduced Pollutant Concentrations From the Use of Dispersion Techniques

PURPOSE: This rule implements provisions of federal regulations which restrict credit in the calculation of emission limitations for reduced pollutant concentrations due to the use of dispersion techniques.

(1) Applicability. This rule shall apply to the procedures to account for emission dispersion techniques used in the calculation of any emission limitation or any revision of any limitation to be established by the director or to be considered for establishment by the Missouri Air Conservation Commission (MACC). This rule also requires that all emission limitations established by the director or by the MACC after December 31, 1970, be reviewed for compliance with this rule.

(2) General.

(A) The degree of emission limitation required of any installation for control of any air pollutant must not be affected by that portion of any installation's stack height that exceeds good engineering practice (GEP) or by any other dispersion technique, except as provided in section (3).

(B) Before the director or the MACC establishes an emission limitation that is based on a GEP stack height that exceeds the formula GEP height allowed by 10 CSR 10-6.020(2)(G)2.B., the director must notify the public of the availability of the demonstration study and must provide opportunity for public hearing on it.

(C) This rule does not restrict the actual stack height of any installation or the use of any dispersion technique by any installation.

(3) Exemptions. The provisions of section (2) shall not apply to emission limitation credits from—

(A) Stack heights on which construction commenced on or before December 31, 1970, except where pollutants are being emitted from the stacks by source operations which were constructed, or reconstructed or on which major modifications were carried out after December 31, 1970; or

(B) Dispersion techniques implemented before December 31, 1970, except where these dispersion techniques are being applied to source operations which were constructed, or reconstructed or on which major modifications were carried out after December 31, 1970.

AUTHORITY: section 643.050, RSMo Supp. 1992. Original rule filed Jan. 6, 1986, effective May 11, 1986.*

**Original authority: 643.050, RSMo 1965, amended 1972, 1992.*

10 CSR 10-6.150 Circumvention

PURPOSE: This rule prohibits the installation or use of any device or means which conceals or dilutes an emission violating a rule.

(1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceal or dilute an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

AUTHORITY: section 643.050, RSMo Supp. 1992. This rule was previously filed as 10 CSR 10-2.090, 10 CSR 10-4.130 and 10 CSR 10-5.230. Original rule filed April 18, 1990, effective Nov. 30, 1990.*

**Original authority: 643.050, RSMo 1965, amended 1972, 1992.*

10 CSR 10-6.160 Medical Waste and Solid Waste Incinerators

Editor's Note: On March 29, 1993, the Circuit Court of Cole County found that 10 CSR 10-6.160 was void since it exceeds the statutory cost analysis requirements of sections 536.200 and 536.205, RSMo.

10 CSR 10-6.161 Commercial and Industrial Solid Waste Incinerators.

PURPOSE: This rule incorporates by reference the federal regulatory requirements for existing commercial and industrial solid waste incineration units in Missouri. The evi-

dence supporting the need for this proposed rulemaking, per 536.016, RSMo, is Federal Register Notice 78 FR 9112, dated February 7, 2013.

(1) Applicability.

(A) This rule applies to commercial and industrial solid waste incinerator (CISWI) units, defined by section (2) of this rule, as follows:

1. Energy recovery units, waste burning kilns, and small remote incinerators that commenced construction on or before June 4, 2010, or commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013;

2. Other CISWI incinerators that commenced construction on or before November 30, 1999 and were not modified or reconstructed after June 1, 2001; and

3. Other CISWI incinerators that commenced construction after November 30, 1999, but no later than June 4, 2010, or commenced modification or reconstruction on or after June 1, 2001 but no later than August 7, 2013.

(B) If the owner or operator of a CISWI unit makes changes that meet the definition of modification or reconstruction on or after June 1, 2001, the CISWI unit becomes subject to 40 CFR 60 subpart CCCC and the CISWI state plan no longer applies to that unit.

(C) Exemptions to this rule are as follows:

1. This rule does not apply to combustion units listed in 40 CFR 60.2555; and

2. If the owner or operator of a CISWI unit makes physical or operational changes to an existing CISWI unit primarily to comply with the CISWI state plan, 40 CFR 60 subpart CCCC does not apply to that unit because such changes do not qualify as modifications or reconstructions under 40 CFR 60 subpart CCCC.

(2) Definitions.

(A) The provisions of 40 CFR 60.2875, promulgated as of February 7, 2013, shall apply and are hereby incorporated by reference in this rule, as published by the Office of Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.

(B) Definitions of certain terms specified in this rule, other than those defined in subsection (2)(A) of this rule, may be found in 10 CSR 10-6.020.

(3) General Provisions. The following references to 40 CFR 60.2575 through 60.2735,



40 CFR 60.2805 through 60.2870, and 40 CFR 60, Subpart DDDD Tables 1 through 9, promulgated February 7, 2013, shall apply and are hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.

(A) Increments of Progress—40 CFR 60.2575 through 60.2615 and 40 CFR 60.2815 through 60.2855;

(B) Waste Management Plan—40 CFR 60.2620 through 60.2630;

(C) Operator Training and Qualification—40 CFR 60.2635 through 60.2665;

(D) Emission Limitations and Operating Limits—40 CFR 60.2670 through 60.2685 and 40 CFR 60.2860;

(E) Performance Testing—40 CFR 60.2690 through 60.2695;

(F) Initial Compliance Requirements—40 CFR 60.2700 through 60.2706;

(G) Continuous Compliance Requirements—40 CFR 60.2710 through 60.2725;

(H) Monitoring—40 CFR 60.2730 through 60.2735 and 40 CFR 60.2865;

(I) Title V Operating Permits—40 CFR 60.2805; and

(J) Table 1 through Table 9. The compliance dates for the increments of progress are—

1. For Increment 1, the final control plan must be submitted within one (1) year of the effective date of this rule; and

2. For Increment 2, for CISWI units that commenced construction on or before June 4, 2010, the final compliance date is February 7, 2018.

(K) General reference notes:

1. Units applicable under paragraph (1)(A)1. of this rule must comply with the emission limits as follows:

A. For energy recovery units, Table 7 of 40 CFR 60 subpart DDDD;

B. For waste burning kilns, Table 8 of 40 CFR 60 subpart DDDD; and

C. For small remote incinerators, Table 9 of 40 CFR 60 subpart DDDD;

2. Units applicable under paragraph (1)(A)2. of this rule, Table 2 of 40 CFR 60 subpart DDDD; and

3. Units applicable under paragraph (1)(A)3. of this rule, Table 6 of 40 CFR 60 subpart DDDD or Table 1 of 40 CFR 60 subpart CCCC, whichever is more stringent.

(4) Reporting and Record Keeping. The provisions of 40 CFR 60.2740 through 60.2800 and 40 CFR 60.2870, promulgated as of February 17, 2013, shall apply and are here-

by incorporated by reference in this rule, as published by the Office of Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.

(5) Test Methods. (Not applicable)

AUTHORITY: section 643.050, RSMo Supp. 2013.* Original rule filed July 12, 2013, effective March 30, 2014.

*Original authority: 643.050, RSMo 1965, amended 1972, 1992.

10 CSR 10-6.165 Restriction of Emission of Odors

PURPOSE: This rule restricts the emission of excessive odorous matter. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, are minutes from a May 28, 2009, Missouri Air Conservation Commission meeting, letters from Washington University in St. Louis School of Law and the Attorney General's Office dated October 6, 2006, and odor workgroup meeting notes from 2007.

(1) Applicability. This rule shall apply to any person that causes, permits, or allows emission of odorous matter throughout the state of Missouri, except—

(A) The provisions of section (3) of this rule shall not apply to the emission of odorous matter from the pyrolysis of wood in the production of charcoal in a Missouri type charcoal kiln;

(B) The provisions of section (3) of this rule shall not apply to the emission of odorous matter from the raising and harvesting of crops nor from the feeding, breeding, and management of livestock or domestic animals or fowl with the exception of Class IA concentrated animal feeding operations; and

(C) The provisions of this rule shall not apply to emissions of odorized natural gas, or the chemicals used to achieve the regulated odorization of natural gas, inherent to the operations of a natural gas utility.

(2) Definitions.

(A) Modification—Any change to a source of odor emissions or source operations, including odor controls, that causes or could cause an increase in potential odor emissions.

(B) Class IA concentrated animal feeding operation—Any concentrated animal feeding operation with a capacity of seven thousand (7,000) animal units or more and corresponding to the following number of animals by species listed below:

Class IA concentrated animal feeding operation 7,000 animal unit equivalents

Animal species	Animal unit equivalents	Number of animals
Beef feeder or slaughter animal	1	7,000
Horse	0.5	3,500
Dairy cow	0.7	4,900
Swine weighing > 55 lbs	2.5	17,500
Swine weighing < 55 lbs	10	70,000
Sheep	1	70,000
Laying hens	30	210,000
Pullets	60	420,000
Turkeys	55	385,000
Broiler chickens	100	700,000

(C) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions. No person may cause, permit, or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one (1) volume of odorous air is diluted with seven (7) volumes of odor free air for two (2) separate trials not less than fifteen (15) minutes apart within the period of one (1) hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

(A) Control of Odors from Class IA Concentrated Animal Feeding Operations. Notwithstanding any provision in any other regulation to the contrary, all Class IA concentrated animal feeding operations shall operate under an odor control plan describing measures to be used to control odor emissions that are necessary to maintain compliance with the odor performance standard described in section (3). All new Class IA concentrated animal feeding operations and any operation that expands to become a Class IA concentrated animal feeding operation shall obtain approval from the department for an odor control plan at least sixty (60) days prior to commencement of operation.

1. The odor control plan shall contain the following:

A. A listing of all sources of odor emissions and description of how odors are currently being controlled;

B. A listing of all potentially innovative and proven odor control options for reducing odor emissions. Odor control options may include odor reductions achieved through: odor prevention, odor capture and treatment, odor dispersion, add on control devices, management practices, modifications to feed stock or waste handling practices, or process changes;

C. A detailed discussion of feasible

SECTION 111(D)/129 STATE PLAN FOR
COMMERCIAL AND INDUSTRIAL SOLID WASTE
INCINERATORS IN MISSOURI

A Missouri Section 111(d)/129 State Plan Revision

Prepared for the
Missouri Air Conservation Commission



**MISSOURI
DEPARTMENT OF
NATURAL RESOURCES**

Adopted
November 21, 2013

**Division of Environmental Quality
Air Pollution Control Program
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Project #2013-CISWI-6

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- B. Published State Rule: 10 CSR 10-6.161 Commercial and Industrial Solid Waste Incineration Units
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I. Introduction

On February 7, 2013, the U.S. Environmental Protection Agency (EPA) finalized emission limitations for Commercial and Industrial Solid Waste Incineration (CISWI) units and definitions for Non-Hazardous Secondary Materials (NHSM) That Are Solid Waste, both under the same notice at 78 Federal Register (FR) 9112. This notice was the final decision on the CISWI rule originally published March 21, 2011 and reconsidered after further public comments were solicited and received. The notice also included final amendments to the NHSM rule. The definition of solid waste in the NHSM rule determines whether a particular incinerator is covered under the CISWI rule or under another incinerator rule.

The State of Missouri is issuing a new rulemaking to meet its obligations for this federal rule. The new rule is 10 CSR 10-6.161 – Commercial and Industrial Solid Waste Incinerators. The new rule incorporates by reference the model rule contained in the federal rule. This state plan is being issued concurrently with the rulemaking.

The Clean Air Act (CAA) requires that state regulatory agencies implement the emission guidelines and compliance times using a state plan developed under sections 111(d) and 129 of the Clean Air Act. Section 111(d) establishes general requirements and procedures on state plan submittals for the control of designated pollutants. Section 129 requires emission guidelines to be promulgated for all categories of solid waste incineration units, including CISWI units. Section 129 mandates that all plan requirements be at least as protective and restrictive as the promulgated emission guidelines. This includes fixed final compliance dates, fixed compliance schedules, and Title V permitting requirements for all affected sources. Section 129 also requires that state plans be submitted to EPA within one year after EPA's promulgation of the emission guidelines and compliance times.

The emission guidelines and compliance times are codified in 40 CFR 60, Subpart DDDD (see model rule in Appendix A). State plans must contain specific information and the legal mechanisms necessary to implement the emission guidelines and compliance times. The requirements, as codified in 40 CFR 60.2515, are as follows:

- *Inventory of affected CISWI units, including those that have ceased operation but have not been dismantled.*
- *Inventory of emissions from affected CISWI units in [Missouri].*
- *Compliance schedules for each affected CISWI unit with a final compliance date no later than February 7, 2018 or three (3) years after the effective date of state plan approval, whichever is earlier.*
- *Emission limitations, operator training and qualification requirements, a waste management plan, and operating limits for affected CISWI units that are at least as protective as the emission guidelines contained in [subpart DDDD].*
- *Performance testing, recordkeeping, and reporting requirements.*

- *Certification that the hearing on the State plan was held, a list of witnesses and their organizational affiliations, if any, appearing at the hearing, and a brief written summary of each presentation or written submission.*
- *Provision for State progress reports to EPA.*
- *Identification of enforceable State mechanisms that you selected for implementing the emission guidelines of [subpart DDDD].*
- *Demonstration of [Missouri's] legal authority to carry out the sections 111(d) and 129 State plan.*

Prior to submittal to EPA, the State must make available to the public the state plan and provide opportunity for public comment. The State must submit the final plan to EPA. The EPA then has one year to approve or disapprove the state plan. Plan approval or disapproval will be published in the Federal Register. If a plan is disapproved, EPA will state the reason for disapproval in the Federal Register and give the State the opportunity to respond to EPA's concerns and submit a revised plan.

This document serves to fulfill Missouri's requirements under CAA Sections 111(d) and 129 for Commercial and Industrial Solid Waste Incinerators.

II. Inventory of Affected CISWI sources.

There are three criteria for determining if a combustion unit is covered under this rule:

- type of incinerator
- date of installation or modification of unit
- type of waste combusted in unit

The applicability of affected units is detailed in 10 CSR 10-6.161 section (1). The definition of commercial and industrial solid waste incineration unit is defined for this purpose in section (2) of 10 CSR 10-6.161. Any exemptions are also detailed in subsection (1)(C) of 10 CSR 10-6.161. A copy of the state rule 10 CSR 10-6.161 can be found in Appendix B.

Combustion units must meet the definition of commercial and industrial incinerators to be covered by this rule. A CISWI unit is defined by CAA Section 129 as "any combustion unit at a commercial or industrial facility that is used to combust solid waste (as defined under RCRA)(40 CFR 60.2265 (NSPS) and 60.2875 (EG))." Some examples of CISWI units are "incinerators (i.e., units designed to burn discarded waste materials for the purpose of disposal); small, remote incinerators; ERUs (i.e., units that would be boilers or process heaters if they did not combust solid waste); and waste burning kilns (i.e., units that would be cement kilns if they did not combust solid waste)."[78 FR 9118 February 7, 2013]

Existing CISWI units that meet the following installation or modification dates are subject to the emission guidelines in this rule:

1. Energy recovery units, waste burning kilns, and small remote incinerators that commenced construction on or before June 4, 2010, or commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013;
2. Other CISWI incinerators that commenced construction on or before November 30, 1999 and were not modified or reconstructed after June 1, 2001; and
3. Other CISWI incinerators that commenced construction after November 30, 1999, but no later than June 4, 2010, or commenced modification or reconstruction on or after June 1, 2001 but no later than August 7, 2013.

The final criteria for determining if a particular combustion unit is covered by this rule is the type of waste burned. To be defined as a non-hazardous solid waste under CISWI, a material must meet the definitions and exclusions for solid waste (40 CFR 258), non-hazardous material (40 CFR 261), secondary material, and NHSM (40 CFR 241).

Solid waste is defined as “any garbage, or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).” (40 CFR 258.2)

Hazardous materials are exempted under CISWI because they are regulated under the Resource Conservation and Recovery Act or other statutes and/or regulations. A solid waste is defined as hazardous if it is not excluded as a hazardous waste under 40 CFR 261.4(b); it meets any one of the four defined characteristics of hazardous waste: ignitability, corrosivity, reactivity, or toxicity (40 CFR 261 Subpart C); it is listed as a waste (40 CFR 261 Subpart D) and has not been excluded from Subpart D under 40 CFR 260.20 or 22; it is a mixture of solid and hazardous waste (see 40 CFR 261.3(a)(2)(iv) for a complete description of mixed wastes); or it is used oil containing more than 1000 parts per million total halogens.

The CISWI rule also covers secondary materials, which may not be covered by the definition of solid waste. They are “any material that is not the primary product of a manufacturing or commercial process, and can include post-consumer material, off-specification commercial chemical products or manufacturing chemical intermediates, post-industrial material, and scrap (40 CFR 241.2).”

The NHSM rule itself contains several exemptions (40 CFR 241.3(b)). These exemptions apply to combusted non-hazardous secondary materials that: are used as fuel that remains in the control of the generator, are scrapped tires removed from vehicles under a managed

tire collection process, are resinated wood, meeting the legitimacy criteria under 40 CFR 241.3(d)(2), or are used to produce a fuel or ingredient product (see 40 CFR 241.3(b)(4)).

Sources that cease burning solid waste would no longer be subject to Section 129, but would become subject to Section 112. Section 112 defines standards for boilers, process heaters, and cement kilns that do not burn solid waste as fuel. If an existing combustion unit that does not currently qualify as a CISWI unit changes fuel to a solid waste that does qualify as a NHSM under 40 CFR 241, that unit will then be considered a CISWI unit and will be subject to all the requirements of this rule.

The source inventory was initially generated using the Air Pollution Control Program’s (Air Program) emission inventory database, the Missouri Emission Inventory System (MoEIS). The Air Program maintains MoEIS for the purposes of air resource planning, permitting, and compliance. The database contains equipment and emission information for facilities with construction and/or operating permits. Each facility submits data to the Air Program via periodic Emission Inventory Questionnaires (EIQs). The Air Program quality assures the data and enters it into MoEIS. Air Program staff queried MoEIS for solid waste incinerators based on Source Classification Code (SCC). A total of 29 SCC codes are related to solid waste disposal. Of those 29, 21 are for various types of incinerators. A list of the SCCs used to identify these incinerators is located in Appendix C.

The initial search resulted in 17 sources identified as possibly being covered by this rule. These sources were then checked to determine if they were exempt from this rule by incinerator type, date of construction or modification, or type of waste burned (Appendix D). Of those seventeen incinerators, ten have been dismantled and five combust materials that do not qualify as solid waste.

A list of known affected sources is shown in Table 1. The information includes: FIPS (Federal Information Processing Standards) ID, Plant ID, facility name, county, SCC code, and unit installation date. There are currently two known facilities, with one incineration unit each, affected by this regulation in the State of Missouri. No new incinerators have been installed in Missouri since 1999. Maps depicting the locations of affected sources are included for reference in Appendix F.

Table 1: Inventory of Sources Subject to CISWI Emission Limits(as of September 2013)

FIPS	Plant	Facility	County	SCC	Unit Installed
093	0007	Specialty Granules INC	Iron	50300101 (Solid Waste Incinerator)	1988
133	0015	McDonald’s Grocery	Mississippi	50200101 (Commercial Incinerator)	1987

IV. Inventory of Emissions from Affected CISWI sources.

Section 129(a)(4) of the Clean Air Act lists the pollutants for which numerical emission limits are set. They are particulate matter (total and fine), opacity (as appropriate), sulfur dioxide, hydrogen chloride, oxides of nitrogen, carbon monoxide, lead, cadmium, mercury, and dioxins and dibenzofurans. The CISWI rule establishes emission limits for each of these pollutants, with the exception of opacity. The EPA removed opacity from the pollutant definition for this rule [78 FR 9140 February 7, 2013].

An emission inventory is included for the affected incinerators. Calculations utilize emission factors and throughputs provided in the facilities' EIQ. The emission factors were taken from EPA's webFIRE (Factor Information REtrieval System) website. The total annual throughput for each facility, in tons of solid waste burned per year, and emission factor, in pounds of pollutant per ton of solid waste burned, were used to calculate annual actual emissions, in tons per year.

The total annual actual emissions as reported by the facility for the affected sources are included in Table 2. The pollutants included in the emission inventory are: particulate matter (PM₁₀), carbon monoxide (CO), sulfur dioxide (SO₂), and nitrogen oxides (NO_x). The emission year is based on the most recent complete EIQ submitted by the facility. Missouri's emission reporting rule, 10 CSR 10-6.110, was promulgated in 2009 and allows for reduced reporting requirements. These reduced requirements allow facilities, such as McDonald's Grocery Store, to forego submitting a full EIQ if their emissions have varied less than five tons from their last full reported EIQ. Therefore, the emissions listed in Table 2 can be considered representative of current operations.

Table 2: Reported Emission Inventory (in tons/year)

County	Plant	Plant Name	Emission Year	Unit Description	PM10	CO	SO2	NOx
133	0015	MCDONALDS GROCERY STORE	2005	COMMERCIAL INCINERATOR	6.11E-02	1.30E-01	3.25E-02	3.90E-02
093	0007	SPECIALTY GRANULES INC	2011	SOLID WASTE INCINERATOR	2.91E-01	6.20E-01	1.55E-01	1.86E-01

Both facilities have Basic operating permits, which do not require them to submit emission data for cadmium (Cd), lead (Pb), mercury (Hg), hydrogen chloride (HCl), and dioxins/furans. Emissions for these pollutants were estimated by multiplying the total annual throughput obtained from MoEIS by emission factors from webFIRE, and AP42 Table 2.1-9. These factors corresponded to the SCC code for solid waste incinerators. The estimated emissions are shown in Table 3 (calculations are shown in Appendix E).

Table 3: Estimated Emission Inventory (in tons/year)

County	Plant	Plant Name	Emission Year	Unit Description	Cd	Pb	Hg	HCl	Dioxin/ Furans
133	0015	MCDONALDS GROCERY STORE	2005	COMMERCIAL INCINERATOR	3.13E-05	3.67E-04	7.28E-05	2.80E-02	3.82E-08
093	0007	SPECIALTY GRANULES INC	2011	SOLID WASTE INCINERATOR (MANUFACTURE DATE 1988)	1.49E-04	1.75E-03	3.47E-04	1.33E-01	1.82E-07

V. Compliance Schedules.

In subsection (3)(J) of 10 CSR 10-6.161, found in Appendix B, are the two increments of progress that must be met by all units that are not expected to be in compliance within one year of the effective date of state plan approval. The first increment is the submission of a final control plan dictating how compliance will be achieved. The second is the final compliance date for all sources to be in compliance with the emission limits. Table 4 summarizes the increments of progress as follows. Additional details on these requirements can be found in 40 CFR 60.2575-2615 and 60.2815-2855, in Appendix A.

Table 4: Increments of Progress

Milestone	Deadline
Final Control Plan Submittal Date	October 25, 2014 (or one year after effective date of state rule 10 CSR 10-6.161)
Final Compliance Date for units that commenced construction on or before June 4, 2010	February 7, 2018 (or three years after effective date of state plan approval)

VI. Emission Limits.

This plan and 10 CSR 10-6.161 establish emission limits for all nine designated pollutants listed in the emission guidelines: PM, CO, Cd, Pb, Hg, SO₂, HCl, dioxins/furans (TMB or TEQ), and NO_x. Missouri’s CISWI rule is at least as protective as the emission guidelines because it incorporates by reference the federal emission guidelines at 40 CFR 60, Subpart DDDD. As required by Section 129 of the Clean Air Act, the emission limits are identical to those listed in the promulgated emission guidelines. These emission limits are found in subsection (3)(D) of rule 10 CSR 10-6.161, located in Appendix B.

VII. Operator Training and Qualification Requirements.

All CISWI operators shall meet the requirements for operator training and qualification as listed in subsection (3)(C) of rule 10 CSR 10-6.161, found in Appendix B. Each facility is required to have at least one trained and qualified CISWI operator on duty or on call. In order to be considered a trained and qualified CISWI operator, an individual

must pass a CISWI operator training course that meets the requirements specified in the state rule. Each facility is required to develop site-specific information regarding CISWI operation. Each employee who is involved in the operation of the CISWI must review the operating information developed for the CISWI each year.

VIII. Waste Management Plan

A waste management plan is a written plan that identifies both the feasibility and the methods used to reduce or separate certain components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste (40 CFR 60.2620 in Appendix A). The source must implement measures identified as practical and feasible, taking into account waste reduction measures already in place, cost, and potential emission reductions.

IX. Testing, Monitoring, and Inspection Requirements.

Owners or operators of CISWI units shall follow the testing, monitoring, and inspection requirements as stated in subsections (3)(E)-(3)(H) of rule 10 CSR 10-6.161, found in Appendix B. Initial compliance and continuous compliance determinations, periodic performance tests, and monitoring of specific operating parameters are among the requirements for applicable CISWI units.

X. Reporting and Recordkeeping Requirements.

Owners or operators of CISWI units shall follow the reporting and recordkeeping requirements listed in section (4) of state rule 10 CSR 10-6.161, located in Appendix B. Required reports are found in Table 5 of 40 CFR 60 Subpart DDDD (see Appendix A – note that the table is a summary; see referenced sections for complete report requirements). Each facility must maintain records of the performance test and specified operating parameters for five years.

XI. Public Hearings.

In accordance with 40 CFR 60.5015, the Air Program is required to hold a public hearing prior to adoption of this state plan and the subsequent submittal to the EPA. The Air Program notified the public and other interested parties of an upcoming public hearing and comment period 30 days prior to holding such hearing for this state plan as follows:

- The public comment period for the 111(d)/129 state plan opened when it was posted on the Department of Natural Resources' Air Pollution Control Program website on August 26, 2013 and closed on October 3, 2013, seven days after the public hearing.
- The public comment period for 10 CSR 10-6.161 began when it was published in the *Missouri Register* on August 15, 2013 and closed on October 3, 2013.

- The public hearing on the state rulemaking and 111(d)/129 plan began at 9:00 a.m., September 26, 2013. The public hearing will be held at the Holiday Inn CoCo Key, 9103 East 39th Street, Kansas City, Missouri.
- Notice of availability of the state rulemaking and 111(d)/129 plan was posted on the Department of Natural Resources' Air Pollution Control Program website on August 26, 2013 <http://dnr.mo.gov/env/apcp/public-notice.htm>

A screenshot of the online public notice with date stamp is included in Appendix G.

XII. Title V Permitting Requirements.

All CISWI units subject to the EPA-approved and effective 111(d)/129 state plan are required to apply for and obtain a Title V operating permit. Specific details regarding permitting requirements are listed in subsection (3)(I) of state rule 10 CSR 10-6.161, located in Appendix B.

XIII. State Progress Reports to EPA.

An annual report must be submitted by the Air Program to the EPA regarding the progress of implementation and enforcement of the emission guidelines (40 CFR 60.2515). Progress reports will include compliance status; enforcement actions; increments of progress; identification of sources that have shut down or started operation; emission inventory information for sources that have started operation; emission inventory and compliance information; and copies of technical reports on all performance testing and monitoring, including concurrent process data (40 CFR 60.25).

XIV. Demonstration of Legal Authority and Identification of Enforceable State Mechanism for Implementing the Emission Guidelines.

The Missouri Air Conservation Commission (MACC) is the air pollution control agency for the State. The commission was created to maintain the purity of the air resources of the State; to protect the health, general welfare and physical property of the people; maximum employment; and the full industrial development of the State by preventing, abating, and controlling air pollution by all practical and economically feasible methods. The MACC has the authority, pursuant to Chapter 536, Revised Statutes of Missouri (RSMo), to promulgate rules and regulations to establish standards and guidelines to ensure that the State of Missouri is in compliance with the provisions of the federal Clean Air Act. The specific powers and duties of the MACC are outlined in section 643.050, RSMo. A copy of the Missouri Air Conservation Law, sections 643.010-643.070, RSMo, can be found in Appendix H.

The State of Missouri will use a state rulemaking as the legal instrument to enforce these emission guidelines and compliance times. Missouri's state rule incorporates by reference the promulgated emission guidelines and model rule; therefore it is as protective as the federal regulation. The state rule is 10 CSR 10-6.161 Commercial and Industrial Solid

Waste Incinerators. This rule will apply to the entire State. A copy of the state rule, as published in the Code of State Regulations (CSR) on February 28, 2014, can be found in Appendix B. This rule's effective date is March 30, 2014.

APPENDIX A

40 CFR 60.2500 Subpart DDDD—Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units

Model Rule – Increments of Progress

§ 60.2575 What are my requirements for meeting increments of progress and achieving final compliance?

If you plan to achieve compliance more than 1 year following the effective date of State plan approval, you must meet the two increments of progress specified in paragraphs (a) and (b) of this section.

- (a) Submit a final control plan.
- (b) Achieve final compliance.

§ 60.2580 When must I complete each increment of progress?

Table 1 of this subpart specifies compliance dates for each of the increments of progress.

§ 60.2585 What must I include in the notifications of achievement of increments of progress? Your notification of achievement of increments of progress must include the three items specified in paragraphs (a) through (c) of this section.

- (a) Notification that the increment of progress has been achieved.
- (b) Any items required to be submitted with each increment of progress.
- (c) Signature of the owner or operator of the CISWI unit.

§ 60.2590 When must I submit the notifications of achievement of increments of progress? Notifications for achieving increments of progress must be postmarked no later than 10 business days after the compliance date for the increment.

§ 60.2595 What if I do not meet an increment of progress?

If you fail to meet an increment of progress, you must submit a notification to the Administrator postmarked within 10 business days after the date for that increment of progress in table 1 of this subpart. You must inform the Administrator that you did not meet the increment, and you must continue to submit reports each subsequent calendar month until the increment of progress is met.

§ 60.2600 How do I comply with the increment of progress for submittal of a control plan? For your control plan increment of progress, you must satisfy the two requirements specified in paragraphs (a) and (b) of this section.

- (a) Submit the final control plan that includes the five items described in paragraphs (a)(1) through (5) of this section.

- (1) A description of the devices for air pollution control and process changes that you will use to comply with the emission limitations and other requirements of this subpart.
 - (2) The type(s) of waste to be burned.
 - (3) The maximum design waste burning capacity.
 - (4) The anticipated maximum charge rate.
 - (5) If applicable, the petition for site-specific operating limits under § 60.2680.
- (b) Maintain an onsite copy of the final control plan.

§ 60.2605 How do I comply with the increment of progress for achieving final compliance? For the final compliance increment of progress, you must complete all process changes and retrofit construction of control devices, as specified in the final control plan, so that, if the affected CISWI unit is brought online, all necessary process changes and air pollution control devices would operate as designed.

§ 60.2610 What must I do if I close my CISWI unit and then restart it?

- (a) If you close your CISWI unit but will restart it prior to the final compliance date in your State plan, you must meet the increments of progress specified in § 60.2575.
- (b) If you close your CISWI unit but will restart it after your final compliance date, you must complete emission control retrofits and meet the emission limitations and operating limits on the date your unit restarts operation.

§ 60.2615 What must I do if I plan to permanently close my CISWI unit and not restart it?

If you plan to close your CISWI unit rather than comply with the State plan, submit a closure notification, including the date of closure, to the Administrator by the date your final control plan is due.

Model Rule – Waste Management Plan

§ 60.2620 What is a waste management plan?

A waste management plan is a written plan that identifies both the feasibility and the methods used to reduce or separate certain components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste.

§ 60.2625 When must I submit my waste management plan?

You must submit a waste management plan no later than the date specified in table 1 of this subpart for submittal of the final control plan.

§ 60.2630 What should I include in my waste management plan?

A waste management plan must include consideration of the reduction or separation of waste-stream elements such as paper, cardboard, plastics, glass, batteries, or metals; or the use of recyclable materials. The plan must identify any additional waste management measures, and the source must implement those measures considered practical and feasible, based on the effectiveness of waste management measures already in place, the costs of additional measures, the emissions reductions expected to be achieved, and any other environmental or energy impacts they might have.

Model Rule – Operator Training and Qualification

§ 60.2635 What are the operator training and qualification requirements?

- (a) No CISWI unit can be operated unless a fully trained and qualified CISWI unit operator is accessible, either at the facility or can be at the facility within 1 hour. The trained and qualified CISWI unit operator may operate the CISWI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified CISWI unit operators are temporarily not accessible, you must follow the procedures in § 60.2665.
- (b) Operator training and qualification must be obtained through a State-approved program or by completing the requirements included in paragraph (c) of this section.
- (c) Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in paragraphs (c)(1) through (3) of this section.
 - (1) Training on the eleven subjects listed in paragraphs (c)(1)(i) through (xi) of this section.
 - (i) Environmental concerns, including types of emissions.
 - (ii) Basic combustion principles, including products of combustion.
 - (iii) Operation of the specific type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures.
 - (iv) Combustion controls and monitoring.
 - (v) Operation of air pollution control equipment and factors affecting performance (if applicable).
 - (vi) Inspection and maintenance of the incinerator and air pollution control devices.
 - (vii) Actions to prevent and correct malfunctions or to prevent conditions that may lead to malfunctions.
 - (viii) Bottom and fly ash characteristics and handling procedures.
 - (ix) Applicable Federal, State, and local regulations, including Occupational Safety and Health Administration workplace standards.
 - (x) Pollution prevention.
 - (xi) Waste management practices.
 - (2) An examination designed and administered by the instructor.
 - (3) Written material covering the training course topics that can serve as reference material following completion of the course.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15771, Mar. 21, 2011]

§ 60.2640 When must the operator training course be completed?

The operator training course must be completed by the later of the three dates specified in paragraphs (a) through (c) of this section.

- (a) The final compliance date (Increment 2).
- (b) Six months after CISWI unit startup.
- (c) Six months after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit.

§ 60.2645 How do I obtain my operator qualification?

- (a) You must obtain operator qualification by completing a training course that satisfies the criteria under § 60.2635(b).
- (b) Qualification is valid from the date on which the training course is completed and the operator successfully passes the examination required under § 60.2635(c)(2).

§ 60.2650 How do I maintain my operator qualification?

To maintain qualification, you must complete an annual review or refresher course covering, at a minimum, the five topics described in paragraphs (a) through (e) of this section.

- (a) Update of regulations.
- (b) Incinerator operation, including startup and shutdown procedures, waste charging, and ash handling.
- (c) Inspection and maintenance.
- (d) Prevention and correction of malfunctions or conditions that may lead to malfunction.
- (e) Discussion of operating problems encountered by attendees.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15771, Mar. 21, 2011]

§ 60.2655 How do I renew my lapsed operator qualification?

You must renew a lapsed operator qualification by one of the two methods specified in paragraphs (a) and (b) of this section.

- (a) For a lapse of less than 3 years, you must complete a standard annual refresher course described in § 60.2650.
- (b) For a lapse of 3 years or more, you must repeat the initial qualification requirements in § 60.2645(a).

§ 60.2660 What site-specific documentation is required?

- (a) Documentation must be available at the facility and readily accessible for all CISWI unit operators that addresses the ten topics described in paragraphs (a)(1) through (10) of this section. You must maintain this information and the training records required by paragraph (c) of this section in a manner that they can be readily accessed and are suitable for inspection upon request.
 - (1) Summary of the applicable standards under this subpart.
 - (2) Procedures for receiving, handling, and charging waste.
 - (3) Incinerator startup, shutdown, and malfunction procedures.
 - (4) Procedures for maintaining proper combustion air supply levels.
 - (5) Procedures for operating the incinerator and associated air pollution control systems within the standards established under this subpart.
 - (6) Monitoring procedures for demonstrating compliance with the incinerator operating limits.
 - (7) Reporting and recordkeeping procedures.
 - (8) The waste management plan required under §§ 60.2620 through 60.2630.
 - (9) Procedures for handling ash.
 - (10) A list of the wastes burned during the performance test.
- (b) You must establish a program for reviewing the information listed in paragraph (a) of this section with each incinerator operator.

- (1) The initial review of the information listed in paragraph (a) of this section must be conducted by the later of the three dates specified in paragraphs (b)(1)(i) through (iii) of this section.
 - (i) The final compliance date (Increment 2).
 - (ii) Six months after CISWI unit startup.
 - (iii) Six months after being assigned to operate the CISWI unit.
- (2) Subsequent annual reviews of the information listed in paragraph (a) of this section must be conducted no later than 12 months following the previous review.
- (c) You must also maintain the information specified in paragraphs (c)(1) through (3) of this section.
 - (1) Records showing the names of CISWI unit operators who have completed review of the information in § 60.2660(a) as required by § 60.2660(b), including the date of the initial review and all subsequent annual reviews.
 - (2) Records showing the names of the CISWI operators who have completed the operator training requirements under § 60.2635, met the criteria for qualification under § 60.2645, and maintained or renewed their qualification under § 60.2650 or § 60.2655. Records must include documentation of training, the dates of the initial refresher training, and the dates of their qualification and all subsequent renewals of such qualifications.
 - (3) For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.

§ 60.2665 What if all the qualified operators are temporarily not accessible?

If all qualified operators are temporarily not accessible (i.e., not at the facility and not able to be at the facility within 1 hour), you must meet one of the two criteria specified in paragraphs (a) and (b) of this section, depending on the length of time that a qualified operator is not accessible.

- (a) When all qualified operators are not accessible for more than 8 hours, but less than 2 weeks, the CISWI unit may be operated by other plant personnel familiar with the operation of the CISWI unit who have completed a review of the information specified in § 60.2660(a) within the past 12 months. However, you must record the period when all qualified operators were not accessible and include this deviation in the annual report as specified under § 60.2770.
- (b) When all qualified operators are not accessible for 2 weeks or more, you must take the two actions that are described in paragraphs (b)(1) and (2) of this section.
 - (1) Notify the Administrator of this deviation in writing within 10 days. In the notice, state what caused this deviation, what you are doing to ensure that a qualified operator is accessible, and when you anticipate that a qualified operator will be accessible.
 - (2) Submit a status report to the Administrator every 4 weeks outlining what you are doing to ensure that a qualified operator is accessible, stating when you anticipate that a qualified operator will be accessible and requesting approval from the Administrator to continue operation of the CISWI unit. You must submit the first status report 4 weeks after you notify the Administrator of the deviation under paragraph (b)(1) of this section. If the Administrator notifies you that your request to continue operation of the CISWI unit is disapproved, the CISWI unit may continue operation for 90 days, then must cease operation. Operation of the unit

may resume if you meet the two requirements in paragraphs (b)(2)(i) and (ii) of this section.

- (i) A qualified operator is accessible as required under § 60.2635(a).
- (ii) You notify the Administrator that a qualified operator is accessible and that you are resuming operation.

Model Rule – Emission Limitations and Operating Limits

§ 60.2670 What emission limitations must I meet and by when?

- (a) You must meet the emission limitations for each CISWI unit, including bypass stack or vent, specified in table 2 of this subpart or tables 6 through 9 of this subpart by the final compliance date under the approved state plan, federal plan, or delegation, as applicable. The emission limitations apply at all times the unit is operating including and not limited to startup, shutdown, or malfunction.
- (b) Units that do not use wet scrubbers must maintain opacity to less than or equal to the percent opacity (three 1-hour blocks consisting of ten 6-minute average opacity values) specified in table 2 of this subpart, as applicable.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15771, Mar. 21, 2011]

§ 60.2675 What operating limits must I meet and by when?

- (a) If you use a wet scrubber(s) to comply with the emission limitations, you must establish operating limits for up to four operating parameters (as specified in table 3 of this subpart) as described in paragraphs (a)(1) through (4) of this section during the initial performance test.
 - (1) Maximum charge rate, calculated using one of the two different procedures in paragraph (a)(1)(i) or (ii), as appropriate.
 - (i) For continuous and intermittent units, maximum charge rate is 110 percent of the average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limitations.
 - (ii) For batch units, maximum charge rate is 110 percent of the daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limitations.
 - (2) Minimum pressure drop across the wet particulate matter scrubber, which is calculated as the lowest 1-hour average pressure drop across the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations; or minimum amperage to the wet scrubber, which is calculated as the lowest 1-hour average amperage to the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations.
 - (3) Minimum scrubber liquid flow rate, which is calculated as the lowest 1-hour average liquid flow rate at the inlet to the wet acid gas or particulate matter scrubber measured during the most recent performance test demonstrating compliance with all applicable emission limitations.
 - (4) Minimum scrubber liquor pH, which is calculated as the lowest 1-hour average liquor pH at the inlet to the wet acid gas scrubber measured during the most

recent performance test demonstrating compliance with the HCl emission limitation.

- (b) You must meet the operating limits established during the initial performance test on the date the initial performance test is required or completed (whichever is earlier). You must conduct an initial performance evaluation of each continuous monitoring system and continuous parameter monitoring system within 60 days of installation of the monitoring system.
- (c) If you use a fabric filter to comply with the emission limitations, you must operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by you to initiate corrective action.
- (d) If you use an electrostatic precipitator to comply with the emission limitations, you must measure the (secondary) voltage and amperage of the electrostatic precipitator collection plates during the particulate matter performance test. Calculate the average electric power value (secondary voltage \times secondary current = secondary electric power) for each test run. The operating limit for the electrostatic precipitator is calculated as the lowest 1-hour average secondary electric power measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations.
- (e) If you use activated carbon sorbent injection to comply with the emission limitations, you must measure the sorbent flow rate during the performance testing. The operating limit for the carbon sorbent injection is calculated as the lowest 1-hour average sorbent flow rate measured during the most recent performance test demonstrating compliance with the mercury emission limitations. For energy recovery units, when your unit operates at lower loads, multiply your sorbent injection rate by the load fraction, as defined in this subpart, to determine the required injection rate (e.g., for 50 percent load, multiply the injection rate operating limit by 0.5).
- (f) If you use selective noncatalytic reduction to comply with the emission limitations, you must measure the charge rate, the secondary chamber temperature (if applicable to your CISWI unit), and the reagent flow rate during the nitrogen oxides performance testing. The operating limits for the selective noncatalytic reduction are calculated as the highest 1-hour average charge rate, lowest secondary chamber temperature, and lowest reagent flow rate measured during the most recent performance test demonstrating compliance with the nitrogen oxides emission limitations.
- (g) If you use a dry scrubber to comply with the emission limitations, you must measure the injection rate of each sorbent during the performance testing. The operating limit for the injection rate of each sorbent is calculated as the lowest 1-hour average injection rate of each sorbent measured during the most recent performance test demonstrating compliance with the hydrogen chloride emission limitations. For energy recovery units, when your unit operates at lower loads, multiply your sorbent injection rate by the load fraction, as defined in this subpart, to determine the required injection rate (e.g., for 50 percent load, multiply the injection rate operating limit by 0.5).

- (h) If you do not use a wet scrubber, electrostatic precipitator, or fabric filter to comply with the emission limitations, and if you do not determine compliance with your particulate matter emission limitation with a particulate matter CEMS, you must maintain opacity to less than or equal to ten percent opacity (1-hour block average).
- (i) If you use a PM CPMS to demonstrate compliance, you must establish your PM CPMS operating limit and determine compliance with it according to paragraphs (i)(1) through (5) of this section.
 - (1) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record all hourly average output values (milliamps) from the PM CPMS for the periods corresponding to the test runs (e.g., three 1-hour average PM CPMS output values for three 1-hour test runs).
 - (i) 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.
 - (ii) Your PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to at least two times your allowable emission limit. If your PM CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading PM concentration from zero to a level equivalent to two times your allowable emission limit.
 - (iii) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record and average all milliamp output values from the PM CPMS for the periods corresponding to the compliance test runs (e.g., average all your PM CPMS output values for three corresponding 2-hour Method 5I test runs).
 - (2) If the average of your three PM performance test runs are below 75% of your PM emission limit, you must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or performance test with the procedures in (i)(1)through (5) of this section.
 - (i) Determine your instrument zero output with one of the following procedures:
 - (A) Zero point data for *in-situ* instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench.
 - (B) Zero point data for extractive instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air.
 - (C) The zero point can also can be established obtained by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (e.g., when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept.

- (D) If none of the steps in paragraphs (i)(2)(i) through (iv) of this section are possible, you must use a zero output value provided by the manufacturer.
- (ii) Determine your PM CPMS instrument average in milliamps, and the average of your corresponding three PM compliance test runs, using equation 5.

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n X_i, \bar{y} = \frac{1}{n} \sum_{i=1}^n Y_i \quad (\text{Eq. 5})$$

Where:

X_i = the PM CPMS data points for the three runs constituting the performance test,

Y_i = the PM concentration value for the three runs constituting the performance test, and

n = the number of data points.

- (iii) With your instrument zero expressed in milliamps, your three run average PM CPMS milliamp value, and your three run average PM concentration from your three compliance tests, determine a relationship of lb/Mmbtu per milliamp with equation 6.

$$R = \frac{Y_1}{(X_1 - z)} \quad (\text{Eq. 6})$$

Where:

R = the relative mg/dscm per milliamp for your PM CPMS,

Y_1 = the three run average mg/dscm PM concentration,

X_1 = the three run average milliamp output from you PM CPMS, and

z = the milliamp equivalent of your instrument zero determined from (2)(i).

- (iv) Determine your source specific 30-day rolling average operating limit using the mg/dscm per milliamp value from Equation 6 in equation 7, below. This sets your operating limit at the PM CPMS output value corresponding to 75% of your emission limit.

$$O_i = z + \frac{0.75(L)}{R} \quad (\text{Eq. 7})$$

Where:

O_i = the operating limit for your PM CPMS on a 30-day rolling average, in milliamps.

L = your source emission limit expressed in lb/Mmbtu,

z = your instrument zero in milliamps, determined from (2)(a), and

R = the relative mg/dscm per milliamp for your PM CPMS, from Equation 3.

- (3) If the average of your three PM compliance test runs is at or above 75% of your PM emission limit you must determine your operating limit by averaging the PM CPMS milliamp output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using equation 8 and you must submit all compliance test and PM CPMS data according to the reporting requirements in paragraph (i)(5) of this section.

$$O_a = \frac{1}{n} \sum_{i=1}^n X_i \quad (\text{Eq. 8})$$

Where:

X_i = the PM CPMS data points for all runs i ,

n = the number of data points, and

O_h = your site specific operating limit, in milliamps.

- (4) To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous 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 in units of the operating limit (e.g., milliamps, PM concentration, raw data signal) on a 30-day rolling average basis.
- (5) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g., beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15771, Mar. 21, 2011; 78 FR 9196, Feb. 7, 2013]

§ 60.2680 What if I do not use a wet scrubber, fabric filter, activated carbon injection, selective noncatalytic reduction, an electrostatic precipitator, or a dry scrubber to comply with the emission limitations?

- (a) If you use an air pollution control device other than a wet scrubber, activated carbon injection, selective noncatalytic reduction, fabric filter, an electrostatic precipitator, or a dry scrubber or limit emissions in some other manner, including mass balances, to comply with the emission limitations under § 60.2670, you must petition the EPA Administrator for specific operating limits to be established during the initial performance test and continuously monitored thereafter. You must submit the petition at least sixty days before the performance test is scheduled to begin. Your petition must include the five items listed in paragraphs (a)(1) through (5) of this section.
 - (1) Identification of the specific parameters you propose to use as additional operating limits.
 - (2) A discussion of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters and how limits on these parameters will serve to limit emissions of regulated pollutants.
 - (3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the operating limits on these parameters.
 - (4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments.
 - (5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
- (b) [Reserved]

[76 FR 15772, Mar. 21, 2011, as amended at 78 FR 9197, Feb. 7, 2013]

§ 60.2685 Affirmative defense for violation of emission standards during malfunction.

In response to an action to enforce the standards set forth in paragraph § 60.2670 you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 60.2. Appropriate penalties may be assessed if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

- (a) *Assertion of affirmative defense.* To establish the affirmative defense in any action to enforce such a standard, you must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:
- (1) The violation:
 - (i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and
 - (ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and
 - (iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and
 - (iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
 - (2) Repairs were made as expeditiously as possible when a violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and
 - (3) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and
 - (4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - (5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and
 - (6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and
 - (7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and
 - (8) At all times, the affected CISWI unit was operated in a manner consistent with good practices for minimizing emissions; and
 - (9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.
- (b) *Report.* The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or

excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

[78 FR 9197, Feb. 7, 2013]

Model Rule – Performance Testing

§ 60.2690 How do I conduct the initial and annual performance test?

- (a) All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations.
- (b) You must document that the waste burned during the performance test is representative of the waste burned under normal operating conditions by maintaining a log of the quantity of waste burned (as required in § 60.2740(b)(1)) and the types of waste burned during the performance test.
- (c) All performance tests must be conducted using the minimum run duration specified in tables 2 and 6 through 9 of this subpart.
- (d) Method 1 of appendix A of this part must be used to select the sampling location and number of traverse points.
- (e) Method 3A or 3B of appendix A of this part must be used for gas composition analysis, including measurement of oxygen concentration. Method 3A or 3B of appendix A of this part must be used simultaneously with each method.
- (f) All pollutant concentrations, except for opacity, must be adjusted to 7 percent oxygen using Equation 1 of this section:

$$C_{\text{adj}} = C_{\text{meas}} (20.9-7)/(20.9-\%O_2) \quad (\text{Eq. 1})$$

Where:

C_{adj} = pollutant concentration adjusted to 7 percent oxygen;

C_{meas} = pollutant concentration measured on a dry basis;

$(20.9-7)$ = 20.9 percent oxygen–7 percent oxygen (defined oxygen correction basis);

20.9 = oxygen concentration in air, percent; and

$\%O_2$ = oxygen concentration measured on a dry basis, percent.

- (g) You must determine dioxins/furans toxic equivalency by following the procedures in paragraphs (g)(1) through (4) of this section.
 - (1) Measure the concentration of each dioxin/furan tetra- through octa-isomer emitted using EPA Method 23 at 40 CFR part 60, appendix A.
 - (2) Quantify isomers meeting identification criteria 2, 3, 4, and 5 in Section 5.3.2.5 of Method 23, regardless of whether the isomers meet identification criteria 1 and 7. You must quantify the isomers per Section 9.0 of Method 23. (Note: You may reanalyze the sample aliquot or split to reduce the number of isomers not meeting identification criteria 1 or 7 of Section 5.3.2.5.)
 - (3) For each dioxin/furan (tetra- through octa-chlorinated) isomer measured in accordance with paragraph (g)(1) and (2) of this section, multiply the isomer

concentration by its corresponding toxic equivalency factor specified in table 4 of this subpart.

- (4) Sum the products calculated in accordance with paragraph (g)(3) of this section to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.
- (h) Method 22 at 40 CFR part 60, appendix A-7 must be used to determine compliance with the fugitive ash emission limit in table 2 of this subpart or tables 6 through 9 of this subpart.
- (i) If you have an applicable opacity operating limit, you must determine compliance with the opacity limit using Method 9 at 40 CFR part 60, appendix A-4, based on three 1-hour blocks consisting of ten 6-minute average opacity values, unless you are required to install a continuous opacity monitoring system, consistent with § 60.2710 and § 60.2730.
- (j) You must determine dioxins/furans total mass basis by following the procedures in paragraphs (j)(1) through (3) of this section.
 - (1) Measure the concentration of each dioxin/furan tetra- through octa-chlorinated isomer emitted using EPA Method 23 at 40 CFR part 60, appendix A-7.
 - (2) Quantify isomers meeting identification criteria 2, 3, 4, and 5 in Section 5.3.2.5 of Method 23, regardless of whether the isomers meet identification criteria 1 and 7. You must quantify the isomers per Section 9.0 of Method 23. (Note: You may reanalyze the sample aliquot or split to reduce the number of isomers not meeting identification criteria 1 or 7 of Section 5.3.2.5.)
 - (3) Sum the quantities measured in accordance with paragraphs (j)(1) and (2) of this section to obtain the total concentration of dioxins/furans emitted in terms of total mass basis.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15773, Mar. 21, 2011; 78 FR 9198, Feb. 7, 2013]

§ 60.2695 How are the performance test data used?

You use results of performance tests to demonstrate compliance with the emission limitations in table 2 of this subpart or tables 6 through 9 of this subpart.

[76 FR 15773, Mar. 21, 2011]

Model Rule – Initial Compliance Requirements

§ 60.2700 How do I demonstrate initial compliance with the amended emission limitations and establish the operating limits?

You must conduct a performance test, as required under §§ 60.2690 and 60.2670, to determine compliance with the emission limitations in table 2 of this subpart and tables 6 through 9 of this subpart, to establish compliance with any opacity operating limits in § 60.2675, and to establish operating limits using the procedures in § 60.2675 or § 60.2680. The performance test must be conducted using the test methods listed in table 2 of this subpart and tables 6 through 9 of this subpart and the procedures in § 60.2690. The use of the bypass stack during a performance test shall invalidate the performance test. You must conduct a performance evaluation of each continuous monitoring system within 60 days of installation of the monitoring system.

[76 FR 15773, Mar. 21, 2011]

§ 60.2705 By what date must I conduct the initial performance test?

- (a) The initial performance test must be conducted no later than 180 days after your final compliance date. Your final compliance date is specified in table 1 of this subpart.
- (b) If you commence or recommence combusting a solid waste at an existing combustion unit at any commercial or industrial facility and you conducted a test consistent with the provisions of this subpart while combusting the given solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, you do not need to retest until 6 months from the date you reintroduce that solid waste.
- (c) If you commence combusting or recommence combusting a solid waste at an existing combustion unit at any commercial or industrial facility and you have not conducted a performance test consistent with the provisions of this subpart while combusting the given solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, you must conduct a performance test within 60 days commencing or recommencing solid waste combustion.

[76 FR 15773, Mar. 21, 2011]

§ 60.2706 By what date must I conduct the initial air pollution control device inspection?

- (a) The initial air pollution control device inspection must be conducted within 60 days after installation of the control device and the associated CISWI unit reaches the charge rate at which it will operate, but no later than 180 days after the final compliance date for meeting the amended emission limitations.
- (b) Within 10 operating days following an air pollution control device inspection, all necessary repairs must be completed unless the owner or operator obtains written approval from the state agency establishing a date whereby all necessary repairs of the designated facility must be completed.

[76 FR 15773, Mar. 21, 2011]

Model Rule – Continuous Compliance Requirements

§ 60.2710 How do I demonstrate continuous compliance with the amended emission limitations and the operating limits?

- (a) Compliance with standards.
 - (1) The emission standards and operating requirements set forth in this subpart apply at all times.
 - (2) If you cease combusting solid waste you may opt to remain subject to the provisions of this subpart. Consistent with the definition of CISWI unit, you are subject to the requirements of this subpart at least 6 months following the last date of solid waste combustion. Solid waste combustion is ceased when solid waste is not in the combustion chamber (*i.e.*, the solid waste feed to the combustor has been cut off for a period of time not less than the solid waste residence time).
 - (3) If you cease combusting solid waste you must be in compliance with any newly applicable standards on the effective date of the waste-to-fuel switch. The effective date of the waste-to-fuel switch is a date selected by you, that must be at least 6 months from the date that you ceased combusting solid waste, consistent with § 60.2710(a)(2). Your source must remain in compliance with this subpart until the effective date of the waste-to-fuel switch.

- (4) If you own or operate an existing commercial or industrial combustion unit that combusted a fuel or non-waste material, and you commence or recommence combustion of solid waste, you are subject to the provisions of this subpart as of the first day you introduce or reintroduce solid waste to the combustion chamber, and this date constitutes the effective date of the fuel-to-waste switch. You must complete all initial compliance demonstrations for any Section 112 standards that are applicable to your facility before you commence or recommence combustion of solid waste. You must provide 30 days prior notice of the effective date of the waste-to-fuel switch. The notification must identify:
- (i) The name of the owner or operator of the CISWI unit, the location of the source, the emissions unit(s) that will cease burning solid waste, and the date of the notice;
 - (ii) The currently applicable subcategory under this subpart, and any 40 CFR part 63 subpart and subcategory that will be applicable after you cease combusting solid waste;
 - (iii) The fuel(s), non-waste material(s) and solid waste(s) the CISWI unit is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the unit will commence combusting;
 - (iv) The date on which you became subject to the currently applicable emission limits;
 - (v) The date upon which you will cease combusting solid waste, and the date (if different) that you intend for any new requirements to become applicable (*i.e.*, the effective date of the waste-to-fuel switch), consistent with paragraphs (a)(2) and (3) of this section.
- (5) All air pollution control equipment necessary for compliance with any newly applicable emissions limits which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the effective date of the waste-to-fuel, or fuel-to-waste switch.
- (6) All monitoring systems necessary for compliance with any newly applicable monitoring requirements which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the effective date of the waste-to-fuel, or fuel-to-waste switch. All calibration and drift checks must be performed as of the effective date of the waste-to-fuel, or fuel-to-waste switch. Relative accuracy tests must be performed as of the performance test deadline for PM CEMS (if PM CEMS are elected to demonstrate continuous compliance with the particulate matter emission limits). Relative accuracy testing for other CEMS need not be repeated if that testing was previously performed consistent with section 112 monitoring requirements or monitoring requirements under this subpart.
- (b) You must conduct an annual performance test for the pollutants listed in table 2 of this subpart or tables 6 through 9 of this subpart and opacity for each CISWI unit as required under § 60.2690. The annual performance test must be conducted using the test methods listed in table 2 of this subpart or tables 6 through 9 of this subpart and the procedures in § 60.2690. Opacity must be measured using EPA Reference Method 9 at 40 CFR part 60.

- Annual performance tests are not required if you use CEMS or continuous opacity monitoring systems to determine compliance.
- (c) You must continuously monitor the operating parameters specified in § 60.2675 or established under § 60.2680 and as specified in § 60.2735. Operation above the established maximum or below the established minimum operating limits constitutes a deviation from the established operating limits. Three-hour block average values are used to determine compliance (except for baghouse leak detection system alarms) unless a different averaging period is established under § 60.2680 or, for energy recovery units, where the averaging time for each operating parameter is a 30-day rolling, calculated each hour as the average of the previous 720 operating hours. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in paragraph (a) of this section constitutes a deviation from your operating limits established under this subpart, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests.
 - (d) You must burn only the same types of waste and fuels used to establish subcategory applicability (for ERUs) and operating limits during the performance test.
 - (e) For energy recovery units, incinerators, and small remote units, you must perform annual visual emissions test for ash handling.
 - (f) For energy recovery units, you must conduct an annual performance test for opacity using EPA Reference Method 9 at 40 CFR part 60 (except where particulate matter continuous monitoring system or continuous parameter monitoring systems are used) and the pollutants listed in table 7 of this subpart.
 - (g) For facilities using a CEMS to demonstrate compliance with the carbon monoxide emission limit, compliance with the carbon monoxide emission limit may be demonstrated by using the CEMS according to the following requirements:
 - (1) You must measure emissions according to § 60.13 to calculate 1-hour arithmetic averages, corrected to 7 percent oxygen. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. You must demonstrate initial compliance with the carbon monoxide emissions limit using a 30-day rolling average of the 1-hour arithmetic average emission concentrations, including CEMS data during startup and shutdown as defined in this subpart, calculated using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7.
 - (2) Operate the carbon monoxide continuous emissions monitoring system in accordance with the applicable requirements of performance specification 4A of appendix B and the quality assurance procedures of appendix F of this part.
 - (h) Coal and liquid/gas energy recovery units with annual average heat input rates greater than 250 MMBtu/hr may elect to demonstrate continuous compliance with the particulate matter emissions limit using a particulate matter CEMS according to the procedures in § 60.2730(n) instead of the continuous parameter monitoring system specified in § 60.2710(i). Coal and liquid/gas energy recovery units with annual average heat input rates less than 250 MMBtu/hr, incinerators, and small remote incinerators may also elect to demonstrate compliance using a particulate matter CEMS according to the procedures in § 60.2730(n) instead of particulate matter testing with EPA Method 5 at 40 CFR part

- 60, appendix A-3 and, if applicable, the continuous opacity monitoring requirements in paragraph (i) of this section.
- (i) For energy recovery units with annual average heat input rates greater than or equal to 10 MMBTU/hour but less than 250 MMBtu/hr you must install, operate, certify and maintain a continuous opacity monitoring system (COMS) according to the procedures in § 60.2730.
 - (j) For waste-burning kilns, you must conduct an annual performance test for the pollutants (except mercury and particulate matter, and hydrogen chloride if no acid gas wet scrubber is used) listed in table 8 of this subpart. If your waste-burning kiln is not equipped with a wet scrubber or dry scrubber, you must determine compliance with the hydrogen chloride emission limit using a CEMS as specified in § 60.2730. You must determine compliance with particulate matter using CPMS. You must determine compliance with the mercury emissions limit using a mercury CEMS according to the following requirements:
 - (1) Operate a CEMS in accordance with performance specification 12A at 40 CFR part 60, appendix B or a sorbent trap based integrated monitor in accordance with performance specification 12B at 40 CFR part 60, appendix B. The duration of the performance test must be a calendar month. For each calendar month in which the waste-burning kiln operates, hourly mercury concentration data and stack gas volumetric flow rate data must be obtained. You must demonstrate compliance with the mercury emissions limit using a 30-day rolling average of these 1-hour mercury concentrations, including CEMS data during startup and shutdown as defined in this subpart, calculated using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7 of this part. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content.
 - (2) Owners or operators using a mercury continuous emissions monitoring systems must install, operate, calibrate and maintain an instrument for continuously measuring and recording the mercury mass emissions rate to the atmosphere according to the requirements of performance specifications 6 and 12A at 40 CFR part 60, appendix B and quality assurance procedure 5 at 40 CFR part 60, appendix F.
 - (3) The owner or operator of a waste-burning kiln must demonstrate initial compliance by operating a mercury CEMS while the raw mill of the in-line kiln/raw mill is operating under normal conditions and including at least one period when the raw mill is off.
 - (k) If you use an air pollution control device to meet the emission limitations in this subpart, you must conduct an initial and annual inspection of the air pollution control device. The inspection must include, at a minimum, the following:
 - (1) Inspect air pollution control device(s) for proper operation.
 - (2) Develop a site-specific monitoring plan according to the requirements in paragraph (l) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under § 60.13(i).
 - (l) For each CMS required in this section, you must develop and submit to the EPA Administrator for approval a site-specific monitoring plan according to the requirements of this paragraph (l) that addresses paragraphs (l)(1)(i) through (vi) of this section.

- (1) You must submit this site-specific monitoring plan at least 60 days before your initial performance evaluation of your continuous monitoring system.
 - (i) Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device).
 - (ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems.
 - (iii) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations).
 - (iv) Ongoing operation and maintenance procedures in accordance with the general requirements of § 60.11(d).
 - (v) Ongoing data quality assurance procedures in accordance with the general requirements of § 60.13.
 - (vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 60.7(b),(c), (c)(1), (c)(4), (d), (e), (f) and (g).
- (2) You must conduct a performance evaluation of each continuous monitoring system in accordance with your site-specific monitoring plan.
- (3) You must operate and maintain the continuous monitoring system in continuous operation according to the site-specific monitoring plan.
- (m) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs (1) and (m)(1) through (4) of this section.
 - (1) Install the flow sensor and other necessary equipment in a position that provides a representative flow.
 - (2) Use a flow sensor with a measurement sensitivity at full scale of no greater than 2 percent.
 - (3) Minimize the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.
 - (4) Conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (n) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (1) and (n)(1) through (6) of this section.
 - (1) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (*e.g.*, PM scrubber pressure drop).
 - (2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.
 - (3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1 percent of the pressure monitoring system operating range, whichever is less.
 - (4) Perform checks at the frequency outlined in your site-specific monitoring plan to ensure pressure measurements are not obstructed (e.g., check for pressure tap pluggage daily).

- (5) Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
 - (6) If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in your monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.
- (o) If you have an operating limit that requires a pH monitoring system, you must meet the requirements in paragraphs (l) and (o)(1) through (4) of this section.
- (1) Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH.
 - (2) Ensure the sample is properly mixed and representative of the fluid to be measured.
 - (3) Conduct a performance evaluation of the pH monitoring system in accordance with your monitoring plan at least once each process operating day.
 - (4) Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit) of the pH monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than quarterly.
- (p) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator, you must meet the requirements in paragraphs (l) and (p)(1) through (2) of this section.
- (1) Install sensors to measure (secondary) voltage and current to the precipitator collection plates.
 - (2) Conduct a performance evaluation of the electric power monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (q) If you have an operating limit that requires the use of a monitoring system to measure sorbent injection rate (*e.g.*, weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (l) and (q)(1) through (3) of this section.
- (1) Install the system in a position(s) that provides a representative measurement of the total sorbent injection rate.
 - (2) Conduct a performance evaluation of the sorbent injection rate monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (r) If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (l) and (r)(1) through (5) of this section.
- (1) Install a bag leak detection sensor(s) in a position(s) that will be representative of the relative or absolute particulate matter loadings for each exhaust stack, roof vent, or compartment (*e.g.*, for a positive pressure fabric filter) of the fabric filter.

- (2) Use a bag leak detection system certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.
 - (3) Conduct a performance evaluation of the bag leak detection system in accordance with your monitoring plan and consistent with the guidance provided in EPA-454/R-98-015 (incorporated by reference, *see* § 60.17).
 - (4) Use a bag leak detection system equipped with a device to continuously record the output signal from the sensor.
 - (5) Use a bag leak detection system equipped with a system that will sound an alarm when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is observed readily by plant operating personnel.
- (s) For facilities using a CEMS to demonstrate compliance with the sulfur dioxide emission limit, compliance with the sulfur dioxide emission limit may be demonstrated by using the CEMS specified in § 60.2730 to measure sulfur dioxide. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. You must calculate a 30-day rolling average of the 1-hour arithmetic average emission concentrations, including CEMS data during startup and shutdown as defined in this subpart, using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7. The sulfur dioxide CEMS must be operated according to performance specification 2 in appendix B of this part and must follow the procedures and methods specified in this paragraph(s). For sources that have actual inlet emissions less than 100 parts per million dry volume, the relative accuracy criterion for inlet sulfur dioxide CEMS should be no greater than 20 percent of the mean value of the reference method test data in terms of the units of the emission standard, or 5 parts per million dry volume absolute value of the mean difference between the reference method and the CEMS, whichever is greater.
- (1) During each relative accuracy test run of the CEMS required by performance specification 2 in appendix B of this part, collect sulfur dioxide and oxygen (or carbon dioxide) data concurrently (or within a 30- to 60-minute period) with both the CEMS and the test methods specified in paragraphs (s)(1)(i) and (ii) of this section.
 - (i) For sulfur dioxide, EPA Reference Method 6 or 6C, or as an alternative ANSI/ASME PTC 19.10-1981 (incorporated by reference, *see* § 60.17) must be used.
 - (ii) For oxygen (or carbon dioxide), EPA Reference Method 3A or 3B, or as an alternative ANSI/ASME PTC 19.10-1981 (incorporated by reference, *see* § 60.17), as applicable, must be used.
 - (2) The span value of the CEMS at the inlet to the sulfur dioxide control device must be 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the unit subject to this rule. The span value of the CEMS at the outlet of the sulfur dioxide control device must be 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the unit subject to this rule.
 - (3) Conduct accuracy determinations quarterly and calibration drift tests daily in accordance with procedure 1 in appendix F of this part.

- (t) For facilities using a CEMS to demonstrate continuous compliance with the nitrogen oxides emission limit, compliance with the nitrogen oxides emission limit may be demonstrated by using the CEMS specified in § 60.2730 to measure nitrogen oxides. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. You must calculate a 30-day rolling average of the 1-hour arithmetic average emission concentration using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7. The nitrogen oxides CEMS must be operated according to performance specification 2 in appendix B of this part and must follow the procedures and methods specified in paragraphs (t)(1) through (t)(5) of this section.
- (1) During each relative accuracy test run of the CEMS required by performance specification 2 of appendix B of this part, collect nitrogen oxides and oxygen (or carbon dioxide) data concurrently (or within a 30- to 60-minute period) with both the CEMS and the test methods specified in paragraphs (t)(1)(i) and (ii) of this section.
 - (i) For nitrogen oxides, EPA Reference Method 7 or 7E at 40 CFR part 60, appendix A-4 must be used.
 - (ii) For oxygen (or carbon dioxide), EPA Reference Method 3A or 3B, or as an alternative ANSI/ASME PTC 19.10-1981 (incorporated by reference, see § 60.17), as applicable, must be used.
 - (2) The span value of the CEMS must be 125 percent of the maximum estimated hourly potential nitrogen oxide emissions of unit.
 - (3) Conduct accuracy determinations quarterly and calibration drift tests daily in accordance with procedure 1 in appendix F of this part.
 - (4) The owner or operator of an affected facility may request that compliance with the nitrogen oxides emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels must be established during the initial performance test according to the procedures and methods specified in paragraphs (t)(4)(i) through (t)(4)(iv) of this section. This relationship may be reestablished during performance compliance tests.
 - (i) The fuel factor equation in Method 3B must be used to determine the relationship between oxygen and carbon dioxide at a sampling location. Method 3A, 3B, or as an alternative ANSI/ASME PTC 19.10-1981 (incorporated by reference, see § 60.17), as applicable, must be used to determine the oxygen concentration at the same location as the carbon dioxide monitor.
 - (ii) Samples must be taken for at least 30 minutes in each hour.
 - (iii) Each sample must represent a 1-hour average.
 - (iv) A minimum of 3 runs must be performed.
- (u) For facilities using a continuous emissions monitoring system to demonstrate continuous compliance with any of the emission limits of this subpart, you must complete the following:
- (1) Demonstrate compliance with the appropriate emission limit(s) using a 30-day rolling average of 1-hour arithmetic average emission concentrations, including

CEMS data during startup and shutdown, as defined in this subpart, calculated using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content.

- (2) Operate all CEMS in accordance with the applicable procedures under appendices B and F of this part.
- (v) Use of the bypass stack at any time is an emissions standards deviation for particulate matter, HCl, Pb, Cd, Hg, NO_x, SO₂, and dioxin/furans.
- (w) For energy recovery units with a design heat input capacity of 100 MMBtu per hour or greater that do not use a carbon monoxide CEMS, you must install, operate, and maintain an oxygen analyzer system as defined in § 60.2875 according to the procedures in paragraphs (w)(1) through (4) of this section.
 - (1) The oxygen analyzer system must be installed by the initial performance test date specified in § 60.2675.
 - (2) You must operate the oxygen trim system within compliance with paragraph (w)(3) of this section at all times.
 - (3) You must maintain the oxygen level such that the 30-day rolling average that is established as the operating limit for oxygen is not below the lowest hourly average oxygen concentration measured during the most recent CO performance test.
 - (4) You must calculate and record a 30-day rolling average oxygen concentration using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 of Appendix A-7 of this part.
- (x) For energy recovery units with annual average heat input rates greater than or equal to 250 MMBtu/hour and waste-burning kilns, you must install, calibrate, maintain, and operate a PM CPMS and record the output of the system as specified in paragraphs (x)(1) through (8) of this section. For other energy recovery units, you may elect to use PM CPMS operated in accordance with this section. PM CPMS are suitable in lieu of using other CMS for monitoring PM compliance (e.g., bag leak detectors, ESP secondary power, PM scrubber pressure).
 - (1) Install, calibrate, operate, and maintain your PM CPMS according to the procedures in your approved site-specific monitoring plan developed in accordance with § 60.2710(l) and (x)(1)(i) through (iii) of this section.
 - (i) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation of the exhaust gas or representative sample. The reportable measurement output from the PM CPMS must be expressed as milliamps.
 - (ii) The PM CPMS must have a cycle time (i.e., period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes.
 - (iii) The PM CPMS must be capable of detecting and responding to particulate matter concentrations of no greater than 0.5 mg/actual cubic meter.
 - (2) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, you must adjust the site-specific

operating limit in accordance with the results of the performance test according to the procedures specified in § 60.2675.

- (3) Collect PM CPMS hourly average output data for all energy recovery unit or waste-burning kiln operating hours. Express the PM CPMS output as milliamps.
- (4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output collected during all energy recovery unit or waste-burning kiln operating hours data (milliamps).
- (5) You must collect data using the PM CPMS at all times the energy recovery unit or waste-burning kiln is operating and at the intervals specified in paragraph (x)(1)(ii) of this section, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), and any scheduled maintenance as defined in your site-specific monitoring plan.
- (6) You must use all the data collected during all energy recovery unit or waste-burning kiln operating hours in assessing the compliance with your operating limit except:
 - (i) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or quality control activities conducted during monitoring system malfunctions are not used in calculations (report any such periods in your annual deviation report);
 - (ii) Any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or quality control activities conducted during out-of-control periods are not used in calculations (report emissions or operating levels and report any such periods in your annual deviation report);
 - (iii) Any PM CPMS data recorded during periods of CEMS data during startup and shutdown, as defined in this subpart.
- (7) You must record and make available upon request results of PM CPMS system performance audits, as well as the dates and duration of periods from when the PM CPMS is out of control until completion of the corrective actions necessary to return the PM CPMS to operation consistent with your site-specific monitoring plan.
- (8) For any deviation of the 30-day rolling average PM CPMS average value from the established operating parameter limit, you must:
 - (i) Within 48 hours of the deviation, visually inspect the air pollution control device;
 - (ii) If inspection of the air pollution control device identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and
 - (iii) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify. Within

45 days of the deviation, you must re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this paragraph.

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

[76 FR 15773, Mar. 21, 2011, as amended at 78 FR 9198, Feb. 7, 2013]

§ 60.2715 By what date must I conduct the annual performance test?

You must conduct annual performance tests between 11 and 13 months of the previous performance test.

[76 FR 15777, Mar. 21, 2011]

§ 60.2716 By what date must I conduct the annual air pollution control device inspection?

On an annual basis (no more than 12 months following the previous annual air pollution control device inspection), you must complete the air pollution control device inspection as described in § 60.2706.

[76 FR 15777, Mar. 21, 2011]

§ 60.2720 May I conduct performance testing less often?

(a) You must conduct annual performance tests according to the schedule specified in § 60.2715, with the following exceptions:

- (1) You may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward, as specified in § 60.2725. The Administrator may request a repeat performance test at any time.
- (2) You must repeat the performance test within 60 days of a process change, as defined in § 60.2875.
- (3) If the initial or any subsequent performance test for any pollutant in table 2 or tables 6 through 9 of this subpart, as applicable, demonstrates that the emission level for the pollutant is no greater than the emission level specified in paragraph (a)(3)(i) or (a)(3)(ii) of this section, as applicable, and you are not required to conduct a performance test for the pollutant in response to a request by the Administrator in paragraph (a)(1) of this section or a process change in paragraph (a)(2) of this section, you may elect to skip conducting a performance test for the pollutant for the next 2 years. You must conduct a performance test for the pollutant during the third year and no more than 37 months following the previous performance test for the pollutant. For cadmium and lead, both cadmium and lead must be emitted at emission levels no greater than their respective emission levels specified in paragraph (a)(3)(i) of this section for you to qualify for less frequent testing under this paragraph.
 - (i) For particulate matter, hydrogen chloride, mercury, carbon monoxide, nitrogen oxides, sulfur dioxide, cadmium, lead, and dioxins/furans, the emission level equal to 75 percent of the applicable emission limit in table 2 or tables 6 through 9 of this subpart, as applicable, to this subpart.

- (ii) For fugitive emissions, visible emissions (of combustion ash from the ash conveying system) for 2 percent of the time during each of the three 1-hour observation periods.
 - (4) If you are conducting less frequent testing for a pollutant as provided in paragraph (a)(3) of this section and a subsequent performance test for the pollutant indicates that your CISWI unit does not meet the emission level specified in paragraph (a)(3)(i) or (a)(3)(ii) of this section, as applicable, you must conduct annual performance tests for the pollutant according to the schedule specified in paragraph (a) of this section until you qualify for less frequent testing for the pollutant as specified in paragraph (a)(3) of this section.
- (b) [Reserved]
[76 FR 15777, Mar. 21, 2011, as amended at 78 FR 9201, Feb. 7, 2013]

§ 60.2725 May I conduct a repeat performance test to establish new operating limits?

- (a) Yes. You may conduct a repeat performance test at any time to establish new values for the operating limits. The Administrator may request a repeat performance test at any time.
- (b) You must repeat the performance test if your feed stream is different than the feed streams used during any performance test used to demonstrate compliance.

Model Rule - Monitoring

§ 60.2730 What monitoring equipment must I install and what parameters must I monitor?

- (a) If you are using a wet scrubber to comply with the emission limitation under § 60.2670, you must install, calibrate (to manufacturers' specifications), maintain, and operate devices (or establish methods) for monitoring the value of the operating parameters used to determine compliance with the operating limits listed in table 3 of this subpart. These devices (or methods) must measure and record the values for these operating parameters at the frequencies indicated in table 3 of this subpart at all times except as specified in § 60.2735(a).
- (b) If you use a fabric filter to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (b)(1) through (8) of this section.
 - (1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.
 - (2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
 - (3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.
 - (4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.
 - (5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

- (6) The bag leak detection system must be equipped with an alarm system that will alert automatically an operator when an increase in relative particulate matter emission over a preset level is detected. The alarm must be located where it is observed easily by plant operating personnel.
 - (7) For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
 - (8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (c) If you are using something other than a wet scrubber, activated carbon, selective non-catalytic reduction, an electrostatic precipitator, or a dry scrubber to comply with the emission limitations under § 60.2670, you must install, calibrate (to the manufacturers' specifications), maintain, and operate the equipment necessary to monitor compliance with the site-specific operating limits established using the procedures in § 60.2680.
 - (d) If you use activated carbon injection to comply with the emission limitations in this subpart, you must measure the minimum sorbent flow rate once per hour.
 - (e) If you use selective noncatalytic reduction to comply with the emission limitations, you must complete the following:
 - (1) Following the date on which the initial performance test is completed or is required to be completed under § 60.2690, whichever date comes first, ensure that the affected facility does not operate above the maximum charge rate, or below the minimum secondary chamber temperature (if applicable to your CISWI unit) or the minimum reagent flow rate measured as 3-hour block averages at all times.
 - (2) Operation of the affected facility above the maximum charge rate, below the minimum secondary chamber temperature and below the minimum reagent flow rate simultaneously constitute a violation of the nitrogen oxides emissions limit.
 - (f) If you use an electrostatic precipitator to comply with the emission limits of this subpart, you must monitor the secondary power to the electrostatic precipitator collection plates and maintain the 3-hour block averages at or above the operating limits established during the mercury or particulate matter performance test.
 - (g) For waste-burning kilns not equipped with a wet scrubber or dry scrubber, in place of hydrogen chloride testing with EPA Method 321 at 40 CFR part 63, appendix A, an owner or operator must install, calibrate, maintain, and operate a CEMS for monitoring hydrogen chloride emissions discharged to the atmosphere and record the output of the system. To demonstrate continuous compliance with the hydrogen chloride emissions limit for units other than waste-burning kilns not equipped with a wet scrubber or dry scrubber, a facility may substitute use of a hydrogen chloride CEMS for conducting the hydrogen chloride annual performance test, monitoring the minimum hydrogen chloride sorbent flow rate, monitoring the minimum scrubber liquor pH.
 - (h) To demonstrate continuous compliance with the particulate matter emissions limit, a facility may substitute use of a particulate matter CEMS for conducting the particulate matter annual performance test and other CMS monitoring for PM compliance (e.g., bag leak detectors, ESP secondary power, PM scrubber pressure).

- (i) To demonstrate continuous compliance with the dioxin/furan emissions limit, a facility may substitute use of a continuous automated sampling system for the dioxin/furan annual performance test. You must record the output of the system and analyze the sample according to EPA Method 23 at 40 CFR part 60, appendix A-7. This option to use a continuous automated sampling system takes effect on the date a final performance specification applicable to dioxin/furan from continuous monitors is published in the FEDERAL REGISTER. The owner or operator who elects to continuously sample dioxin/furan emissions instead of sampling and testing using EPA Method 23 at 40 CFR part 60, appendix A-7 must install, calibrate, maintain and operate a continuous automated sampling system and must comply with the requirements specified in § 60.58b(p) and (q). A facility may substitute continuous dioxin/furan monitoring for the minimum sorbent flow rate, if activated carbon sorbent injection is used solely for compliance with the dioxin/furan emission limit.
- (j) To demonstrate continuous compliance with the mercury emissions limit, a facility may substitute use of a continuous automated sampling system for the mercury annual performance test. You must record the output of the system and analyze the sample at set intervals using any suitable determinative technique that can meet performance specification 12B criteria. This option to use a continuous automated sampling system takes effect on the date a final performance specification applicable to mercury from monitors is published in the FEDERAL REGISTER. The owner or operator who elects to continuously sample mercury emissions instead of sampling and testing using EPA Method 29 or 30B at 40 CFR part 60, appendix A-8, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see § 60.17), or an approved alternative method for measuring mercury emissions, must install, calibrate, maintain and operate a continuous automated sampling system and must comply with the requirements specified in § 60.58b(p) and (q). A facility may substitute continuous mercury monitoring for the minimum sorbent flow rate, if activated carbon sorbent injection is used solely for compliance with the mercury emission limit.
- (k) To demonstrate continuous compliance with the nitrogen oxides emissions limit, a facility may substitute use of a continuous emissions monitoring system for the nitrogen oxides annual performance test to demonstrate compliance with the nitrogen oxides emissions limits.
 - (1) Install, calibrate, maintain and operate a continuous emission monitoring system for measuring nitrogen oxides emissions discharged to the atmosphere and record the output of the system. The requirements under performance specification 2 of appendix B of this part, the quality assurance procedure 1 of appendix F of this part and the procedures under § 60.13 must be followed for installation, evaluation and operation of the continuous emission monitoring system.
 - (2) Following the date that the initial performance test for nitrogen oxides is completed or is required to be completed under § 60.2690, compliance with the emission limit for nitrogen oxides required under § 60.52b(d) must be determined based on the 30-day rolling average of the hourly emission concentrations using continuous emission monitoring system outlet data. The 1-hour arithmetic averages must be expressed in parts per million by volume (dry basis) and used to calculate the 30-day rolling average concentrations. The 1-hour arithmetic averages must be calculated using the data points required under § 60.13(e)(2).

- (l) To demonstrate continuous compliance with the sulfur dioxide emissions limit, a facility may substitute use of a continuous automated sampling system for the sulfur dioxide annual performance test to demonstrate compliance with the sulfur dioxide emissions limits.
 - (1) Install, calibrate, maintain and operate a CEMS for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system. The requirements under performance specification 2 of appendix B of this part, the quality assurance requirements of procedure 1 of appendix F of this part and the procedures under § 60.13 must be followed for installation, evaluation and operation of the CEMS.
 - (2) Following the date that the initial performance test for sulfur dioxide is completed or is required to be completed under § 60.2690, compliance with the sulfur dioxide emission limit may be determined based on the 30-day rolling average of the hourly arithmetic average emission concentrations using CEMS outlet data. The 1-hour arithmetic averages must be expressed in parts per million corrected to 7 percent oxygen (dry basis) and used to calculate the 30-day rolling average emission concentrations. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. The 1-hour arithmetic averages must be calculated using the data points required under § 60.13(e)(2).
- (m) For energy recovery units that do not use a wet scrubber, fabric filter with bag leak detection system, or particulate matter CEMS, you must install, operate, certify and maintain a continuous opacity monitoring system according to the procedures in paragraphs (m)(1) through (5) of this section by the compliance date specified in § 60.2670. Energy recovery units that use a particulate matter CEMS to demonstrate initial and continuing compliance according to the procedures in § 60.2730(n) are not required to install a continuous opacity monitoring system and must perform the annual performance tests for opacity consistent with § 60.2710(f).
 - (1) Install, operate and maintain each continuous opacity monitoring system according to performance specification 1 at 40 CFR part 60, appendix B.
 - (2) Conduct a performance evaluation of each continuous opacity monitoring system according to the requirements in § 60.13 and according to performance specification 1 at 40 CFR part 60, appendix B.
 - (3) As specified in § 60.13(e)(1), each continuous opacity monitoring system must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
 - (4) Reduce the continuous opacity monitoring system data as specified in § 60.13(h)(1).
 - (5) Determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected.
- (n) For coal and liquid/gas energy recovery units, incinerators, and small remote incinerators, an owner or operator may elect to install, calibrate, maintain and operate a CEMS for monitoring particulate matter emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who continuously monitors particulate matter emissions instead of conducting performance testing using

EPA Method 5 at 40 CFR part 60, appendix A-3 or, as applicable, monitor with a particulate matter CPMS according to paragraph (r) of this section, must install, calibrate, maintain and operate a CEMS and must comply with the requirements specified in paragraphs (n)(1) through (13) of this section.

- (1) Notify the Administrator 1 month before starting use of the system.
- (2) Notify the Administrator 1 month before stopping use of the system.
- (3) The monitor must be installed, evaluated and operated in accordance with the requirements of performance specification 11 of appendix B of this part and quality assurance requirements of procedure 2 of appendix F of this part and § 60.13.
- (4) The initial performance evaluation must be completed no later than 180 days after the final compliance date for meeting the amended emission limitations, as specified under § 60.2690 or within 180 days of notification to the Administrator of use of the continuous monitoring system if the owner or operator was previously determining compliance by Method 5 at 40 CFR part 60, appendix A-3 performance tests, whichever is later.
- (5) The owner or operator of an affected facility may request that compliance with the particulate matter emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility must be established according to the procedures and methods specified in § 60.2710(s)(5)(i) through (s)(5)(iv).
- (6) The owner or operator of an affected facility must conduct an initial performance test for particulate matter emissions as required under § 60.2690. Compliance with the particulate matter emission limit, if PM CEMS are elected for demonstrating compliance, must be determined by using the CEMS specified in paragraph (n) of this section to measure particulate matter. You must calculate a 30-day rolling average of 1-hour arithmetic average emission concentrations, including CEMS data during startup and shutdown, as defined in this subpart, using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7 of this part.
- (7) Compliance with the particulate matter emission limit must be determined based on the 30-day rolling average calculated using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, Appendix A-7 of the part from the 1-hour arithmetic average of the CEMS outlet data.
- (8) At a minimum, valid continuous monitoring system hourly averages must be obtained as specified § 60.2735.
- (9) The 1-hour arithmetic averages required under paragraph (n)(7) of this section must be expressed in milligrams per dry standard cubic meter corrected to 7 percent oxygen (or carbon dioxide)(dry basis) and must be used to calculate the 30-day rolling average emission concentrations. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. The 1-hour arithmetic averages must be calculated using the data points required under § 60.13(e)(2).

- (10) All valid CEMS data must be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (n)(8) of this section are not met.
- (11) The CEMS must be operated according to performance specification 11 in appendix B of this part.
- (12) During each relative accuracy test run of the CEMS required by performance specification 11 in appendix B of this part, particulate matter and oxygen (or carbon dioxide) data must be collected concurrently (or within a 30-to 60-minute period) by both the CEMS and the following test methods.
 - (i) For particulate matter, EPA Reference Method 5 at 40 CFR part 60, appendix A-3 must be used.
 - (ii) For oxygen (or carbon dioxide), EPA Reference Method 3A or 3B at 40 CFR part 60, appendix A-2, as applicable, must be used.
- (13) Quarterly accuracy determinations and daily calibration drift tests must be performed in accordance with procedure 2 in appendix F of this part.
- (o) To demonstrate continuous compliance with the carbon monoxide emissions limit, a facility may substitute use of a continuous automated sampling system for the carbon monoxide annual performance test to demonstrate compliance with the carbon monoxide emissions limits.
 - (1) Install, calibrate, maintain, and operate a CEMS for measuring carbon monoxide emissions discharged to the atmosphere and record the output of the system. The requirements under performance specification 4B of appendix B of this part, the quality assurance procedure 1 of appendix F of this part and the procedures under § 60.13 must be followed for installation, evaluation, and operation of the CEMS.
 - (2) Following the date that the initial performance test for carbon monoxide is completed or is required to be completed under § 60.2690, compliance with the carbon monoxide emission limit may be determined based on the 30-day rolling average of the hourly arithmetic average emission concentrations, including CEMS data during startup and shutdown as defined in this subpart, using CEMS outlet data. Except for CEMS data during startup and shutdown, as defined in this subpart, the 1-hour arithmetic averages must be expressed in parts per million corrected to 7 percent oxygen (dry basis) and used to calculate the 30-day rolling average emission concentrations. CEMS data collected during startup or shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. The 1-hour arithmetic averages must be calculated using the data points required under § 60.13(e)(2).
- (p) The owner/operator of an affected source with a bypass stack shall install, calibrate (to manufacturers' specifications), maintain and operate a device or method for measuring the use of the bypass stack including date, time and duration.
- (q) For energy recovery units with a heat input capacity of 100 MMBtu per hour or greater that do not use a carbon monoxide continuous emission monitoring system, you must install, operate and maintain the continuous oxygen monitoring system according to the procedures in paragraphs (q)(1) through (4) of this section by the compliance date specified in table 1 of this subpart. The oxygen level shall be monitored at the outlet of the energy recovery unit.

- (1) Each monitor must be installed, operated, and maintained according to the applicable procedures under performance specification 3 of appendix B of this part, the quality assurance procedure 1 of appendix F of this part, the procedures under § 60.13 and according to the site-specific monitoring plan developed according to paragraph (1) of this section.
 - (2) During each relative accuracy test run of the continuous emission monitoring system required by performance specification 3 of appendix B of this part, oxygen data must be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitor and the test methods specified in paragraphs (w)(3) of this section.
 - (3) For oxygen, EPA Reference Method 3A or 3B, or as an alternative ANSI/ASME PTC 19.10-1981 (incorporated by reference, *see* § 60.17), as applicable, must be used.
 - (4) You must calculate and record a 30-day rolling average oxygen concentration using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 of Appendix A-7 of this part. The 1-hour arithmetic averages must be calculated using the data points required under § 60.13(e)(2).
- (r) For energy recovery units with annual average heat input rates greater than or equal to 250 MMBtu/hour and waste-burning kilns, you must install, calibrate, maintain, and operate a PM CPMS and record the output of the system as specified in paragraphs (r)(1) through (8) of this section. For other energy recovery units, you may elect to use PM CPMS operated in accordance with this section. PM CPMS are suitable in lieu of using other CMS for monitoring PM compliance (e.g., bag leak detectors, ESP secondary power, PM scrubber pressure).
- (1) Install, calibrate, operate, and maintain your PM CPMS according to the procedures in your approved site-specific monitoring plan developed in accordance with § 60.2710(l) and (r)(1)(i) through (iii) of this section.
 - (i) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation of the exhaust gas or representative sample. The reportable measurement output from the PM CPMS must be expressed as milliamps.
 - (ii) The PM CPMS must have a cycle time (i.e., period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes.
 - (iii) The PM CPMS must be capable of detecting and responding to particulate matter concentrations of no greater than 0.5 mg/actual cubic meter.
 - (2) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, you must adjust the site-specific operating limit in accordance with the results of the performance test according to the procedures specified in § 60.2675.
 - (3) Collect PM CPMS hourly average output data for all energy recovery unit or waste-burning kiln operating hours. Express the PM CPMS output as milliamps..
 - (4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output collected during all energy recovery unit or waste-burning kiln operating hours data (milliamps).

- (5) You must collect data using the PM CPMS at all times the energy recovery unit or waste-burning kiln is operating and at the intervals specified in paragraph (r)(1)(ii) of this section, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), and any scheduled maintenance as defined in your site-specific monitoring plan.
- (6) You must use all the data collected during all energy recovery unit or waste-burning kiln operating hours in assessing the compliance with your operating limit except:
 - (i) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or quality control activities conducted during monitoring system malfunctions are not used in calculations (report any such periods in your annual deviation report);
 - (ii) Any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or quality control activities conducted during out-of-control periods are not used in calculations (report emissions or operating levels and report any such periods in your annual deviation report);
 - (iii) Any PM CPMS data recorded during periods of CEMS data during startup and shutdown, as defined in this subpart.
- (7) You must record and make available upon request results of PM CPMS system performance audits, as well as the dates and duration of periods from when the PM CPMS is out of control until completion of the corrective actions necessary to return the PM CPMS to operation consistent with your site-specific monitoring plan.
- (8) For any deviation of the 30-day rolling average PM CPMS average value from the established operating parameter limit, you must:
 - (i) Within 48 hours of the deviation, visually inspect the air pollution control device;
 - (ii) If inspection of the air pollution control device identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and
 - (iii) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify. Within 45 days of the deviation, you must re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this paragraph.
 - (iv) PM CPMS deviations leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a violation of this subpart.

- (s) If you use a dry scrubber to comply with the emission limits of this subpart, you must monitor the injection rate of each sorbent and maintain the 3-hour block averages at or above the operating limits established during the hydrogen chloride performance test. [65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15777, Mar. 21, 2011; 78 FR 9201, Feb. 7, 2013]

EDITORIAL NOTE: At 78 FR 9201, Feb. 7, 2013, § 60.2730 was amended by revising (o)(9); however, the amendment could not be incorporated because (o)(9) doesn't exist.

§ 60.2735 Is there a minimum amount of monitoring data I must obtain?

For each continuous monitoring system required or optionally allowed under § 60.2730, you must monitor and collect data according to this section:

- (a) You must operate the monitoring system and collect data at all required intervals at all times compliance is required except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods (as specified in § 60.2770(o) of this part), and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments. 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 in part by poor maintenance or careless operation are not malfunctions. You are required to effect monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.
- (b) You may not use data recorded during the monitoring system malfunctions, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.
- (c) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation of the monitoring requirements.

[76 FR 15780, Mar. 21, 2011]

Model Rule – Recordkeeping and Reporting

§ 60.2740 What records must I keep?

You must maintain the items (as applicable) as specified in paragraphs (a), (b), and (e) through (w) of this section for a period of at least 5 years:

- (a) Calendar date of each record.
- (b) Records of the data described in paragraphs (b)(1) through (6) of this section:
- (1) The CISWI unit charge dates, times, weights, and hourly charge rates.
 - (2) Liquor flow rate to the wet scrubber inlet every 15 minutes of operation, as applicable.

- (3) Pressure drop across the wet scrubber system every 15 minutes of operation or amperage to the wet scrubber every 15 minutes of operation, as applicable.
 - (4) Liquor pH as introduced to the wet scrubber every 15 minutes of operation, as applicable.
 - (5) For affected CISWI units that establish operating limits for controls other than wet scrubbers under § 60.2675(d) through (g) or § 60.2680, you must maintain data collected for all operating parameters used to determine compliance with the operating limits. For energy recovery units using activated carbon injection or a dry scrubber, you must also maintain records of the load fraction and corresponding sorbent injection rate records.
 - (6) If a fabric filter is used to comply with the emission limitations, you must record the date, time, and duration of each alarm and the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of operating time during each 6-month period that the alarm sounds, calculated as specified in § 60.2675(c).
- (c)-(d) [Reserved]
- (e) Identification of calendar dates and times for which data show a deviation from the operating limits in table 3 of this subpart or a deviation from other operating limits established under § 60.2675(d) through (g) or § 60.2680 with a description of the deviations, reasons for such deviations, and a description of corrective actions taken.
 - (f) The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating limits, as applicable. Retain a copy of the complete test report including calculations.
 - (g) Records showing the names of CISWI unit operators who have completed review of the information in § 60.2660(a) as required by § 60.2660(b), including the date of the initial review and all subsequent annual reviews.
 - (h) Records showing the names of the CISWI operators who have completed the operator training requirements under § 60.2635, met the criteria for qualification under § 60.2645, and maintained or renewed their qualification under § 60.2650 or § 60.2655. Records must include documentation of training, the dates of the initial and refresher training, and the dates of their qualification and all subsequent renewals of such qualifications.
 - (i) For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.
 - (j) Records of calibration of any monitoring devices as required under § 60.2730.
 - (k) Equipment vendor specifications and related operation and maintenance requirements for the incinerator, emission controls, and monitoring equipment.
 - (l) The information listed in § 60.2660(a).
 - (m) On a daily basis, keep a log of the quantity of waste burned and the types of waste burned (always required).
 - (n) Maintain records of the annual air pollution control device inspections that are required for each CISWI unit subject to the emissions limits in table 2 of this subpart or tables 6 through 9 of this subpart, any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the state regulatory agency.
 - (o) For continuously monitored pollutants or parameters, you must document and keep a record of the following parameters measured using continuous monitoring systems.

- (1) All 6-minute average levels of opacity.
 - (2) All 1-hour average concentrations of sulfur dioxide emissions. You must indicate which data are CEMS data during startup and shutdown.
 - (3) All 1-hour average concentrations of nitrogen oxides emissions. You must indicate which data are CEMS data during startup and shutdown.
 - (4) All 1-hour average concentrations of carbon monoxide emissions. You must indicate which data are CEMS data during startup and shutdown.
 - (5) All 1-hour average concentrations of particulate matter emissions. You must indicate which data are CEMS data during startup and shutdown.
 - (6) All 1-hour average concentrations of mercury emissions. You must indicate which data are CEMS data during startup and shutdown.
 - (7) All 1-hour average concentrations of hydrogen chloride emissions. You must indicate which data are CEMS data during startup and shutdown.
 - (8) All 1-hour average percent oxygen concentrations.
 - (9) All 1-hour average PM CPMS readings or particulate matter CEMS outputs.
- (p) Records indicating use of the bypass stack, including dates, times and durations.
 - (q) If you choose to stack test less frequently than annually, consistent with § 60.2720(a) through (c), you must keep annual records that document that your emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.
 - (r) Records of the occurrence and duration of each malfunction of operation (*i.e.* , process equipment) or the air pollution control and monitoring equipment.
 - (s) Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - (t) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 60.11(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
 - (u) For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to § 241.3(b)(1), you must keep a record which documents how the secondary material meets each of the legitimacy criteria under § 241.3(d)(1). If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to § 241.3(b)(4), you must keep records as to how the operations that produced the fuel satisfies the definition of processing in § 241.2 and each of the legitimacy criteria in § 241.3(d)(1) of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under § 241.3(c), you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per § 241.4, you must keep records documenting that the material is a listed non-waste under § 241.4(a).
 - (v) Records of the criteria used to establish that the unit qualifies as a small power production facility under section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)) and that the waste material the unit is proposed to burn is homogeneous.

- (w) Records of the criteria used to establish that the unit qualifies as a cogeneration facility under section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)) and that the waste material the unit is proposed to burn is homogeneous.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15780, Mar. 21, 2011; 78 FR 9204, Feb. 7, 2013]

§ 60.2745 Where and in what format must I keep my records?

All records must be available onsite in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator.

§ 60.2750 What reports must I submit?

See table 5 of this subpart for a summary of the reporting requirements.

§ 60.2755 When must I submit my waste management plan?

You must submit the waste management plan no later than the date specified in table 1 of this subpart for submittal of the final control plan.

§ 60.2760 What information must I submit following my initial performance test?

You must submit the information specified in paragraphs (a) through (c) of this section no later than 60 days following the initial performance test. All reports must be signed by the facilities manager.

- (a) The complete test report for the initial performance test results obtained under § 60.2700, as applicable.
- (b) The values for the site-specific operating limits established in § 60.2675 or § 60.2680.
- (c) If you are using a fabric filter to comply with the emission limitations, documentation that a bag leak detection system has been installed and is being operated, calibrated, and maintained as required by § 60.2730(b).

§ 60.2765 When must I submit my annual report?

You must submit an annual report no later than 12 months following the submission of the information in § 60.2760. You must submit subsequent reports no more than 12 months following the previous report. (If the unit is subject to permitting requirements under title V of the Clean Air Act, you may be required by the permit to submit these reports more frequently.)

§ 60.2770 What information must I include in my annual report?

The annual report required under § 60.2765 must include the ten items listed in paragraphs (a) through (j) of this section. If you have a deviation from the operating limits or the emission limitations, you must also submit deviation reports as specified in §§ 60.2775, 60.2780, and 60.2785.

- (a) Company name and address.
- (b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
- (c) Date of report and beginning and ending dates of the reporting period.
- (d) The values for the operating limits established pursuant to § 60.2675 or § 60.2680.
- (e) If no deviation from any emission limitation or operating limit that applies to you has been reported, a statement that there was no deviation from the emission limitations or operating limits during the reporting period.

- (f) The highest recorded 3-hour average and the lowest recorded 3-hour average, as applicable, for each operating parameter recorded for the calendar year being reported.
- (g) Information recorded under § 60.2740(b)(6) and (c) through (e) for the calendar year being reported.
- (h) If a performance test was conducted during the reporting period, the results of that test.
- (i) If you met the requirements of § 60.2720(a) or (b), and did not conduct a performance test during the reporting period, you must state that you met the requirements of § 60.2720(a) or (b), and, therefore, you were not required to conduct a performance test during the reporting period.
- (j) Documentation of periods when all qualified CISWI unit operators were unavailable for more than 8 hours, but less than 2 weeks.
- (k) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction that occurred during the reporting period and that caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 60.11(d), including actions taken to correct a malfunction.
- (l) For each deviation from an emission or operating limitation that occurs for a CISWI unit for which you are not using a CMS to comply with the emission or operating limitations in this subpart, the annual report must contain the following information.
 - (1) The total operating time of the CISWI unit at which the deviation occurred during the reporting period.
 - (2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (m) If there were periods during which the continuous monitoring system, including the CEMS, was out of control as specified in paragraph (o) of this section, the annual report must contain the following information for each deviation from an emission or operating limitation occurring for a CISWI unit for which you are using a continuous monitoring system to comply with the emission and operating limitations in this subpart.
 - (1) The date and time that each malfunction started and stopped.
 - (2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
 - (3) The date, time, and duration that each continuous monitoring system was out-of-control, including start and end dates and hours and descriptions of corrective actions taken.
 - (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
 - (5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
 - (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - (7) 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 operating time of the CISWI unit at

which the continuous monitoring system downtime occurred during that reporting period.

- (8) An identification of each parameter and pollutant that was monitored at the CISWI unit.
 - (9) A brief description of the CISWI unit.
 - (10) A brief description of the continuous monitoring system.
 - (11) The date of the latest continuous monitoring system certification or audit.
 - (12) A description of any changes in continuous monitoring system, processes, or controls since the last reporting period.
- (n) If there were periods during which the continuous monitoring system, including the CEMS, was not out of control as specified in paragraph (o) of this section, a statement that there were not periods during which the continuous monitoring system was out of control during the reporting period.
- (o) A continuous monitoring system is out of control if any of the following occur.
- (1) The zero (low-level), mid-level (if applicable), or high-level calibration drift exceeds two times the applicable calibration drift specification in the applicable performance specification or in the relevant standard.
 - (2) The continuous monitoring system fails a performance test audit (*e.g.*, cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit.
 - (3) The continuous opacity monitoring system calibration drift exceeds two times the limit in the applicable performance specification in the relevant standard.
- (p) For energy recovery units, include the annual heat input and average annual heat input rate of all fuels being burned in the unit to verify which subcategory of energy recovery unit applies.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15781, Mar. 21, 2011; 78 FR 9204, Feb. 7, 2013]

§ 60.2775 What else must I report if I have a deviation from the operating limits or the emission limitations?

- (a) You must submit a deviation report if any recorded 3-hour average parameter level is above the maximum operating limit or below the minimum operating limit established under this subpart, if the bag leak detection system alarm sounds for more than 5 percent of the operating time for the 6-month reporting period, or if a performance test was conducted that deviated from any emission limitation.
- (b) The deviation report must be submitted by August 1 of that year for data collected during the first half of the calendar year (January 1 to June 30), and by February 1 of the following year for data you collected during the second half of the calendar year (July 1 to December 31).

§ 60.2780 What must I include in the deviation report?

In each report required under § 60.2775, for any pollutant or parameter that deviated from the emission limitations or operating limits specified in this subpart, include the six items described in paragraphs (a) through (f) of this section.

- (a) The calendar dates and times your unit deviated from the emission limitations or operating limit requirements.
- (b) The averaged and recorded data for those dates.

- (c) Durations and causes of the following:
 - (1) Each deviation from emission limitations or operating limits and your corrective actions.
 - (2) Bypass events and your corrective actions.
- (d) A copy of the operating limit monitoring data during each deviation and any test report that documents the emission levels.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15781, Mar. 21, 2011]

§ 60.2785 What else must I report if I have a deviation from the requirement to have a qualified operator accessible?

- (a) If all qualified operators are not accessible for 2 weeks or more, you must take the two actions in paragraphs (a)(1) and (2) of this section.
 - (1) Submit a notification of the deviation within 10 days that includes the three items in paragraphs (a)(1)(i) through (iii) of this section.
 - (i) A statement of what caused the deviation.
 - (ii) A description of what you are doing to ensure that a qualified operator is accessible.
 - (iii) The date when you anticipate that a qualified operator will be available.
 - (2) Submit a status report to the Administrator every 4 weeks that includes the three items in paragraphs (a)(2)(i) through (iii) of this section.
 - (i) A description of what you are doing to ensure that a qualified operator is accessible.
 - (ii) The date when you anticipate that a qualified operator will be accessible.
 - (iii) Request approval from the Administrator to continue operation of the CISWI unit.
- (b) If your unit was shut down by the Administrator, under the provisions of § 60.2665(b)(2), due to a failure to provide an accessible qualified operator, you must notify the Administrator that you are resuming operation once a qualified operator is accessible.

§ 60.2790 Are there any other notifications or reports that I must submit?

- (a) Yes. You must submit notifications as provided by § 60.7.
- (b) If you cease combusting solid waste but continue to operate, you must provide 30 days prior notice of the effective date of the waste-to-fuel switch, consistent with § 60.2710(a). The notification must identify:
 - (1) The name of the owner or operator of the CISWI unit, the location of the source, the emissions unit(s) that will cease burning solid waste, and the date of the notice;
 - (2) The currently applicable subcategory under this subpart, and any 40 CFR part 63 subpart and subcategory that will be applicable after you cease combusting solid waste;
 - (3) The fuel(s), non-waste material(s) and solid waste(s) the CISWI unit is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the unit will commence combusting;
 - (4) The date on which you became subject to the currently applicable emission limits;
 - (5) The date upon which you will cease combusting solid waste, and the date (if different) that you intend for any new requirements to become applicable (i.e., the

effective date of the waste-to-fuel switch), consistent with paragraphs (b)(2) and (3) of this section.

[76 FR 15781, Mar. 21, 2011]

§ 60.2795 In what form can I submit my reports?

- (a) Submit initial, annual, and deviation reports electronically or in paper format, postmarked on or before the submittal due dates.
- (b) Submit results of performance tests and CEMS performance evaluation tests as follows.
 - (1) Within 60 days after the date of completing each performance test as required by this subpart, you must submit the results of the performance tests required by this subpart to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX)(www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see <http://www.epa.gov/ttn/chief/ert/index.html>). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive, or other commonly used electronic storage media to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test in paper submissions to the Administrator.
 - (2) Within 60 days after the date of completing each CEMS performance evaluation test, as defined in this subpart and required by this subpart, you must submit the relative accuracy test audit (RATA) data electronically into EPA's Central Data Exchange by using CEDRI as mentioned in paragraph (b)(1) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator shall submit the results of the performance evaluation in paper submissions to the Administrator.

[78 FR 9205, Feb. 7, 2013]

§ 60.2800 Can reporting dates be changed?

If the Administrator agrees, you may change the semiannual or annual reporting dates. See § 60.19(c) for procedures to seek approval to change your reporting date.

Model Rule – Title V Operating Permits

§ 60.2805 Am I required to apply for and obtain a Title V operating permit for my unit?
Yes. Each CISWI unit and air curtain incinerator subject to standards under this subpart must operate pursuant to a permit issued under Clean Air Act sections 129(e) and Title V.
[76 FR 15782, Mar. 21, 2011]

Model Rule – Air Curtain Incinerators

§ 60.2815 What are my requirements for meeting increments of progress and achieving final compliance?

If you plan to achieve compliance more than 1 year following the effective date of State plan approval, you must meet the two increments of progress specified in paragraphs (a) and (b) of this section.

- (a) Submit a final control plan.
- (b) Achieve final compliance.

§ 60.2820 When must I complete each increment of progress?

Table 1 of this subpart specifies compliance dates for each of the increments of progress.

§ 60.2825 What must I include in the notifications of achievement of increments of progress? Your notification of achievement of increments of progress must include the three items described in paragraphs (a) through (c) of this section.

- (a) Notification that the increment of progress has been achieved.
- (b) Any items required to be submitted with each increment of progress (see § 60.2840).
- (c) Signature of the owner or operator of the incinerator.

§ 60.2830 When must I submit the notifications of achievement of increments of progress?

Notifications for achieving increments of progress must be postmarked no later than 10 business days after the compliance date for the increment.

§ 60.2835 What if I do not meet an increment of progress?

If you fail to meet an increment of progress, you must submit a notification to the Administrator postmarked within 10 business days after the date for that increment of progress in table 1 of this subpart. You must inform the Administrator that you did not meet the increment, and you must continue to submit reports each subsequent calendar month until the increment of progress is met.

§ 60.2840 How do I comply with the increment of progress for submittal of a control plan?

For your control plan increment of progress, you must satisfy the two requirements specified in paragraphs (a) and (b) of this section.

- (a) Submit the final control plan, including a description of any devices for air pollution control and any process changes that you will use to comply with the emission limitations and other requirements of this subpart.
- (b) Maintain an onsite copy of the final control plan.

§ 60.2845 How do I comply with the increment of progress for achieving final compliance?

For the final compliance increment of progress, you must complete all process changes and retrofit construction of control devices, as specified in the final control plan, so that, if the affected incinerator is brought online, all necessary process changes and air pollution control devices would operate as designed.

§ 60.2850 What must I do if I close my air curtain incinerator and then restart it?

- (a) If you close your incinerator but will reopen it prior to the final compliance date in your State plan, you must meet the increments of progress specified in § 60.2815.
- (b) If you close your incinerator but will restart it after your final compliance date, you must complete emission control retrofits and meet the emission limitations on the date your incinerator restarts operation.

§ 60.2855 What must I do if I plan to permanently close my air curtain incinerator and not restart it?

If you plan to close your incinerator rather than comply with the State plan, submit a closure notification, including the date of closure, to the Administrator by the date your final control plan is due.

§ 60.2860 What are the emission limitations for air curtain incinerators?

After the date the initial stack test is required or completed (whichever is earlier), you must meet the limitations in paragraphs (a) and (b) of this section.

- (a) Maintain opacity to less than or equal to 10 percent opacity (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values), except as described in paragraph (b) of this section.
- (b) Maintain opacity to less than or equal to 35 percent opacity (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values) during the startup period that is within the first 30 minutes of operation.

[76 FR 15782, Mar. 21, 2011]

§ 60.2865 How must I monitor opacity for air curtain incinerators?

- (a) Use Method 9 of appendix A of this part to determine compliance with the opacity limitation.
- (b) Conduct an initial test for opacity as specified in § 60.8 no later than 180 days after your final compliance date.
- (c) After the initial test for opacity, conduct annual tests no more than 12 calendar months following the date of your previous test.

§ 60.2870 What are the recordkeeping and reporting requirements for air curtain incinerators?

- (a) Keep records of results of all initial and annual opacity tests onsite in either paper copy or electronic format, unless the Administrator approves another format, for at least 5 years.
- (b) Make all records available for submittal to the Administrator or for an inspector's onsite review.
- (c) Submit an initial report no later than 60 days following the initial opacity test that includes the information specified in paragraphs (c) (1) and (2) of this section.
 - (1) The types of materials you plan to combust in your air curtain incinerator.

- (2) The results (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values) of the initial opacity tests.
 - (d) Submit annual opacity test results within 12 months following the previous report.
 - (e) Submit initial and annual opacity test reports as electronic or paper copy on or before the applicable submittal date and keep a copy onsite for a period of 5 years.
- [65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15782, Mar. 21, 2011]

§ 60.2875 What definitions must I know?

Terms used but not defined in this subpart are defined in the Clean Air Act and subparts A and B of this part.

30-day rolling average means the arithmetic mean of the previous 720 hours of valid operating data. Valid data excludes periods when this unit is not operating. The 720 hours should be consecutive, but not necessarily continuous if operations are intermittent.

Administrator means the Administrator of the U.S. Environmental Protection Agency or his/her authorized representative or Administrator of a State Air Pollution Control Agency.

Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

Agricultural waste means vegetative agricultural materials such as nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds, and other vegetative waste materials generated as a result of agricultural operations.

Air curtain incinerator means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor. (Air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors.)

Annual heat input means the heat input for the 12 months preceding the compliance demonstration.

Auxiliary fuel means natural gas, liquified petroleum gas, fuel oil, or diesel fuel.

Average annual heat input rate means annual heat input divided by the hours of operation for the 12 months preceding the compliance demonstration.

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Burn-off oven means any rack reclamation unit, part reclamation unit, or drum reclamation unit. A burn-off oven is not an incinerator, waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Bypass stack means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

Calendar quarter means three consecutive months (nonoverlapping) beginning on: January 1, April 1, July 1, or October 1.

Calendar year means 365 consecutive days starting on January 1 and ending on December 31.

CEMS data during startup and shutdown means the following:

- (1) For incinerators, small remote incinerators, and energy recovery units: CEMS data collected during the first hours of operation of a CISWI unit startup from a cold start until waste is fed into the unit and the hours of operation following the cessation of waste material being fed to the CISWI unit during a unit shutdown. For each startup event, the length of time that CEMS data may be claimed as being CEMS data during startup must be 48 operating hours or less. For each shutdown event, the length of time that CEMS data may be claimed as being CEMS data during shutdown must be 24 operating hours or less.
- (2) For waste-burning kilns: CEMS data collected during the periods of kiln operation that do not include normal operations. Startup begins when the kiln's induced fan is turned on and continues until continuous feed is introduced into the kiln, at which time the kiln is in normal operating mode. Shutdown begins when feed to the kiln is halted.

Chemical recovery unit means combustion units burning materials to recover chemical constituents or to produce chemical compounds where there is an existing commercial market for such recovered chemical constituents or compounds. A chemical recovery unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart. The following seven types of units are considered chemical recovery units:

- (1) *Units burning only pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery process and reused in the pulping process.*
- (2) *Units burning only spent sulfuric acid used to produce virgin sulfuric acid.*
- (3) *Units burning only wood or coal feedstock for the production of charcoal.*
- (4) *Units burning only manufacturing byproduct streams/residue containing catalyst metals that are reclaimed and reused as catalysts or used to produce commercial grade catalysts.*
- (5) *Units burning only coke to produce purified carbon monoxide that is used as an intermediate in the production of other chemical compounds.*
- (6) *Units burning only hydrocarbon liquids or solids to produce hydrogen, carbon monoxide, synthesis gas, or other gases for use in other manufacturing processes.*
- (7) *Units burning only photographic film to recover silver.*

Chemical recovery unit means combustion units burning materials to recover chemical constituents or to produce chemical compounds where there is an existing commercial market for such recovered chemical constituents or compounds. The following seven types of units are considered chemical recovery units:

- (1) Units burning only pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery process and reused in the pulping process.
- (2) Units burning only spent sulfuric acid used to produce virgin sulfuric acid.
- (3) Units burning only wood or coal feedstock for the production of charcoal.
- (4) Units burning only manufacturing byproduct streams/residue containing catalyst metals that are reclaimed and reused as catalysts or used to produce commercial grade catalysts.
- (5) Units burning only coke to produce purified carbon monoxide that is used as an intermediate in the production of other chemical compounds.
- (6) Units burning only hydrocarbon liquids or solids to produce hydrogen, carbon monoxide, synthesis gas, or other gases for use in other manufacturing processes.

(7) Units burning only photographic film to recover silver.

Chemotherapeutic waste means waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.

Clean lumber means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote.

Commercial and industrial solid waste incineration (CISWI) unit means any distinct operating unit of any commercial or industrial facility that combusts, or has combusted in the preceding 6 months, any solid waste as that term is defined in 40 CFR part 241. If the operating unit burns materials other than traditional fuels as defined in § 241.2 that have been discarded, and you do not keep and produce records as required by § 60.2740(u), the operating unit is a CISWI unit. While not all CISWI units will include all of the following components, a CISWI unit includes, but is not limited to, the solid waste feed system, grate system, flue gas system, waste heat recovery equipment, if any, and bottom ash system. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the solid waste hopper (if applicable) and extends through two areas: The combustion unit flue gas system, which ends immediately after the last combustion chamber or after the waste heat recovery equipment, if any; and the combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. The CISWI unit includes all ash handling systems connected to the bottom ash handling system.

Contained gaseous material means gases that are in a container when that container is combusted.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters. A particulate matter continuous parameter monitoring system (PM CPMS) is a type of CMS.

Cyclonic burn barrel means a combustion device for waste materials that is attached to a 55 gallon, open-head drum. The device consists of a lid, which fits onto and encloses the drum, and a blower that forces combustion air into the drum in a cyclonic manner to enhance the mixing of waste material and air. A cyclonic burn barrel is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation, operating limit, or operator qualification and accessibility requirements.
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

Dioxins/furans means tetra-through octachlorinated dibenzo-p-dioxins and dibenzofurans.

Discard means, for purposes of this subpart and 40 CFR part 60, subpart DDDD, only, burned in an incineration unit without energy recovery.

Drum reclamation unit means a unit that burns residues out of drums (e.g., 55 gallon drums) so that the drums can be reused.

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition. A dry scrubber is a dry control system.

Energy recovery means the process of recovering thermal energy from combustion for useful purposes such as steam generation or process heating.

Energy recovery unit means a combustion unit combusting solid waste (as that term is defined by the Administrator in 40 CFR part 241) for energy recovery. Energy recovery units include units that would be considered boilers and process heaters if they did not combust solid waste.

Energy recovery unit designed to burn biomass (Biomass) means an energy recovery unit that burns solid waste, biomass, and non-coal solid materials but less than 10 percent coal, on a heat input basis on an annual average, either alone or in combination with liquid waste, liquid fuel or gaseous fuels.

Energy recovery unit designed to burn liquid waste materials and gas (Liquid/gas) means an energy recovery unit that burns a liquid waste with liquid or gaseous fuels not combined with any solid fuel or waste materials.

Energy recovery unit designed to burn solid materials (Solids) includes energy recovery units designed to burn coal and energy recovery units designed to burn biomass

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse.

Foundry sand thermal reclamation unit means a type of part reclamation unit that removes coatings that are on foundry sand. A foundry sand thermal reclamation unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Incinerator means any furnace used in the process of combusting solid waste (as that term is defined by the Administrator in 40 CFR part 241) for the purpose of reducing the volume of the waste by removing combustible matter. Incinerator designs include single chamber and two-chamber.

Kiln means an oven or furnace, including any associated preheater or precalciner devices, used for processing a substance by burning, firing or drying. Kilns include cement kilns that produce clinker by heating limestone and other materials for subsequent production of Portland Cement.

Laboratory analysis unit means units that burn samples of materials for the purpose of chemical or physical analysis. A laboratory analysis unit is not an incinerator, waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Load fraction means the actual heat input of an energy recovery unit divided by heat input during the performance test that established the minimum sorbent injection rate or minimum activated carbon injection rate, expressed as a fraction (e.g., for 50 percent load the load fraction is 0.5).

Low-level radioactive waste means waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable Federal or State standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual

manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions.

Minimum voltage or amperage means 90 percent of the lowest test-run average voltage or amperage to the electrostatic precipitator measured during the most recent particulate matter or mercury performance test demonstrating compliance with the applicable emission limits.

Modification or modified CISWI unit means a CISWI unit that has been changed later than August 7, 2013, and that meets one of two criteria:

- (1) The cumulative cost of the changes over the life of the unit exceeds 50 percent of the original cost of building and installing the CISWI unit (not including the cost of land) updated to current costs (current dollars). To determine what systems are within the boundary of the CISWI unit used to calculate these costs, see the definition of CISWI unit.
- (2) Any physical change in the CISWI unit or change in the method of operating it that increases the amount of any air pollutant emitted for which section 129 or section 111 of the Clean Air Act has established standards.

Municipal solid waste or municipal-type solid waste means household, commercial/retail, or institutional waste. Household waste includes material discarded by residential dwellings, hotels, motels, and other similar permanent or temporary housing. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes materials discarded by schools, by hospitals (nonmedical), by nonmanufacturing activities at prisons and government facilities, and other similar establishments or facilities. Household, commercial/retail, and institutional waste does include yard waste and refuse-derived fuel. Household, commercial/retail, and institutional waste does not include used oil; sewage sludge; wood pallets; construction, renovation, and demolition wastes (which include railroad ties and telephone poles); clean wood; industrial process or manufacturing wastes; medical waste; or motor vehicles (including motor vehicle parts or vehicle fluff).

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Operating day means a 24-hour period between 12:00 midnight and the following midnight during which any amount of solid waste is combusted at any time in the CISWI unit.

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler or process heater flue gas, boiler/process heater, firebox, or other appropriate location. This definition includes oxygen trim systems and certified oxygen CEMS. The source owner or operator is responsible to install, calibrate, maintain, and operate the oxygen analyzer system in accordance with the manufacturer's recommendations.

Oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller.

Part reclamation unit means a unit that burns coatings off parts (e.g., tools, equipment) so that the parts can be reconditioned and reused.

Particulate matter means total particulate matter emitted from CISWI units as measured by Method 5 or Method 29 of appendix A of this part.

Pathological waste means waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding (if applicable).

Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

Process change means any of the following physical or operational changes:

- (1) A physical change (maintenance activities excluded) to the CISWI unit which may increase the emission rate of any air pollutant to which a standard applies;
- (2) An operational change to the CISWI unit where a new type of non-hazardous secondary material is being combusted;
- (3) A physical change (maintenance activities excluded) to the air pollution control devices used to comply with the emission limits for the CISWI unit (e.g., replacing an electrostatic precipitator with a fabric filter);
- (4) An operational change to the air pollution control devices used to comply with the emission limits for the affected CISWI unit (e.g., change in the sorbent injection rate used for activated carbon injection).

Rack reclamation unit means a unit that burns the coatings off racks used to hold small items for application of a coating. The unit burns the coating overspray off the rack so the rack can be reused.

Raw mill means a ball or tube mill, vertical roller mill or other size reduction equipment, that is not part of an in-line kiln/raw mill, used to grind feed to the appropriate size. Moisture may be added or removed from the feed during the grinding operation. If the raw mill is used to remove moisture from feed materials, it is also, by definition, a raw material dryer. The raw mill also includes the air separator associated with the raw mill.

Reconstruction means rebuilding a CISWI unit and meeting two criteria:

- (1) The reconstruction begins on or after June 1, 2001.
- (2) The cumulative cost of the construction over the life of the incineration unit exceeds 50 percent of the original cost of building and installing the CISWI unit (not including land) updated to current costs (current dollars). To determine what systems are within the boundary of the CISWI unit used to calculate these costs, see the definition of CISWI unit.

Refuse-derived fuel means a type of municipal solid waste produced by processing municipal solid waste through shredding and size classification. This includes all classes of refuse-derived fuel including two fuels:

- (1) Low-density fluff refuse-derived fuel through densified refuse-derived fuel.
- (2) Pelletized refuse-derived fuel.

Responsible official means one of the following:

- (1) For a corporation: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or

- (ii) The delegation of authority to such representatives is approved in advance by the permitting authority;
- (2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- (3) For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA); or
- (4) For affected facilities:
 - (i) The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Clean Air Act or the regulations promulgated thereunder are concerned; or
 - (ii) The designated representative for any other purposes under part 60.

Shutdown means the period of time after all waste has been combusted in the primary chamber.

Small, remote incinerator means an incinerator that combusts solid waste (as that term is defined by the Administrator in 40 CFR part 241) and combusts 3 tons per day or less solid waste and is more than 25 miles driving distance to the nearest municipal solid waste landfill.

Soil treatment unit means a unit that thermally treats petroleum-contaminated soils for the sole purpose of site remediation. A soil treatment unit may be direct-fired or indirect fired. A soil treatment unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Solid waste means the term solid waste as defined in 40 CFR 241.2.

Solid waste incineration unit means a distinct operating unit of any facility which combusts any solid waste (as that term is defined by the Administrator in 40 CFR part 241) material from commercial or industrial establishments or the general public (including single and multiple residences, hotels and motels). Such term does not include incinerators or other units required to have a permit under section 3005 of the Solid Waste Disposal Act. The term “solid waste incineration unit” does not include:

- (1) Materials recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals;
- (2) Qualifying small power production facilities, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 769(17)(C)), or qualifying cogeneration facilities, as defined in section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), which burn homogeneous waste (such as units which burn tires or used oil, but not including refuse-derived fuel) for the production of electric energy or in the case of qualifying cogeneration facilities which burn homogeneous waste for the production of electric energy and steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating or cooling purposes; or
- (3) Air curtain incinerators provided that such incinerators only burn wood wastes, yard wastes and clean lumber and that such air curtain incinerators comply with opacity limitations to be established by the Administrator by rule.

Space heater means a unit that meets the requirements of 40 CFR 279.23. A space heater is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Standard conditions, when referring to units of measure, means a temperature of 68 °F (20 °C) and a pressure of 1 atmosphere (101.3 kilopascals).

Startup period means the period of time between the activation of the system and the first charge to the unit.

Waste-burning kiln means a kiln that is heated, in whole or in part, by combusting solid waste (as the term is defined by the Administrator in 40 CFR part 241). Secondary materials used in Portland cement kilns shall not be deemed to be combusted unless they are introduced into the flame zone in the hot end of the kiln or mixed with the precalciner fuel.

Wet scrubber means an add-on air pollution control device that uses an aqueous or alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.

Wood waste means untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings. Wood waste does not include:

- (1) Grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands.
- (2) Construction, renovation, or demolition wastes.
- (3) Clean lumber.

[65 FR 75362, Dec. 1, 2000, as amended at 70 FR 55581, Sept. 22, 2005; 76 FR 15782, Mar. 21, 2011; 78 FR 9205, Feb. 7, 2013]

Table 1 to Subpart DDDD of Part 60—Model Rule—Increments of Progress and Compliance Schedules

Comply with these increments of progress	By these dates ^a
Increment 1—Submit final control plan	(Dates to be specified in state plan).
Increment 2—Final compliance	(Dates to be specified in state plan). ^b

^a Site-specific schedules can be used at the discretion of the state.

^b The date can be no later than 3 years after the effective date of state plan approval or December 1, 2005 for CISWI units that commenced construction on or before November 30, 1999. The date can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018, for CISWI units that commenced construction on or before June 4, 2010. [76 FR 15784, Mar. 21, 2011, as amended at 78 FR 9207, Feb. 7, 2013]

Table 2 to Subpart DDDD of Part 60—Model Rule—Emission Limitations That Apply to Incinerators Before [Date to be specified in state plan]^b

For the air pollutant	You must meet this emission limitation ^a	Using this averaging time	And determining compliance using this method
Cadmium	0.004 milligrams per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of appendix A of this part)

Carbon monoxide	157 parts per million by dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 10, 10A, or 10B, of appendix A of this part)
Dioxins/furans (toxic equivalency basis)	0.41 nanograms per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 23 of appendix A of this part)
Hydrogen chloride	62 parts per million by dry volume	3-run average (For Method 26, collect a minimum volume of 120 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run)	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A-8).
Lead	0.04 milligrams per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of appendix A of this part)
Mercury	0.47 milligrams per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A-8) or ASTM D6784-02 (Reapproved 2008). ^c
Opacity	10 percent	Three 1-hour blocks consisting of ten 6-minute average opacity values	Performance test (Method 9 at 40 CFR part 60, appendix A-4).
Oxides of nitrogen	388 parts per million by dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Methods 7 or 7E at 40 CFR part 60, appendix A-4).
Particulate matter	70 milligrams per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 5 or 29 of appendix A of this part)
Sulfur dioxide	20 parts per million by dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 6 or 6c of appendix A of this part)

^a All emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions.

^b Applies only to incinerators subject to the CISWI standards through a state plan or the Federal plan prior to June 4, 2010. The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

^c Incorporated by reference, *see* § 60.17.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15784, Mar. 21, 2011]

Table 3 to Subpart DDDD of Part 60—Model Rule—Operating Limits for Wet Scrubbers

For these operating parameters	You must establish these operating limits	And monitor using these minimum frequencies		
		Data measurement	Data recording	Averaging time
Charge rate	Maximum charge rate	Continuous	Every hour	Daily (batch units). 3-hour rolling (continuous and intermittent units) ^a
Pressure drop across the wet scrubber or amperage to wet scrubber	Minimum pressure drop or amperage	Continuous	Every 15 minutes	3-hour rolling ^a
Scrubber liquor flow rate	Minimum flow rate	Continuous	Every 15 minutes	3-hour rolling ^a
Scrubber liquor pH	Minimum pH	Continuous	Every 15 minutes	3-hour rolling ^a

^a Calculated each hour as the average of the previous 3 operating hours.

Table 4 to Subpart DDDD of Part 60—Model Rule—Toxic Equivalency Factors

Dioxin/furan isomer	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01

octachlorinated dibenzofuran	0.001
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[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15785, Mar. 21, 2011]

Table 5 to Subpart DDDD of Part 60—Model Rule—Summary of Reporting Requirements ^a

Report	Due date	Contents	Reference
Waste Management Plan	No later than the date specified in table 1 for submittal of the final control plan	<ul style="list-style-type: none"> Waste management plan 	§ 60.2755.
Initial Test Report	No later than 60 days following the initial performance test	<ul style="list-style-type: none"> Complete test report for the initial performance test The values for the site-specific operating limits Installation of bag leak detection systems for fabric filters 	§ 60.2760.
Annual report	No later than 12 months following the submission of the initial test report. Subsequent reports are to be submitted no more than 12 months following the previous report	<ul style="list-style-type: none"> Name and address Statement and signature by responsible official Date of report Values for the operating limits Highest recorded 3-hour average and the lowest 3-hour average, as applicable, for each operating parameter recorded for the calendar year being reported 	§§ 60.2765 and 60.2770.
		<ul style="list-style-type: none"> If a performance test was conducted during the reporting period, the results of the test 	
		<ul style="list-style-type: none"> If a performance test was not conducted during the reporting period, a statement that the requirements of § 60.2720(a) were met 	
		<ul style="list-style-type: none"> Documentation of periods when all qualified CISWI unit operators were unavailable for more than 8 hours but less than 2 weeks 	
		<ul style="list-style-type: none"> If you are conducting performance tests once every 3 years consistent with § 60.2720(a), the date of the last 2 performance tests, a comparison of the emission level you achieved in the 	

		last 2 performance tests to the 75 percent emission limit threshold required in § 60.2720(a) and a statement as to whether there have been any operational changes since the last performance test that could increase emissions	
Emission limitation or operating limit deviation report	By August 1 of that year for data collected during the first half of the calendar year. By February 1 of the following year for data collected during the second half of the calendar year	<ul style="list-style-type: none"> • Dates and times of deviation • Averaged and recorded data for those dates • Duration and causes of each deviation and the corrective actions taken • Copy of operating limit monitoring data and any test reports • Dates, times and causes for monitor downtime incidents 	§ 60.2775 and 60.2780.
Qualified Operator Deviation Notification	Within 10 days of deviation	<ul style="list-style-type: none"> • Statement of cause of deviation • Description of efforts to have an accessible qualified operator • The date a qualified operator will be accessible 	§ 60.2785(a)(1).
Qualified Operator Deviation Status Report	Every 4 weeks following deviation	<ul style="list-style-type: none"> • Description of efforts to have an accessible qualified operator • The date a qualified operator will be accessible • Request for approval to continue operation 	§ 60.2785(a)(2).
Qualified Operator Deviation Notification of Resumed Operation	Prior to resuming operation	<ul style="list-style-type: none"> • Notification that you are resuming operation 	§ 60.2785(b)

^a This table is only a summary, see the referenced sections of the rule for the complete requirements.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15785, Mar. 21, 2011]

Table 6 to Subpart DDDD of Part 60—Model Rule—Emission Limitations That Apply to Incinerators on and After [Date to be specified in state plan] ^a

For the air pollutant	You must meet this emission limitation ^b	Using this averaging time	And determining compliance using this method
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Cadmium	0.0026 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 2 dry standard cubic meters)	Performance test (Method 29 at 40 CFR part 60, appendix A-8). Use ICPMS for the analytical finish.
Carbon monoxide	17 parts per million dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 10 at 40 CFR part 60, appendix A-4).
Dioxins/furans (total mass basis)	4.6 nanograms per dry standard cubic meter	3-run average (collect a minimum volume of 2 dry standard cubic meters)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Dioxins/furans (toxic equivalency basis)	0.13 nanograms per dry standard cubic meter	3-run average (collect a minimum volume of 2 dry standard cubic meters)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Hydrogen chloride	29 parts per million dry volume	3-run average (For Method 26, collect a minimum volume of 60 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run)	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A-8).
Lead	0.015 milligrams per dry standard cubic meter. ^c	3-run average (collect a minimum volume of 2 dry standard cubic meters)	Performance test (Method 29 at 40 CFR part 60, appendix A-8). Use ICPMS for the analytical finish.
Mercury	0.0048 milligrams per dry standard cubic meter	3-run average (For Method 29 an ASTM D6784-02 (Reapproved 2008) ^d , collect a minimum volume of 2 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A)	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A-8) or ASTM D6784-02 (Reapproved 2008). ^d
Oxides of nitrogen	53 parts per million dry volume	3-run average (for Method 7E, 1 hour minimum sample time per run)	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A-4).
Particulate matter filterable	34 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 1 dry standard cubic meter)	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A-3 or appendix A-8).

Sulfur dioxide	11 parts per million dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A-4).
Fugitive ash	Visible emissions for no more than 5% of the hourly observation period	Three 1-hour observation periods	Visible emission test (Method 22 at 40 CFR part 60, appendix A-7).

^a The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

^b All emission limitations are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

^c If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit, you can skip testing according to § 60.2720 if all of the other provisions of § 60.2720 are met. For all other pollutants that do not contain a footnote “c”, your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing.

^d Incorporated by reference, see § 60.17.

[76 FR 15485, Mar. 21, 2011, as amended at 78 FR 9208, Feb. 7, 2013]

Table 7 to Subpart DDDD of Part 60—Model Rule—Emission Limitations That Apply to Energy Recovery Units After May 20, 2011
[Date to be specified in state plan] ^a

For the air pollutant	You must meet this emission limitation ^b		Using this averaging time	And determining compliance using this method
	Liquid/Gas	Solids		
Cadmium	0.023 milligrams per dry standard cubic meter	Biomass—0.0014 milligrams per dry standard cubic meter. ^c Coal—0.0095 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters)	Performance test (Method 29 at 40 CFR part 60, appendix A-8). Use ICPMS for the analytical finish.
Carbon monoxide	35 parts per million dry volume	Biomass—260 parts per million dry volume Coal—95	3-run average (1 hour minimum sample time per run)	Performance test (Method 10 at 40 CFR part 60, appendix A-4).

		parts per million dry volume		
Dioxins/furans (total mass basis)	2.9 nanograms per dry standard cubic meter	Biomass—0.52 nanograms per dry standard cubic meter. ^c Coal—5.1 nanograms per dry standard cubic meter. ^c	3-run average (collect a minimum volume of 4 dry standard cubic meter)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Dioxins/furans (toxic equivalency basis)	0.32 nanograms per dry standard cubic meter	Biomass—0.12 nanograms per dry standard cubic meter Coal—0.075 nanograms per dry standard cubic meter. ^c	3-run average (collect a minimum volume of 4 dry standard cubic meters)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Hydrogen chloride	14 parts per million dry volume	Biomass—0.20 parts per million dry volume Coal—13 parts per million dry volume	3-run average (for Method 26, collect a minimum of 120 liters; for Method 26A, collect a minimum volume of 1 dry standard cubic meter)	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A-8).
Lead	0.096 milligrams per dry standard cubic meter	Biomass—0.014 milligrams per dry standard cubic meter. ^c Coal—0.14 milligrams per dry standard cubic meter. ^c	3-run average (collect a minimum volume of 2 dry standard cubic meters)	Performance test (Method 29 at 40 CFR part 60, appendix A-8). Use ICPMS for the analytical finish.
Mercury	0.0024	Biomass—	3-run average (For	Performance test (Method

	milligrams per dry standard cubic meter	0.0022 milligrams per dry standard cubic meter Coal—0.016 milligrams per dry standard cubic meter	Method 29 and ASTM D6784-02 (Reapproved 2008) ^d , collect a minimum volume of 2 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A)	29 or 30B at 40 CFR part 60, appendix A-8) or ASTM D6784-02 (Reapproved 2008) ^d .
Oxides of nitrogen	76 parts per million dry volume	Biomass—290 parts per million dry volume Coal—340 parts per million dry volume	3-run average (for Method 7E, 1 hour minimum sample time per run)	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A-4).
Particulate matter filterable	110 milligrams per dry standard cubic meter	Biomass—11 milligrams per dry standard cubic meter Coal—160 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 1 dry standard cubic meter)	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A-3 or appendix A-8) if the unit has an annual average heat input rate less than or equal to 250 MMBtu/hr; or PM CPMS (as specified in § 60.2710(x)) if the unit has an annual average heat input rate greater than 250 MMBtu/hr.
Sulfur dioxide	720 parts per million dry volume	Biomass—7.3 parts per million dry volume Coal—650 parts per million dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A-4).
Fugitive ash	Visible emissions for no more than 5 percent of the hourly	Visible emissions for no more than 5 percent of the hourly	Three 1-hour observation periods	Visible emission test (Method 22 at 40 CFR part 60, appendix A-7).

	observation period	observation period		
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^a The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

^b All emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

^c If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit, you can skip testing according to § 60.2720 if all of the other provisions of § 60.2720 are met. For all other pollutants that do not contain a footnote “c”, your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing, with the exception of annual performance tests to certify a CEMS or PM CPMS.

^d Incorporated by reference, see § 60.17.
[78 FR 9209, Feb. 7, 2013]

Table 8 to Subpart DDDD of Part 60—Model Rule—Emission Limitations That Apply to Waste-Burning Kilns After May 20, 2011
[Date to be specified in state plan.] ^a

For the air pollutant	You must meet this emission limitation ^b	Using this averaging time	And determining compliance using this method
Cadmium	0.0014 milligrams per dry standard cubic meter. ^c	3-run average (collect a minimum volume of 2 dry standard cubic meters)	Performance test (Method 29 at 40 CFR part 60, appendix A-8).
Carbon monoxide	110 (long kilns)/790 (preheater/precalciner) parts per million dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 10 at 40 CFR part 60, appendix A-4).
Dioxins/furans (total mass basis)	1.3 nanograms per dry standard cubic meter. ^c	3-run average (collect a minimum volume of 4 dry standard cubic meters)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Dioxins/furans (toxic equivalency basis)	0.075 nanograms per dry standard cubic meter. ^c	3-run average (collect a minimum volume of 4 dry standard cubic meters)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Hydrogen chloride	3.0 parts per million dry volume. ^c	3-run average (collect a minimum volume of 1 dry standard cubic meter) or 30-day rolling average if HCl	Performance test (Method 321 at 40 CFR part 63, appendix A of this part) or HCl CEMS if a wet scrubber is not used.

		CEMS is being used	
Lead	0.014 milligrams per dry standard cubic meter. ^c	3-run average (collect a minimum volume of 2 dry standard cubic meters)	Performance test (Method 29 at 40 CFR part 60, appendix A-8).
Mercury	0.011 milligrams per dry standard cubic meter	30-day rolling average	Mercury CEMS or sorbent trap monitoring system (performance specification 12A or 12B, respectively, of appendix B of this part.)
Oxides of nitrogen	630 parts per million dry volume	3-run average (for Method 7E, 1 hour minimum sample time per run)	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A-4).
Particulate matter filterable	4.6 milligrams per dry standard cubic meter	30-day rolling average	PM CPMS (as specified in § 60.2710(x))
Sulfur dioxide	600 parts per million dry volume	3-run average (for Method 6, collect a minimum of 20 liters; for Method 6C, 1 hour minimum sample time per run)	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A-4).

^a The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

^b All emission limitations are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

^c If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit, you can skip testing according to § 60.2720 if all of the other provisions of § 60.2720 are met. For all other pollutants that do not contain a footnote “c”, your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing, with the exception of annual performance tests to certify a CEMS or PM CPMS.

[78 FR 9210, Feb. 7, 2013]

Table 9 to Subpart DDDD of Part 60—Model Rule—Emission Limitations That Apply to Small, Remote Incinerators After May 20, 2011

[Date to be specified in state plan] ^a

For the air pollutant	You must meet this emission limitation ^b	Using this averaging time	And determining compliance using this method
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Cadmium	0.95 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 1 dry standard cubic meters per run)	Performance test (Method 29 at 40 CFR part 60, appendix A-8).
Carbon monoxide	64 parts per million dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 10 at 40 CFR part 60, appendix A-4).
Dioxins/furans (total mass basis)	4,400 nanograms per dry standard cubic meter ^b	3-run average (collect a minimum volume of 1 dry standard cubic meters per run)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Dioxins/furans (toxic equivalency basis)	180 nanograms per dry standard cubic meter ^b	3-run average (collect a minimum volume of 1 dry standard cubic meters)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Fugitive ash	Visible emissions for no more than 5 percent of the hourly observation period	Three 1-hour observation periods	Visible emissions test (Method 22 at 40 CFR part 60, appendix A-7).
Hydrogen chloride	300 parts per million dry volume	3-run average (For Method 26, collect a minimum volume of 120 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run)	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A-8).
Lead	2.1 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 1 dry standard cubic meters)	Performance test (Method 29 at 40 CFR part 60, appendix A-8). Use ICPMS for the analytical finish.
Mercury	0.0053 milligrams per dry standard cubic meter	3-run average (For Method 29 and ASTM D6784-02 (Reapproved 2008), ^c collect a minimum volume of 2 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A)	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A-8) or ASTM D6784-02 (Reapproved 2008). ^c
Oxides of nitrogen	190 parts per million dry volume	3-run average (for Method 7E, 1 hour minimum sample time per run)	Performance test (Method 7 or 7E at 40 CFR part 60, appendix

			A-4).
Particulate matter (filterable)	270 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 1 dry standard cubic meters)	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A-3 or appendix A-8).
Sulfur dioxide	150 parts per million dry volume	3-run average (for Method 6, collect a minimum of 20 liters per run; for Method 6C, 1 hour minimum sample time per run)	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A-4).

^aThe date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

^bAll emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

^cIncorporated by reference, see § 60.17.

[78 FR 9210, Feb. 7, 2013]

APPENDIX B

10 CSR 10-6.161 Commercial and Industrial Solid Waste Incinerators.

*PURPOSE: This rule incorporates by reference the federal regulatory requirements for existing commercial and industrial solid waste incineration units in Missouri. The evidence supporting the need for this proposed rulemaking, per 536.016, RSMo, is **Federal Register Notice 78 FR 9112**, dated February 7, 2013.*

(1) Applicability.

- (A) This rule applies to commercial and industrial solid waste incinerator (CISWI) units, defined by section (2) of this rule, as follows:
 - 1. Energy recovery units, waste burning kilns, and small remote incinerators that commenced construction on or before June 4, 2010, or commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013;
 - 2. Other CISWI incinerators that commenced construction on or before November 30, 1999 and were not modified or reconstructed after June 1, 2001; and
 - 3. Other CISWI incinerators that commenced construction after November 30, 1999, but no later than June 4, 2010, or commenced modification or reconstruction on or after June 1, 2001 but no later than August 7, 2013.
- (B) If the owner or operator of a CISWI unit makes changes that meet the definition of modification or reconstruction on or after June 1, 2001, the CISWI unit becomes subject to 40 CFR 60 subpart CCCC and the CISWI state plan no longer applies to that unit.
- (C) Exemptions to this rule are as follows:
 - 1. This rule does not apply to combustion units listed in 40 CFR 60.2555; and
 - 2. If the owner or operator of a CISWI unit makes physical or operational changes to an existing CISWI unit primarily to comply with the CISWI state plan, 40 CFR 60 subpart CCCC does not apply to that unit because such changes do not qualify as modifications or reconstructions under 40 CFR 60 subpart CCCC.

(2) Definitions.

- (A) The provisions of 40 CFR 60.2875, promulgated as of February 7, 2013, shall apply and are hereby incorporated by reference in this rule, as published by the Office of Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.
- (B) Definitions of certain terms specified in this rule, other than those defined in subsection (2)(A) of this rule, may be found in 10 CSR 10-6.020.

- (3) General Provisions. The following references to 40 CFR 60.2575 through 60.2735, 40 CFR 60.2805 through 60.2870, and 40 CFR 60, Subpart DDDD Tables 1 through 9, promulgated February 7, 2013, shall apply and are hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.
- (A) Increments of Progress—40 CFR 60.2575 through 60.2615 and 40 CFR 60.2815 through 60.2855;
 - (B) Waste Management Plan—40 CFR 60.2620 through 60.2630;
 - (C) Operator Training and Qualification—40 CFR 60.2635 through 60.2665;
 - (D) Emission Limitations and Operating Limits—40 CFR 60.2670 through 60.2685 and 40 CFR 60.2860;
 - (E) Performance Testing—40 CFR 60.2690 through 60.2695;
 - (F) Initial Compliance Requirements—40 CFR 60.2700 through 60.2706;
 - (G) Continuous Compliance Requirements—40 CFR 60.2710 through 60.2725;
 - (H) Monitoring—40 CFR 60.2730 through 60.2735 and 40 CFR 60.2865;
 - (I) Title V Operating Permits—40 CFR 60.2805; and
 - (J) Table 1 through Table 9. The compliance dates for the increments of progress are—
 - 1. For Increment 1, the final control plan must be submitted within one (1) year of the effective date of this rule; and
 - 2. For Increment 2, for CISWI units that commenced construction on or before June 4, 2010, the final compliance date is February 7, 2018.
 - (K) General reference notes:
 - 1. Units applicable under paragraph (1)(A)1. of this rule must comply with the emission limits as follows:
 - A. For energy recovery units, Table 7 of 40 CFR 60 subpart DDDD;
 - B. For waste burning kilns, Table 8 of 40 CFR 60 subpart DDDD; and
 - C. For small remote incinerators, Table 9 of 40 CFR 60 subpart DDDD;
 - 2. Units applicable under paragraph (1)(A)2. of this rule, Table 2 of 40 CFR 60 subpart DDDD; and
 - 3. Units applicable under paragraph (1)(A)3. of this rule, Table 6 of 40 CFR 60 subpart DDDD or Table 1 of 40 CFR 60 subpart CCCC, whichever is more stringent.
- (4) Reporting and Record Keeping. The provisions of 40 CFR 60.2740 through 60.2800 and 40 CFR 60.2870, promulgated as of February 17, 2013, shall apply and are hereby incorporated by reference in this rule, as published by the Office of Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.
- (5) Test Methods. *(Not applicable)*

AUTHORITY: section 643.050, RSMo Supp. 2012. Original rule filed July 15, 2013.

APPENDIX C

SCC Codes Used to Identify Possible CISWI Units.

The codes in bold type are the 21 codes that apply to incinerators.

SCC Code	SCC Level 1	SCC Level 2	SCC Level 3	SCC Level 4
10200906	External Combustion Boilers	Industrial	Wood-fired Boiler (< 50,000 Lb Steam) **	Wood/Bark Waste
30100701	Industrial Processes	Chemical Manufacturing	Carbon Reactivation	Chlorine
30101899	Industrial Processes	Chemical Manufacturing	Others Not Specified	Plastics Production
30103399	Industrial Processes	Chemical Manufacturing	Other Not Classified	Pesticides
30190013	Industrial Processes	Chemical Manufacturing	Fuel Fired Equipment	Natural Gas: Incinerators
30190014	Industrial Processes	Chemical Manufacturing	Fuel Fired Equipment	Process Gas: Incinerators
30400208	Industrial Processes	Secondary Metal Production	Copper	Wire Burning: Incinerator
30801002	Industrial Processes	Rubber and Miscellaneous Plastics Products	Extruder	Plastic Products Manufacturing
39001389	Industrial Processes	In-process Fuel Use	General	Liquid Waste
39001399	Industrial Processes	In-process Fuel Use	General	Liquid Waste
40290013	Petroleum and Solvent Evaporation	Surface Coating Operations	Fuel Fired Equipment	Natural Gas: Incinerator/Afterburner
49000203	Petroleum and Solvent Evaporation	Organic Solvent Evaporation	Waste Solvent Recovery Operations	Incinerator Stack
50100103	Waste Disposal	Solid Waste Disposal - Government	Municipal Incineration	Refuse Derived Fuel
50100505	Waste Disposal	Solid Waste Disposal - Government	Other Incineration	Medical Waste Incinerator, unspecified type, Infectious wastes only
50100508	Waste Disposal	Solid Waste Disposal - Government	Conical Design (Tee Pee) Wood Refuse	Other Incineration
50100515	Waste Disposal	Solid Waste Disposal - Government	Sludge: Multiple Hearth	Other Incineration
50100516	Waste Disposal	Solid Waste Disposal - Government	Other Incineration	Sludge: Fluidized Bed
50200101	Waste Disposal	Solid Waste Disposal - Commercial/Institutional	Multiple Chamber	Incineration
50200102	Waste Disposal	Solid Waste Disposal - Commercial/Institutional	Single Chamber	Incineration

50200103	Waste Disposal	Solid Waste Disposal - Commercial/Institutional	Controlled Air	Incineration
50200501	Waste Disposal	Solid Waste Disposal - Commercial/Institutional	Med Waste Controlled Air Incin-aka Starved air, 2-stg, or Modular comb	Incineration: Special Purpose
50200505	Waste Disposal	Solid Waste Disposal - Commercial/Institutional	Incineration: Special Purpose	Medical Waste Incinerator, unspecified type, Infectious wastes only
50300101	Waste Disposal	Solid Waste Disposal - Industrial	Multiple Chamber	Incineration
50300102	Waste Disposal	Solid Waste Disposal - Industrial	Single Chamber	Incineration
50300103	Waste Disposal	Solid Waste Disposal - Industrial	Incineration	Controlled Air
50300104	Waste Disposal	Solid Waste Disposal - Industrial	Incineration	Conical Design (Tee Pee) Municipal Refuse
50300105	Waste Disposal	Solid Waste Disposal - Industrial	Conical Design (Tee Pee) Wood Refuse	Incineration
50300501	Waste Disposal	Solid Waste Disposal - Industrial	Incineration	Hazardous Waste
50300899	Waste Disposal	Solid Waste Disposal - Industrial	General: Fugitive Emissions	Treatment, Storage, Disposal/TSDF

APPENDIX D

Combustion Units and Fuels Not Covered Under 40 CFR 60.2500 Subpart DDDD

Incinerator types that are not covered by the CISWI rule because they are covered by other incinerator rules.

Pathological Waste Incineration Units	40 CFR 60.2020 (a)
Agricultural Waste Incineration Units	40 CFR 60.2020 (b)
Municipal Waste Incineration Units	40 CFR 60.2020 (c)
Medical Waste Incineration Units	40 CFR 60.2020 (d)
Small power production facilities.(except using refuse derived fuel)	40 CFR 60.2020 (e)
Cogeneration facilities. .(except using refuse derived fuel)	40 CFR 60.2020 (f)
Hazardous waste combustion units.	40 CFR 60.2020 (g)
Sewage sludge incineration units	40 CFR 60.2020 (n)
Other solid waste incineration units	40 CFR 60.2020 (o)
Materials recovery units.	40 CFR 60.2020 (h)
Air curtain incinerators	40 CFR 60.2020 (i)
Burn-off ovens	Definitions
Space Heaters	Definitions

Fuels that are not considered solid waste by the Non-Hazardous Solid Material rule.

Tires	Scrap tires that are not discarded and are managed under the oversight of established tire collection programs, including tires removed from vehicles and off-specification tires. Shredded tires from discarded tire pick ups are considered solid waste unless the metal has been removed. (FR preamble of incinerator rule page 9132) http://www.gpo.gov/fdsys/pkg/FR-2013-02-07/pdf/2012-31632.pdf
Clean cellulosic biomass	Definition of waste
Kiln	If waste material is not introduced into the flame zone in the hot end
Processed landfill gas	Landfill gas that has been processed is considered commodity fuel
Non-hazardous secondary materials used as a fuel in a combustion unit that remain within the control of the generator and that meet the legitimacy criteria specified in	NHSM rule

NHSM rule	
Clean cellulosic biomass	NHSM rule
Used oil which meets the specifications outlined in 40 CFR 279.11	NHSM rule
Resinated wood.	NHSM rule
Coal refuse that has been recovered from legacy piles and processed in the same manner as currently generated coal refuse.	NHSM rule
Dewatered pulp and paper sludges that are not discarded and are generated and burned on-site by pulp and paper mills that burn a significant portion of such materials where such dewatered residuals are managed in a manner that preserves the meaningful heating value of the materials.	NHSM rule

APPENDIX E

Estimated Emission Calculations

These tables contain the emission factors and throughput used to estimate emission calculations for the two known CISWI sources in Table 3:

McDonald's Grocery Store

Source Description	Emission Factor (lbs/ton)	Throughput (tons/year)	Emissions (tons/year)	Emission Factor Source
PM10	4.7	26	6.11E-02	webFIRE
CO	10	26	1.30E-01	webFIRE
SO2	2.5	26	3.25E-02	webFIRE
NOx	3	26	3.90E-02	webFIRE
Cd	0.00241	26	3.13E-05	AP42 Section 2.1 Table 9 Uncontrolled
Pb	0.0282	26	3.67E-04	AP42 Section 2.1 Table 9 ESP
Hg	0.0056	26	7.28E-05	AP42 Section 2.1 Table 9 Uncontrolled
HCl	2.15	26	2.80E-02	AP42 Section 2.1 Table 9 Uncontrolled
Dioxin/Furans	2.94E-06	26	3.82E-08	AP42 Section 2.1 Table 9 Uncontrolled

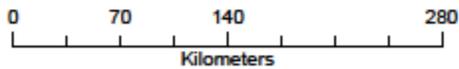
Specialty Granules

Source Description	Emission Factor (lbs/ton)	Throughput (tons/year)	Emissions (tons/year)	Emission Factor Source
PM10	4.7	124	2.91E-01	webFIRE
CO	10	124	6.20E-01	webFIRE
SO2	2.5	124	1.55E-01	webFIRE
NOx	3	124	1.86E-01	webFIRE
Cd	0.00241	124	1.49E-04	AP42 Section 2.1 Table 9 Uncontrolled
Pb	0.0282	124	1.75E-03	AP42 Section 2.1 Table 9 ESP
Hg	0.0056	124	3.47E-04	AP42 Section 2.1 Table 9 Uncontrolled
HCl	2.15	124	1.33E-01	AP42 Section 2.1 Table 9 Uncontrolled
Dioxin/Furans	2.94E-06	124	1.82E-07	AP42 Section 2.1 Table 9 Uncontrolled

APPENDIX F

Map of Affected Sources

Affected Commercial and Industrial Solid Waste Incinerators in Missouri



Facilities

- ★ McDonald's Grocery Store
- ★ Specialty Granules, INC



Missouri Department of Natural Resources
Division of Environmental Quality
Air Pollution Control Program
Prepared by Bern Johnson 16 APR 13

APPENDIX G

Public Notice – As posted on Internet

Jay Nixon, Governor
Sara Parker Pauley, Director

Air Pollution Control Program



State Plan Actions

[On Public Notice](#) | [Proposed for Adoption](#)

On Public Notice

Clean Air Act Section 111(d)/129 State Plan Revision – Section 111(d)/129 State Plan for Implementation of the Commercial and Industrial Solid Waste Incinerator Emission Guidelines for Missouri

Pursuant to sections 111(d) and 129 of the Clean Air Act, this plan was developed to demonstrate that the State of Missouri has the legal authority and enforceable mechanism in place to implement and enforce the Emission Guidelines and Compliance Times as set forth by the EPA in 40 CFR 60, Subpart DDDD for existing Commercial and Industrial Solid Waste Incinerators. The plan references legal authority established in chapter 536 of the Revised Statutes of Missouri (RSMo) and the enforceable mechanism provided by the proposed new state rule, 10 CSR 10-6.161 Commercial and Industrial Solid Waste Incinerators. This plan provides source and emission inventories of affected existing commercial and industrial solid waste incinerators in the state. It also establishes emission limits, operating requirements and compliance times that are consistent with the federal emission guidelines as promulgated.

A public hearing is scheduled for this plan action on September 26, 2013. Comments about this plan action will be accepted through the close of business on October 3, 2013.

[Section 111\(d\)/129 State Plan for Implementation of the Commercial and Industrial Solid Waste Incinerator Emission Guidelines for Missouri](#)

[Submit Comments](#)

Proposed for Adoption

None at this time.

[Back to top](#)

APPENDIX H

Missouri Air Conservation Law, sections 643.010 -643.070, RSMo

643.010. This chapter shall be known and may be cited as the "Missouri Air Conservation Law".

(L. 1965 p. 335 § 1)

*Transferred 1986; formerly 203.010

Definitions.

643.020. When used in this chapter and in standards, rules and regulations promulgated under authority of this chapter, the following words and phrases mean:

- (1) "AHERA", Asbestos Hazard Emergency Response Act of 1986 (P.L. 99-519);
- (2) "Abatement project designer", an individual who designs or plans AHERA asbestos abatement;
- (3) "Air cleaning device", any method, process, or equipment which removes, reduces, or renders less obnoxious air contaminants discharged into ambient air;
- (4) "Air contaminant", any particulate matter or any gas or vapor or any combination thereof;
- (5) "Air contaminant source", any and all sources of air contaminants whether privately or publicly owned or operated;
- (6) "Air pollution", the presence in the ambient air of one or more air contaminants in quantities, of characteristics and of a duration which directly and proximately cause or contribute to injury to human, plant, or animal life or health or to property or which unreasonably interferes with the enjoyment of life or use of property;
- (7) "Ambient air", all space outside of buildings, stacks, or exterior ducts;
- (8) "Area of the state", any geographical area designated by the commission;
- (9) "Asbestos", the asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite, tremolite and actinolite;
- (10) "Asbestos abatement", the encapsulation, enclosure or removal of asbestos-containing materials in or from a building or air contaminant source, or preparation of friable asbestos-containing material prior to demolition;
- (11) "Asbestos abatement contractor", any person who by agreement, contractual or otherwise, conducts asbestos abatement projects at a location other than his own place of business;
- (12) "Asbestos abatement projects", an activity undertaken to encapsulate, enclose or remove one hundred sixty square feet or two hundred sixty linear feet or thirty-five cubic feet or more of regulated asbestos-containing materials from buildings and other air contaminant sources, or to demolish buildings and other air contaminant sources containing one hundred sixty square feet or two hundred sixty linear feet or thirty-five cubic feet or more of regulated asbestos-containing materials;
- (13) "Asbestos abatement supervisor", an individual who directs, controls, or supervises others in asbestos abatement projects;
- (14) "Asbestos abatement worker", an individual who engages in asbestos abatement projects;

- (15) "Asbestos air sampling professional", an individual who by qualifications and experience is proficient in asbestos abatement air monitoring. The individual shall conduct, oversee or be responsible for air monitoring of asbestos abatement projects before, during and after the project has been completed;
- (16) "Asbestos air sampling technician", an individual who has been trained by an air sampling professional to do air monitoring. Such individual conducts air monitoring of an asbestos abatement project before, during and after the project has been completed;
- (17) "Asbestos-containing material", any material or product which contains more than one percent asbestos;
- (18) "Class A source", either a class A1, A2 or A3 source as defined in this section;
- (19) "Class A1 source", any air contaminant source with the potential to emit equal to or greater than one hundred tons per year of an air contaminant;
- (20) "Class A2 source", any air contaminant source, which is not a class A1 source, and with the potential, air cleaning devices not considered, to emit equal to or greater than one hundred tons per year of an air contaminant;
- (21) "Class A3 source", any air contaminant source which emits or has the potential to emit, ten tons per year or more of any hazardous air pollutant or twenty-five tons of any combination of hazardous air pollutants, or as defined pursuant to Section 112 of the federal Clean Air Act, as amended, 42 U.S.C. 7412;
- (22) "Class B source", any air contaminant source with the potential, air cleaning devices not considered, to emit equal to or greater than the de minimis amounts of an air contaminant established by the commission, but not a class A source;
- (23) "Commission", the air conservation commission of the state of Missouri created in section 643.040;
- (24) "Competent person", as defined in the United States Occupational Safety and Health Administration's (OSHA) standard 29 CFR 1926.1101(b). Such person shall also be a certified asbestos abatement supervisor;
- (25) "Conference, conciliation and persuasion", a process of verbal or written communications consisting of meetings, reports, correspondence or telephone conferences between authorized representatives of the department and the alleged violator. The process shall, at a minimum, consist of one offer to meet with the alleged violator tendered by the department. During any such meeting, the department and the alleged violator shall negotiate in good faith to eliminate the alleged violation and shall attempt to agree upon a plan to achieve compliance;
- (26) "De minimis source", any air contaminant source with a potential to emit an air contaminant, air cleaning devices not considered, less than that established by the commission as de minimis for the air contaminant;
- (27) "Department", the department of natural resources of the state of Missouri;
- (28) "Director", the director of the department of natural resources;
- (29) "Emergency asbestos project", an asbestos project that must be undertaken immediately to prevent imminent, severe, human exposure or to restore essential facility operation;
- (30) "Emission", the discharge or release into the atmosphere of one or more air contaminants;
- (31) "Emission control regulations", limitations on the emission of air contaminants into the ambient air;

- (32) "Friable asbestos-containing material", any material containing more than one percent, as determined by either the method specified in appendix E, section 1 Polarized Light Microscopy in 40 CFR Part 61, Subpart M or EPA/600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials, asbestos that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure;
- (33) "Grinding", to reduce to powder or small fragments and includes mechanical chipping or drilling;
- (34) "Inspector", an individual who collects and assimilates information used to determine whether asbestos-containing material is present in a building or other air contaminant sources;
- (35) "Management planner", an individual, under AHERA, who devises and writes plans for asbestos abatement;
- (36) "Minor violation", a violation which possesses a small potential to harm the environment or human health or cause pollution, was not knowingly committed, and is not defined by the United States Environmental Protection Agency as other than minor;
- (37) "Nonattainment area", any area designated by the governor as a "nonattainment area" as defined in the federal Clean Air Act, as amended, 42 U.S.C. 7501;
- (38) "Nonfriable asbestos-containing material", any material containing more than one percent asbestos as determined by either the method specified in appendix E, section 1 Polarized Light Microscopy in 40 CFR Part 61, Subpart M or EPA/600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials, that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure;
- (39) "Person", any individual, partnership, copartnership, firm, company, or public or private corporation, association, joint stock company, trust, estate, political subdivision, or any agency, board, department, or bureau of the state or federal government, or any other legal entity whatever which is recognized by law as the subject of rights and duties;
- (40) "Regulated asbestos-containing material" or "RACM":
- (a) Friable asbestos-containing material;
 - (b) Category I nonfriable asbestos-containing material that will be or has been subjected to sanding, grinding, cutting, or abrading; or
 - (c) Category II nonfriable asbestos-containing material that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations;
- (41) "School district", seven-director districts, urban school districts, and metropolitan school districts, as defined in section 160.011;
- (42) "Small business", for the purpose of sections 643.010 to 643.355, a small business shall include any business regulated under this chapter, which is not a class A source and which employs less than one hundred people and emits less than fifty tons of any regulated pollutant per year and less than seventy-five tons of all regulated pollutants or as otherwise defined by the commission by rule.
(L. 1965 p. 335 § 2, A.L. 1972 H.B. 1184, A.L. 1988 H.B. 1187, A.L. 1989 H.B. 77, et al., A.L. 1992 S.B. 544, A.L. 1993 S.B. 80, et al., A.L. 1994 S.B. 590, A.L. 2011 H.B. 89)
*Transferred 1986; formerly 203.020
CROSS REFERENCE:
Nonseverability clause, 640.099

Intent of law--commission to control air pollution.

643.030. The discharge into the ambient air of air contaminants so as to cause or contribute to air pollution is contrary to the public policy of Missouri and in violation of this chapter. It is the intent and purpose of this chapter to maintain purity of the air resources of the state to protect the health, general welfare and physical property of the people, maximum employment and the full industrial development of the state. The commission shall seek the accomplishment of this objective through the prevention, abatement and control of air pollution by all practical and economically feasible methods. (L. 1965 p. 335 § 3)

*Transferred 1986; formerly 203.030

Air conservation commission created--members, terms, expenses, meetings.

643.040. 1. There is created hereby an air pollution control agency to be known as the "Air Conservation Commission of the State of Missouri", whose domicile for the purposes of sections 643.010 to 643.355 is the department of natural resources of the state of Missouri. The commission shall consist of seven members appointed by the governor, with the advice and consent of the senate. No more than four of the members shall belong to the same political party and no two members shall be a resident of and domiciled in the same senatorial district. At the first meeting of the commission and at yearly intervals thereafter, the members shall select from among themselves a chairman and a vice chairman.

2. All members shall be representative of the general interest of the public and shall have an interest in and knowledge of air conservation and the effects and control of air contaminants. At least three of such members shall represent agricultural, industrial and labor interests, respectively. The governor shall not appoint any other person who has a substantial interest as defined in section 105.450 in any business entity regulated under this chapter or any business entity which would be regulated under this chapter if located in Missouri. The commission shall establish rules of procedure which specify when members shall exempt themselves from participating in discussions and from voting on issues before the commission due to potential conflict of interest.

3. The members' terms of office shall be four years and until their successors are selected and qualified, except that the terms of those first appointed shall be staggered to expire at intervals of one, two and three years after the date of appointment as designated by the governor at the time of appointment. There is no limitation of the number of terms any appointed member may serve. If a vacancy occurs the governor may appoint a member for the remaining portion of the unexpired term created by the vacancy. The governor may remove any appointed member for cause. The members of the commission shall be reimbursed for travel and other expenses actually and necessarily incurred in the performance of their duties.

4. The commission shall hold at least nine regular meetings each year and such additional regular meetings as the chairman deems desirable at a place and time to be fixed by the chairman. Special meetings may be called by three members of the commission upon delivery of written notice to each member of the commission. Reasonable written notice of all meetings shall be given to all members of the commission. Four members of the commission shall constitute a quorum. All powers and duties conferred upon members of the commission shall be exercised personally by the members and not by alternates or representatives. All actions of the commission shall be taken at meetings open to the public, except as provided in chapter 610. Any member absent from four regular

commission meetings per calendar year for any cause whatsoever shall be deemed to have resigned and the vacancy shall be filled immediately in accordance with subsection 1 and subsection 3 of this section.

(L. 1965 p. 335 § 4, A.L. 1972 H.B. 1184, A.L. 1992 S.B. 544, A.L. 1994 S.B. 590, A.L. 1998 H.B. 1601, et al., A.L. 2011 H.B. 89)

*Transferred 1986; formerly 203.040

CROSS REFERENCE:

Nonseverability clause, 640.099

Powers and duties of commission--rules, procedure.

643.050. 1. In addition to any other powers vested in it by law the commission shall have the following powers:

(1) Adopt, promulgate, amend and repeal rules and regulations consistent with the general intent and purposes of sections 643.010 to 643.355, chapter 536, and Titles V and VI of the federal Clean Air Act, as amended, 42 U.S.C. 7661, et seq., including but not limited to:

(a) Regulation of use of equipment known to be a source of air contamination;

(b) Establishment of maximum quantities of air contaminants that may be emitted from any air contaminant source; and

(c) Regulations necessary to enforce the provisions of Title VI of the Clean Air Act, as amended, 42 U.S.C. 7671, et seq., regarding any Class I or Class II substances as defined therein;

(2) After holding public hearings in accordance with section 643.070, establish areas of the state and prescribe air quality standards for such areas giving due recognition to variations, if any, in the characteristics of different areas of the state which may be deemed by the commission to be relevant;

(3) (a) To require persons engaged in operations which result in air pollution to monitor or test emissions and to file reports containing information relating to rate, period of emission and composition of effluent;

(b) Require submission to the director for approval of plans and specifications for any article, machine, equipment, device, or other contrivance specified by regulation the use of which may cause or control the issuance of air contaminants; but any person responsible for complying with the standards established under sections 643.010 to 643.355 shall determine, unless found by the director to be inadequate, the means, methods, processes, equipment and operation to meet the established standards;

(4) Hold hearings upon appeals from orders of the director or from any other actions or determinations of the director hereunder for which provision is made for appeal, and in connection therewith, issue subpoenas requiring the attendance of witnesses and the production of evidence reasonably relating to the hearing;

(5) Enter such order or determination as may be necessary to effectuate the purposes of sections 643.010 to 643.355. In making its orders and determinations hereunder, the commission shall exercise a sound discretion in weighing the equities involved and the advantages and disadvantages to the person involved and to those affected by air contaminants emitted by such person as set out in section 643.030. If any small business, as defined by section 643.020, requests information on what would constitute compliance with the requirements of sections 643.010 to 643.355 or any order or determination of the department or commission, the department shall respond with written criteria to inform the small business of the actions necessary for compliance. No enforcement action shall

be undertaken by the department or commission until the small business has had a period of time, negotiated with the department, to achieve compliance;

(6) Cause to be instituted in a court of competent jurisdiction legal proceedings to compel compliance with any final order or determination entered by the commission or the director;

(7) Settle or compromise in its discretion, as it may deem advantageous to the state, any suit for recovery of any penalty or for compelling compliance with the provisions of any rule;

(8) Develop such facts and make such investigations as are consistent with the purposes of sections 643.010 to 643.355, and, in connection therewith, to enter or authorize any representative of the department to enter at all reasonable times and upon reasonable notice in or upon any private or public property for the purpose of inspecting or investigating any condition which the commission or director shall have probable cause to believe to be an air contaminant source or upon any private or public property having material information relevant to said air contaminant source. The results of any such investigation shall be reduced to writing, and a copy thereof shall be furnished to the owner or operator of the property. No person shall refuse entry or access, requested for purposes of inspection under this provision, to an authorized representative of the department who presents appropriate credentials, nor obstruct or hamper the representative in carrying out the inspection. A suitably restricted search warrant, upon a showing of probable cause in writing and upon oath, shall be issued by any judge having jurisdiction to any such representative for the purpose of enabling him to make such inspection;

(9) Secure necessary scientific, technical, administrative and operational services, including laboratory facilities, by contract or otherwise, with any educational institution, experiment station, or any board, department, or other agency of any political subdivision or state or the federal government;

(10) Classify and identify air contaminants; and

(11) Hold public hearings as required by sections 643.010 to 643.355.

2. No rule or portion of a rule promulgated under the authority of this chapter shall become effective unless it has been promulgated pursuant to the provisions of section 536.024.

3. The commission shall have the following duties with respect to the prevention, abatement and control of air pollution:

(1) Prepare and develop a general comprehensive plan for the prevention, abatement and control of air pollution;

(2) Encourage voluntary cooperation by persons or affected groups to achieve the purposes of sections 643.010 to 643.355;

(3) Encourage political subdivisions to handle air pollution problems within their respective jurisdictions to the extent possible and practicable and provide assistance to political subdivisions;

(4) Encourage and conduct studies, investigations and research;

(5) Collect and disseminate information and conduct education and training programs;

(6) Advise, consult and cooperate with other agencies of the state, political subdivisions, industries, other states and the federal government, and with interested persons or groups;

(7) Represent the state of Missouri in all matters pertaining to interstate air pollution including the negotiations of interstate compacts or agreements.

4. Nothing contained in sections 643.010 to 643.355 shall be deemed to grant to the commission or department any jurisdiction or authority with respect to air pollution existing solely within commercial and industrial plants, works, or shops or to affect any aspect of employer-employee relationships as to health and safety hazards.

5. Any information relating to secret processes or methods of manufacture or production discovered through any communication required under this section shall be kept confidential.

(L. 1965 p. 335 § 5, A.L. 1972 H.B. 1184, A.L. 1992 S.B. 544, A.L. 1993 S.B. 52, A.L. 1995 S.B. 3, A.L. 2011 H.B. 89)

*Transferred 1986; formerly 203.050

CROSS REFERENCE:

Nonseverability clause, 640.099

Commission may adopt rules for compliance with federal law--suspension, reinstatement--exemption, limitations.

643.055. 1. Other provisions of law notwithstanding, the Missouri air conservation commission shall have the authority to promulgate rules and regulations, pursuant to chapter 536, to establish standards and guidelines to ensure that the state of Missouri is in compliance with the provisions of the federal Clean Air Act, as amended (42 U.S.C. Section 7401, et seq.). The standards and guidelines so established shall not be any stricter than those required under the provisions of the federal Clean Air Act, as amended; nor shall those standards and guidelines be enforced in any area of the state prior to the time required by the federal Clean Air Act, as amended. The restrictions of this section shall not apply to the parts of a state implementation plan developed by the commission to bring a nonattainment area into compliance and to maintain compliance when needed to have a United States Environmental Protection Agency approved state implementation plan. The determination of which parts of a state implementation plan are not subject to the restrictions of this section shall be based upon specific findings of fact by the air conservation commission as to the rules, regulations and criteria that are needed to have a United States Environmental Protection Agency approved plan.

2. The Missouri air conservation commission shall also have the authority to grant exceptions and variances from the rules set under subsection 1 of this section when the person applying for the exception or variance can show that compliance with such rules:

- (1) Would cause economic hardship; or
- (2) Is physically impossible; or
- (3) Is more detrimental to the environment than the variance would be; or
- (4) Is impractical or of insignificant value under the existing conditions.

(L. 1979 S.B. 21 § 1, A.L. 1992 S.B. 544, A.L. 1994 S.B. 590)

*Transferred 1986; formerly 203.055

Powers and duties of director.

643.060. In addition to any other powers vested by law, the director shall have the following powers and duties:

- (1) Retain, employ, provide for, and compensate, within appropriations available therefor, such consultants, assistants, deputies, clerks, and other employees on a full- or part-time basis as may be necessary to carry out the provisions of sections 643.010 to

643.355 and prescribe the times at which they shall be appointed and their powers and duties;

(2) Accept, receive and administer grants or other funds or gifts from public and private agencies including the federal government for the purpose of carrying out any of the functions of sections 643.010 to 643.355. The director shall apply for all available grants and funds authorized and distributed pursuant to Title XI of the federal Clean Air Act, as amended, 29 U.S.C. 1662e, for training, assistance and payments to eligible individuals. The director shall report annually to the governor and the general assembly the amount of revenue received under Title XI of the Clean Air Act and the distribution of such funds to eligible persons. Funds received by the director pursuant to this section shall be deposited with the state treasurer and held and disbursed by him in accordance with the appropriations of the general assembly. The director is authorized to enter into contracts as he may deem necessary for carrying out the provisions of sections 643.010 to 643.355;

(3) Budget and receive duly appropriated moneys for expenditures to carry out the provisions and purposes of sections 643.010 to 643.355;

(4) Administer and enforce sections 643.010 to 643.355, investigate complaints, issue orders and take all actions necessary to implement sections 643.010 to 643.355;

(5) Receive and act upon reports, plans, specifications and applications submitted under rules promulgated by the commission. Any person aggrieved by any action of the director under this provision shall be entitled to a hearing before the commission as provided in section 643.080. The commission may sustain, reverse, or modify any action of the director taken under this provision, or make such other order as the commission shall deem appropriate under the circumstances.

(L. 1965 p. 335 § 6, A.L. 1972 H.B. 1184, A.L. 1992 S.B. 544, A.L. 2011 H.B. 89)

*Transferred 1986; formerly 203.060

CROSS REFERENCE:

Nonseverability clause, 640.099

Commission to adopt rules, notice--public hearing.

643.070. 1. The commission shall adopt rules pursuant to chapter 536. The commission shall notify any air pollution control agency with a certificate of authority which may be affected by the rule and any person who has previously requested notice when the proposed rulemaking is submitted to the secretary of state for publication in the Missouri Register. In addition, any interested persons, whether or not heard, may submit, within seven days subsequent to the hearings, a written statement of their views. The commission may solicit the views, in writing, of persons who may be affected by, or interested in, proposed rules and regulations, or standards. Any person heard or represented at the hearing or making written request for notice shall be given written notice of the action of the commission with respect to the subject thereof.

2. Rules shall be approved after public hearing and shall be approved in writing by at least four members of the commission.

3. Any rule or any amendment or repeal thereof which is adopted by the commission may differ in its terms and provisions for particular types and conditions of air pollution or air contamination, for particular air contaminant sources, and for particular areas of the state.

(L. 1965 p. 335 § 7, A.L. 1972 H.B. 1184, A.L. 1992 S.B. 544, A.L. 1993 S.B. 52)

*Transferred 1986; formerly 203.070

Order of Rulemaking

The Missouri Air Conservation Commission **ADOPTS** the following action on this 21st day of November, 2013:

10 CSR 10-6.161 (new rule) *Commercial and Industrial Solid Waste Incinerators*

Original signed by Jack C Baker

_____, Chairman

_____, Vice Chairman

_____, Member

_____, Member

_____, Member

_____, Member

_____, Member

Order of Rulemaking

The Missouri Air Conservation Commission **ADOPTS** the following action on this 21st day of November, 2013:

10 CSR 10-6.161 (new rule) *Commercial and Industrial Solid Waste Incinerators*

_____, Chairman

Original signed by Gary J. Pendergrass _____, Vice Chairman

_____, Member

_____, Member

_____, Member

_____, Member

_____, Member

Order of Rulemaking

The Missouri Air Conservation Commission **ADOPTS** the following action on this 21st day of November, 2013:

10 CSR 10-6.161 (new rule) *Commercial and Industrial Solid Waste Incinerators*

_____, Chairman

_____, Vice Chairman


Original signed by Mark Garnett

_____, Member

_____, Member

_____, Member

_____, Member

_____, Member

Order of Rulemaking

The Missouri Air Conservation Commission **ADOPTS** the following action on this 21st day of November, 2013:

10 CSR 10-6.161 (new rule) *Commercial and Industrial Solid Waste Incinerators*

_____, Chairman

_____, Vice Chairman

_____, Member

Original signed by David C. Zimmermann


_____, Member

_____, Member

_____, Member

_____, Member

The Missouri Air Conservation Commission **ADOPTS** the following action on this 21st day of November, 2013:

Clean Air Act Section 111(d)/129 State Plan Revision – Section 111(d)/129 State Plan for Implementation of the Commercial and Industrial Solid Waste Incinerator Emission Guidelines for Missouri

Original signed by Jack C Baker



, Chairman

_____, Vice Chairman

_____, Member

_____, Member

_____, Member

_____, Member

_____, Member

The Missouri Air Conservation Commission **ADOPTS** the following action on this 21st day of November, 2013:

Clean Air Act Section 111(d)/129 State Plan Revision – Section 111(d)/129 State Plan for Implementation of the Commercial and Industrial Solid Waste Incinerator Emission Guidelines for Missouri

_____, Chairman

Original signed by Gary J. Pendergrass

_____, Vice Chairman

_____, Member

_____, Member

_____, Member

_____, Member

_____, Member

The Missouri Air Conservation Commission **ADOPTS** the following action on this 21st day of November, 2013:

Clean Air Act Section 111(d)/129 State Plan Revision – Section 111(d)/129 State Plan for Implementation of the Commercial and Industrial Solid Waste Incinerator Emission Guidelines for Missouri

_____, Chairman

_____, Vice Chairman


Original signed by Mark Garnett _____, Member

_____, Member

_____, Member

_____, Member

_____, Member

The Missouri Air Conservation Commission **ADOPTS** the following action on this 21st day of November, 2013:

Clean Air Act Section 111(d)/129 State Plan Revision – Section 111(d)/129 State Plan for Implementation of the Commercial and Industrial Solid Waste Incinerator Emission Guidelines for Missouri

_____, Chairman

_____, Vice Chairman

_____, Member

Original signed by David C. Zimmermann

_____, Member

_____, Member

_____, Member

_____, Member

Jay Nixon, Governor
Sara Parker Pauley, Director

Air Pollution Control Program



Rulemakings on Public

Notice

The Missouri Department of Natural Resources filed the following proposed rulemakings with the secretary of state's office and comments are being accepted as noted at the end of the proposed rulemaking under the *Notice of Public Hearing and Notice to Submit Comments* heading. To submit comments electronically, use the links below the rule or to [submit written comments](#) see the address below.

10 CSR 10-6.020 (amendment) Definitions and Common Reference Tables

This proposed amendment will provide a maintenance update to add definitions needed for other rulemakings filed while the general definitions rule was being changed and remove obsolete definitions. In addition, several non-substantive error corrections and clarification will be made.

[Proposed Rulemaking](#)- Published in August 15, 2013 *Missouri Register*

[Additional Information](#) on this rulemaking.

[Submit comments now](#)

[Submit written comments](#)

Comments will be accepted through close of business October 3, 2013.

10 CSR 10-6.161 (new rule) Commercial and Industrial Solid Waste Incinerators

This proposed rulemaking will incorporate by reference the regulatory requirements of 40 CFR 60, subpart DDDD - Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration (CISWI) Units which was promulgated by the U.S. Environmental Protection Agency (EPA) on February 7, 2013. To meet the obligations of section 111(d) of the Clean Air Act (CAA), states must submit plans by February 7, 2014 to control certain hazardous and other air pollutants at existing solid waste incineration units. Incorporation of this federal regulation into a state rule will shift enforcement authority for existing CISWI units from EPA to the State of Missouri.

[Proposed Rulemaking](#)- Published in August 15, 2013 *Missouri Register*

[Additional Information](#) on this rulemaking.

[Submit comments now](#)
[Submit written comments](#)

Comments will be accepted through close of business October 3, 2013.

10 CSR 10-3.010 (rescission) Auto Exhaust Emission Controls

This proposed rescission will remove an outdated rule originally written in 1972. This rule was intended to control emissions from all vehicles subject to required vehicle safety inspections in areas outside of the Kansas City, Springfield, and St. Louis metropolitan areas. Since the most recent rule update in 1978, standard manufactured vehicle emissions equipment has advanced significantly beyond the requirements set forth by this rule.

[Proposed Rulemaking](#)- Published in July 1, 2013 *Missouri Register*

[Additional Information](#) on this rulemaking.

[Submit comments now](#)
[Submit written comments](#)

Comments will be accepted through close of business September 5, 2013.

[Proposed Rulemaking](#)

Submit written comments about any rule development to:

Chief, Air Quality Planning Section
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176

[Back to top](#)

Jay Nixon, Governor
Sara Parker Pauley, Director

Air Pollution Control Program



State Plan Actions

[On Public Notice](#) | [Proposed for Adoption](#)

On Public Notice

Clean Air Act Section 111(d)/129 State Plan Revision – Section 111(d)/129 State Plan for Implementation of the Commercial and Industrial Solid Waste Incinerator Emission Guidelines for Missouri

Pursuant to sections 111(d) and 129 of the Clean Air Act, this plan was developed to demonstrate that the State of Missouri has the legal authority and enforceable mechanism in place to implement and enforce the Emission Guidelines and Compliance Times as set forth by the EPA in 40 CFR 60, Subpart DDDD for existing Commercial and Industrial Solid Waste Incinerators. The plan references legal authority established in chapter 536 of the Revised Statutes of Missouri (RSMo) and the enforceable mechanism provided by the proposed new state rule, 10 CSR 10-6.161 Commercial and Industrial Solid Waste Incinerators. This plan provides source and emission inventories of affected existing commercial and industrial solid waste incinerators in the state. It also establishes emission limits, operating requirements and compliance times that are consistent with the federal emission guidelines as promulgated.

A public hearing is scheduled for this plan action on September 26, 2013. Comments about this plan action will be accepted through the close of business on October 3, 2013.

[Section 111\(d\)/129 State Plan for Implementation of the Commercial and Industrial Solid Waste Incinerator Emission Guidelines for Missouri](#)

[Submit Comments](#)

Proposed for Adoption

None at this time.

[Back to top](#)

Bechtel, Cheri

From: Missouri DNR <MODNR@public.govdelivery.com>
Sent: Friday, August 23, 2013 4:27 PM
To: Bechtel, Cheri
Subject: Courtesy Copy: Missouri DNR Air Public Notices Update-MISSOURI AIR CONSERVATION COMMISSION PUBLIC HEARING

This is a courtesy copy of an email bulletin sent by Cheri Bechtel.

This bulletin was sent to the following groups of people:

Subscribers of Air Public Notices (477 recipients)



Having trouble viewing this email? [View it as a Web page.](#)



You are subscribed to the Air Public Notices topic for Missouri DNR. This information has recently been updated, and is now available at the link below. Thank you for your interest in the Air Public Notices.

<http://dnr.mo.gov/env/apcp/rulemaking.htm>

MISSOURI AIR CONSERVATION COMMISSION
WILL HOLD PUBLIC HEARING

JEFFERSON CITY, MO -- The Missouri Air Conservation Commission will hold a public hearing on Thursday, September 26, 2013 beginning at 9 a.m. at the Holiday Inn, CoCo Key, 9103 East 39th Street, Grand BC, Kansas City, Missouri. The commission will hear testimony related to the following proposed action(s):

- * 10 CSR 10-6.020 (amendment) Definitions and Common Reference Tables

This proposed amendment will provide a maintenance update to add definitions needed for other rulemakings filed while the general definitions rule was being changed and remove obsolete definitions. In addition, several non-substantive error corrections and clarification will be made.

The above rule action will be submitted for inclusion in the Missouri State Implementation Plan, for inclusion in the plan established under Clean Air Act Section 111(d) covering existing sources of noncriteria pollutants, and the Missouri Title V program.

- * 10 CSR 10-6.161 (new rule) Commercial and Industrial Solid Waste Incinerators

This rulemaking will incorporate by reference the regulatory requirements of 40 CFR 60, subpart DDDD - Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration (CISWI) Units which was promulgated by the U.S. Environmental Protection Agency (EPA) on February 7, 2013. To meet the obligations of section 111(d) of the Clean Air Act (CAA), states must submit plans by February 7, 2014 to control certain hazardous and other air pollutants at existing solid waste incineration units. Incorporation of this federal regulation into a state rule will shift enforcement authority for existing CISWI units from EPA to the State of Missouri.

The above rule action will not be submitted for inclusion in the Missouri State Implementation Plan but will be submitted for inclusion in the plan established under Clean Air Act Section 111(d) covering existing sources of noncriteria pollutants.

- * Clean Air Act Section 111(d)/129 State Plan Revision — Section 111(d)/129 State Plan for Implementation of the Commercial and Industrial Solid Waste Incinerator Emission Guidelines for Missouri

Pursuant to sections 111(d) and 129 of the Clean Air Act, this plan was developed to demonstrate that the State of Missouri has the legal authority and enforceable mechanism in place to implement and enforce the Emission Guidelines and Compliance Times as set forth by the EPA in 40 CFR 60, Subpart DDDD for existing Commercial and Industrial Solid Waste Incinerators. The plan references legal authority established in chapter 536 of the Revised Statutes of Missouri (RSMo) and the enforceable mechanism provided by the proposed new state rule, 10 CSR 10-6.161 Commercial and Industrial Solid Waste Incinerators. This plan provides source and emission inventories of affected existing commercial and industrial solid waste incinerators in the state. It also establishes emission limits, operating requirements and compliance times that are consistent with the federal emission guidelines as promulgated.

The above plan action will not be submitted for inclusion in the Missouri State Implementation Plan but will be submitted for inclusion in the plan established under Clean Air Act Section 111(d) covering existing sources of noncriteria pollutants.

If the Commission adopts the action(s), it will be the Department's intention to submit the action(s) to the U.S. Environmental Protection Agency to be included in Missouri's State Implementation Plan unless otherwise noted above.

Documents for the above item(s) will be available for review at the Missouri Department of Natural Resources, Air Pollution Control Program, 1659 Elm Street, Jefferson City, (573) 751-4817 and in the Public Notices section of the program web site <http://dnr.mo.gov/env/apcp/public-notices.htm>. This information will be available at least 30 days prior to the public hearing date.

The Department will accept written or email comments for the record until 5 p.m. on October 3, 2013. Please send written comments to Chief, Air Quality Planning Section, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176. Email comments may be submitted via the program web site noted above. All written and email comments and public hearing testimony will be equally considered.

Citizens wishing to speak at the public hearing should notify the secretary to the Missouri Air Conservation Commission, Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102-0176, or telephone (573) 526-3420. The Department requests persons intending to give verbal presentations also provide a written copy of their testimony to the commission secretary at the time of the public hearing.

Persons with disabilities requiring special services or accommodations to attend the meeting can make

arrangements by calling the Program directly at (573) 751-4817, the Division of Environmental Quality's toll free number at (800) 361-4827, or by writing two weeks in advance of the meeting to: Missouri Department of Natural Resources, Air Conservation Commission Secretary, P.O. Box 176, Jefferson City, MO 65102. Hearing impaired persons may contact the program through Relay Missouri, (800) 735-2966.

Update your subscriptions, modify your password or email address, or stop subscriptions at any time on your [Subscriber Preferences Page](#). You will need to use your email address to log in. If you have questions or problems with the subscription service, please contact support@govdelivery.com.

This service is provided to you at no charge by [Missouri DNR](#).

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STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI AIR CONSERVATION COMMISSION

TRANSCRIPT OF PROCEEDINGS

Public Hearing
September 26, 2013
Holiday Inn CoCoKey
Grand Ballroom D
9103 East 39th Street
Kansas City, MO 64133

Mr. Jack Baker, Chairman
Mr. Gary Pendergrass (Telephonic)

Mr. Mark S. Garnett
Mr. David Zimmerman

COMMISSIONERS

Ms. Kyra Moore, Director
Mr. Kendall Hale
Ms. Wendy Vit
Ms. Shelly Reimer
Mr. Wayne Graf
Mr. Tim Duggan

Ms. Amy Bhesania, EPA Region 7
Mr. David S. Gilmore, Assistant

STAFF

1 ITEM D - PUBLIC HEARING

2 (Starting time of the Hearing Item D:
3 9:43 a.m.)

4 CHAIRMAN BAKER: The Hearing will come to
5 order. Let the record show the following
6 Commissioners are present: Jack Baker, Mark
7 Garnett, Gary Pendergrass, and David Zimmerman.

8 The Air Conservation Commission of the
9 State of Missouri has called this Public Hearing
10 pursuant to Section 643.070, Revised Statutes of
11 Missouri; EPA Promulgated Rule 40 CFR 51.102, for
12 the purpose of hearing testimony relating to:

13 10 CSR 10-6.020 (amendment) Definitions
14 and Common Reference Tables;

15 10 CSR 10-6.161 (new rule) Commercial
16 and Industrial Waste Incinerators;

17 Clean Air Act Section 111(d)/129 State
18 Plan Revision - Section 111(d)/129 State Plan for
19 Implementation of the Commercial and Industrial
20 Solid Waste Incinerator Emission Guidelines for
21 Missouri.

22 The Hearing record will close at 5:00
23 p.m. on October 3rd, 2013.

24 Anyone who has not been scheduled to
25 appear, but who wishes to be heard, should indicate

1 action, it will be the Department's intention to
2 submit this rule amendment to the U.S.
3 Environmental Protection Agency to replace the
4 current rule that is in the Missouri State
5 Implementation Plan.

6 This concludes my testimony. I will be
7 happy to answer any questions you might have
8 regarding this rule amendment.

9 CHAIRMAN BAKER: Questions? Gary, do you
10 have any questions?

11 COMMISSIONER PENDERGRASS: No.

12 CHAIRMAN BAKER: Okay. Thank you,
13 Shelly. Next will be Aaron.

14 (WHEREIN, the witness was duly sworn to
15 testify by the court reporter.)

16 MR. BASHAM: Mr. Chairman, Members of the
17 Commission.

18 My name is Aaron Basham. I am employed
19 with the Missouri Department of Natural Resources'
20 Air Pollution Control Program. I work at 1659 East
21 Elm Street in Jefferson City, Missouri.

22 I'm here to present testimony for the
23 proposed Rule 10 CSR 10-6.161 Commercial and
24 Industrial Solid Waste Incinerators. The rule
25 information begins on page 187 of the briefing

1 approval as part of the plan for commercial and
2 industrial solid waste incinerators pursuant to
3 sections 111(d) and 129 of the Clean Air Act.

4 This concludes my testimony. I will be
5 happy to answer any questions you might have
6 specific to the proposed rule.

7 CHAIRMAN BAKER: Any questions?

8 COMMISSIONER GARNETT: Aaron, where are
9 those two facilities?

10 MR. BASHAM: They're in southeast
11 Missouri. One is in Annapolis, Missouri.
12 Southeast Missouri.

13 COMMISSIONER GARNETT: Same place, both of
14 them?

15 MR. BASHAM: They are different cities.

16 CHAIRMAN BAKER: Any other questions?

17 COMMISSIONER PENDERGRASS: No.

18 CHAIRMAN BAKER: Okay, thank you, Aaron.
19 Next is Bern.

20 (WHEREIN, the witness was duly sworn to
21 testify by the court reporter.)

22 MR. JOHNSON: Mr. Chairman, Members of
23 the Commission.

24 My name is Bern Johnson. I am employed
25 with the Missouri Department of Natural Resources'

1 Air Pollution Control Program. I work at 1659 East
2 Elm Street, Jefferson City, Missouri.

3 I am here to present testimony for a
4 proposed revision to the Missouri 111(d)/129 State
5 Plan, specifically the inclusion of the Section
6 111(d)/129 State Plan for Commercial and Industrial
7 Solid Waste Incinerators in Missouri. A plan
8 summary begins on page 191 of your briefing
9 document.

10 This State plan fulfills the
11 requirements of sections 111(d) and 129 of the
12 Clean Air Act, for the emission guidelines and
13 compliance times for existing Commercial and
14 Industrial Solid Waste Incinerators (CISWI), as
15 promulgated by the United States Environmental
16 Protection Agency, and finally amended in February,
17 2013. These guidelines are established in 40 CFR,
18 Subpart DDDD. Section 111(d) establishes general
19 requirements for the control of designated
20 pollutants. Section 129 requires emission
21 guidelines to be promulgated for all categories of
22 solid waste incineration units, including CISWI's.
23 Section 129 states that all plan requirements must
24 be as protective as the federal emission guidelines
25 and that state plans must be submitted to EPA

each VOC used in a year, and the individual component vapor pressure, per the equation in paragraph (1)(E)1. of 10 CSR 10-5.540.

(W) All terms beginning with W.

1. Wall fired boiler—A boiler that has pulverized coal burners arranged on the wall of the furnace. The burners have discrete, individual flames that extend perpendicularly into the furnace area.

2. Washcoat—A transparent special purpose coating having a solids content by weight of twelve percent (12%) or less. They are applied over initial stains to protect and control color and to stiffen the wood fibers in order to aid sanding.

3. Washing—Purifying, cleaning, or removing impurities from coal by mechanical process, regardless of the cleaning medium used.

4. Washoff operations—Those operations in which organic solvent is used to remove coating from a substrate.

{15. Waste generator—The business entity that is directly responsible for the supervision of activities that result in the accumulation of friable asbestos containing waste materials.}

5. Waterproof resorcinol glue—A two (2) part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

6. Waxy, heavy pour crude oil—A crude oil with a pour point of fifty degrees Fahrenheit (50 °F) or higher as determined by the ASTM [Standard] D [(97-66)] 97-12[, Test for Pour Point of Petroleum Oils].

{7. Waterproof resorcinol glue—A two (2) part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.}

{8.7. Web—A printing process where a continuous roll of substrate is fed into the press.

{9. Wet cleaning—The process of using water or other liquid and a wet brush, mop, cloth, sponge, or similar wet cleaning device to completely remove any residue of asbestos containing materials from surfaces on which they may be located. This definition does not include the use of a wet vacuum cleaner.}

{10.8. Wet scrubber—An add on air pollution control device that utilizes an alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.

{11.9. Wood furniture—Any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured under any of the following standard industrial classification codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.

{12.10. Wood furniture component—Any part that is used in the manufacture of wood furniture. Examples include, but are not limited to, drawer sides, cabinet doors, seat cushions, and laminated tops.

{13.11. Wood furniture manufacturing operations—The finishing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.

{14. Work area—A specific room or physically isolated portion of a room, other than the space enclosed within a glove bag, in which friable asbestos containing material is required to be handled in accordance with 10 CSR 10-6.241. The area is designated as a work area from the time that the room, or portion of it, is secured and access restrictions are in place. The area remains designated as a work area until the time that it has been cleaned in accordance with any requirements applicable to these operations.}

{15.12. Working day—A day, or any part of a day, in which a facility is engaged in manufacturing.

AUTHORITY: section 643.050, RSMo Supp. 2012, and section 643.055, RSMo 2000. Original rule filed Aug. 16, 1977, effective

Feb. 11, 1978. For intervening history, please consult the Code of State Regulations. Amended: Filed July 12, 2013.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., September 26, 2013. The public hearing will be held at the Holiday Inn CoCo Key, 9103 East 39th Street, Kansas City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., October 3, 2013. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprule-spn@dnr.mo.gov.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 6—Air Quality Standards, Definitions, Sampling
and Reference Methods and Air Pollution Control
Regulations for the Entire State of Missouri

PROPOSED RULE

10 CSR 10-6.161 Commercial and Industrial Solid Waste Incinerators. If the commission adopts this rule action, it will be the department's intention to submit this new rule to the U.S. Environmental Protection Agency for inclusion in the Missouri State Plan for Designated Facilities and Pollutants pursuant to section 111(d) of the Clean Air Act for commercial and industrial solid waste incinerators. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule incorporates by reference the federal regulatory requirements for existing commercial and industrial solid waste incineration units in Missouri. The evidence supporting the need for this proposed rulemaking, per 536.016, RSMo, is **Federal Register Notice 78 FR 9112**, dated February 7, 2013.

(1) Applicability.

(A) This rule applies to commercial and industrial solid waste incinerator (CISWI) units, defined by section (2) of this rule, as follows:

1. Energy recovery units, waste burning kilns, and small remote incinerators that commenced construction on or before June 4, 2010, or commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013;

2. Other CISWI incinerators that commenced construction on or before November 30, 1999 and were not modified or reconstructed after June 1, 2001; and

3. Other CISWI incinerators that commenced construction after November 30, 1999, but no later than June 4, 2010, or commenced modification or reconstruction on or after June 1, 2001 but no later than August 7, 2013.

(B) If the owner or operator of a CISWI unit makes changes that

meet the definition of modification or reconstruction on or after June 1, 2001, the CISWI unit becomes subject to 40 CFR 60 subpart CCCC and the CISWI state plan no longer applies to that unit.

(C) Exemptions to this rule are as follows:

1. This rule does not apply to combustion units listed in 40 CFR 60.2555; and

2. If the owner or operator of a CISWI unit makes physical or operational changes to an existing CISWI unit primarily to comply with the CISWI state plan, 40 CFR 60 subpart CCCC does not apply to that unit because such changes do not qualify as modifications or reconstructions under 40 CFR 60 subpart CCCC.

(2) Definitions.

(A) The provisions of 40 CFR 60.2875, promulgated as of February 7, 2013, shall apply and are hereby incorporated by reference in this rule, as published by the Office of Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.

(B) Definitions of certain terms specified in this rule, other than those defined in subsection (2)(A) of this rule, may be found in 10 CSR 10-6.020.

(3) General Provisions. The following references to 40 CFR 60.2575 through 60.2735, 40 CFR 60.2805 through 60.2870, and 40 CFR 60, Subpart DDDD Tables 1 through 9, promulgated February 7, 2013, shall apply and are hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.

(A) Increments of Progress—40 CFR 60.2575 through 60.2615 and 40 CFR 60.2815 through 60.2855;

(B) Waste Management Plan—40 CFR 60.2620 through 60.2630;

(C) Operator Training and Qualification—40 CFR 60.2635 through 60.2665;

(D) Emission Limitations and Operating Limits—40 CFR 60.2670 through 60.2685 and 40 CFR 60.2860;

(E) Performance Testing—40 CFR 60.2690 through 60.2695;

(F) Initial Compliance Requirements—40 CFR 60.2700 through 60.2706;

(G) Continuous Compliance Requirements—40 CFR 60.2710 through 60.2725;

(H) Monitoring—40 CFR 60.2730 through 60.2735 and 40 CFR 60.2865;

(I) Title V Operating Permits—40 CFR 60.2805; and

(J) Table 1 through Table 9. The compliance dates for the increments of progress are—

1. For Increment 1, the final control plan must be submitted within one (1) year of the effective date of this rule; and

2. For Increment 2, for CISWI units that commenced construction on or before June 4, 2010, the final compliance date is February 7, 2018.

(K) General reference notes:

1. Units applicable under paragraph (1)(A)1. of this rule must comply with the emission limits as follows:

A. For energy recovery units, Table 7 of 40 CFR 60 subpart DDDD;

B. For waste burning kilns, Table 8 of 40 CFR 60 subpart DDDD; and

C. For small remote incinerators, Table 9 of 40 CFR 60 subpart DDDD;

2. Units applicable under paragraph (1)(A)2. of this rule, Table 2 of 40 CFR 60 subpart DDDD; and

3. Units applicable under paragraph (1)(A)3. of this rule, Table 6 of 40 CFR 60 subpart DDDD or Table 1 of 40 CFR 60 subpart CCCC, whichever is more stringent.

(4) Reporting and Record Keeping. The provisions of 40 CFR 60.2740 through 60.2800 and 40 CFR 60.2870, promulgated as of February 17, 2013, shall apply and are hereby incorporated by reference in this rule, as published by the Office of Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.

(5) Test Methods. *(Not applicable)*

AUTHORITY: section 643.050, RSMo Supp. 2012. Original rule filed July 12, 2013.

PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate because currently there are no public entity commercial and industrial solid waste incinerators in the state. Should an existing combustion source currently not burning solid waste elect to do so in the future and become a commercial and industrial solid waste incinerator, the cost of compliance with federal standards is accounted for in the federal rulemaking.

PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate because the rulemaking adopts federal rules without variance and costs to comply have already been accounted for in the federal rulemaking. Should an existing combustion source currently not burning solid waste elect to do so in the future and become a commercial and industrial solid waste incinerator, the cost of compliance with the federal standards is accounted for in the federal rulemaking.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed rule will begin at 9:00 a.m., September 26, 2013. The public hearing will be held at the Holiday Inn CoCo Key, 9103 East 39th Street, Kansas City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., October 3, 2013. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

~~Title 10—DEPARTMENT OF NATURAL RESOURCES~~
~~Division 40—Land Reclamation Commission~~
~~Chapter 6—Permitting Requirements for Surface and~~
~~Underground Coal Mining and Reclamation Operations~~
~~and Coal Exploration~~

~~PROPOSED AMENDMENT~~

~~10 CSR 40 6.030 Surface Mining Permit Applications—~~
~~Minimum Requirements for Legal, Financial, Compliance, and~~
~~Related Information.~~ The commission is amending sections (1) and (2).

~~PURPOSE: This amendment adds the term “member” in section (1) and “operator” in section (2) and changes other wording to better match federal regulations~~

~~(1) Identification of Interests.~~

~~(B) Each application shall contain a statement of whether the applicant is a corporation, partnership, single proprietorship, association, or other business entity. For businesses other than single proprietorships, the application shall contain the following information, where applicable:~~

This section will contain the final text of the rules proposed by agencies. The order of rulemaking is required to contain a citation to the legal authority upon which the order of rulemaking is based; reference to the date and page or pages where the notice of proposed rulemaking was published in the *Missouri Register*; an explanation of any change between the text of the rule as contained in the notice of proposed rulemaking and the text of the rule as finally adopted, together with the reason for any such change; and the full text of any section or subsection of the rule as adopted which has been changed from that contained in the notice of proposed rulemaking. The effective date of the rule shall be not less than thirty (30) days after the date of publication of the revision to the *Code of State Regulations*.

The agency is also required to make a brief summary of the general nature and extent of comments submitted in support of or opposition to the proposed rule and a concise summary of the testimony presented at the hearing, if any, held in connection with the rulemaking, together with a concise summary of the agency's findings with respect to the merits of any such testimony or comments which are opposed in whole or in part to the proposed rule. The ninety-(90-) day period during which an agency shall file its Order of Rulemaking for publication in the *Missouri Register* begins either: 1) after the hearing on the Proposed Rulemaking is held; or 2) at the end of the time for submission of comments to the agency. During this period, the agency shall file with the secretary of state the order of rulemaking, either putting the proposed rule into effect, with or without further changes, or withdrawing the proposed rule.

Title 2—DEPARTMENT OF AGRICULTURE

Division 30—Animal Health

Chapter 2—Health Requirements for Movement of Livestock, Poultry, and Exotic Animals

ORDER OF WITHDRAWAL

By the authority vested in the Department of Agriculture under section 267.645, RSMo 2000, the director withdraws a proposed amendment as follows:

2-CSR 30-2.020 Movement of Livestock, Poultry, and Exotic Animals Within Missouri is ~~withdrawn~~.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 3, 2013 (38 MoReg 1360-1362). This proposed amendment is ~~withdrawn~~.

SUMMARY OF COMMENTS: The Missouri Department of Agriculture received numerous comments on the proposed amendment. The comments emphasized that the department should further open the rule up for additional comments regarding the Trichomoniasis regulation and implementation of this rule.

RESPONSE: The Missouri Department of Agriculture has decided to withdraw the proposed amendment and seek additional stakeholder input.

Title 10—DEPARTMENT OF NATURAL RESOURCES

Division 10—Air Conservation Commission

Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulation for the Entire State of Missouri

ORDER OF RULEMAKING

By the authority vested in the Missouri Air Conservation Commission under section 643.050, RSMo Supp. 2013, the commission amends a rule as follows:

10-CSR 10-6.020 Definitions and Common Reference Tables is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 15, 2013 (38 MoReg 1265-1297). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The Missouri Department of Natural Resources' Air Pollution Control Program received no comments on the proposed amendment.

Title 10—DEPARTMENT OF NATURAL RESOURCES

Division 10—Air Conservation Commission

Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulation for the Entire State of Missouri

ORDER OF RULEMAKING

By the authority vested in the Missouri Air Conservation Commission under section 643.050, RSMo Supp. 2013, the commission adopts a rule as follows:

10-CSR 10-6.161 Commercial and Industrial Solid Waste Incinerators is adopted.

A notice of proposed rulemaking containing the text of the proposed rule was published in the *Missouri Register* on August 15, 2013 (38 MoReg 1297-1298). No changes have been made in the text of the proposed rule, so it is not reprinted here. This proposed rule becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The Missouri Department of Natural Resources' Air Pollution Control Program received no comments on the proposed rule.

Title 12—DEPARTMENT OF REVENUE

Division 10—Director of Revenue

Chapter 2—Income Tax

ORDER OF RULEMAKING

By the authority vested in the acting director of revenue under section 143.961, RSMo 2000, and section 143.451.2(3), RSMo Supp. 2013, the acting director adopts a rule as follows:

**COMMENTS AND RESPONSES
AND
RECOMMENDATION FOR ADOPTION**

**Section 111(d)/129 State Plan for Commercial
and Industrial Solid Waste Incinerators in Missouri**

On September 26, 2013, the Missouri Air Conservation Commission held a public hearing concerning the inclusion of the Section 111(d)/129 State Plan for Commercial and Industrial Solid Waste Incinerators (CISWI) to the Missouri 111(d)/129 State Plan. This plan was developed to fulfill the requirements of Sections 111(d) and 129 of the Clean Air Act for the implementation of the emission guidelines and compliance times for existing CISWI units as promulgated by the Environmental Protection Agency (EPA) in February 2013. Section 111(d) establishes general requirements and procedures on state plan submittals for the control of designated pollutants. Section 129 requires emission guidelines to be promulgated for all categories of solid waste incineration units, including CISWI units. This plan demonstrates Missouri's legal authority and enforceable mechanism to implement the emission guidelines.

The document has not been reprinted in the briefing document as no changes were made from the proposal. The entire document is available for review at the Missouri Department of Natural Resources', Air Pollution Control Program, 1659 East Elm Street, Jefferson City, Missouri, 65101, (573)751-4817. It is also available online at <http://dnr.mo.gov/env/apcp/stateplanrevisions.htm>

The Missouri Department of Natural Resources' Air Pollution Control Program recommends the commission adopt the plan action as proposed. If the commission adopts this plan, it will be the department's intention to submit this plan to the U.S. Environmental Protection Agency for inclusion in the Missouri 111(d)/129 State Plan.

SUMMARY OF COMMENTS: No written or verbal comments were received concerning this proposed plan.