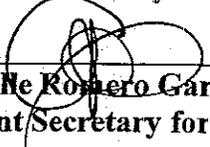


COMMONWEALTH OF PUERTO RICO
OFFICE OF THE GOVERNOR
ENVIRONMENTAL QUALITY BOARD

DEPARTMENT OF STATE

Regulation No. **6630**

Date: June 4, 2003
Approved: Ferdinand Mercado
Secretary of State

By: 
Giselle Romero García
Assistant Secretary for Services



RADICACION DE REGLAMENTO NUEVO EN
BIBLIOTECA LEGISLATIVA

FECHA: 16/6/03

HORA: 3:01 p.m.

ENTREGADO POR: Joe A. Santiago

RECIBIDO POR: [Signature]

REGULATION FOR THE CONTROL OF ATMOSPHERIC POLLUTION

(Amendments to Rules 102 and 405)

2003

COMMONWEALTH OF PUERTO RICO
OFFICE OF THE GOVERNOR
ENVIRONMENTAL QUALITY BOARD

TITLE OF REGULATION: AMENDMENTS TO
REGULATION FOR THE CONTROL OF
ATMOSPHERIC POLLUTION
(RULES 102 AND 405)

DATE OF APPROVAL: APRIL 16, 2003


ESTEBAN MUJICA COTTO, ESQ.
CHAIRMAN
ENVIRONMENTAL QUALITY BOARD



Estado Libre Asociado de Puerto Rico
Departamento de Estado
San Juan, Puerto Rico

9 de junio de 2003

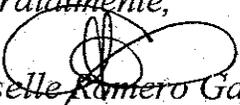
Lic. Esteban Mujica Cotto
Presidente
JUNTA DE CALIDAD AMBIENTAL
Apartado 11488
Santurce, Puerto Rico 00910

Estimado licenciado Mujica Cotto:

Tenemos a bien informarle que el 4 de junio de 2003, quedó radicado en este Departamento, a tenor con las disposiciones de la Ley Núm. 170 de 12 de agosto de 1988, según enmendada, la Enmienda al Reglamento para el Control de la Contaminación Atmosférica (Enmiendas a las Reglas 102 y 405), versiones al inglés y español.

Nos place informarle que a dicho reglamento le correspondió el número 6630.

Cordialmente,


Giselle Romero García
Secretaria Auxiliar de Servicios

GRG/et

Anejo

COMMONWEALTH OF PUERTO RICO
OFFICE OF THE GOVERNOR
ENVIRONMENTAL QUALITY BOARD

DIST. CERTIFICACIONES

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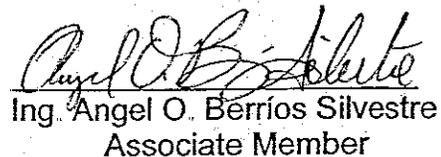
Pursuant and in accordance with the Environmental Public Policy Act (Law No. 9 of June 18, 1970, as amended) and the Uniform Administrative Procedure Act (Law No. 170 of August 12, 1988, as amended), the following amendments of Rules 102 and 405 of the:

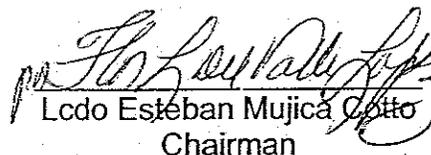
REGULATION FOR THE CONTROL OF ATMOSPHERIC POLLUTION

Has been promulgated by Resolution **R-03-10-4** of **April 16, 2003** to adopt the Emission Guidelines for Commercial and Industrial Solid Waste Incineration and to promulgate the regulatory provisions to implement the emission guidelines.

In San Juan, Puerto Rico, June 2, 2003.


Biol. Flor del Valle López
Vice-Chairwoman


Ing. Angel O. Berrios Silvestre
Associate Member


Lcdo Esteban Mujica Cotto
Chairman

REGULATION FOR THE CONTROL OF ATMOSPHERIC POLLUTION

SUPLETORY SHEET

1. Title of Regulation: Regulation for the Control of Atmospheric Pollution (Amendments to Rules 102 and 405)
2. Date of approval: April 16, 2003 (Resolution R-03-10-4)
3. Officials whom approved: EQB Board of Directors composed by:

Mr. Esteban Mujica Cotto, Esq.
Chairman

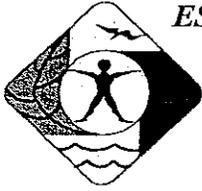
Mrs. Flor del Valle López
Vice-Chairwoman

Eng. Angel O. Berríos Silvestre
Associate member
4. Office where approved: Environmental Quality Board
of the Commonwealth of Puerto Rico
5. Date of public notice: December 13, 2002 (The San Juan Star,
El Vocero)
6. Reference of the legal authority to promulgate this regulation: Law No.9 of June 18, 1970, as amended
known as "Public Policy Environmental Act"
7. Regulation Number: 6630
8. Date of radication: June 4, 2003
9. Date of effectiveness: [Thirty (30) days after the filing of this
Regulation in the State Department]
10. Reference to all other Regulations which has been amended or
derogated by the adoption or promulgation of this regulation: **Regulation for the Control of Atmospheric
Pollution (Regulation No.5300 and 6302)**

CERTIFICATION

I, CERTIFY that the procedures followed for the adoption of this regulation where accomplished in accordance with the Commonwealth of Puerto Rico Uniform Administrative Procedure Act, Law No. 170 of August 12, 1988, as amended, 3 I.P.R.A. §1121 *et seq.* and that the regulation object of this Supletory Sheet has been duly reviewed and does not contain substantive, tipographic or clerical errors.


Secretary
Board of Directors
Environmental Quality Board
Commonwealth of Puerto Rico



CERTIFICACIÓN

Por la presente, **CERTIFICO** que las enmiendas a las Reglas 102 y 405 del Reglamento para el Control de la Contaminación Atmosférica (versión en español y en inglés) conjuntamente con el Apéndice que se acompaña, fueron aprobadas por la Honorable Junta de Gobierno de la Junta de Calidad Ambiental mediante la Resolución R-03-10-4 del 16 de abril de 2003 y son una copia fiel y exacta de los originales radicado en el Departamento de Estado el 4 de junio de 2003. A dichas enmiendas del reglamento de referencia se le asignó el número 6630.

En San Juan, Puerto Rico, hoy 16 de junio de 2003.



ELSY E. FERNÁNDEZ
SECRETARIA
JUNTA DE GOBIERNO
JUNTA DE CALIDAD AMBIENTAL

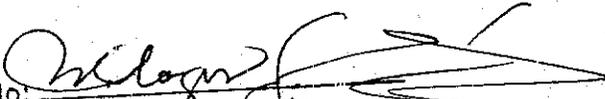
Recibido: 
Entregado: José A. Jenkins
Fecha: 16/6/03
Hora: 3:01 p.m.

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RULE 102 DEFINITIONS

Administrator (For the purpose of Rule 405(c)

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

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).

Auxiliary fuel

Means natural gas, liquified petroleum gas, fuel oil, or diesel fuel.

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.

Board

Means the Environmental Quality Board (EQB) of the Commonwealth of Puerto Rico.

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.

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 combustion device that combusts commercial and industrial waste, as defined in this rule. The boundaries of a CISWI unit are defined as, but not limited to, the commercial or industrial solid waste fuel feed system, grate system, flue gas system, and bottom ash. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the commercial and industrial solid waste hopper (if applicable) and extends through two areas:

1. The combustion unit flue gas system, which ends immediately after the last combustion chamber.
2. The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system.

Commercial and industrial waste

Means solid waste combusted in an enclosed device using controlled flame combustion without energy recovery that is a distinct operating unit of any commercial or industrial facility (including field-erected, modular, and custom built incineration units operating with starved or excess air), or solid waste combusted in an air curtain incinerator without energy recovery that is a distinct operating unit of any commercial or industrial facility.

Contained gaseous material

Means gases that are in a container when that container is combusted.

Cyclonic barrel burner

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.

Deviation

Means any instance in which an affected source subject to Rule 405, or an owner or operator of such a source:

1. Fails to meet any requirement or obligation established by Rule 405, 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 Rule 405 and that is included in the operating permit for any affected source required to obtain such a permit; or
3. Fails to meet any emission limitation, operating limit, or operator qualification and accessibility requirement in Rule 405 during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this regulation.

Dioxins/furans

Means tetra-through octachlorinated dibenzo-p-dioxins and dibenzofurans.

Discard

Means, for purposes of Rule 405(c) and 40 CFR part 60, subpart DDDD, 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.

Energy recovery

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

EPA

Means the United States Environmental Protection Agency.

EQB

Means the Board; the Environmental Quality Board of the Commonwealth of Puerto Rico.

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.

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

Modification or modified CISWI unit (For the purpose of Rule 405(c))

Means a CISWI unit you have changed later than June 1, 2001 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.

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 (For the purpose of Rule 405(c))

Means total particulate matter emitted from CISWI units as measured by Method 5 or Method 29 of appendix A of 40 CFR Part 60.

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).

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.

Reconstruction (For the purpose of Rule 405(c))

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 (For the purpose of Rule 405(c))

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.

Shutdown (For the purpose of Rule 405(c))

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

Solid waste (For the purpose of Rule 405(c))

Means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1342), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. 2014). For purposes of 40 CFR 60 subpart DDDD and subpart CCCC, solid waste does not include the waste burned in the fifteen types of units described in Rule 405(c)(1)(B).

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 (For the purpose of Rule 405)

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

Wet scrubber

Means an add-on air pollution control device that utilizes 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.

You

Throughout the Rule 405(c) means the owner or operator of a CISWI unit.

RULE 405 INCINERATION

(a) Requirements for non-hazardous solid waste incinerators

- (a) (1) **Applicability** - This Section (a) of Rule 405 applies to all existing, new and modified non-hazardous solid waste incinerators not covered by any other section of this Rule 405.
- (a) (1) (A) Existing incinerators at the time of adoption of this rule shall comply with this section within a time-frame of six (6) months starting from the effective date of this rule and must complete a performance test to demonstrate compliance with the limits established in this Section (a).
- (a) (1) (B) New incinerators must complete a performance test to demonstrate compliance with the limits established in this Section (a) within a time-frame of 180 days starting from the date of approval of the first operating permit.
- (a) (1) (C) All incinerators affected by this Section (a) must complete a performance test to demonstrate compliance with the rule every five (5) years after the first performance test.
- (a) (1) (D) This rule shall not apply to domestic non-hazardous solid waste incinerators except for the following requirements:
- (a) (1) (D) (i) must comply with daily periodic clean-up of the combustion chamber after the last incineration activity of the day but before of the chamber reloading.
- (a) (1) (D) (ii) must comply with a maintenance plan to the settling chamber to avoid exceedances of the 20% opacity limit as required under Rule 403, and
- (a) (1) (D) (iii) must segregate waste materials and recycle or dispose to a recycle collection center all plastics, glasses, metals and batteries so that these materials are not incinerated.
- (a) (1) (D) (iv) any other applicable requirement for domestic non-hazardous solid waste incinerator established by the Board
- (a) (1) (E) Existing non-hazardous solid waste incinerators having a capacity of 15 tons /day or less, that have previously obtained an emission source permit and, that have conducted compliance tests within the last five years, will not be required to perform an initial performance test for particulate matter (PM) if their previous compliance determination demonstrated compliance with the standard established by this rule in paragraph (a) (2). For these incinerators having a capacity of 15 tons/day or less that must comply with (a) (1) (C), the next test will be required five (5) years after the effective date of this rule.
- (a) (2) Non-hazardous solid waste incinerators shall not cause or permit the emission of particulate matter (PM) in excess of 0.40 pounds per 100 pounds (4 gm/kg) of waste charged.

- (a) (3) Any person who operates a non-hazardous solid waste incinerator must submit to the Board a certification showing their adequate operational training for such incinerators and related equipment that should be similar to the requirements for operator training and certification contained in other sections of this rule.
- (a) (4) Any incinerator affected by this rule shall comply with the applicable requirements under Rule 106.
- (a) (5) Any non-hazardous solid waste incinerator that shall comply with any applicable regulation or requirements under the "Standards of Performance for New Stationary Sources" (SPNSS), "National Emission Standards for Hazardous Air Pollutants" (NESHAPS) or "Maximum Achievable Control Technology"(MACT) standards is exempted to comply with Section (a) of this rule.
- (b) Emission Guidelines and Compliance Schedule for Hospital/Medical and Infectious Waste Incinerators (HMIWI).**
- (c) Emission Guidelines and Compliance Schedule for Commercial and Industrial Solid Waste Incinerators (CISWI).**
- (c)(1) Applicability**
- (c)(1)(A) Except as provided in paragraph (c)(1)(B) of this section, the designated facility to which this section applies is each individual commercial and industrial solid waste incineration (CISWI) unit that commenced construction on or before November 30, 1999.
- (c)(1)(B) This section exempts the types of units described in paragraphs (c)(1)(B)(i) through (c)(1)(B)(xv), only after the Board acknowledges receipt of a written request by the source owner or operator of the units to be exempted.
- (c)(1)(B)(i) Pathological waste incineration units. Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste as defined in these regulations are not subject to this section if the following requirements are met:
 - (c)(1)(B)(i)(1) Notify the EPA and the EQB that the units meet above criteria.
 - (c)(1)(B)(i)(2) Keep records on a calendar quarter basis of the weight of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit.

- (c)(1)(B)(I)(3) Keep such records demonstrating that the unit attains and maintains the exemption for at least five consecutive years and submit them upon request within ten business days.
- (c)(1)(B)(ii) Agricultural waste incineration units. Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of agricultural waste as defined in these regulations are not subject to this section if the following requirements are met:
- (c)(1)(B)(ii)(1) Notify the EPA and the EQB that the units meet above criteria.
- (c)(1)(B)(ii)(2) Keep records on a calendar quarter basis of the weight of agricultural waste burned, and the weight of all other fuels and wastes burned in the unit.
- (c)(1)(B)(ii)(3) Keep such records demonstrating that the unit attains and maintains the exemption for at least five consecutive years and submit them upon request within ten business days.
- (c)(1)(B)(iii) Municipal waste combustion units. Incineration units that meet either of the two following criteria:
- (c)(1)(B)(iii)(1) Are regulated under 40 CFR 60 Subpart Ea (Standards of Performance for Municipal Waste Combustors); 40 CFR 60 Subpart Eb (Standards of Performance for Municipal Waste Combustors for which construction is commenced after September 20, 1994); 40 CFR 60 Subpart Cb (Emission Guidelines and Compliance Times for Large Municipal Combustors that are constructed on or before September 20, 1994); 40 CFR 60 Subpart AAAA (Standards of Performance for New Stationary Sources: Small Municipal Waste Combustion units); or 40 CFR 60 Subpart BBBB (Emission Guidelines for Existing Stationary Sources: Small Municipal Waste Combustion units)
- (c)(1)(B)(iii)(2) Burn greater than 30 percent municipal solid waste or refuse-derived fuel, as defined in 40 CFR Part 60 Subpart Ea, Subpart Eb, Subpart AAAA, and Subpart BBBB, and that have the capacity to burn less than 35 tons (32 megagrams) per day of municipal solid waste or refuse-derived fuel, if the following requirements are met:
- (c)(1)(B)(iii)(2)(a) Notify the EPA and the EQB that the units meet above criteria.
- (c)(1)(B)(iii)(2)(b) Keep records on a calendar quarter basis of the weight of municipal solid waste burned, and the weight of all other fuels and wastes burned in the unit.
- (c)(1)(B)(iii)(2)(c) Keep such records demonstrating that the unit attains and maintains the exemption for at least five consecutive years and submit them upon request within ten business days.

- (c)(1)(B)(iv) Medical Waste incineration units.

Incineration units regulated under 40 CFR Part 60 Subpart Ec (Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for which construction is commenced after June 20, 1996) or under Rule 405(b) of these regulations.
- (c)(1)(B)(v) Small power production facilities. Units that meet all the following requirements:
 - (c)(1)(B)(v)(1) 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)).
 - (c)(1)(B)(v)(2) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity.
 - (c)(1)(B)(v)(3) Notify the EPA and the EQB that the unit meets the above criteria.
- (c)(1)(B)(vi) Cogeneration facilities. Units that meet all the following requirements:
 - (c)(1)(B)(vi)(1) The unit qualifies as a cogeneration facility under section 3(18)(B) of the Federal Power Act (16 U.S.C. 796 (18)(B)).
 - (c)(1)(B)(vi)(2) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes.
 - (c)(1)(B)(vi)(3) Notify the EPA and the EQB that the unit meets the above criteria.
- (c)(1)(B)(vii) Hazardous waste combustion units. Units that meet either of the following two criteria:
 - (c)(1)(B)(vii)(1) Units for which are required to get a permit under section 3005 of the Solid Waste Disposal Act.
 - (c)(1)(B)(vii)(2) Units regulated under subpart EEE of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors).
- (c)(1)(B)(viii) Materials recovery units. Units that combusts waste for the primary purpose of recovering metals, such as primary and secondary smelters.
- (c)(1)(B)(ix) Air curtain incinerators. Air curtain incinerators that burn only the materials listed in the following paragraphs, are only required to meet the requirements under "Air Curtain Incinerators" (Rule 405(c)(11)).
 - (c)(1)(B)(ix)(1) 100 percent wood waste.
 - (c)(1)(B)(ix)(2) 100 percent clean lumber.

- (c)(1)(B)(ix)(3) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.
- (c)(1)(B)(x) Cyclonic barrel burners.
- (c)(1)(B)(xi) Rack, part, and drum reclamation units.
- (c)(1)(B)(xii) Cement kilns. Kilns regulated under subpart LLL of 40 CFR part 63 (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).
- (c)(1)(B)(xiii) Sewage sludge incinerators. Incineration units regulated under subpart O of 40 CFR part 60 (Standards of Performance for Sewage Treatment Plants).
- (c)(1)(B)(xiv) Chemical recovery units. Combustion units burning materials to recover chemical constituents or to produce chemical compounds where there is an existing commercial market for such recovered chemical constituent or compound. The types of units described in the following paragraphs are considered chemical recovery units:
 - (c)(1)(B)(xiv)(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.
 - (c)(1)(B)(xiv)(2) Units burning only spent sulfuric acid used to produce virgin sulfuric acid.
 - (c)(1)(B)(xiv)(3) Units burning only wood or coal feedstock for the production of charcoal.
 - (c)(1)(B)(xiv)(4) Units burning only manufacturing by product streams/residues containing catalyst metals which are reclaimed and reused as catalysts or used to produce commercial grade catalysts.
 - (c)(1)(B)(xiv)(5) Units burning only coke to produce purified carbon monoxide that is used as an intermediate in the production of other chemical compounds.
 - (c)(1)(B)(xiv)(6) Units burning only photographic film to recover silver.
 - (c)(1)(B)(xiv)(7) Units burning only hydrocarbon liquids or solids to produce hydrogen, carbon monoxide, synthesis gas, or other gases for use in other manufacturing processes.
 - (c)(1)(B)(xiv)(8) Any other chemical recovery unit that comply with 40 CFR 60.2558 and that is approved by EPA.
- (c)(1)(B)(xv) Laboratory analysis units. Units that burn samples of materials for the purpose of chemical or physical analysis.

(c)(1)(C) 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 part 60 Subpart CCCC (Standards of Performance for Commercial and Industrial Solid Waste Incineration) and the State plan no longer applies to that unit.

(c)(1)(D) If the owner or operator of a CISWI unit makes physical or operational changes to an existing CISWI unit primarily to comply with the State Plan, the 40 CFR Part 60 Subpart CCCC does not apply to that unit, as such changes are not considered modifications or reconstructions.

(c)(1)(E) **Permitting Requirements.**

Any CISWI unit that is subject to Rule 405(c) or that become subject to Title V for any other reason must operate pursuant to a Title V permit issued under the Part VI of the Regulation for the Control of Atmospheric Pollution (RCAP) by not later than December 1, 2003.

(c)(2) **Emission Limitations and Operating Limits.**

(c)(2)(A) On the date that the initial performance test is completed or is required to be completed under this rule, whichever date comes first, the designated facility must meet the emission limitations specified in Table 1 of Rule 405(c).

(c)(2)(B) If a wet scrubber is used to comply with the emission limitations, then operating limits must be established during the initial performance test for the operating parameters as specified in Table 2 of Rule 405(c) and described in the following paragraphs:

(c)(2)(B)(i) Maximum charge rate, calculated using one of the following procedures:

(c)(2)(B)(i)(1) 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.

(c)(2)(B)(i)(2) 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.

(c)(2)(B)(ii) Minimum pressure drop across the wet scrubber, which is calculated as 90 percent of the 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 90 percent of the average amperage to the wet scrubber, measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations.

TABLE 1 - EMISSION LIMITATIONS

Pollutant	Emission Limitation^a	Averaging time	Method of Compliance
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 40 CFR Part 60).
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 40 CFR Part 60).
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 40 CFR Part 60).
Hydrogen chloride	62 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 26A of appendix A of 40 CFR Part 60).
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 40 CFR Part 60).
Mercury	0.47 milligrams per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Performance test (Method 29 of appendix A of 40 CFR Part 60).
Opacity	10 percent	6-minute averages	Performance test (Method 9 of appendix A of 40 CFR Part 60).
Oxides of nitrogen	388 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Methods 7, 7A, 7C, 7D, or 7E of appendix A of 40 CFR Part 60).
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 40 CFR Part 60).
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 40 CFR Part 60).

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

- (c)(2)(B)(iii) Minimum scrubber liquor flow rate, which is calculated as 90 percent of the average liquor flow rate at the inlet to the wet scrubber measured during the most recent performance test demonstrating compliance with all applicable emission limitations.
- (c)(2)(B)(iv) Minimum scrubber liquor pH, which is calculated as 90 percent of the average liquor pH at the inlet to the wet scrubber measured during the most recent performance test demonstrating compliance with the HCl emission limitation.
- (c)(2)(C) On the date that the initial performance test is completed or is required to be completed, whichever date comes first, the designated facility must meet the established operating limits.
- (c)(2)(D) If a fabric filter is used to comply with the emission limitations, the designated facility 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 it takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.
- (c)(2)(E) If an air pollution control device other than a wet scrubber is used, or emissions are limited in some other manner, to comply with the emission limitations under Rule 405(c)(2), the owner or operator of a designated facility must petition the Administrator for specific operating limits to be established during the initial performance test and continuously monitored thereafter. The initial performance test must not be conducted until after the petition has been approved by the Administrator. The petition must include the following items:
- (c)(2)(E)(i) Identification of the specific parameters proposed to use as additional operating limits.
- (c)(2)(E)(ii) 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.
- (c)(2)(E)(iii) A discussion of how will establish the upper and/or lower values for these parameters which will establish the operating limits on these parameters.
- (c)(2)(E)(iv) A discussion identifying the methods that will be used to measure and the instrument that will be used to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments.

TABLE 2 - OPERATING LIMITS FOR WET SCRUBBERS

Operating Parameters	Operating limits	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.

- (c)(2)(E)(v) A discussion identifying the frequency and methods for recalibrating the instruments that will be used for monitoring these parameters.
- (c)(2)(F) The emission limitations and operating limits apply at all times except during CISWI unit startups, shutdowns, or malfunctions. Each malfunction must last no longer than 3 hours.
- (c)(3) **Requirements for operators training and qualification**
- (c)(3)(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, the procedures in section (c)(3)(L) must be followed.
- (c)(3)(B) Operator training and qualification must be obtained through a program approved by the Board or by completing the requirements included in paragraph (c)(3)(C) of this section.
- (c)(3)(C) Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the elements described in the following paragraphs:
- (c)(3)(C)(i) Training on the subjects listed in paragraphs (c)(3)(C)(i)(1) through (c)(3)(C)(i)(11).
- (c)(3)(C)(i)(1) Environmental concerns, including types of emissions.
- (c)(3)(C)(i)(2) Basic combustion principles, including products of combustion.
- (c)(3)(C)(i)(3) Operation of the specific type of incinerator to be used by the operator, including proper startup, waste charging and shutdown procedures.
- (c)(3)(C)(i)(4) Combustion controls and monitoring.
- (c)(3)(C)(i)(5) Operation of air pollution control equipment and factors affecting performance (if applicable).
- (c)(3)(C)(i)(6) Inspection and maintenance of the incinerator and air pollution control devices.
- (c)(3)(C)(i)(7) Actions to correct malfunctions or conditions that may lead to malfunction.
- (c)(3)(C)(i)(8) Bottom and fly ash characteristics and handling procedures.

- (c)(3)(C)(i)(9) Applicable Federal, State, and local regulations, including Occupational Safety and Health Administration workplace standards.
- (c)(3)(C)(i)(10) Pollution prevention.
- (c)(3)(C)(i)(11) Waste management practices.
- (c)(3)(C)(ii) An examination designed and administered by the instructor.
- (c)(3)(C)(iii) Written material covering the training course topics that can serve as reference material following completion of the course.
- (c)(3)(D) The operator training course must be completed by the later of the three dates specified in the following paragraphs:
 - (c)(3)(D)(i) The final compliance date.
 - (c)(3)(D)(ii) Six months after CISWI unit startup.
 - (c)(3)(D)(iii) Six months after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit.
- (c)(3)(E) The operator qualification must be obtained by completing a training course that satisfies the criteria under (c)(3)(B).
- (c)(3)(F) Qualification is valid from the date on which the training course is completed and the operator successfully passes the examination required under (c)(3)(C)(ii).
- (c)(3)(G) To maintain qualification, you must complete an annual review or refresher course covering at a minimum, the topics described in the following paragraphs:
 - (c)(3)(G)(i) Update of regulations.
 - (c)(3)(G)(ii) Incinerator operation, including startup and shutdown procedures, waste charging, and ash handling.
 - (c)(3)(G)(iii) Inspection and maintenance.
 - (c)(3)(G)(iv) Responses to malfunctions or conditions that may lead to malfunction.
 - (c)(3)(G)(v) Discussion of operating problems encountered by attendees.

- (c)(3)(H) You must renew a lapsed operator qualification by one of the methods specified in the following paragraphs:
- (c)(3)(H)(i) For a lapse of less than 3 years, you must complete a standard annual refresher course described in (c)(3)(G).
- (c)(3)(H)(ii) For a lapse of 3 years or more, you must repeat the initial qualification requirements in (c)(3)(E).
- (c)(3)(I) Documentation must be available at the facility and readily accessible for all CISWI unit operators that addresses the ten topics described below. Must maintain this information and the training records required by (c)(3)(K) in a manner that they can be readily accessed and are suitable for inspection upon request.
 - (c)(3)(I)(i) Summary of the applicable standards under this rule.
 - (c)(3)(I)(ii) Procedures for receiving, handling and charging waste.
 - (c)(3)(I)(iii) Incinerator startup, shutdown, and malfunction procedures.
 - (c)(3)(I)(iv) Procedures for maintaining proper combustion air supply levels.
 - (c)(3)(I)(v) Procedures for operating the incinerator and associated air pollution control systems within the standards established under this rule.
 - (c)(3)(I)(vi) Monitoring procedures for demonstrating compliance with the incinerator operating limits.
 - (c)(3)(I)(vii) Reporting and recordkeeping procedures.
 - (c)(3)(I)(viii) The waste management plan required under (c)(4)(A) through (c)(4)(C).
 - (c)(3)(I)(ix) Procedures for handling ash.
 - (c)(3)(I)(x) A list of the wastes burned during the performance test.
- (c)(3)(J) You must establish a program for reviewing the information listed in (c)(3)(I) with each incinerator operator.
 - (c)(3)(J)(i) The initial review of the information listed in (c)(3)(I) must be conducted by the later of the three dates specified in the following paragraphs:
 - (c)(3)(J)(i)(1) The final compliance date.

- (c)(3)(J)(i)(2) Six month after CISWI unit startup.
- (c)(3)(J)(i)(3) Six months after being assigned to operate the CISWI unit.
- (c)(3)(J)(ii) Subsequent annual reviews of the information listed in (c)(3)(I) must be conducted no later than 12 months following the previous review
- (c)(3)(K) You must also maintain the information specified in the following paragraphs:
 - (c)(3)(K)(i) Records showing the names of CISWI unit operators who have completed review of the information in (c)(3)(I) as required by (c)(3)(J), including the date of the initial review and all subsequent annual reviews.
 - (c)(3)(K)(ii) Records showing the names of the CISWI operators who have completed the operator training requirements under (c)(3)(A), met the criteria for qualification under (c)(3)(E), and maintained or renewed their qualification under (c)(3)(G) or (c)(3)(H). 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.
 - (c)(3)(K)(iii) For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.
- (c)(3)(L) 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), the designated facility must meet one of the two criteria specified in the paragraphs below, depending on the length of time that a qualified operator is not accessible.
 - (c)(3)(L)(i) 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 (c)(3)(I) within the past 12 months. However, must record the period when all qualified operators were not accessible and include this deviation in the annual report as specified under (c)(7)(G).
 - (c)(3)(L)(ii) When all qualified operators are not accessible for 2 weeks or more, must take the two actions that are described in the following paragraphs:
 - (c)(3)(L)(ii)(1) Notify the EPA and the Board 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.

(c)(3)(L)(ii)(2) Submit a status report to the EPA and to the Board 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 EPA to continue operation of the CISWI unit. Must submit the first status report 4 weeks after notifying the EPA and the Board of the deviation under (c)(3)(L)(ii)(1). If the EPA 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 the following paragraphs:

(c)(3)(L)(ii)(2)(a) A qualified operator is accessible as required under (c)(3)(A).

(c)(3)(L)(ii)(2)(b) Notify the EPA and the Board that a qualified operator is accessible and that you are resuming operation.

(c)(4) **Waste Management Plan**

(c)(4)(A) 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.

(c)(4)(B) The owner or operator of a designated facility must submit a waste management plan no later than the date for submittal of the final control plan.

(c)(4)(C) 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.

(c)(5) **Performance testing**

(c)(5)(A) All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations.

(c)(5)(B) 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 (c)(7)(A)(ii)(1)) and the types of waste burned during the performance test.

(c)(5)(C) All performance test must be conducted using the minimum run duration specified in Table 1 of this rule.

(c)(5)(D) Method 1 of appendix A of 40 CFR Part 60 and contained in this regulation must be used to select the sampling location and number of traverse points.

(c)(5)(E) Method 3A or 3B of appendix A of 40 CFR Part 60 and contained in this regulation must be used for gas composition analysis, including measurement of oxygen concentration. Method 3A or 3B must be used simultaneously with each method.

(c)(5)(F) All pollutants concentrations, except for opacity, must be adjusted to 7 percent oxygen using the following equation:

$$C_{adj} = C_{meas} (20.9-7) / (20.9-\%O_2)$$

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.

(c)(5)(G) You must determine dioxins/furans toxic equivalency by following the procedures in paragraphs below:

(c)(5)(G)(i) Measure the concentration of each dioxin/furan tetra-through octa-congener emitted using EPA Method 23 contained in this regulation.

(c)(5)(G)(ii) For each dioxin/furan congener measured in accordance with paragraph (c)(5)(G)(i), multiply the congener concentration by its corresponding toxic equivalency factor specified in Table 3 of this rule.

(c)(5)(G)(iii) Sum the products calculated in accordance with paragraph (c)(5)(G)(ii) to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

(c)(5)(H) Use results of performance tests to demonstrate compliance with the emission limitations in Table 1 of this rule.

TABLE 3 - TOXIC EQUIVALENCY FACTORS

DIOXIN/FURAN CONGENER	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

(c)(6) **Monitoring requirements**

- (c)(6)(A) If a wet scrubber is used to comply with the emission limitation under (c)(2)(A), you must install, calibrate (to manufacturer's 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 2 of this rule. These devices (or methods) must measure and record the values for these operating parameters at the frequencies indicated in Table 2 of this rule at all times except as specified in (c)(6)(D).
- (c)(6)(B) If a fabric filter is used to comply with the requirements of this rule, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in the following paragraphs:
- (c)(6)(B)(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.
- (c)(6)(B)(ii) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- (c)(6)(B)(iii) 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.
- (c)(6)(B)(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.
- (c)(6)(B)(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- (c)(6)(B)(vi) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- (c)(6)(B)(vii) 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.
- (c)(6)(B)(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

- (c)(6)(C) If something other than a wet scrubber is used to comply with the emission limitations under (c)(2)(A), you must install, calibrate (to the manufacturer's specifications), maintain, and operate the equipment necessary to monitor compliance with the site-specific operating limits established using the procedures in (c)(2)(E).
- (c)(6)(D) Except for monitoring malfunctions, associated repairs, and required quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments of the monitoring system), you must conduct all monitoring at all times the CISWI unit is operating.
- (c)(6)(E) Do not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or quality control activities for meeting the requirements of this rule, including data averages and calculations. You must use all the data collected during all other periods in assessing compliance with the operating limits.
- (c)(7) **Recordkeeping and Reporting Requirements**
- (c)(7)(A) The designated facility must maintain the items (as applicable) as specified in the following paragraphs for a period of at least 5 years:
- (c)(7)(A)(i) Calendar date of each record.
- (c)(7)(A)(ii) Records of the data described in the following paragraphs:
- (c)(7)(A)(ii)(1) The CISWI unit charge dates, times, weights, and hourly charge rates.
- (c)(7)(A)(ii)(2) Liquor flow rate to the wet scrubber inlet every 15 minutes of operation, as applicable.
- (c)(7)(A)(ii)(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.
- (c)(7)(A)(ii)(4) Liquor pH as introduced to the wet scrubber every 15 minutes of operation, as applicable.
- (c)(7)(A)(ii)(5) For affected CISWI unit that establish operating limits for controls other than wet scrubbers under (c)(2)(E), you must maintain data collected for all operating parameters used to determine compliance with the operating limits.
- (c)(7)(A)(ii)(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 (c)(2)(D).

- (c)(7)(A)(iii) Identification of calendar dates and times for which monitoring systems used to monitor operating limits were inoperative, inactive, malfunctioning, or out of control (except for downtime associated with zero and span and other routine calibration checks). Identify the operating parameters not measured, the duration, reasons for not obtaining the data, and a description of corrective actions taken.
- (c)(7)(A)(iv) Identification of calendar dates, times, and durations of malfunctions and a description of the malfunction and the corrective action taken.
- (c)(7)(A)(v) Identification of calendar dates and times for which data show a deviation from the operating limits in Table 2 of this rule or a deviation from other operating limits established under (c)(2)(E) with a description of the deviations, reasons for such deviations, and a description of corrective actions taken.
- (c)(7)(A)(vi) 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.
- (c)(7)(A)(vii) Records showing the names of CISWI unit operators who have completed review of the information in (c)(3)(I) as required by (c)(3)(J), including the date of the initial review and all subsequent annual reviews.
- (c)(7)(A)(viii) Records showing the names of the CISWI operators who have completed the operator training requirements under (c)(3)(A), met the criteria for qualification under (c)(3)(E), and maintained or renewed their qualification under (c)(3)(G) or (c)(3)(H). 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.
- (c)(7)(A)(ix) For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.
- (c)(7)(A)(x) Records of calibration of any monitoring devices as required under (c)(6).
- (c)(7)(A)(xi) Equipment vendor specifications and related operation and maintenance requirements for the incinerator, emission controls, and monitoring equipment.
- (c)(7)(A)(xii) The information listed in (c)(3)(I).
- (c)(7)(A)(xiii) On a daily basis, keep a log of the quantity of waste burned and the types of waste burned (always required).

- (c)(7)(B) 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.
- (c)(7)(C) The reporting requirements are summarized in Table 4 of this rule.
- (c)(7)(D) The waste management plan must be submitted no later than the date for submittal of the final control plan.
- (c)(7)(E) You must submit the information specified in the following paragraphs no later than 60 days following the initial performance test. All reports must be signed by the facilities manager.
- (c)(7)(E)(i) The complete test report for the initial performance test results obtained under (c)(9), as applicable.
- (c)(7)(E)(ii) The values for the site-specific operating limits established in (c)(2)(B), (C), and (D), or (c)(2)(E).
- (c)(7)(E)(iii) If a fabric filter is used 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 (c)(6)(B).
- (c)(7)(F) An annual report must be submitted no later than 12 months following the submission of the information in (c)(7)(E). Subsequent reports must be submitted 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 or the Part VI of the RCAP, it may be required to submit these reports more frequently.
- (c)(7)(G) The annual report required under (c)(7)(F) must include the items listed in the following paragraphs. If there is a deviation from the operating limits or the emission limitations, also a deviation report must be submitted as specified in (c)(7)(H), (c)(7)(I), (c)(7)(J), (c)(7)(K) and (c)(7)(L).
- (c)(7)(G)(i) Company name and address.
- (c)(7)(G)(ii) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
- (c)(7)(G)(iii) Date of report and beginning and ending dates of the reporting period.
- (c)(7)(G)(iv) The values for the operating limits established pursuant to (c)(2)(B), (C), and (D), or (c)(2)(E).

TABLE 4 - SUMMARY OF REPORTING REQUIREMENTS*

Report	Due date	Contents	Reference
Waste Management Plan	No later than the date specified in Table 5 for submittal of the final control plan.	<ul style="list-style-type: none"> Waste management plan 	Rule 405(c)(7)(D)
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. 	Rule 405(c)(7)(E)
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. If no deviations or malfunctions were reported, a statement that no deviations occurred during the reporting period. Highest recorded 3-hour average and the lowest 3-hour average, as applicable, for each operating parameter recorded for the calendar year being reported. Information for deviations or malfunctions recorded under Rule 405(c)(7)(A)(ii)(6) and (iii) through (v). If a performance test was conducted during the reporting period, the results of the test. If a performance test was not conducted during the reporting period, a statement that the requirements of Rule 405(c)(10)(E) or (F) were met. Documentation of periods when all qualified CISWI unit operators were unavailable for more than 8 hours but less than 2 weeks. 	Rule 405(c)(7)(F) and (G)
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 deviations Averaged and recorded data for these dates. Duration and causes for 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. Whether each deviation occurred during a period of startup, shutdown, or malfunction. 	Rule 405(c)(7)(H), (I) and (J)
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. 	Rule 405(c)(7)(K)(i)
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. 	Rule 405(c)(7)(K)(ii)
Qualified Operator Deviation Notification of Resumed Operation	Prior to resuming operation	<ul style="list-style-type: none"> Notification that you are resuming operation 	Rule 405(c)(7)(L)

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

- (c)(7)(G)(v) 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, and that no monitoring system used to determine compliance with the operating limits was inoperative, inactive, malfunctioning or out of control.
- (c)(7)(G)(vi) 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.
- (c)(7)(G)(vii) Information recorded under (c)(7)(A)(ii)(6) and (c)(7)(A)(iii) through (v) for the calendar year being reported.
- (c)(7)(G)(viii) If a performance test was conducted during the reporting period, the results of that test.
- (c)(7)(G)(ix) If the designated facility met the requirements of (c)(10)(A) or (B), and did not conduct a performance test during the reporting period, you must state that you met the requirements of (c)(10)(A) or (B), and, therefore, you were not required to conduct a performance test during the reporting period.
- (c)(7)(G)(x) Documentation of periods when all qualified CISWI unit operators were unavailable for more than 8 hours, but less than 2 weeks.
- (c)(7)(H) 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 rule, 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.
- (c)(7)(I) 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 collected during the second half of the calendar year (July 1 to December 31).
- (c)(7)(J) In each report required under (c)(7)(H) and (I), for any pollutant or parameter that deviated from the emission limitations or operating limits specified in this rule, include the six items described in the following paragraphs:
- (c)(7)(J)(i) The calendar dates and times the unit deviated from the emission limitations or operating limit requirements.
- (c)(7)(J)(ii) The averaged and recorded data for those dates.

- (c)(7)(J)(iii) Duration and causes of each deviation from the emission limitations or operating limits and your corrective actions.
- (c)(7)(J)(iv) A copy of the operating limit monitoring data during each deviation and any test report that documents the emission levels.
- (c)(7)(J)(v) The dates, times, number, duration, and causes for monitoring downtime incidents (other than downtime associated with zero, span, and other routine calibration checks).
- (c)(7)(J)(vi) Whether each deviation occurred during a period of startup, shutdown, or malfunction, or during another period.
- (c)(7)(K) If all qualified operators are not accessible for 2 weeks or more, you must take the two actions in the following paragraphs:
 - (c)(7)(K)(i) Submit a notification of the deviation within 10 days that includes the three items in the following paragraphs:
 - (c)(7)(K)(i)(1) A statement of what caused the deviation.
 - (c)(7)(K)(i)(2) A description of what you are doing to ensure that a qualified operator is accessible.
 - (c)(7)(K)(i)(3) The date when you anticipate that a qualified operator will be available.
 - (c)(7)(K)(ii) Submit a status report to the EPA and to the Board every 4 weeks that includes the three items in the following paragraphs:
 - (c)(7)(K)(ii)(1) A description of what you are doing to ensure that a qualified operator is accessible.
 - (c)(7)(K)(ii)(2) The date when you anticipate that a qualified operator will be accessible.
 - (c)(7)(K)(ii)(3) Request approval from the EPA to continue operation of the CISWI unit.
- (c)(7)(L) If your unit was shutdown by the EPA, under the provisions of (c)(3)(L)(ii)(2), due to a failure to provide an accessible qualified operator, you must notify the EPA and the Board that you are resuming operation once a qualified operator is accessible.
- (c)(7)(M) The designated facility must submit notifications as provided in 40 CFR Section 60.7 and contained in this regulation.

- (c)(7)(N) Submit initial, annual, and deviation reports electronically or in paper format, postmarked on or before the submittal due dates.
- (c)(7)(O) If the EQB agrees, you may change the semiannual or annual reporting dates. Refer to 40 CFR Section 60.19 (c) and contained in this regulation for procedures to seek approval to change the reporting date.
- (c)(8) **Increments of Progress**
- (c)(8)(A) If you plan to achieve compliance more than one (1) year following the effective date of State Plan approval, you must meet the two increments of progress specified in the following paragraphs:
- (c)(8)(A)(i) Submit a final control plan.
- (c)(8)(A)(ii) Achieve final compliance.
- (c)(8)(B) Table 5 of this rule specifies the compliance dates for each of the increment of progress.
- (c)(8)(C) Your notification of achievement of increments of progress must include the three items specified in the following paragraphs:
- (c)(8)(C)(i) Notification that the increment of progress has been achieved.
- (c)(8)(C)(ii) Any items required to be submitted with each increment of progress.
- (c)(8)(C)(iii) Signature of the owner or operator of the CISWI unit.
- (c)(8)(D) Notifications for achieving increments of progress must be postmarked no later than 10 business days after the compliance date for the increment.
- (c)(8)(E) If you fail to meet an increment of progress, you must submit a notification to the EPA and to the Board, postmarked within 10 business days after the date for that increment of progress in Table 5 of this rule. You must inform the EPA and the Board 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.
- (c)(8)(F) For your control plan increment of progress, you must satisfy the two requirements specified in the following paragraphs:
- (c)(8)(F)(i) Submit the final control plan that includes the five items described as follows:

TABLE 5 - INCREMENTS OF PROGRESS AND COMPLIANCE SCHEDULES

Comply with these increments of progress	By these dates
Increment 1 - Submit final control plan	6 months after the effective date of EPA plan approval
Increment 2 - Achieve final compliance	18 months after the effective date of EPA plan approval, or by December 1, 2005, whichever date is earlier.

- (c)(8)(F)(i)(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 rule.
- (c)(8)(F)(i)(2) The types of waste to be burned.
- (c)(8)(F)(i)(3) The maximum design waste burning capacity.
- (c)(8)(F)(i)(4) The anticipated maximum charge rate.
- (c)(8)(F)(i)(5) If applicable, the petition for site-specific operating limits under (c)(2)(E).
- (c)(8)(F)(ii) Maintain an onsite copy of the final control plan.
- (c)(8)(G) 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.
- (c)(8)(H) If you close your CISWI unit but will restart it prior to the final compliance date in the State plan, you must meet the increments of progress specified in (c)(8)(A).
- (c)(8)(I) 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.
- (c)(8)(J) 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 EPA and to the Board by the date your final control plan is due.
- (c)(8)(K) If your unit is to be exempted, you must request the exemption by written, as specified in (c)(1)(B), by the date the final control plan is due.
- (c)(9) **Initial Compliance Requirements**
- (c)(9)(A) You must conduct an initial performance test, as required under 40 CFR - section 60.8 and contained in this regulation, to determine compliance with the emission limitations in Table 1 of this rule and to establish operating limits using the procedure in (c)(2)(B), (C), and (D), or (c)(2)(E). The initial performance test must be conducted using the test methods listed in Table 1 of this rule and the procedures in (c)(5).
- (c)(9)(B) 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 5 of this rule.

(c)(10)

Continuous Compliance Requirements

- (c)(10)(A) You must conduct an annual performance test for particulate matter, hydrogen chloride, and opacity for each CISWI unit as required under 40 CFR-Section 60.8 to determine compliance with the emission limitations. The annual performance test must be conducted using the test methods listed in Table 1 of this rule and the procedures in (c)(5).
- (c)(10)(B) You must continuously monitor the operating parameters specified in (c)(2)(B), (C), and (D) or established under (c)(2)(E). Operation above the established maximum or below the established minimum operating limits constitutes a deviation from the established operating limits. Three-hour rolling average values are used to determine compliance (except for baghouse leak detection system alarms) unless a different averaging period is established under (c)(2)(E). Operating limits do not apply during performance tests.
- (c)(10)(C) You must only burn the same types of waste used to establish operating limits during the performance test.
- (c)(10)(D) You must conduct annual performance tests for particulate matter, hydrogen chloride, and opacity within 12 months following the initial performance test. Conduct subsequent annual performance tests within 12 months following the previous one.
- (c)(10)(E) You can test less often for a given pollutant if you have test data for at least 3 years, and all performance tests for the pollutant (particulate matter, hydrogen chloride or opacity) over 3 consecutive years show that you comply with the emission limitation. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 36 months following the previous performance test.
- (c)(10)(F) If your CISWI unit continues to meet the emission limitation for particulate matter, hydrogen chloride, or opacity, you may choose to conduct performance tests for these pollutants every third year, but each test must be within 36 months of the previous performance test.
- (c)(10)(G) If a performance test shows a deviation from an emission limitation for particulate matter, hydrogen chloride, or opacity, you must conduct annual performance tests for that pollutant until all performance tests over a 3-year period show compliance.
- (c)(10)(H) You may conduct a repeat performance test at any time to establish new values for the operating limits. The EPA and or the Board may request a repeat performance test at any time.

- (c)(10)(I) 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.
- (c)(11) **Air Curtain Incinerators**
- (c)(11)(A) An air curtain incinerator operates by forcefully projecting a curtain of air across an open chamber or open 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.
- (c)(11)(B) Air curtain incinerators that burn only the materials listed in the following paragraphs are only required to meet the requirements under "Air Curtain Incinerators" ((c)(11)(A) through (c)(11)(V)).
- (c)(11)(B)(i) 100 percent wood waste.
- (c)(11)(B)(ii) 100 percent clean lumber.
- (c)(11)(B)(iii) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.
- (c)(11)(C) 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 the following paragraphs:
- (c)(11)(C)(i) Submit a final control plan.
- (c)(11)(C)(ii) Achieve final compliance.
- (c)(11)(D) Table 5 of this rule specifies the compliance dates for each of the increments of progress.
- (c)(11)(E) Your notification of achievement of increments of progress must include the three items described in the following paragraphs:
- (c)(11)(E)(i) Notification that the increment of progress has been achieved.
- (c)(11)(E)(ii) Any items required to be submitted with each increment of progress (See (c)(11)(H)).
- (c)(11)(E)(iii) Signature of the owner or operator of the incinerator.
- (c)(11)(F) Notifications for achieving increments of progress must be postmarked no later than 10 business days after the compliance date for the increment.

- (c)(11)(G) If you fail to meet an increment of progress, you must submit a notification to the EPA and to the Board, postmarked within 10 business days after the date for that increment of progress in Table 5 of this rule. You must inform the EPA and the Board 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.
- (c)(11)(H) For your control plan increment of progress, you must satisfy the two requirements specified in the following paragraphs:
- (c)(11)(H)(i) 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 rule.
- (c)(11)(H)(ii) Maintain an onsite copy of the final control plan.
- (c)(11)(I) 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.
- (c)(11)(J) 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 (c)(11)(C).
- (c)(11)(K) 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.
- (c)(11)(L) 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 EPA and to the Board by the date your final control plan is due.
- (c)(11)(M) After the date the initial stack test is required or completed, whichever is earlier, you must meet the limitations in the following paragraphs:
- (c)(11)(M)(i) The opacity limitation is 10 percent (6-minute average), except as described in paragraph (M)(ii).
- (c)(11)(M)(ii) The opacity limitation is 35 percent (6-minute average) during the startup period that is within the first 30 minutes of operation.
- (c)(11)(N) Except during malfunctions, the requirements of this rule apply at all times, and each malfunction must not exceed 3 hours.
- (c)(11)(O) Use Method 9 of appendix A of 40 CFR-Part 60 and contained in this regulation to determine compliance with the opacity limitation.

- (c)(11)(P) Conduct an initial test for opacity as specified in 40 CFR-Section 60.8 no later than 180 days after your final compliance date.
- (c)(11)(Q) After the initial test for opacity, conduct annual tests no more than 12 calendar months following the date of your previous test.
- (c)(11)(R) 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.
- (c)(11)(S) Make all records available for submission to the EPA and to the Board or for an inspector's onsite review.
- (c)(11)(T) Submit an initial report no later than 60 days following the initial opacity test that includes the information specified in the following paragraphs:
 - (c)(11)(T)(i) The types of materials you plan to combust in your air curtain incinerator.
 - (c)(11)(T)(ii) The results (each 6-minute average) of the initial opacity tests.
- (c)(11)(U) Submit annual opacity test results within 12 months following the previous report.
- (c)(11)(V) Submit initial and annual opacity test reports as electronic or paper copy on or before the applicable submission date and keep a copy onsite for a period of 5 years.