POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

1) Heading of the Part: Hospital/Medical/Infectious Waste Incinerators

2) Code Citation: 35 Ill. Adm. Code 229

3)

Section Numbers:	Proposed Action:
229.100	Amend
229.102	Amend
229.104	Amend
229.110	Amend
229.112	Amend
229.115	Amend
229.116	Amend
229.120	Amend
229.125	Amend
229.126	Amend
229.130	Repeal
229.142	Amend
229.146	Amend
229.148	Amend
229.150	Amend
229.152	Amend
229.154	Amend
229.156	Amend
229.158	Amend
229.160	Amend
229.162	Amend
229.166	Amend
229.168	Amend
229.180	Amend
229,182	Amend
229.184	Amend
229.APPENDIX B	Amend
229.APPENDIX C	Amend

4) Statutory Authority: Implementing Section 10 and authorized by Sections 27, 28, and 28.5 of the Environmental Protection Act [415 ILCS 5/10, 27, 28, and 28.5]

5) A complete description of the subjects and issues involved: A lengthier description of this rulemaking to date is contained in the Board's first notice opinion and order in Amendments to 35 Ill. Adm. Code Part 229: Hospital/Medical/Infectious Waste

Incinerators (HMIWI), R11-20 (June 16, 2011). The proposed amendments are based on a proposal filed December 23, 2011 by the Illinois Environmental Protection Agency (IEPA). They reflect amendments adopted by the United States Environmental Protection Agency (USEPA) to tighten up federal air quality standards, including new source performance standards and emissions guidelines.

The proposed amendments are more stringent than existing rules, and have a January 1, 2014 compliance date. The IEPA reports Illinois currently has only one HMIWI facility to which the new rules would apply: the Stericycle, Inc. facility located in Clinton, DeWitt County. The Board has held a hearing on the proposed amendments on June 8, 2011. Stericycle testified that it believed it could come into compliance by the various interim dates set in the rules.

If Illinois does not adopt rules, USEPA will act instead. USEPA adopted its "Standards of Performance for New Stationary Sources and Emissions Guidelines for Existing Sources: Hospital/Medical/Infectious Waste Incinerators" at 74 Fed. Reg. 51368 (Oct. 6, 2009). Section 129(b)(3) of the federal Clean Air Act (CAA), 42 USC7429(c), requires USEPA to develop a Federal Implementation Plan (FIP) within two years of federal promulgation of rules i.e., by October 6, 2011, unless the states adopt an approvable State Implementation Plan (SIP) revision containing the new incinerator rules.

6) Published studies or reports, and sources of underlying data, used to compose this rulemaking:

a) Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Hospital/Medical/Infectious Waste Incinerators; Final Rule. 62 Federal Register 48348, September 15, 1997.

b) Sierra Club v. EPA, 167 F.3d 658 (DC Cir. 1999)

c) Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Hospital/Medical/Infectious Waste Incinerators; Final Rule. 74 Federal Register 51368, October 6, 2009.

d) Sierra Club v. EPA, 551 F.3d 1019 (DC Circ. 2008) (SSM Exemption). (Docket ID No.: EPA-HQ-OAR-2006-0534).

e) Thomas Holloway, January 12, 2007.MACT Performance Data for HMTWI

Facilities (Docket ID No.: EPA-HQ-OAR-2006-0534)

f) Thomas Holloway, July 6, 2009. Revised Compliance Costs and Economic Inputs for Existing HMIWI (Docket ID No.: EPA-HQ-OAR-2006-0534)

g) Medical Waste Incinerators – Background Information for Proposed Standards and Guidelines: Control Technology Performance Report for New and Existing Facilities U.S. Environmental Protection Agency. July 1994. (Docket ID No. EPA-453/R-94-044a).

h) Medical Waste Incinerators – Background Information for Proposed Standards and Guidelines: Model Plant Description and Cost Report for New and Existing Facilities U.S. Environmental Protection Agency. July 1994. (Docket ID No. EPA-453/R-94-045a).

i) Stericycle, Inc. Waste Management Plan. Submitted to Illinois EPA as an attachment to annual performance test results.

j) Response to Information Collection Request. Stericycle, Inc. December 20, 2007. (Docket ID No. EPA-HQ-OAR-2006-0534)

k) Guidelines for Protecting the Safety and Health of Health Care. The National Institute for Occupational Safety and Health (NIOSH). Publication No. 88-119. September 1988.

l) Stericycle, Inc. Environmental Responsibility. http://www.stericycle.com/medical-waste-disposal/health-safety.html Assessed on March 10, 2010.

m) Economic Impacts of Revised MACT Standards for Hospital/Medical/Infectious Waste Incinerators. Katherine Heller, et al. July 2009. (Docket ID No. EPA-HQ-OAR-2006-0534)

n) Illinois Environmental Protection Act (415 ILCS 5.).

o) Clean Air Act (42 USC 7401 et seq.).

7) Will this rulemaking replace any emergency rulemaking currently in effect? No

8) Does this rulemaking contain an automatic repeal date? No

POLLUTION CONTROL BOARD

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9) Does this rulemaking contain incorporations by reference? Yes. See 35 Ill. Adm. Code 229.104, Incorporations by Reference

10) Are there any other proposed rulemakings pending on this Part? No

11) Statement of statewide policy objectives: This proposed rulemaking does not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805/3(b)].

12) Time, place, and manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comments on this proposal for a period of forty-five 45 days after the date of publication in the Illinois Register. Comments should reference Docket R11-20 and be addressed to:

Clerk's Office
Illinois Pollution Control Board
James R. Thompson Center, Suite 11-500
100 W. Randolph St.
Chicago, IL 60601

The Board will accept oral public comment at the second hearing in this docket, set for: June 28, 2011, at 11:00 at James R. Thompson Center, Room 11-512, 100 W. Randolph St., Chicago IL. Persons interested in testifying should contact the hearing officer, Kathleen Crowley, at 312-814-6929.

Interested persons may obtain copies of the Board's opinion and order by downloading it from the Board's Web site at www.ipcb.state.il.us or by calling the Clerk's office at 312-814-3620.

13) Initial regulatory flexibility analysis: IEPA reports that there is only one source affected in Illinois: Stericycle, Inc. in Clinton, DeWitt County. Stericycle does not identify itself as a small business.

14) Regulatory agenda on which this rulemaking was summarized: January 2011

The full text of the Proposed Amendments begins on the next page:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: GENERAL PROVISIONS
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 229
HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS

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SUBPART I: MONITORING REQUIREMENTS

Section
229.166 Monitoring Requirements for All~~Small, Medium, and Large~~ HMIWIs
229.168 Monitoring Requirements for Rural HMIWIs

SUBPART J: REQUIREMENTS FOR HMIWI OPERATORS

Section
229.170 Operator Training and Qualification Requirements
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SUBPART K: WASTE MANAGEMENT PLAN REQUIREMENTS

Section
229.176 Waste Management Plan Requirements for Hospitals Using On-Site Incinerators
229.178 Waste Management Plan Requirements for Hospitals Transporting Waste Off-Site to an HMIWI
229.180 Waste Management Requirements for Commercial HMIWIs~~Accepting Waste~~

SUBPART L: RECORDKEEPING AND REPORTING REQUIREMENTS

AUTHORITY: Implementing Sections 10, 39 and 39.5 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/10, 27, 39 and 39.5].

SOURCE: Adopted at 23 Ill. Reg. 6477, effective May 15, 1999; amended in R11-20 at 35 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 229.100 Abbreviations

The following abbreviations have been used in this Part~~part~~:

Act	Illinois Environmental Protection Act [415 ILCS 5]
Agency	Illinois Environmental Protection Agency
Board	Illinois Pollution Control Board
Btu	British thermal units
CAAPP	Clean Air Act Permit Program [415 ILCS 5/39.5]
CEMS	Continuous Emissions Monitoring System
CO	carbon monoxide
Cd	cadmium
~~dscf~~	~~dry standard cubic foot~~
~~dscm~~	~~dry standard cubic meter~~
~~ft^3~~	~~cubic feet~~
gr/10^3 dscf	grains per thousand dry standard cubic feet
gr/10^9 dscf	grains per billion dry standard cubic feet
gr/dscf	grains per dry standard cubic foot
HCl	hydrogen chloride
Hg	mercury
HMIWI	hospital/medical/infectious waste incinerator

hr	hour
lb(s)	pound(s)
mg/dscm	milligrams per dry standard cubic meter
~~mg~~	~~milligrams~~
ng/dscm	nanograms per dry standard cubic meter
NO_x	Nitrogen Oxide
Pb	lead
PM	particulate matter
ppmv	parts per million by volume
SO^2	Sulfur Dioxide
TEQ	toxic equivalent~~equivalency~~
USEPA	United States Environmental Protection Agency

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.102 Definitions

The definitions contained in this Section apply only to the provisions of this Part. Unless otherwise defined herein and unless a different meaning of a term is clear from its context, the definitions of terms used in this Part shall have the meanings specified for those terms in 415 ILCS 5/39.5, 35 Ill. Adm. Code 201.102 or 35 Ill. Adm. Code 211.

"Bag leak detection system" means an instrument that is capable of monitoring PM loadings in the exhaust of a fabric filter in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, lightscattering, light-transmittance, or other effects to monitor relative PM loadings.

"Batch HMIWI" means an HMIWI that is designed in such a way that neither waste charging nor ash removal can occur during combustion.

"Biologicals" means preparations made from living organisms and their products, including vaccines, cultures, etc., intended for use in diagnosing, immunizing, or treating humans or animals or in research pertaining thereto.

"Body fluids" means liquid emanating or derived from humans and limited to: blood; dialysate; amniotic, cerebrospinal, synovial, pleural, peritoneal and pericardial fluids; semen and vaginal secretions.

"Bypass stack" means an alternative stack used for discharging combustion gases to the atmosphere primarily to avoid severe damage to an air pollution control device or other equipment.

"Charge" means the act of placing waste into an HMIWI for incineration.

"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.

"Co-fired combustor" means a unit combusting hospital waste or medical/infectious waste with other fuels or wastes (e.g., coal, municipal solid waste) and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, of which 10 percent or less of the weight is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis. For purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other" wastes when calculating the percentage of hospital waste and medical/infectious waste combusted.

"Commercial HMIWI" means an HMIWI that offers incineration services for hospital/medical/ infectious waste generated offsite by firms unrelated to the firm that owns the HMIWI.

"Continuous emission monitoring system" or "CEMS" means a monitoring system for continuously measuring and recording the emissions of a pollutant from an affected facility.

"Continuous HMIWI" means an HMIWI that is designed to allow waste charging and ash removal during combustion.

"Dioxins/furans" means the total emissions of any tetra- through octa-chlorinated dibenzo-para-dioxins and dibenzofurans, as measured by EPA Reference Method 23, incorporated by reference in Section 229.104(d) of this Subpart.

"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 gases in an HMIWI exhaust stream, forming a dry powder material.

"Fabric filter" means an add-on air pollution control system that removes PM and nonvaporous metals emissions by passing flue gas through filter bags.

"Facilities manager" means the individual in charge of purchasing, maintaining, and operating an HMIWI, or the owner's or operator's representative responsible for the management of an HMIWI. Alternative titles may include director of facilities or vice president of support services.

"High air phase" means the stage of the batch operating cycle when the primary chamber reaches and maintains maximum operating temperatures.

"Hospital" means any facility that has an organized medical staff, maintaining at least 6 inpatient beds and where the primary function of the facility is to provide diagnostic and therapeutic patient services and continuous nursing care primarily to human inpatients who are not related and who stay on average in excess of 24 hours per admission. This definition does not include facilities maintained for the sole purpose of providing nursing or convalescent care to human patients who generally are not acutely ill but who require continuing medical supervision.

"Hospital/medical/infectious waste incinerator" or "HMIWI" means any device that combusts any amount of hospital waste or medical/infectious waste.

"Hospital waste" means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, or anatomical parts that are intended for interment or cremation.

"HMIWI operator" means any person who operates, controls, or supervises the day-to-day operation of an HMIWI.

"Infectious agent" means any organism that is capable of being communicated by invasion and multiplication in body tissues and is also capable of causing disease or adverse health impacts in humans.

"Intermittent HMIWI" means an HMIWI that is designed to allow waste charging, but not ash removal, during combustion.

"Large HMIWI" means:

An HMIWI whose maximum design waste burning capacity is more than 500 lbs per hour; or

A continuous or intermittent HMIWI whose maximum charge rate is more than 500 lbs per hour; or

A batch HMIWI whose maximum charge rate is more than 4,000 lbs per day.

"Low-level radioactive waste" means waste that 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 USC 2014(e)(2)).

"Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or of 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.

"Maximum charge rate" means:

For continuous and intermittent HMIWI, 110 percent of the lowest 3-hour average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits specified in Subpart E of this Part.

For batch HMIWI, 110 percent of the lowest daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits specified in Subpart E of this Part.

"Maximum design waste burning capacity" means:

For intermittent and continuous HMIWI:

$$\frac{C = P_v X 15{,}000}{8{,}500}$$

Where:

C	=	HMIWI capacity, lb/hr
P_v	=	primary chamber volume, ft^3
15,000	=	primary chamber heat release rate factor, $Btu/ft^3/hr$
8,500	=	standard waste heating value, Btu/lb;

For batch HMIWI:

$$\frac{P_v x 4.5}{8}$$

Where:

C	=	HMIWI capacity, lb/hr
P_v	=	primary chamber volume, ft^3

4.5 = waste density factor, lb/ft^3
8 = typical hours of operation of a batch HMIWI, hours.

"Maximum fabric filter inlet temperature" means 110 percent of the lowest 3-hour average temperature at the inlet to the fabric filter (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable dioxin/furan emission limit specified in Subpart E of this Part.

"Maximum flue gas temperature" means 110 percent of the lowest 3-hour average temperature at the outlet from the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable Hg emission limit specified in Subpart E of this Part.

"Medical/infectious waste" means any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals. The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in 40 CFR 261; household waste, as defined in 40 CFR 261.4(b)(1); and domestic sewage materials identified in 40 CFR 261.4(a)(1). For the purposes of this Part, medical/infectious waste includes:

Cultures and stocks of infectious agents and associated biologicals, including: vaccines and cultures intended for use in diagnosing, immunizing, or treating humans or animals; cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; and discarded live and attenuated vaccines;

Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers;

Human blood, any products derived from human blood, or anything that has been in contact with human blood in any form;

Intravenous bags and associated tubing;

Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, and needles with attached tubing;

Culture dishes, regardless of the presence of infectious agents, and culture dishes and devices used to transfer, inoculate, and mix cultures;

Any type of broken or unbroken glassware that has been in contact with infectious agents;

Animal waste, including contaminated animal carcasses, body parts, bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals;

Isolation wastes, including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with highly communicable diseases; and

Unused sharps, including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

"Medium HMIWI" means:

An HMIWI whose maximum design waste burning capacity is more than 200 lbs per hour but less than or equal to 500 lbs per hour; or

A continuous or intermittent HMIWI whose maximum charge rate, as set by permit, is more than 200 lbs per hour but less than or equal to 500 lbs per hour; or

A batch HMIWI whose maximum charge rate, as set by permit, is more than 1,600 lbs per day but less than or equal to 4,000 lbs per day.

"Minimum dioxin/furan sorbent flow rate" means 90 percent of the highest 3-hour average dioxin/furan sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the applicable dioxin/furan emission limit specified in Subpart E of this Part.

"Minimum Hg sorbent flow rate" means 90 percent of the highest 3-hour average Hg sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the applicable Hg emission limit specified in Subpart E of this Part.

"Minimum HCl sorbent flow rate" means 90 percent of the highest 3-hour average HCl sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the applicable HCl emission limit specified in Subpart E of this Part.

"Minimum horsepower" or "minimum amperage" means 90 percent of the highest 3-hour average horsepower or amperage to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limits specified in Subpart E of this Part.

"Minimum pressure drop across the wet scrubber" means 90 percent of the highest 3-hour average pressure drop across the wet scrubber PM control device (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable PM emission limit specified in this Subpart E of this Part.

"Minimum reagent flow rate" means 90 percent of the highest 3-hour average reagent flow rate at the inlet to the selective noncatalytic reduction technology (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable NOx emissions limit specified in Subpart E of this Part.

"Minimum scrubber liquor flow rate" means 90 percent of the highest 3-hour average liquor flow rate at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limits specified in Subpart E of this Part.

"Minimum scrubber liquor pH" means 90 percent of the highest 3-hour average liquor pH at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable HCl emission limit specified in Subpart E of this Part.

"Minimum secondary chamber temperature" means 90 percent of the highest 3-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM, CO, dioxin/furan, and applicable NOx emissions limits specified in Subpart E of this Part.

"Operating day" means a 24-hour period between 12:00 midnight and the following midnight during which any amount of hospital waste or medical/infectious waste is combusted at any time in an HMIWI.

"Operation" means any period during which waste is combusted in an HMIWI, excluding periods of startup or shutdown.

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

"Primary chamber" means the chamber in an HMIWI that receives waste material, in which the waste is ignited, and from which ash is removed.

"Rural HMIWI" means any HMIWI identified in Section 229.110(a) of this Part, that is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area, as defined in OMB Bulletin No. 93-17, incorporated by reference at Section 229.104(b) of this Part, meets the criteria specified in the definition of "small HMIWI" and burns less than 2,000 lbs per week of hospital waste and medical/infectious waste (except the 2,000 lbs per week limitation does not apply during performance testing).

"Secondary chamber" means that component of an HMIWI that receives combustion gases from the primary chamber and in which the combustion process is completed.

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

"Small HMIWI" means:

An HMIWI whose maximum design waste burning capacity is less than or equal to 200 lbs per hour; or

A continuous or intermittent HMIWI whose maximum charge rate, as set by permit, is less than or equal to 200 lbs per hour; or

A batch HMIWI whose maximum charge rate, as set by permit, is less than or equal to 1,600 lbs per day.

"Startup" means the period of time between the activation of an HMIWI and the first charge of waste to the unit. For batch HMIWI, startup means the period of time between activation of an HMIWI and ignition of the waste.

"Wet scrubber" means an add-on air pollution control device that utilizes either an alkaline or some other type of scrubbing liquor to collect pollutants and/or neutralize acid gases.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.104 Incorporations by Reference

The following materials are incorporated in this Part by reference. These incorporations by reference do not include any later amendments or editions.

a) "An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities," American Society for Healthcare Environmental Services, 840 North Lake Shore Drive, Chicago, Illinois, 60611 (1993).

b) "Revised Statistical Definitions for Metropolitan Areas," OMB Bulletin No. 93-17, Office of Management and Budget, Washington, D.C. (June 30, 1993). Office of Management and Budget, National Technical Information Services, 5285 Port Royal Road, Springfield, VA 22161. (703) 487-4600.

c) 40 CFR 60.8.

d) 40 CFR 60, appendix~~Appendix~~ A, Methods 1, 2, 3, 3A, 5, 9, 10, 10B, 23, 26, 26A, 29.

e) 40 CFR 60, appendices~~Appendices~~ B and F.

f) 40 CFR appendix A, Methods 3B, 6, 6C, 7, 7E, 22 (2010).

g) 40 CFR 60, subpart Ce and Ec (2010).

h) ANSI/ASME PTC19.10-1981, Flue and Gas Analyses [Part 10, Instruments and Apparatus]. American National Standards Institute (ANSI), Attn: Customer Service Department, 25 West 43rd Street, 4th Floor, New York, NY 10036. (212) 642-4980.

i) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method). American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, PO Box C70, West Conshohocken, PA 19428-2959. (610) 832-9585.

j) "Fabric Filter Bag Leak Detection Guidance", U.S. Environmental Protection Agency. (EPA-454/R-98-015, September 1997). Superintendent of Documents, U.S. Government Printing Office (GPO), P979050, St. Louis, MO 63197-9000.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART B: APPLICABILITY

Section 229.110 General Applicability

a) Except as provided for in subsections (b), (c), (d) and (e) of this Section and Section 229.112 of this Subpart, this Part applies to all HMIWIs for which:

1) Construction commenced either on or before June 20, 1996, or modification was commenced either on or before March 16, 1998; or

2) Construction commenced either after June 20, 1996 but no later than December 1, 2008, or for which modification is commenced after March 16, 1998 but no later than April 6, 2010.~~This Part applies to all HMIWIs for which construction commenced either on or before June 20, 1996, except as provided for in subsections (b), (c), (d) and (e) of this Section and Section 229.112 of this Subpart.~~

b) An HMIWI otherwise subject to the emission limits in this Part is only subject to the recordkeeping requirements set forth in Section 229.182(b), (f) and (g) of this Part during those periods when it combusts only pathological waste, low-level radioactive waste, or chemotherapeutic waste, provided the owner or operator of the HMIWI notifies the Agency of its intention to operate pursuant to this operating scenario in its CAAPP application submitted in accordance with either Section 229.115(b)(1), Subpart D of this Part, or Section 39.5 of the Act.

c) An HMIWI that combusts only pathological waste, low-level radioactive waste, or chemotherapeutic waste is subject to only the recordkeeping requirements set forth in Section~~Sections~~ 229.182(c), (f) and (g) of this Part provided that the owner or operator of an HMIWI provides, by December 15, 1999, both the Agency and the USEPA with a written certification of its status as an HMIWI burning only the wastes listed in this subsection.

d) A co-fired combustor is subject only to the recordkeeping requirements set forth in Section~~Sections~~ 229.182(d), (f) and (g) of this Part, provided that the owner or operator of the combustor is subject to a permit condition limiting its fuel feed stream to co-fired combustor status, provides, by December 15, 1999, both the Agency and USEPA with a written certification of its status as a co-fired

combustor, including an estimate of the relative weight of hospital waste, medical/infectious waste, and other fuels and/or waste combusted at the facility.

e) Any hospital that does not operate an HMIWI but that sends any of its hospital waste or medical/infectious waste to an off-site HMIWI is subject only to the waste management plan provisions set forth at Section 229.178 of this Part.

f) Before January 1, 2014, each owner or operator of an HMIWI as defined in subsection (a)(1) of this Section, subject to the emissions limits under Section 229.125(a) or Section 229.126(a), shall comply with all the applicable provisions of this Part.

g) On and after January 1, 2014, an HMIWI as defined in subsection (a)(1) of this Section is no longer subject to the emissions limits under Section 229.125(a) or Section 229.126(a) of this Part, but is subject to the emissions limits under Section 229.125(c) or Section 229.126(c), and shall comply with all the applicable provisions of this Part.

h) On and after January 1, 2014, each owner and operator of an HMIWI as defined in subsection (a)(2) of this Section is no longer subject to the provisions under New Source Performance Standards for Hospital/Medical/Infectious Waste Incinerators (40 CFR 60, subpart Ec), but is subject to the emissions limits under Section 229.125(c) or Section 229.126(c), and shall comply with all the applicable provisions of this Part.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.112 Exemptions

Notwithstanding other provisions of this Part, the following emission units are exempt from the requirements of this Part:

a) Any combustor required to have a permit under Section 3005 of the Solid Waste Disposal Act, 42 USC~~U.S.C~~ 6925;

b) Any municipal waste combustor that meets the applicability provisions for municipal waste combustors under Subparts Cb, Ea or Eb of 40 CFR 60;

c) Any pyrolysis unit (i.e., a unit that uses endothermic gasification to treat hospital waste or medical/infectious waste in order to render such waste harmless);

d) Any cement kiln firing hospital waste or medical/infectious waste; or

e) Any HMIWI that meets the applicability provisions for Standards of Performance for Hospital/Medical/Infectious Waste Incinerators under subpart Ec of 40 CFR 60.

~~e) Any HMIWI subject to the *Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996*, contained in Subpart Ec of 40 CFR 60.50e.~~

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART C: COMPLIANCE SCHEDULES

Section 229.115 Compliance Schedules for HMIWIs That Will Continue to Operate

a) Before January 1, 2014, each owner or operator of an HMIWI as defined in Section 229.110(a)(1) of this Part, subject to the emissions limits under Section 229.125(a) or Section 229.126(a) of this Part, shall comply with all the applicable provisions of this Part according to the following schedules:

1~~a~~) Except as provided in subsection (a)(2)~~(b)~~ of this Section and unless another date is specified in the provisions of this Part, all owners or operators of HMIWIs shall be in compliance with all of the provisions of this Part by September 15, 2000.

2~~b~~) Except as provided in subsection (a)(3)~~(c)~~ of this Section, the owner or operator of an HMIWI may have up to September 15, 2002, to come into compliance with this Part. To avail themselves of this extended compliance timeframe, the owner or operator of an HMIWI shall:

A~~1~~) Submit its CAAPP application to the Agency, on or before November 15, 1999, requesting an extended compliance schedule, pursuant to Section 39.5(5)(d) of the Act, [415 ILCS 5/39.5(5)(d)]. This compliance schedule shall include documentation supporting the need for an extension, a final control plan for the HMIWI and incremental steps to be taken toward compliance with this Part that, at a minimum, meet the increments of progress specified in subsection (a)(2)(B)~~(b)(2)~~ of this Section;

B~~2~~) Meet the following increments of progress by the dates indicated:

i~~A~~) Finalize all contracts for the purchase of either pollution control equipment, process modification or control systems by February 29, 2000;

ii~~B~~) Commence the implementation of either the process modifications or the necessary construction or installation of air pollution control devices for the HMIWI by November 30, 2000;

iii~~C~~) Complete either the process modifications or the installation or construction of the new air pollution control equipment by August 31, 2001;

iv~~D~~) Perform initial startup of the retrofitted HMIWI by January 15, 2002; and

v~~E~~) Complete the initial performance test in accordance with Section 229.142 of this Part within 180 days after initial startup.

3e) Any owner or operator of an HMIWI that fails to demonstrate compliance with this Part by September 15, 2002, shall cease operation of the HMIWI until compliance with the provisions of this Part is achieved.

4~~d~~) Notwithstanding subsection (a)(2)~~(b)~~ of this Section, all owners or operators of HMIWIs shall be in full compliance with all of the HMIWI operator provisions of Subpart J of this Part by September 15, 2000.

b) On and after January 1, 2014, each owner or operator of an HMIWI, as defined in Section 229.110(a)(1) or (a)(2) of this Part, and subject to the emissions limits under Section 229.125(c) of this Part as applicable, or Section 229.126(c) of this Part, shall comply with the applicable provisions of this Part according to the following schedules:

1) Except as provided in subsection (b)(2) of this Section and unless another date is specified in the provisions of this Part, all owners or operators of HMIWIs shall comply with all of the provisions of this Part by January 1, 2014.

2) Except as provided in subsection (b)(4) of this Section, the owner or operator of an HMIWI may have until October 6, 2014 to come into compliance with the emissions limits under Section 229.125(c) or 229.126(c) of this Part. To avail itself of this extended compliance timeframe, the owner or operator of an HMIWI shall:

A) Submit its CAAPP application and construction permit to the Agency, on or before January 1, 2012, requesting an extended compliance schedule, pursuant to Section 39.5(5)(d) of the Act [415 ILCS 5/39.5(5)(d)]. This compliance schedule shall include documentation supporting the need for an extension, a final control plan for the HMIWI and incremental steps to be taken toward compliance with this Part that, at a minimum, meet the increments of progress specified in subsection (b)(2)(B) of this Section;

B) Meet the following increments of progress by the dates indicated:

i) Finalize all contracts for the purchase of pollution control equipment, process modification or control systems by August 1, 2012;

ii) Commence the implementation of either the process modifications or the necessary construction or installation of air pollution control devices for the HMIWI by March 1, 2013;

iii) Complete either the process modifications or the installation or construction of the new air pollution control equipment by September 1, 2013;

iv) Achieve final compliance, which includes incorporating all process changes and/or completing retrofit construction as described in the final control plan, connecting the air pollution control equipment or process changes so that the unit is brought on line, and ensuring that all necessary process changes and air pollution control equipment are operating properly, no later than June 1, 2014;

v) Complete the initial performance test in accordance with Section 229.142 of this Part no later than October 6, 2014;

vi) Submit the results of the initial performance test and revised waste management plan to the Agency no later than 60 days following the initial performance test; and

vii) Submit notification to the Agency within 10 business days after completing (or failing to complete by the applicable date) each of the increments of progress specified in subsection (b)(2)(B) of this Section. The notification must

be signed by the owner's or operator's representative responsible for the management of the HMIWI.

3) If a petition for compliance extension is granted, the owner or operator of an HMIWI, as defined in Section 229.110(a)(1) or (a)(2), must continue to comply with the provisions of its current CAAPP permit during the interim.

4) Any owner or operator of an HMIWI that fails to demonstrate compliance with this Part by October 6, 2014 shall cease operation of the HMIWI until compliance with the provisions of this Part is achieved.

5) Notwithstanding subsection (b)(2) of this Section, all owners or operators of HMIWIs shall be in full compliance with all of the HMIWI operator provisions of Subpart J of this Part before January 1, 2014.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.116 Compliance Schedules for HMIWIs That Will Shut Down

All owners or operators of HMIWIs that intend to permanently shut down their HMIWI as a means of complying with this Part shall:

a) Provide the Agency with written notice of their intention to permanently shut down their HMIWI, as follows:

1) On or before November 15, 1999, for an HMIWI as defined in Section 229.110(a)(1) of this Part, subject to the emissions limits under Section 229.125(a) or Section 229.126(a) of this Part;

2) On or before January 1, 2013, except as provided for in Section 229.116(c), for an HMIWI as defined in Section 229.110(a)(2) of this Part, subject to the emissions limits under Section 229.125(c), as applicable, or Section 229.126(c) of this Part.

b) Take the following affirmative steps to demonstrate that the HMIWI has been rendered permanently inoperable by September 15, 2000, for an HMIWI as defined in Section 229.110(a)(1), or by January 1, 2014 for an HMIWI as defined in Sections 229.110(a)(2) of this Part:

~~a) Provide the Agency with written notice of their intention to permanently shut down their HMIWI on or before November 15, 1999; and~~

~~b)~~ ~~Take the following affirmative steps to demonstrate that the HMIWI has been rendered permanently inoperable by September 15, 2000:~~

1) Weld the primary chamber door shut;

2) Dismantle the HMIWI; or

3) Other means that reasonably demonstrate that the HMIWI is no longer functional.

c) Except as provided in subsection (c)(5) of this Section, owners or operators may have up to October 6, 2014 to shut down their HMIWIs to avoid being subject to compliance with the emissions limits under Section 229.125(c) or 229.126(c). To avail themselves of this extended compliance timeframe, the owner or operator of an HMIWI shall:

1) Submit its application to the Agency by July 1, 2013 requesting an extended compliance schedule, pursuant to Section 39.5(5)(d) of the Act [415 ILCS 5/39.5(5)(d)]. This compliance schedule shall include documentation of the analysis undertaken to support the need for an extension, including an explanation of why the timeframe up to October 6, 2014 is sufficient while the timeframe up to January 1, 2014 is not sufficient, and incremental steps to be taken toward compliance with applicable requirements of this Part.

2) If an onsite alternative waste treatment technology is needed to be installed before the HMIWI is shut down, an application for compliance extension shall include the following elements of increments of progress and completion date for each step of progress:

A) Finalize contract with an alternative waste treatment technology vendor;

B) Initiate onsite construction or installation of alternative waste treatment technology;

C) Complete onsite construction or installation of alternative waste treatment technology; and

D) Take the steps described under subsection (b) of this Section to demonstrate that the HMIWI has been rendered permanently inoperable.

3) If an onsite alternative waste treatment technology is not needed to be installed before an HMIWI is shut down, an application for compliance extension shall include a plan for shut down. The plan for shut down shall include steps described under subsection (b) of this Section to demonstrate that the HMIWI has been rendered permanently inoperable.

4) If a petition for compliance extension is granted, the owner or operator of an HMIWI, as defined in Section 229.110(a)(1) or (a)(2), must continue to comply with the provisions of its current CAAPP permit during the interim.

5) Any owner or operator of an HMIWI that fails to demonstrate compliance with this Part by October 6, 2014 shall cease operation of the HMIWI until compliance with the provisions of this Part is achieved.

6) Notwithstanding subsection (c)(1) of this Section, all owners or operators of HMIWIs shall be in full compliance with all of the HMIWI operator provisions of Subpart J of this Part by January 1, 2014.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART D: CAAPP PERMIT REQUIREMENTS

Section 229.120 CAAPP Permit Requirements

a) All HMIWIs subject to the emissions limits in this Part shall operate pursuant to a CAAPP permit, as follows:

1) By September 15, 2000, for an HMIWI as defined in Section 229.110(a)(1) of this Part; and

2) By January 1, 2014, for an HMIWI as defined in Section 229.110(a)(1) or (a)(2) of this Part.

b) For any HMIWI subject to the emission limits in this Part that is first required to obtain a CAAPP permit because it is subject to the emission limits in this Part, the owner or operator shall submit a complete application for a CAAPP permit, as follows:

1) By September 15, 2000, except as provided for in Section 229.115(a)(2)(A) of this Part, for an HMIWI as defined in Section 229.110 (a)(1) of this Part; or

2) By January 1, 2014, except as provided for in Section 229.115(b)(2)(A) of this Part, for an HMIWI as defined in Section 229.110(a)(1) or (a)(2) of this Part.

~~a)~~ ~~All HMIWIs subject to the emissions limits in this Part shall operate pursuant to a CAAPP permit by September 15, 2000.~~

~~b)~~ ~~For any HMIWI subject to the emission limits in this Part that is first required to obtain a CAAPP permit because it is subject to the emission limits in this Part, the owner or operator shall submit a complete application for a CAAPP permit by September 15, 2000, except as provided for in Section 229.115(b)(1) of this Part.~~

c) Upon submittal of a timely and complete CAAPP application, the owner or operator of an HMIWI shall not be in violation of the requirement, specified in subsection (a) of this Section, to have a CAAPP permit, to the extent provided in Section 39.5(5)(h) of the Act [415 ILCS 5/39.5(5)(h)].

d) For any HMIWI that currently has a CAAPP permit, the following conditions apply:

1) If the CAAPP permit has 3 or more years remaining on the permit term, the owner or operator of an HMIWI shall apply for revision to the CAAPP permit to incorporate the applicable requirements of this Part, as follows: ~~on or before November 15, 1999; or~~

A) On or before November 15, 1999, for an HMIWI as defined in Section 229.110(a)(1) of this Part; and

B) On or before January 1, 2013, for an HMIWI as defined in Section 229.110 (a)(1) or (a)(2) of this Part; or

2) If the CAAPP permit has less than 3 years remaining on the permit term, the CAAPP permit shall be revised to incorporate the applicable requirements of this Part, upon renewal of the permit.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART E: EMISSIONS~~EMISSION~~ LIMITS

Section 229.125 Emissions~~Emission~~ Limits for Small, Medium, and Large HMIWIs

~~a)~~The emission limits in this Section shall apply at all times to HMIWIs identified in Section 229.110(a) ~~at all times~~, except as provided in Section 229.110(b) of this Part and~~,~~ Section

229.126 of this Subpart ~~and Subpart F of this Part~~.

a) Before January 1, 2014, each owner or operator of a small, medium, or large HMIWI as defined in Section 229.110(a)(1) of this Part shall comply with the following emissions limits:

~~b) The emission limits for small, medium, and large HMIWIs are as follows:~~

Pollutant	**Units** (7% oxygen, dry basis)	**HMIWI EMISSIONS LIMITS**		
		Small	**Medium**	**Large**
Particulate matter	Milligrams per dry standard cubic meter (mg/dscm) (grains per dry standard cubic foot (gr/dscf))	115 (0.05)	69 (0.03)	34 (0.015)
Carbon monoxide	Parts per million by volume (ppmv)	40	40	40
Dioxins/furans	Nanograms per dry standard cubic meter total dioxins/furans (ng/dscm) (grains per billion dry standard cubic feet ($gr/10^9$ dscf)) or ng/dscm TEQ ($gr/10^9$ dscf)	125 (55) or 2.3 (1.0)	125 (55) or 2.3 (1.0)	125 (55) or 2.3 (1.0)
Hydrogen chloride	(ppmv) or percent reduction	100 or 93%	100 or 93%	100 or 93%
Sulfur dioxide	(ppmv)	55	55	55
Nitrogen oxides	(ppmv)	250	250	250
Lead	mg/dscm (grains per thousand dry standard cubic feet ($gr/10^3$ dscf)) or percent reduction	1.2 (0.52) or 70%	1.2 (0.52) or 70%	1.2 (0.52) or 70%

Cadmium	mg/dscm (gr/10^3 dscf) or percent reduction	0.16 (0.07) or 65%	0.16 (0.07) or 65%	0.16 (0.07) or 65%
Mercury	mg/dscm (gr/10^3 dscf) or percent reduction	0.55 (0.24) or 85%	0.55 (0.24) or 85%	0.55 (0.24) or 85%

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		~~HMIWI EMISSION LIMITS~~		
~~Pollutant~~	~~Units (7% oxygen, dry basis)~~	~~Small~~	~~Medium~~	~~Large~~
~~PM~~	~~mg per dscm(grains per dscf)~~	~~115 (0.05)~~	~~69 (0.03)~~	~~34 (0.015)~~
~~CO~~	~~ppmv~~	~~40~~	~~40~~	~~40~~
~~Dioxins/Furans~~	~~Nanograms per dscm, total dioxins/furans (grains per billion dscf), or nanograms per dscm TEQ (grains per billion dscf)~~	~~125 (55) or 2.3 (1.0)~~	~~125 (55) or 2.3 (1.0)~~	~~125 (55) or 2.3 (1.0)~~
~~HCl~~	~~ppmv or percent reduction~~	~~100 or 93%~~	~~100 or 93%~~	~~100 or 93%~~
~~SO_2~~	~~ppmv~~	~~55~~	~~55~~	~~55~~
~~NO_x~~	~~ppmv~~	~~250~~	~~250~~	~~250~~
~~Pb~~	~~mg per dscm (grains per thousand dscf) or percent reduction~~	~~1.2 (0.52) or 70%~~	~~1.2 (0.52) or 70%~~	~~1.2 (0.52) or 70%~~
~~Cd~~	~~mg per dscm (grains per thousand dscf) or percent reduction~~	~~0.16 (0.07) or 65%~~	~~0.16 (0.07) or 65%~~	~~0.16 (0.07) or 65%~~
~~Hg~~	~~mg per dscm (grains per thousand dscf) or percent reduction~~	~~0.55 (0.24) or 85%~~	~~0.55 (0.24) or 85%~~	~~0.55 (0.24) or 85%~~

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869 b) No owner or operator of a small, medium, or large HMIWI subject to emissions
870 limits listed under subsection (a) of this Section shall cause or allow any

emissions that cause greater than 10 percent opacity, as measured on a 6-minute block average, according to Method 9, 40 CFR 60, appendix A, incorporated by reference in Section 229.104(d) of this Part, from any stack used by an HMIWI.

c) On and after January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), as applicable, each owner or operator of a small, medium, or large HMIWI, as defined in Section 229.110(a)(1) and (a)(2) of this Part, shall comply with the following emissions limits, as applicable:

~~e) No owner or operator of a small, medium, or large HMIWI shall cause or allow any emissions that cause greater than 10 percent opacity, as measured on a 6 minute block average, according to Method 9, 40 CFR 60, Appendix A, incorporated by reference at Section 229.104(d) of this Part, from any stack used by an HMIWI.~~

Pollutant	**Units** (7% oxygen, dry basis)	**HMIWI EMISSIONS LIMITS**		
		Small	**Medium**	**Large**
Particulate matter	Milligrams per dry standard cubic meter (mg/dscm) (grains per dry standard cubic foot (gr/dscf))	66 (0.029)	46 (0.020)[a] 34 (0.015)[b]	25 (0.011)
Carbon monoxide	Parts per million by volume (ppmv)	20	5.5	11
Dioxins/furans	Nanograms per dry standard cubic meter total dioxins/furans (ng/dscm) (grains per billion dry standard cubic feet (gr/10^9 dscf)) or ng/dscm TEQ (gr/10^9 dscf)	16 (7.0) or 0.013 (0.0057)	0.85 (0.37) or 0.020 (0.0087)	9.3 (4.1) or 0.054 (0.024)
Hydrogen chloride	(ppmv)	44[a] 15[b]	7.7	6.6
Sulfur dioxide	(ppmv)	4.2	4.2	9.0
Nitrogen oxides	(ppmv)	190	190	140

Lead	mg/dscm (grains per thousand dry standard cubic feet ($gr/10^3$ dscf))	0.31 (0.14)	0.018 (0.0079)	0.036 (0.016)
Cadmium	mg/dscm ($gr/10^3$ dscf)	0.017 (0.0074)	0.013 (0.0057)	0.0092 (0.0040)
Mercury	mg/dscm ($gr/10^3$ dscf)	0.014 (0.0061)	0.025 (0.011)	0.018 (0.0079)

[a] Emissions limits for HMIWIs as defined in Section 229.110(a)(1) of this Part.
[b] Emissions limits for HMIWIs as defined in Section 229.110(a)(2) of this Part.

d) No owner or operator of a small, medium, or large HMIWI subject to emission limits listed under subsection (c) of this Section shall cause or allow any emissions that cause greater than 6 percent opacity, as measured on a 6-minute block average, according to Method 9, 40 CFR 60, appendix A, incorporated by reference at Section 229.104(d) of this Part, from any stack used by an HMIWI.

e) On and after the date on which the initial performance test is completed or required to be completed under Section 229.142 of this Part, whichever date comes first, no owner or operator of an HMIWI, as defined in Section 229.110 (a)(1) or (a)(2) of this Part and subject to the emissions limits under subsection (c) of this Section, shall cause to be discharged into the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points), enclosures of ash conveying systems, buildings, or other sources in excess of 5 percent of the observation period of 9 minutes per 3-hour period, according to Method 22, 40 CFR 60, appendix A, incorporated by reference in Section 229.104(d) of this Part, except as provided by the following exclusions:

1) Visible emissions discharged inside buildings or enclosures of ash conveying systems; or

2) During maintenance and repair of ash conveying systems. Maintenance and/or repair shall not exceed 10 operating days per calendar quarter unless the owner or operator of an HMIWI makes a request to the Agency in writing for a longer period of time to complete maintenance and/or repair, and the Agency approves the owner's or operator's request in writing.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.126 Emissions~~Emission~~ Limits For Rural HMIWIs

~~a)~~Notwithstanding the emissions~~emission~~ limits set out in Section 229.125 of this Part, any rural HMIWI shall comply with the emissions~~emission~~ limits set out in subsection (a) or (c)~~(b)~~ of this Section. The emissions~~emission~~ limits under this Section shall apply at all times, except as provided for in Section 229.110(b)~~ and Subpart F of this Part~~.

a) Before January 1, 2014, a rural HMIWI as defined in Section 229.110(a)(1) shall comply with the following emissions limits:

~~b)~~ ~~The emission limits for rural HMIWI are as follows:~~

Pollutant	**Units** (7% oxygen, dry basis)	**EMISSION LIMITS**
Particulate matter	mg/dscm (gr/dscf)	197 (0.086)
Carbon monoxide	ppmv	40
Dioxins/furans	ng/dscm total dioxins/furans ($gr/10^9$ dscf) or ng/dscm TEQ ($gr/10^9$ dscf)	800 (350) or 15 (6.6)
Hydrogen chloride	ppmv	3100
Sulfur dioxide	ppmv	55
Nitrogen oxides	ppmv	250
Lead	mg/dscm ($gr/10^3$ dscf)	10 (4.4)
Cadmium	mg/dscm ($gr/10^3$ dscf)	4 (1.7)
Mercury	mg/dscm ($gr/10^3$ dscf)	7.5 (3.3)

~~**Pollutant**~~	~~**Units** (7% oxygen, dry basis)~~	~~**EMISSION LIMITS**~~
~~PM~~	~~mg per dscm (grains per dscf~~	~~197 (0.086)~~
~~CO~~	~~ppmv~~	~~40~~
~~Dioxin/Furans~~	~~nanograms per dscm total dioxins/furans (grains per billion dscf), or nanograms per dscm TEQ (grains per billion dscf)~~	~~800 (350) or 15 (6.6)~~
~~HCl~~	~~ppmv~~	~~3100~~
~~SO_2~~	~~ppmv~~	~~55~~
~~Nox~~	~~ppmv~~	~~250~~
~~Pb~~	~~mg per dscm (grains per thousand dscf)~~	~~10 (4.4)~~
~~Cd~~	~~mg per dscm (grains per thousand~~	~~4 (1.7)~~

	~~dscf)~~	
~~Hg~~	~~mg per dscm (grains per thousand dscf)~~	~~7.5 (3.3)~~

b) No owner or operator of a rural HMIWI subject to emissions limits listed under subsection (a) of this Section shall cause or allow any emissions that cause greater than 10 percent opacity, as measured on a 6-minute block average, according to Method 9, 40 CFR 60, appendix A, incorporated by reference at Section 229.104(d) of this Part, from any stack used by an HMIWI.

c) On and after January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), as applicable, a rural HMIWI, as defined in Section 229.110(a)(1) or (a)(2) of this Part, shall comply with the following emissions limits:

Pollutant	**Units** (7% oxygen, dry basis)	**EMISSION LIMITS**
Particulate matter	mg/dscm (gr/dscf)	87 (0.038)
Carbon monoxide	ppmv	20
Dioxins/furans	ng/dscm total dioxins/furans ($gr/10^9$ dscf) or ng/dscm TEQ ($gr/10^9$ dscf)	240 (100) or 5.1 (2.2)
Hydrogen chloride	ppmv	810
Sulfur dioxide	ppmv	55
Nitrogen oxides	ppmv	130
Lead	mg/dscm ($gr/10^3$ dscf)	0.50 (0.22)
Cadmium	mg/dscm ($gr/10^3$ dscf)	0.11 (0.048)
Mercury	mg/dscm ($gr/10^3$ dscf)	0.0051 (0.0022)

d) No owner or operator of a rural HMIWI subject to emissions limits listed under subsection (c) of this Section shall cause or allow any emissions that cause greater than 6 percent opacity, as measured on a 6 minute block average, according to Method 9, 40 CFR 60, appendix A, incorporated by reference at Section 229.104(d) of this Part, from any stack used by an HMIWI.

e) On and after the date on which the initial performance test is completed or required to be completed under Section 229.142 of this Part, whichever date comes first, no owner or operator of a rural HMIWI, as defined in Section 229.110(a)(1) or (a)(2) of this Part, subject to the emissions limits under

subsection (c) of this Section, shall cause to be discharged into the atmosphere visible emissions of combustion ash from ash conveying system (including conveyor transfer points), enclosures of ash conveying systems, buildings, or other sources in excess of 5 percent of the observation period of 9 minutes per 3-hour period, according to Method 22, 40 CFR 60, appendix A, incorporated by reference at Section 229.104(d) of this Part, except as provided by the following exclusions:

1) Visible emissions discharged inside buildings or enclosures of ash conveying systems; or

2) During maintenance and repair of ash conveying systems. Maintenance and/or repair shall not exceed 10 operating days per calendar quarter, unless the owner or operator of an HMIWI makes a request to the Agency in writing for a longer period of time to complete maintenance and/or repair, and the Agency approves the owner's or operator's request in writing.

~~e) No owner or operator of a rural HMIWI shall cause or allow any emissions that cause greater than 10 percent opacity, as measured on a 6 minute block average, according to Method 9, 40 CFR 60, Appendix A, incorporated by reference at Section 229.104(d) of this Part, from any stack used by an HMIWI.~~

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART F: EXCEPTIONS FROM EMISSION LIMITS

Section 229.130 Operation During Periods of Startup, Shutdown, or Malfunction (Repealed)

~~a) The emission limits specified in Subpart E of this Part do not apply to an HMIWI during periods of startup, shutdown or malfunction, if the requirements provided in subsections (b), (c) and (d) of this Section are met.~~

~~b) No waste shall be charged to an HMIWI during periods of startup, shutdown or malfunction.~~

~~c) The shutdown of any HMIWI shall proceed according to the following requirements:~~

~~1) For continuous HMIWIs, shutdown may commence no less than 2 hours after the last charge to an HMIWI;~~

~~2)~~ ~~For intermittent HMIWIs, shutdown may commence no less than 4 hours after the last charge to an HMIWI; and~~

~~3)~~ ~~For batch HMIWIs, shutdown may commence no less than 5 hours after the high air phase of combustion has been completed.~~

~~d)~~ ~~During periods of malfunction, the owner or operator of an HMIWI shall do all of the following:~~

~~1)~~ ~~Take all reasonable steps to ensure that an HMIWI operates within the parameters established for that HMIWI and to minimize excess emissions;~~

~~2)~~ ~~Continue monitoring all applicable parameters; and~~

~~3)~~ ~~Take appropriate corrective actions prior to resuming the charging of any waste to an HMIWI.~~

(Source: Repealed at 33 Ill. Reg. _____, effective _____)

SUBPART H: COMPLIANCE REQUIREMENTS

Section 229.142 Initial Performance Testing and Establishment of Operating Parameters for All HMIWIs

a) Before January 1, 2014, each owner or operator of an HMIWI as defined in Section 229.110(a)(1) of this Part, subject to the emissions limits under Section 229.125(a) or Section 229.126(a) of this Part, shall comply with the following requirements:

~~The owner or operator of an HMIWI subject to the emissions limits under this Part shall comply with the following requirements:~~

1~~a~~) Except as provided in Section 229.115(a)(2)(B)(v)~~229.115(b)(2)(E)~~ of this Part, conduct an initial performance test on their HMIWI by September 15, 2000.~~;~~

2~~b~~) Except as provided in subsection (a)(3)~~(c)~~ of this Section, in the initial performance test, test for all pollutants limited pursuant to Subpart E of this Part.~~;~~

3~~c~~) During the initial performance test, rural HMIWIs are not required to test for HCl, Pb or Cd.~~;~~

4~~d~~) If an HMIWI is equipped with a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and wet scrubber, or a selective noncatalytic reduction system, establish the appropriate maximum and minimum operating parameter values indicated in Appendix B of this Part for the relevant control system during the initial performance test, provided that the performance test demonstrates compliance with the emission limits specified in Section 229.125 of this Part.~~;~~

5~~e~~) If air pollution control equipment other than a dry scrubber followed by a fabric filter, a wet scrubber, ~~a~~or dry scrubber followed by a fabric filter and a wet scrubber, or a selective noncatalytic reduction system is used to comply with the emission limits under Section 229.125 of this Part, the initial performance test may not be conducted until site-specific operating parameters that will be monitored to demonstrate compliance with this Part have been established by the Agency in a construction permit and approved by USEPA.

6~~f~~) For rural HMIWI, establish the maximum charge rate and minimum secondary chamber temperature as site-specific parameters during the initial performance test, provided that the performance test demonstrates that the HMIWI is in compliance with the emission limits specified in Section 229.126 of this Part.

b) On and after January 1, 2014, each owner or operator of an HMIWI, as defined in Section 229.110(a)(1) or (a)(2) of this Part, and subject to the emissions limits under Section 229.125(c) as applicable, or Section 229.126(c) of this Part, shall comply with the following requirements:

1) Except as provided in Section 229.115(a)(2)(B)(v) of this Part, conduct an initial performance test on its HMIWI by January 1, 2014.

2) Except as provided for in subsection (b)(6), in the initial performance test, test for all pollutants to demonstrate compliance with Section 229.125(c) or Section 229.126(c) emissions limits, as applicable, pursuant to Subpart E of this Part.

3) If an HMIWI is equipped with a dry scrubber followed by a fabric filter, a wet scrubber, a dry scrubber followed by a fabric filter and wet scrubber, or a selective noncatalytic reduction system, establish the appropriate maximum and minimum operating parameter values indicated in Appendix B of this Part for the relevant control system during the initial performance test, provided that the performance test demonstrates

compliance with the emission limits specified in Section 229.125 or 229.126 of this Part.

4) If an air pollution control device other than a dry scrubber followed by a fabric filter, a wet scrubber, a dry scrubber followed by a fabric filter and a wet scrubber, or a selective noncatalytic reduction system is used to comply with the emission limits under Section 229.125 or Section 229.126 of this Part, the initial performance test may not be conducted until site-specific operating parameters that will be monitored to demonstrate compliance with this Part have been established by the Agency in a construction permit and approved by USEPA.

5) For a rural HMIWI that is not equipped with an air pollution control device, establish the maximum charge rate and minimum secondary chamber temperature as site-specific parameters during the initial performance test, provided that the performance test demonstrates that the HMIWI is in compliance with the emission limits specified in Section 229.126(c) of this Part.

6) The owner or operator of an HMIWI may use results of previous performance tests for initial compliance demonstration with the applicable emissions limits, provided the following conditions are met:

A) The previous emissions tests were conducted using procedures and test methods listed in Section 229.140 of this Part or USEPA-accepted voluntary consensus standards;

B) The test results are certified as representative of current operations; and

C) The previous emissions tests were conducted no earlier than 1996.

7) The owner or operator of an HMIWI that cannot certify and/or whose previous performance test results do not demonstrate compliance with one or more of the revised emission limits must conduct another performance test for those pollutants.

8) The owner or operator of an HMIWI, as defined in Section 229.110(a)(1) or (a)(2) of this Part, and subject to the emissions limits under Section 229.125(c) as applicable, or Section 229.126(c) of this Part, as applicable, shall determine compliance with the visible emissions limit for fugitive emissions from ash handling in Sections 229.125(g) and 229.126(e) by

conducting an initial performance test using Method 22, at 40 CFR 60, appendix A, incorporated by reference at Section 229.104(d) of this Part.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.146 Annual Testing for Opacity

Following the date on which the initial performance test is completed, as required by Section 229.142 of this Section, the owners or operators of all HMIWIs shall conduct an annual opacity test, in accordance with Section 229.140 of this Part. The opacity test schedules are as follows:~~, by September 15 of each year.~~

a) By September 15 of each year for an HMIWI as defined in Section 229.110(a)(1) of this Part and subject to the emissions limits under Section 229.125(a) or Section 229.126(a) of this Part; and

b) By January 1 of each year for an HMIWI, as defined in Section 229.110(a)(1) or (a)(2) of this Part, and subject to the emissions limits under Section 229.125(c) as applicable, or Section 229.126(c) of this Part.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.148 Annual Performance Testing for All~~Small, Medium and Large~~ HMIWIs

Following the date on which the initial performance test is completed, as required by Section 229.142 of this Part, each owner or operator of an HMIWI, as applicable,~~all owners or operators of small, medium, or large HMIWIs~~ shall conduct an annual performance test~~, by September 15 of each year~~ to determine compliance with the applicable PM, CO and HCl emission limits specified in Section 229.125 or 229.126~~(b)~~ of this Part, using the applicable test procedures and methods specified in Section 229.140 of this Part.

a) Annual performance test schedules are as follows:

1) Before January 1, 2014, each owner or operator of a small, medium, or large HMIWI as defined in Section 229.110(a)(1), subject to the emissions limits under Section 229.125(a) of this Part, shall complete an annual performance test by September 15 of each year; and

2) On and after January 1, 2014, an owner or operator of a small, rural, medium, or large HMIWI, as defined in Section 229.110(a)(1) or (a)(2), subject to the emissions limits under Section 229.125(c) as applicable, or in Section 229.126(c) of this Part, shall complete an annual performance test by January 1 of each year.

b~~a~~) If all 3 annual performance tests over a 3-year period indicate compliance with the applicable emission limits for PM, CO, or HCl specified in Section 229.125~~(b)~~ of this Part, the owner or operator of an HMIWI may forego a performance test for that pollutant during the next 2 years. If the next performance test conducted every third year indicates compliance with the emission limits for PM, CO, or HCl specified in Section 229.125~~(b)~~ of this Part, the owner or operator of an HMIWI may forego a performance test for that pollutant for an additional 2 years from the date of the previous performance test.

c~~b~~) If any performance test indicates noncompliance with the respective emission limit, the owner or operator of an HMIWI shall conduct a performance test for that pollutant annually until all annual performance tests over a 3-year period indicate compliance with the respective emission limits.

d) The owner or operator of an HMIWI may use any of the following types of continuous emission monitoring systems (CEMS), as provided in Section 229.152 of this Part, to substitute for annual performance tests and parameter monitoring to demonstrate compliance with applicable emissions limits:

1) PM CEMS: replace annual PM testing and opacity testing and monitoring of pressure drop across the wet scrubber, if applicable;

2) CO CEMS: replace annual CO testing and monitoring of minimum secondary chamber temperature;

3) HCl CEMS: replace annual HCl testing and monitoring of minimum HCl sorbent flow rate and minimum scrubber liquor pH.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.150 Compliance with Operating Parameter Values

a) Following the date on which the initial performance test is completed, or is required to be completed under~~as provided in~~ Section 229.142 of this Subpart, whichever date comes first~~Part~~, an HMIWI, using a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber to comply with the emission limits of this Part~~,~~ shall not operate above any of the applicable maximum or below any of the applicable minimum operating parameters~~parameter~~ values specified in Appendix B of this Part. All operating parameters shall be measured as a 3-hour rolling average (calculated each hour as a 3-hour rolling average of the previous 3 operating hours) at all times~~, except during periods of startup, shutdown, and malfunction (calculated~~

~~each hour as a 3-hour rolling average of the previous 3 operating hours~~). For batch HMIWIs, the charge rate shall be measured on a per batch basis.

b) Except as provided in Section 229.164 of this Subpart, for an HMIWI equipped with a selective noncatalytic reduction system, operation of the HMIWI above the maximum charge rate, below the minimum secondary chamber temperature, and below the minimum reagent flow rate simultaneously shall constitute a violation of the NO_x emissions limit.

c~~b~~) For HMIWIs using air pollution control equipment other than a dry scrubber followed by a fabric filter, a wet scrubber, or dry scrubber followed by a fabric filter and a wet scrubber to comply with the emission limits under Section 229.125 or Section 229.126 of this Part, following the date on which the initial performance test is completed, as provided in Section 229.142 of this Part, an HMIWI shall not operate above any applicable maximum or below any applicable minimum operating parameter values established in its CAAPP permit.

d~~c~~) Operating parameter limits do not apply during performance tests.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.152 Compliance Requirements for HMIWIs using CEMS

The owner or operator of an HMIWI may use a CEMS to demonstrate compliance with any of the emission limits under Section 229.125 or Section 229.126~~(b)~~ of this Part, if provided for in its permit. ~~Any HMIWI that is allowed to use a CEMS to demonstrate compliance with the emission limits of this Part shall:~~

a) Any HMIWI that is allowed to use a CEMS to demonstrate compliance with the emission limits of this Part shall:

1~~a~~) Determine compliance with the applicable emission limits using a 12-hour rolling average, calculated each hour as the average of the previous 12 operating hours~~, not including startup, shutdown, or malfunction~~; and

2~~b~~) Operate all CEMS in accordance with the applicable procedures under appendices~~Appendices~~ B and F of 40 CFR 60, incorporated by reference at Section 229.104(e) of this Part.

b) In the case of CEMS for which USEPA has not published performance specifications, the option to use the CEMS takes effect on the date of publication of the performance specifications in the Federal Register or after site-specific

operating parameters used to demonstrate compliance with this Part have been established by the Agency in a construction permit and approved by USEPA.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.154 Violations by HMIWIs Equipped with a Dry Scrubber Followed by a Fabric Filter

Except as provided in Section 229.164 of this Subpart, for an HMIWI equipped with a dry scrubber followed by a fabric filter:

a) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a 3-hour rolling average) shall be a violation of the CO emissions~~emission~~ limit;

b) Simultaneous operation of an HMIWI above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxin/furan sorbent flow rate (each measured on a 3-hour rolling average) shall be a violation of the dioxin/furan emissions~~emission~~ limit;

c) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum HCl sorbent flow rate (each measured on a 3-hour rolling average) shall be a violation of the HCl emissions~~emission~~ limit;

d) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a 3-hour rolling average) shall be a violation of the Hg emissions~~emission~~ limit;~~ or~~

e) Use of the bypass stack at any time during operation of an HMIWI~~(except during startup, shutdown or malfunction)~~ is a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emissions~~emission~~ limits;~~.~~

f) If a CO CEMS is used to determine compliance with a CO emissions limit, operation of the HMIWI above the CO emissions limit as measured by the CO CEMS shall be a violation of the emissions limit;

g) If a bag leak detection system is used, failure to initiate corrective action within one hour after the bag leak detection system alarm, or failure to operate and maintain the fabric filter so that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period, shall be a violation of the PM emissions limit;

h) If a bag leak detection system is used to demonstrate compliance with the opacity limit, failure to initiate corrective action within one hour after the bag leak detection system alarm shall be a violation of the opacity emissions limit;

i) If a CEMS is used to determine compliance with a PM, HCl, Pb, Cd, and/or Hg emissions limit, operation of the HMIWI above the applicable emissions limit as measured by the CEMS shall be a violation of the emissions limit;

j) If a continuous automated sampling system is used, operation of the HMIWI above the dioxin/furan emissions limit as measured by the continuous automated sampling system shall be a violation of the dioxin/furan emissions limit; or

k) If a continuous automated sampling system is used, operation of the HMIWI above the Hg emissions limit as measured by the continuous automated sampling system shall be a violation of the Hg emissions limit.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.156 Violations by HMIWIs Equipped with a Wet Scrubber

Except as provided in Section 229.164 of this Subpart, for an HMIWI equipped with a wet scrubber:

a) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum pressure drop across the wet scrubber or below the minimum horsepower or amperage to the system (each measured on a 3-hour rolling average) is a violation of the PM emissions~~emission~~ limit;

b) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a 3-hour rolling average) is a violation of the CO emissions~~emission~~ limit;

c) Simultaneous operation of an HMIWI above the maximum charge rate, below the minimum secondary chamber temperature and below the minimum scrubber liquor flow rate (each measured on a 3-hour rolling average) is a violation of the dioxin/furan emissions~~emission~~ limit;

d) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a 3-hour rolling average) is a violation of the HCl emissions~~emission~~ limit;

e) Simultaneous operation of an HMIWI above the maximum flue gas temperature and above the maximum charge rate (each measured on a 3-hour rolling average)

is a violation of the Hg emissions~~emission~~ limit; ~~or~~

f) Use of the bypass stack at any time during operation of an HMIWI~~(except during startup, shutdown, or malfunction)~~ is a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emissions~~emission~~ limits; ~~.~~

g) If a CO CEMS is used to determine compliance with a CO emissions limit, operation of the HMIWI above the CO emissions limit as measured by the CO CEMS shall be a violation of the emissions limit;

h) If a CEMS is used to determine compliance with a PM, HCl, Pb, Cd, and/or Hg emissions limit, operation of the HMIWI above the applicable emissions limit as measured by the CEMS shall be a violation of the emissions limit;

i) If a continuous automated sampling system is used, operation of the HMIWI above the dioxin/furan emissions limit as measured by the continuous automated sampling system shall be a violation of the dioxin/furan emissions limit; or

j) If a continuous automated sampling system is used, operation of the HMIWI above the Hg emissions limit as measured by the continuous automated sampling system shall be a violation of the Hg emissions limit.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.158 Violations by HMIWIs Equipped with a Dry Scrubber Followed by a Fabric Filter and a Wet Scrubber

Except as provided in Section 229.164 of this Subpart, for an HMIWI equipped with a dry scrubber followed by a fabric filter and a wet scrubber:

a) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a 3-hour rolling average) is a violation of the CO emissions~~emission~~ limit;

b) Simultaneous operation of an HMIWI above the maximum fabric filter inlet temperature, above the maximum charge rate and below the minimum dioxin/furan sorbent flow rate (each measured on a 3-hour rolling average) is a violation of the dioxin/furan emissions~~emission~~ limit;

c) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a 3-hour rolling average) is a violation of the HCl emissions~~emission~~ limit;

d) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a 3-hour rolling average) is a violation of the Hg emissions~~emission~~ limit; or

e) Use of the bypass stack at any time during operation of an HMIWI~~(except during startup, shutdown, or malfunction)~~ is a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emissions~~emission~~ limits;~~.~~

f) If CO CEMS is used to determine compliance with a CO emissions limit, operation of the HMIWI above the CO emissions limit as measured by the CO CEMS shall be a violation of the emissions limit;

g) If a bag leak detection system is used, failure to initiate corrective action within one hour after the bag leak detection system alarm, or failure to operate and maintain the fabric filter so that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period, shall be a violation of the PM emissions limit;

h) If a bag leak detection system is used to demonstrate compliance with the opacity limit, failure to initiate corrective action within one hour after the bag leak detection system alarm shall be a violation of the opacity emissions limit;

i) If CEMS is used to determine compliance with a PM, HCl, Pb, Cd, and/or Hg emissions limit, operation of the HMIWI above the applicable emissions limit as measured by the CEMS shall be a violation of the emissions limit;

j) If a continuous automated sampling system is used, operation of the HMIWI above the dioxin/furan emissions limit as measured by the continuous automated sampling system shall be a violation of the dioxin/furan emissions limit; or

k) If a continuous automated sampling system is used, operation of the HMIWI above the Hg emissions limit as measured by the continuous automated sampling system shall be a violation of the Hg emissions limit.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.160 Compliance Requirements for Rural HMIWIs

a) Prior to January 1, 2014, the requirements set forth in subsections (c) through (e) of this Section shall apply to all rural HMIWIs subject to the emissions limits under Section 229.126 of this Part.

b) On and after January 1, 2014, the requirements set forth in subsections (c) through (e) of this Section shall apply to all rural HMIWIs that are not equipped with an air pollution control device and that are subject to the emissions limits under Section 229.126 of this Part.

~~c~~a) Following the date on which the initial performance test is completed or is required to be completed under Section 229.142 of this Subpart, whichever date comes first, the owners or operators of rural HMIWI shall not operate their HMIWI either above the maximum charge rate or below the minimum secondary chamber temperature measured as 3-hour rolling averages~~at all times, except during periods of startup or shutdown~~ (calculated each hour as ~~a 3-hour rolling~~ the average of the previous 3 operating hours) at all times.

d) Operating parameter limits do not apply during performance tests.

~~e~~b) Except as provided in Section 229.164 of this Subpart, the simultaneous operation of a rural HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (calculated as a 3-hour rolling average) shall constitute a violation of the PM, CO and dioxin/furan emission limits.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.162 Inspection Requirements for All~~Rural~~ HMIWIs

a) Before January 1, 2014, each owner or operator of a rural HMIWI subject to the emission limits under Section 229.126 of this Part shall inspect the HMIWI according to the following schedule:~~Each owner or operator of a rural HMIWI shall inspect the HMIWI according to the following schedule:~~

1) An initial inspection shall be conducted by September 15, 2000; and

2) An annual inspection shall be conducted by September 15 of each year thereafter.

b) Each equipment inspection shall be conducted to ensure the proper operation of the ~~rural~~ HMIWI and, at a minimum, shall consist of the following steps:

1) An inspection of all burners, pilot assemblies, and pilot sensing devices, cleaning the pilot flame sensor, as necessary;

2) An inspection of the primary and secondary chamber combustion air flow, adjusting, as necessary;

3) An inspection of the hinges and door latches, lubricating, as necessary;

4) An inspection of dampers, fans, and blowers;

5) An inspection of the HMIWI door and door gaskets;

6) An inspection of all HMIWI motors;

7) An inspection of the primary chamber refractory lining, cleaning, repairing or replacing the lining, as necessary;

8) An inspection of the incinerator shell for corrosion or hot spots;

9) An inspection of the secondary/tertiary chamber and stack, cleaning as necessary;

10) Where applicable, an inspection of the mechanical loader, including limit switches;

11) A visual inspection of the waste bed (grates), repairing or sealing, as necessary;

12) Where applicable, an inspection of air pollution control devices to ensure their proper operation;

13) Where applicable, an inspection of the waste heat boiler systems;

14) An inspection of all bypass stack components;

15) Calibration of thermocouples, sorbent feed systems and monitoring equipment; and

16) A general inspection of all equipment to ensure that it is maintained in good operating condition.

c) The owner or operator of an~~a rural~~ HMIWI shall document that, during the burn cycle immediately following the inspection required by this Section, the HMIWI is operating properly and make any necessary adjustments.

d) All maintenance, adjustments, or repairs identified during the equipment inspection required under this Section shall be completed within 10 days after the inspection. The owner or operator of an HMIWI may have a longer period of time in which to complete any repairs identified as a result of the inspection required

by this Section, provided that it makes this request to the Agency in writing, and the Agency approves the owner or operator of an HMIWI's request in writing.

e) The owner or operator of a small, rural, medium, or large HMIWI subject to the emission limits under Section 229.125(c) as applicable, or Section 229.126 of this Part, shall inspect the HMIWI as outlined in subsection (b) of this Section, according to the following schedule:

1) An initial equipment inspection shall be conducted by January 1, 2014; and

2) An annual equipment inspection shall be conducted by January 1 of each year thereafter.

f) The owner or operator of an HMIWI subject to the emissions limits under Section 229.125(c) as applicable, or Section 229.126(c) of this Part, shall inspect the air pollution control devices, according to the following schedule:

1) An initial air pollution control device inspection shall be conducted by January 1, 2014; and

2) An annual air pollution control device inspection shall be conducted by January 1 of each year thereafter.

g) Each air pollution control device inspection, as applicable, shall be conducted to ensure the proper operation of the device and, at a minimum, shall consist of the following steps:

1) Where applicable, an inspection of the thermocouples, sorbent feed systems, and any other monitoring equipment, adjusting applicable calibrations, as necessary; and

2) A general inspection of the equipment to ensure that it is maintained in good operating condition.

h) All maintenance, adjustments, or repairs identified during an air pollution control device inspection required under this Section shall be completed within 10 days after the inspection. The owner or operator of an HMIWI may have a longer period of time in which to complete any repairs identified as a result of the inspection required by this Section, provided that it makes this request to the Agency in writing and the Agency approves the request in writing.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART I: MONITORING REQUIREMENTS

Section 229.166 Monitoring Requirements for AllSmall, Medium, and Large HMIWIs

a) Each owner or operator of an HMIWI subject to the emissions limits under Section 229.125(c) as applicable, or Section 229.126(c) of this Part, shall comply with requirements of this Section according to the following schedule:

1) Before January 1, 2014, for a small, medium or large HMIWI;

2) On and after January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), for a small, medium or large HMIWI and a rural HMIWI that is equipped with an air pollution control device.

ba) Once the initial performance test required by Section 229.142 of this Part has been performed, and the site-specific minimum and maximum operating parameter values have been established, the owner or operator of ana small, medium or large HMIWI, as applicable, shall continuously monitor those parameters.

cb) The owner or operator of ana small, medium or large HMIWI, as applicable, shall comply with the following monitoring requirements:

1) Install, calibrate according to manufacturer's specifications, maintain, and operate devices or establish methods for monitoring the applicable maximum and minimum operating parameters specified in Appendix B of this Part (unless CEMS are used as a substitute for certain parameters as specified) sosuch that these devices or methods measure and record values for these operating parameters at the frequencies indicated in Appendix B of this Part at all times, except during periods of startup and shutdown;

2) Install, calibrate according to manufacturer's specifications, maintain, and operate a device or establish a method for identifying the use of the bypass stack, including date, time, and duration of use;

3) If control equipment other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber, or a selective noncatalytic reduction system is used to comply with the applicable emissionsemission limits under Section 229.125(c)229.125(b) as applicable, or Section 229.126(c) of this Part, install, calibrate according to manufacturer's specifications, maintain, and

operate the equipment necessary to monitor the site-specific operating parameters developed and approved pursuant to Section 229.142(a)(5) or (b)(5)~~Section 229.142(e)~~ of this Part; and

4) Record monitoring data at all times during HMIWI operation, except during the periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be recorded for 75 percent of the operating hours per day ~~and~~ for 90 percent of the operating days per calendar quarter that an HMIWI is combusting hospital waste or medical/infectious waste.

d) If an HMIWI is equipped with an air pollution control device that includes a fabric filter and a PM CEMS is not used to demonstrate compliance, the owner or operator of the HMIWI may use a bag leak detection system to determine compliance with the PM emissions limit. The owner or operator shall meet the following requirements for each bag leak detection system installed:

1) Each triboelectric bag leak detection system may be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," as incorporated by reference in Section 229.104;

2) The bag leak detection system shall be certified by the manufacturer as being capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;

3) The bag leak detection system sensor shall provide an output of relative PM loadings;

4) The bag leak detection system shall be equipped with a device to continuously record the output signal from the sensor;

5) The bag leak detection system shall be equipped with an audible alarm system that sounds automatically when an increase in relative PM emissions over a preset level is detected. The alarm shall be located where it is easily heard by plant operating personnel;

6) For positive pressure fabric filter systems, a bag leak detector shall be installed in each baghouse compartment or cell;

7) For negative pressure or induced air fabric filters, a bag leak detector shall be installed downstream of the fabric filter;

8) If multiple bag leak detectors are required, the bag leak detection system's instrumentation and alarm may be shared among detectors;

9) The baseline output shall be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the "Fabric Filter Bag Leak Detection Guidance," as incorporated by reference in Section 229.104;

10) Following initial adjustment of the system, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted. Increasing the sensitivity by more than 100 percent or decreasing by more than 50 percent over a 365-day period is a violation, unless the adjustment follows a complete fabric filter inspection that demonstrates that the fabric filter is in good operating condition. Each adjustment shall be recorded;

11) Records of the results of each inspection, calibration, and validation check shall be maintained; and

12) The fabric filter must be operated and maintained so that the bag leak detection system alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; however, corrective action must be initiated within 1 hour after the alarm.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.168 Monitoring Requirements for Rural HMIWIs

a) Each owner or operator of a rural HMIWI subject to the emissions limits under Section 229.126 of this Part shall comply with requirements of this Section according to the following schedule:

1) Before January 1, 2014, for a rural HMIWI; and

2) On and after January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), for a rural HMIWI that is not equipped with an air pollution control device.

b) The owner or operator of each rural HMIWI shall comply with the following monitoring requirements:

1a) Install, calibrate according to manufacturer's specifications, maintain and

operate a device measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute of operation;

2~~b~~) Install, calibrate according to manufacturer's specifications, maintain, and operate a device that automatically measures and records the date, time, and weight of each charge fed into an HMIWI; and

3e) Record monitoring data at all times during HMIWI operation, except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be recorded for 75 percent of the operating hours per day ~~and~~ for 90 percent of the operating hours per calendar quarter that an HMIWI is combusting hospital waste or medical/infectious waste.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART K: WASTE MANAGEMENT PLAN REQUIREMENTS

Section 229.180 Waste Management Requirements for Commercial HMIWIs ~~Accepting Waste Generated Off-Site~~

a) The owner or operator of any commercial HMIWI that accepts hospital waste or medical/infectious waste generated off-site shall:

1) Provide hospital, medical or infectious waste customers with written information at least once a year concerning the availability of waste management practices for reducing the volume and toxicity of waste to be incinerated; ~~and~~

2) Conduct training and education programs in waste segregation for each of the company's waste generator customers;

3) Ensure that each waste generator customer prepares its own waste management plan that includes, at a minimum, the following elements:

A) Segregation of recyclable wastes such as paper products, glass, batteries and metals;

B) Segregation of non-recyclable wastes such as polyvinyl chloride plastics, pharmaceutical waste, and mercury-containing waste; and

C) Purchasing recycled or recyclable products;

42) Submit a waste management plan to the Agency, in accordance with Section 229.184(b) of this Part, that outlines the efforts that will be undertaken to implement the requirements~~distribute information as~~ specified in subsections~~subsection~~ (a)(1) through (a)(3) of this Section ~~and identifies the information that will be distributed~~.

b) Paper or electronic copies of the materials disseminated under this Section shall be made available to the Agency upon written request.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

SUBPART L: RECORDKEEPING AND REPORTING REQUIREMENTS

Section 229.182 Recordkeeping Requirements

a) The owner or operator of an HMIWI subject to the emissions~~emission~~ limits under Subpart E of this Part shall maintain records of the following information:

1) The calendar date of each record;

2) The following data, where applicable:

A) Concentrations of all applicable pollutants listed in Section 229.125(a) or (c), or in Section 229.126(a) or (c) of this Part (as determined by the CEMS, if applicable), and any measurements of opacity as required under Section 229.125(b), (d), or (f) or Section 229.126(b) or (d);~~Concentrations of all applicable pollutants listed in Section 229.125(b) or 229.126(b) of this Part (as determined by the CEMS, if applicable) and any measurements of opacity as required under Section 229.125(e) or 229.126(e);~~

B) HMIWI charge dates, times and weights, and hourly charge rates;

C) If a fabric filter is used, the fabric filter inlet temperatures during each minute of operation;

D) The amount and type of dioxin/furan sorbent used during each hour of operation;

E) The amount and type of Hg sorbent used during each hour of operation;

F) The amount and type of HCl sorbent used during each hour of operation;

G) If a selective noncatalytic reduction system is used to comply, the amount and type of NO_X reagent used during each hour of operation;

H) If a selective noncatalytic reduction system is used to comply, the minimum secondary chamber temperature recorded during each minute of operation;

I~~G~~) The secondary chamber temperatures recorded during each minute of operation;

J~~H~~) The liquor flow rate to the wet scrubber inlet during each minute of operation;

K~~I~~) The horsepower or amperage to the wet scrubber during each minute of operation;

L~~J~~) Any pressure drop across the wet scrubber system during each minute of operation;

M~~K~~) The temperature at the outlet from the wet scrubber during each minute of operation;

N~~L~~) The pH at the inlet to the wet scrubber during each minute of operation;

O~~M~~) Identification of any use of the bypass stack, including dates, times, and the duration of such use; ~~and~~

P~~N~~) For sources complying with Section 229.166(c)~~(b)(3)~~ of this Part, all operating parameter data collected~~monitored~~; and

Q) If a bag leak detection system is used, maintain records of the system alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken, as applicable;

3) Identification of any calendar days for which data on emissions~~emission~~ rates or operating parameters specified under subsection (a)(2) of this Section have not been obtained, with an identification of the

emissions~~emission~~ rates or operating parameters not measured, reasons for not obtaining data, and a description of the corrective actions taken;

4) Identification of any malfunctions, including the calendar date, the time and duration, and a description of the malfunction and of the corrective action taken to remedy it;

5) Identification of calendar days for which data on emissions~~emission~~ rates or operating parameters specified under subsection (a)(2) of this Section exceeded the applicable limits, with a description of the exceedences, reasons for such exceedences, and a description of the corrective actions taken;

6) The results of the initial, annual, and any other subsequent performance tests conducted to determine compliance with the applicable emissions limits and/or to establish or re-establish operating parameters, as applicable, and a description, including sample calculations, of how the operating parameters were established or re-established, if applicable;

7) Records of calibration of any monitoring devices as required under Sections 229.166(c)~~(b)~~(1), (2) and (3) and 229.168~~(a) and~~ (b)(1) and (2) of this Part; and

8) Identification of the names of all HMIWI operators who have met the criteria for qualification under Section 229.170 of this Part, including:

A) Documentation of training and the dates of the training; and

B) The date of the initial review and all subsequent annual reviews of the information specified in Section 229.172(a) of this Part, as required by Section 229.172(b) of this Part.

b) The owner or operator of an HMIWI claiming an exemption from the emissions~~emission~~ limits in this Part pursuant to Section 229.110(b) of this Part shall keep contemporaneous records identifying each period of time when only pathological waste, low-level radioactive waste, or chemotherapeutic waste is burned, including the calendar date and duration of such periods.

c) The owner or operator of an HMIWI claiming an exemption pursuant to Section 229.110(c) of this Part shall keep records on a calendar quarter basis demonstrating that only pathological waste, low-level radioactive waste, or chemotherapeutic waste is burned.

d) The owner or operator of a co-fired combustor claiming an exemption from the emissions~~emission~~ limits under Section 229.110(d) of this Part shall maintain records on a calendar quarter basis of the relative weight of hospital waste and/or medical/infectious waste, and of all other fuels or waste combusted.

e) The owner or operator of each HMIWI subject to the emissions limits under Section 229.125(c) or Section 229.126 of this Part shall maintain records of the annual equipment inspection required under Section 229.162 of this Part.

f) The owner or operator of each HMIWI subject to the emissions limits under Section 229.125(c) or 229.126(c) of this Part shall maintain records of the annual air pollution control device inspection required under Section 229.162 of this Part.

~~e)~~ ~~The owner or operator of each rural HMIWI shall maintain records of the annual equipment inspections required under Section 229.162 of this Part, any required maintenance, and any repairs not completed within 10 days after an inspection or the time frame established by the Agency.~~

g) If a bag leak detection system is used, the owner or operator shall maintain records of the system alarm, the time of the alarm, the time corrective action was initiated and completed, a brief description of the cause of the alarm and the corrective action taken, as applicable.

h) The owner or operator of each HMIWI, when applicable, shall maintain records of any required maintenance, adjustments, or repairs identified during an inspection required under Section 229.162 of this Part not completed within 10 days after the inspection or the timeframe approved in writing by the Agency.

i~~f~~) All records required under this Section shall be maintained onsite for a period of 5 years, in either paper copy or electronic format, unless an alternative format has been approved by the Agency in a permit condition.

j~~g~~) All records required to be maintained pursuant to this Section shall be made available to the Agency upon request.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.184 Reporting Requirements

a) The facilities manager and the responsible official for the affected source shall certify each report required under this Section.

b) The owner or operator of an HMIWI shall submit to the Agency the results of any

performance test conducted on the HMIWI within 60 days after conducting the performance test. The information submitted with the initial performance test required by Section 229.142 of this Part shall include:

1) Before January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), as applicable, the test data and values for the site-specific operating parameters established pursuant to Section 229.142(a)(4), (5) or (6), as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test for an HMIWI subject to the emissions limits under Section 229.125(a) or 229.126(a) of this Part; ~~The test data and values for the site-specific operating parameters established for an HMIWI pursuant to either Section 229.142(d), (e) or (f) of this Part, as applicable; and~~

2) On and after January 1, 2014, the test data and values for the site-specific operating parameters established pursuant to Section 229.142(b)(3), (4) or (5), as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test for an HMIWI subject to the emissions limits under Section 229.125(c) or Section 229.126(c) of this Part;

3) If a bag leak detection system is used, analysis and supporting documentation demonstrating conformance with guidance and specifications for bag leak detection systems in Section 229.166(d)(1); and

4) A copy of the waste management plan required under Subpart K of this Part.

c) All owners or operators of HMIWIs shall submit the information specified under this subsection (c) to the Agency, as follows: ~~All owners or operators of HMIWIs shall submit the information specified under this subsection (c) to the Agency by September 15, 2001 and by September 15 of each year thereafter. Once an HMIWI is issued a CAAPP permit, the owner or operator of an HMIWI shall submit these reports semi-annually, in accordance with subsection (d) of this Section. The annual report shall include the following information:~~

1) By September 15, 2001, and by September 15 of each year thereafter, for an HMIWI subject to the emissions limits under Section 229.125(a) or 229.126(a) of this Part;

2) By January 1, 2014, and by January 1 of each year thereafter, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), as

applicable, for an HMIWI subject to the emissions limits under Section 229.125(c) or (e) or Section 229.126(c) of this Part; and

3) The annual report required under subsection (c)(1) or (2) of this Section shall include the following information:

A~~1~~) Before January 1, 2014, the values for site-specific operating parameters established pursuant to Section 229.142(a)(4), (5) or (6) of this Part, as applicable;~~The values for site-specific operating parameters established pursuant to either Section 229.142(d), (e) or (f) of this Part;~~

B) On and after January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), as applicable, the values for site-specific operating parameters established pursuant to Section 229.142(b)(3), (4) or (5) of this Part, as applicable;

C~~2~~) The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter, recorded for the calendar year being reported pursuant to Section 229.142(a)(4), (5) or (6), or Section 229.142(b)(3), (4) or (5) of this Part, as applicable;~~ and for the calendar year preceding the year being reported;~~

D) The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded pursuant to Section 229.142(a)(4), (5) or (6) or Section 229.142(b)(3), (4) or (5) of this Part, as applicable, for the calendar year preceding the year being reported, in order to provide the Agency with a summary of the performance of the affected facility over a 2-year period;

E~~3~~) Any information recorded pursuant to Section 229.182(a)(3) through (5) of this Subpart for the calendar year being reported and for the calendar year preceding the year being reported;

F4) If no exceedences or malfunctions were recorded under Section 229.182(a)(3) through (a)(5) of this Subpart for the calendar year being reported, a statement that no exceedences occurred during the reporting period; and

G~~5~~) Any use of the bypass stack, the duration of use, the reason for malfunction, and the corrective actions taken.

d) Once an HMIWI is issued a CAAPP permit, the owner or operator of the HMIWI shall submit the reports required under subsection (c) of this Section semiannually. The semiannual reports must be submitted within 60 days following the end of the reporting period. The first semiannual reporting period ends on June 30 of each year and the second semiannual reporting period ends on December 31 of each year.~~Once the owner or operator of an HMIWI is required to submit semiannual reports, these reports must be submitted within 60 days following the end of the reporting period. The first semiannual reporting period ends on March 15 of each year and the second semiannual reporting period ends on September 15 of each year.~~

e) The owner or operator of each rural HMIWI subject to the emissions~~emission~~ limits under Section 229.126(b) of this Part, shall submit an annual report containing all information listed in subsections (b) and (c) of this Section by no later than 60 days following the year in which the data was collected. Subsequent reports shall be sent no later than 12 calendar months following the previous report. Once the unit is subject to permitting requirements under the CAAPP, the owner or operator shall submit these reports semiannually in accordance with the schedule specified in subsection (d) of this Section.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.APPENDIX B Operating Parameters to be Monitored and Minimum Measurement and Recording Frequencies

An "X" in any box in this matrix means that measurement of that parameter is required.

MINIMUM FREQUENCY			CONTROL SYSTEM			
Operating Parameters	**Data Measurement**	**Data Recording**	**Dry Scrubber Followed by Fabric Filter**	**Wet Scrubber**	**Dry Scrubber Followed by Fabric Filter and Wet Scrubber**	**Selective Noncatalytic Reduction System**
Maximum Charge Rate[1]	Continuous	Once per hour	X	X	X	X
Maximum Fabric Filter Inlet Temperature	Continuous	Once per minute	X		X	
Maximum Flue Gas Temperature	Continuous	Once per minute	X	X		
Minimum Secondary Chamber Temperature	Continuous	Once per minute	X	X	X	X
Minimum Dioxin/Furan Sorbent Flow Rate	Hourly	Once per hour	X		X	
Minimum HCl Sorbent Flow Rate	Hourly	Once per hour	X		X	
Minimum Reagent Flow Rate	Hourly	Once per hour				X
Minimum Hg Sorbent Flow Rate	Hourly	Once per hour	X		X	
Minimum Pressure Drop Across	Continuous	Once per minute		X	X	

the Wet Scrubber or Minimum Horsepower or Amperage to Wet Scrubber						
Minimum Scrubber Liquor Flow Rate	Continuous	Once per hour		X	X	
Minimum Scrubber Liquor pH	Continuous	Once per hour		X	X	

2009 [1]For batch HMIWIs, record the charge per batch.
2010

~~MINIMUM FREQUENCY~~			~~CONTROL SYSTEM~~		
~~Operating Parameters~~	~~Data Measurement~~	~~Data Recording~~	~~Dry Scrubber Followed by Fabric Filter~~	~~Wet Scrubber~~	~~Dry Scrubber Followed by Fabric Filter and Wet Scrubber~~
~~Maximum[1] Charge Rate~~	~~Continuous~~	~~Once per hour~~	~~X~~	~~X~~	~~X~~
~~Maximum Fabric Filter Inlet Temperature~~	~~Continuous~~	~~Once per minute~~	~~X~~		~~X~~
~~Maximum flue gas temperature~~	~~Continuous~~	~~Once per minute~~	~~X~~	~~X~~	
~~Minimum secondary chamber temperature~~	~~Continuous~~	~~Once per minute~~	~~X~~	~~X~~	~~X~~
~~Minimum Dioxin/Furan Sorbent Flow Rate~~	~~Hourly~~	~~Once per hour~~	~~X~~		~~X~~
~~Minimum HCl Sorbent~~	~~Hourly~~	~~Once per hour~~	~~X~~		~~X~~

~~Flow Rate~~					
~~Minimum Hg Sorbent Flow Rate~~	~~Hourly~~	~~Once per hour~~	~~X~~		~~X~~
~~Minimum Pressure Drop Across the Wet Scrubber or Minimum Horsepower or Amperage to Wet Scrubber~~	~~Continuous~~	~~Once per minute~~		~~X~~	~~X~~
~~Minimum Scrubber Liquor Flow Rate~~	~~Continuous~~	~~Once per minute~~		~~X~~	~~X~~
~~Minimum Scrubber Liquor pH~~	~~Continuous~~	~~Once per minute~~		~~X~~	~~X~~

~~[1]For batch HMIWIs, record the charge per batch.~~

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 229.APPENDIX C Reference Test Methods and Procedures for Performance Tests

The following test methods and procedures shall be used as specified in Section 229.140(e) of this Part, when conducting any performance test for the purpose of demonstrating compliance with the emissions~~emission~~ limits established under this Part.

a) All performance tests shall consist of a minimum of 3 test runs conducted under representative operating conditions. The minimum sample time of 1 hour per test run shall be used unless otherwise indicated. In order to demonstrate compliance with the emissions~~emission~~ limits set forth in Subpart E of this Part, the arithmetic average of all 3 performance test runs shall be used.

b) Method 1, at 40 CFR 60, incorporated by reference at Section 229.104(d) of this Part, shall be used to select the sampling location and number of traverse points.

c) Method 2, at 40 CFR 60, shall be used to determine average gas density, as well as to measure gas velocity.

d) Method 3, 3A, or 3B, at 40 CFR 60, shall be used for gas composition analysis, including measurement of oxygen concentration. Method 3, 3A or 3B, at 40 CFR 60, shall be used simultaneously with each of the other reference methods. As an alternative to Method 3B, ASME PTC-19-10-1981-Part 10 may be used.

~~d) Method 3 or 3A, at 40 CFR 60 shall be used for gas composition analysis, including measurement of oxygen concentration. Method 3 or 3A, at 40 CFR 60, shall be used simultaneously with each reference method.~~

e) The pollutant concentrations shall 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 corrective basis);
20.9	=	oxygen concentration in air, percent; and
$\%O_2$	=	oxygen concentration measured on a dry basis, percent.

f) Method 5, 26A, or 29, at 40 CFR 60, shall be used to measure PM emissions. As an alternative, a PM CEMS may be used in determining compliance with PM emissions using a 12-hour rolling average, calculated each hour as the average of the previous 12 operating hours.

~~f) Method 5 or 29, at 40 CFR 60 shall be used to measure particulate matter emissions.~~

g) Method 7 or 7E, at 40 CFR 60, shall be used to measure NO_X emissions.

h) Method 6 or 6C, at 40 CFR 60, shall be used to measure SO_2 emissions.

ig) Method 9, at 40 CFR 60, shall be used to measure stack opacity. As an alternative, the use of a bag leak detection system or a PM CEMS to demonstrate compliance with the PM standards is considered demonstrative of compliance with the opacity requirements.

jh) Method 10 or 10B, at 40 CFR 60, shall be used to measure CO emissions. As an alternative, a CO CEMS may be used to measure CO emissions.

k) Method 22, at 40 CFR 60, shall be used to measure fugitive ash emissions.

li) Method 23, at 40 CFR 60, shall be used to measure total dioxin/furan emissions. As an alternative, the facility may elect to sample total dioxins/furans by installing, calibrating, maintaining, and operating a continuous automated sampling system for monitoring dioxin/furan emissions. The minimum sample time for Method 23 sampling shall be 4 hours per test run. If the affected facility has selected the TEQ for dioxin/furans (set out in Appendix A of this Part), as provided under Section 229.125~~(b)~~ or 229.126~~(b)~~ of this Part, whichever is applicable, the following procedures shall be used to determine compliance:

1) Measure the concentration of each dioxin/furan tetra-through-octa-congener emitted using Method 23;

2) For each dioxin/furan congener measured in accordance with subsection (i)(1) of this Section, multiply the congener concentration by its corresponding TEQ factor specified in Appendix A of this Part; and

3) Sum the products calculated in accordance with subsection (i)(2) of this Section to obtain the total concentration of dioxin/furans emitted in terms of TEQ.

mj) Method 26 or 26A, at 40 CFR 60, shall be used to measure HCl emissions. As an

alternative, an HCl CEMS may be used to measure HCl emissions. Before January 1, 2014, if~~If~~ the affected facility has selected the percentage reduction standard for HCl as provided under Section 229.125(a)~~(b)~~ or 229.126(a)~~(b)~~ of this Part, whichever is applicable, the percentage reduction in HCl emissions ($\%R_{HCl}$) is computed using the following formula:

$$(\%R_{HCl}) = ((E_i - E_o)/E_i) \times 100$$

Where:

$\%R_{HCl}$ = percentage reduction of HCl emissions achieved;

E_i = HCl emissions concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis); and

E_o = metal emissions concentration (Pb, Cd, or Hg) measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

n~~k~~) Method 29, at 40 CFR 60, shall be used to measure Pb, Cd, and Hg emissions. As an alternative, ASTM D6784-02 may be used to measure Hg emissions; a multi-metals CEMS or Hg CEMS may be used to measure Pb, Cd, and Hg emissions; or the facility may elect to sample Hg by installing, calibrating, maintaining, and operating a continuous automated sampling system for monitoring Hg emissions. Before January 1, 2014, if~~If~~ the affected facility has selected the percentage reduction standards for metals as provided in Section 229.125(a)~~(b)~~ or 229.126(a)~~(b)~~ of this Part, whichever is applicable, the percentage reduction in emissions ($\%R_{metal}$) is computed using the following formula:

$$(\%R_{metal}) = ((E_i - E_o)/E_i) \times 100$$

Where:

$\%R_{METAL}$ = percentage reduction of metal emissions (Pb, Cd, or Hg) achieved;

E_i = metal emissions concentration (Pb, Cd, or Hg) measured at the control device inlet, corrected to 7 percent oxygen (dry basis); and

E_O = metal emissions concentration (Pb, Cd, or Hg) measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

(Source: Amended at 35 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: GENERAL PROVISIONS
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 229
HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS

SUBPART A: GENERAL PROVISIONS

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229.100 Abbreviations
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SUBPART B: APPLICABILITY

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SUBPART C: COMPLIANCE SCHEDULES

Section
229.115 Compliance Schedules for HMIWIs That Will Continue to Operate
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SUBPART D: CAAPP PERMIT REQUIREMENTS

Section
229.120 CAAPP Permit Requirements

SUBPART E: EMISSIONS LIMITS

Section
229.125 Emissions Limits for Small, Medium, and Large HMIWIs
229.126 Emissions Limits for Rural HMIWIs

SUBPART F: EXCEPTIONS FROM EMISSION LIMITS ~~(Repealed)~~

Section
229.130 Operation During Periods of Startup, Shutdown, or Malfunction (Repealed)

SUBPART G: METHODS AND PROCEDURES FOR PERFORMANCE TESTING

Section
229.140 Methods and Procedures for Performance Testing

SUBPART H: COMPLIANCE REQUIREMENTS

Section
229.142 Initial Performance Testing and Establishment of Operating Parameters for All HMIWIs
229.144 Subsequent Performance Testing for All HMIWIs
229.146 Annual Testing for Opacity

AUTHORITY: Implementing Sections 10, 39 and 39.5 and authorized by Section 27 of the Environmental Protection Act ~~[~~[415 ILCS 5/10, 27, 39 and 39.5~~]~~].

SOURCE: Adopted at 23 Ill. Reg. 6477, effective May 15, 1999; amended in R11-20 at 35 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 229.100 Abbreviations

The following abbreviations have been used in this ~~part:~~Part:

ActIllinois Environmental Protection Act [415 ILCS 5]AgencyIllinois Environmental Protection AgencyBoardIllinois Pollution Control BoardBtuBritish thermal unitsCAAPPClean Air Act Permit Program [415 ILCS 5/39.5]~~CdCadmiumCEMSContinuous~~CEMSContinuous Emissions Monitoring ~~SystemCOCarbon monoxidedscfdry standard cubic footdscmdry standard cubic meterft3cubic feetgr~~SystemCOcarbon monoxideCdcadmiumgr/103 dscfgrains per thousand dry standard cubic feetgr/109 dscfgrains per billion dry standard cubic feetgr/dscfgrains per dry standard cubic ~~footHClHydrogen chlorideHgMercuryHMIWIHospital/Medical/Infectious Waste Incineratorhrhourlb~~footHClhydrogen chlorideHgmercuryHMIWIhospital/medical/infectious waste incineratorhrhourlb(s)pound(s)mg/dscmmilligrams per dry standard cubic ~~metermg ng/dscmmilligramsnanograms~~meterng/dscmnanograms per dry standard cubic meterNOxNitrogen ~~OxidePbLeadPMParticulate~~OxidePbleadPMparticulate matterppmvparts per million by volumeSO2Sulfur ~~dioxideTEQToxic equivalent equivalencyUSEPAUnited~~DioxideTEQtoxic equivalentUSEPAUnited States Environmental Protection Agency

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

Section 229.102 Definitions

The definitions contained in this Section apply only to the provisions of this Part. Unless otherwise defined herein and unless a different meaning of a term is clear from its context, the definitions of terms used in this Part shall have the meanings specified for those terms in 415 ILCS 5/39.5, 35 Ill. Adm. Code 201.102 or 35 Ill. Adm. Code 211.

"Bag leak detection system" means an instrument that is capable of monitoring PM loadings in the exhaust of a fabric filter in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, lightscattering, light-transmittance, or other effects to monitor relative PM loadings.

"Batch HMIWI" means an HMIWI that is designed in such a way that neither waste charging nor ash removal can occur during combustion.

"Biologicals" means preparations made from living organisms and their products, including vaccines, cultures, etc., intended for use in diagnosing, immunizing, or treating humans or animals or in research pertaining thereto.

"Body fluids" means liquid emanating or derived from humans and limited to: blood; dialysate; amniotic, cerebrospinal, synovial, pleural, peritoneal and pericardial fluids; semen and vaginal secretions.

"Bypass stack" means an alternative stack used for discharging combustion gases to the atmosphere primarily to avoid severe damage to an air pollution control device or other equipment.

"Charge" means the act of placing waste into an HMIWI for incineration.

"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.

"Co-fired combustor" means a unit combusting hospital waste or medical/infectious waste with other fuels or wastes (e.g., coal, municipal solid waste) and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, of which 10 percent or less of the weight is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis. For purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other" wastes when calculating the percentage of hospital waste and medical/infectious waste combusted.

"Commercial HMIWI" means an HMIWI ~~which~~that offers incineration services for hospital/medical/ infectious waste generated offsite by firms unrelated to the firm that owns the HMIWI.

"Continuous emission monitoring system" or "CEMS" means a monitoring system for continuously measuring and recording the emissions of a pollutant from an affected facility.

"Continuous HMIWI" means an HMIWI that is designed to allow waste charging and ash removal during combustion.

"Dioxins/furans" means the total emissions of any tetra- through octa-chlorinated dibenzo-para-dioxins and dibenzofurans, as measured by EPA Reference Method 23, incorporated by reference in Section 229.104(d) of this Subpart.

"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 gases in an HMIWI exhaust stream, forming a dry powder material.

"Fabric filter" means an add-on air pollution control system that removes PM and nonvaporous metals emissions by passing flue gas through filter bags.

"Facilities manager" means the individual in charge of purchasing, maintaining, and operating an HMIWI, or the owner's or operator's representative responsible for the management of an HMIWI. Alternative titles may include director of facilities or vice president of support services.

"High air phase" means the stage of the batch operating cycle when the primary chamber reaches and maintains maximum operating temperatures.

"Hospital" means any facility that has an organized medical staff, maintaining at least 6 inpatient beds and where the primary function of the facility is to provide diagnostic and therapeutic patient services and continuous nursing care primarily to human inpatients who are not related and who stay on average in excess of 24 hours per admission. This definition does not include facilities maintained for the sole purpose of providing nursing or convalescent care to human patients who generally are not acutely ill but who require continuing medical supervision.

"Hospital/medical/infectious waste incinerator" or "HMIWI" means any device that combusts any amount of hospital waste or medical/infectious waste.

"Hospital waste" means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, or anatomical parts that are intended for interment or cremation.

"HMIWI operator" means any person who operates, controls, or supervises the day-to-day operation of an HMIWI.

"Infectious agent" means any organism that is capable of being communicated by invasion and multiplication in body tissues and is also capable of causing disease or adverse health impacts in humans.

"Intermittent HMIWI" means an HMIWI that is designed to allow waste charging, but not ash removal, during combustion.

"Large HMIWI" means:

An HMIWI whose maximum design waste burning capacity is more than 500 lbs per hour; or

A continuous or intermittent HMIWI whose maximum charge rate is more than 500 lbs per hour; or

A batch HMIWI whose maximum charge rate is more than 4,000 lbs per day.

"Low-level radioactive waste" means waste that 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.~~USC 2014(e)(2)).

"Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or of 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.

"Maximum charge rate" means:

For continuous and intermittent HMIWI, 110 percent of the lowest 3-hour average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits specified in Subpart E of this Part.

For batch HMIWI, 110 percent of the lowest daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits specified in Subpart E of this Part.

"Maximum design waste burning capacity" means:

For intermittent and continuous HMIWI:

~~C=PV x 15,000/8,500~~

Where: ~~C~~ = C=HMIWI capacity, lb/~~hr~~

~~PV~~ = hrPv=primary chamber volume, ft~~3~~ ~~15,000~~ = 315,000=primary chamber heat release rate factor, Btu/ft3/hr

8,500 = standard waste heating value, Btu/lb;

For batch HMIWI:

~~C=PV x 4.5/8~~

Where: ~~C~~ = C=HMIWI capacity, lb/~~hr~~

~~PV~~ = hrPv=primary chamber volume, ft~~3~~ ~~4.5~~ = 34.5=waste density factor, lb/ft~~3~~ ~~8~~ = 38=typical hours of operation of a batch HMIWI, hours.

"Maximum fabric filter inlet temperature" means 110 percent of the lowest 3-hour average temperature at the inlet to the fabric filter (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable dioxin/furan emission limit specified in Subpart E of this Part.

"Maximum flue gas temperature" means 110 percent of the lowest 3-hour average temperature at the outlet from the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable Hg emission limit specified in Subpart E of this Part.

"Medical/infectious waste" means any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals. The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in 40 CFR 261; household waste, as defined in 40 CFR 261.4(b)(1); and domestic sewage materials identified in 40 CFR 261.4(a)(1). For the purposes of this Part, medical/infectious waste includes:

Cultures and stocks of infectious agents and associated biologicals, including: vaccines and cultures intended for use in diagnosing, immunizing, or treating humans or animals; cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; and discarded live and attenuated vaccines;

Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers;

Human blood, any products derived from human blood, or anything that has been in contact with human blood in any form;

Intravenous bags and associated tubing;

Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, and needles with attached tubing;

Culture dishes, regardless of the presence of infectious agents, and culture dishes and devices used to transfer, inoculate, and mix cultures;

Any type of broken or unbroken glassware that has been in contact with infectious agents;

Animal waste, including contaminated animal carcasses, body parts, bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals;

Isolation wastes, including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with highly communicable diseases; and

Unused sharps, including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

"Medium HMIWI" means:

An HMIWI whose maximum design waste burning capacity is more than 200 lbs per hour but less than or equal to 500 lbs per hour; or

A continuous or intermittent HMIWI whose maximum charge rate, as set by permit, is more than 200 lbs per hour but less than or equal to 500 lbs per hour; or

A batch HMIWI whose maximum charge rate, as set by permit, is more than 1,600 lbs per day but less than or equal to 4,000 lbs per day.

"Minimum dioxin/furan sorbent flow rate" means 90 percent of the highest 3-hour average dioxin/furan sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the applicable dioxin/furan emission limit specified in Subpart E of this Part.

"Minimum Hg sorbent flow rate" means 90 percent of the highest 3-hour average Hg sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the applicable Hg emission limit specified in Subpart E of this Part.

"Minimum HCl sorbent flow rate" means 90 percent of the highest 3-hour average HCl sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the applicable HCl emission limit specified in Subpart E of this Part.

"Minimum horsepower" or "minimum amperage" means 90 percent of the highest 3-hour average horsepower or amperage to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limits specified in Subpart E of this Part.

"Minimum pressure drop across the wet scrubber" means 90 percent of the highest 3-hour average pressure drop across the wet scrubber PM control device (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable PM emission limit specified in this Subpart E of this Part.

"Minimum reagent flow rate" means 90 percent of the highest 3-hour average reagent flow rate at the inlet to the selective noncatalytic reduction technology (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable NOx emissions limit specified in Subpart E of this Part.

"Minimum scrubber liquor flow rate" means 90 percent of the highest 3-hour average liquor flow rate at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limits specified in Subpart E of this Part.

"Minimum scrubber liquor pH" means 90 percent of the highest 3-hour average liquor pH at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable HCl emission limit specified in Subpart E of this Part.

"Minimum secondary chamber temperature" means 90 percent of the highest 3-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM, CO, dioxin/furan, and applicable NOx emissions limits specified in Subpart E of this Part.

~~"Minimum secondary chamber temperature" means 90 percent of the highest 3-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable PM, CO, and dioxin/furan emission limits specified in Subpart E of this Part.~~

"Operating day" means a 24-hour period between 12:00 midnight and the following midnight during which any amount of hospital waste or medical/infectious waste is combusted at any time in an HMIWI.

"Operation" means any period during which waste is combusted in an HMIWI, excluding periods of startup or shutdown.

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

"Primary chamber" means the chamber in an HMIWI that receives waste material, in which the waste is ignited, and from which ash is removed.

"Rural HMIWI" means any HMIWI identified in Section 229.110(a) of this Part, that is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area, as defined in OMB Bulletin No. 93-17, incorporated by reference at Section 229.104(b) of this Part, meets the criteria specified in the definition of "small HMIWI" and burns less than 2,000 lbs per week of hospital waste and medical/infectious waste (except the 2,000 lbs per week limitation does not apply during performance testing).

"Secondary chamber" means that component of an HMIWI that receives combustion gases from the primary chamber and in which the combustion process is completed.

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

"Small HMIWI" means:

An HMIWI whose maximum design waste burning capacity is less than or equal to 200 lbs per hour; or

A continuous or intermittent HMIWI whose maximum charge rate, as set by permit, is less than or equal to 200 lbs per hour; or

A batch HMIWI~~,~~ whose maximum charge rate, as set by permit, is less than or equal to 1,600 lbs per day.

"Startup" means the period of time between the activation of an HMIWI and the first charge of waste to the unit. For batch HMIWI, startup means the period of time between activation of an HMIWI and ignition of the waste.

"Wet scrubber" means an add-on air pollution control device that utilizes either an alkaline or some other type of scrubbing liquor to collect pollutants and/or neutralize acid gases.

(Source: Amended at 35 Ill. Reg.~~____~~ _____, effective _____)

Section 229.104 Incorporations by Reference

The following materials are incorporated in this Part by reference. These incorporations by reference do not include any later amendments or editions.

a) "An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities," American Society for Healthcare Environmental Services, 840 North Lake Shore Drive, Chicago, Illinois~~,~~ 60611 (1993).

b) "Revised Statistical Definitions for Metropolitan Areas," OMB Bulletin No. 93-17, Office of Management and Budget, Washington, D.C. (June 30, 1993). Office of Management and Budget, National Technical Information Services, 5285 Port Royal Road, Springfield, VA 22161. (703) 487-4600.

c) 40 CFR 60.8.

d) 40 CFR 60, ~~Appendix~~appendix A, Methods 1, 2, 3, 3A, 5, 9, 10, 10B, 23, 26, 26A, 29.

e) 40 CFR 60, ~~Appendices~~appendices B and F.

f) 40 CFR ~~Appendix~~appendix A, Methods 3B, 6, 6C, 7, 7E, 22 (2010).

g) 40 CFR 60, subpart Ce and Ec (2010).

h) ANSI/ASME PTC19.10-1981, Flue and Gas Analyses~~,~~ [Part 10, Instruments and Apparatus]. American National Standards Institute (ANSI), Attn: Customer Service Department, 25 West 43rd Street, 4th Floor, New York, NY 10036. (212) 642-4980.

i) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources

(Ontario Hydro Method). American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, PO Box C70, West Conshohocken, PA 19428-2959. (610) 832-9585.

j) "Fabric Filter Bag Leak Detection Guidance", U.S. Environmental Protection Agency. (EPA-454/R-98-015, September 1997). Superintendent of Documents, U.S. Government Printing Office (GPO), P979050, St. Louis, MO 63197-9000.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

SUBPART B: APPLICABILITY

Section 229.110 General Applicability

a) Except as provided for in subsections (b), (c), (d) and (e) of this Section and Section 229.112 of this Subpart, this Part applies to all HMIWIs for which:

1) Construction commenced either on or before June 20, 1996, or modification was commenced either on or before March 16, 1998; or

2) Construction commenced either after June 20, 1996 but no later than December 1, 2008, or for which modification is commenced after March 16, 1998 but no later than April 6, 2010.

~~a) This Part applies to all HMIWIs for which construction commenced either on or before June 20, 1996, except as provided for in subsections (b), (c), (d) and (e) of this Section and Section 229.112 of this Subpart.~~

b) An HMIWI otherwise subject to the emission limits in this Part is only subject to the recordkeeping requirements set forth in Section 229.182(b), (f) and (g) of this Part during those periods when it combusts only pathological waste, low-level radioactive waste, or chemotherapeutic waste, provided the owner or operator of the HMIWI notifies the Agency of its intention to operate pursuant to this operating scenario in its CAAPP application submitted in accordance with either Section 229.115(b)(1), Subpart D of this Part, or Section 39.5 of the Act.

c) An HMIWI that combusts only pathological waste, low-level radioactive waste, or chemotherapeutic waste is subject to only the recordkeeping requirements set forth in ~~Sections~~Section 229.182(c), (f) and (g) of this Part~~,~~ provided that the owner or operator of an HMIWI provides, by December 15, 1999, both the Agency and the USEPA with a written certification of its status as an HMIWI burning only the wastes listed in this subsection.

d) A co-fired combustor is subject only to the recordkeeping requirements set forth in ~~Sections~~Section 229.182(d), (f) and (g) of this Part, provided that the owner or operator of the combustor is subject to a permit condition limiting its fuel feed stream to co-fired combustor status, provides, by December 15, 1999, both the Agency and USEPA with a written certification of its status as a co-fired combustor, including an estimate of the relative weight of hospital waste, medical/infectious waste, and other fuels and/or waste combusted at the facility.

e) Any hospital that does not operate an HMIWI but that sends any of its hospital waste or medical/infectious waste to an off-site HMIWI is subject only

to the waste management plan provisions set forth at Section 229.178 of this Part.

f) Before January 1, 2014, each owner or operator of an HMIWI~~,~~ as defined in subsection ~~229.110~~ (a)(1) of this Section, subject to the emissions limits under Section 229.125(a) or Section 229.126(a), shall comply with all the applicable provisions of this Part.

g) On and after January 1, 2014, an HMIWI as defined in subsection ~~229.110~~ (a)(1) of this Section is no longer subject to the emissions limits under Section 229.125(a) or Section 229.126(a) of this Part, but is subject to the emissions limits under Section 229.125(c) or Section 229.126(c), and shall comply with all the applicable provisions of this Part.

h) On and after January 1, 2014, each owner and operator of an HMIWI as defined in subsection ~~229.110~~ (a)(2) of this ~~subpart~~Section is no longer subject to the provisions under New Source Performance Standards for Hospital/Medical/Infectious Waste Incinerators (40 CFR 60, ~~Subpart~~subpart Ec), but is subject to the emissions limits under Section 229.125(c) or Section 229.126(c), and shall comply with all the applicable provisions of this Part.

(Source: Amended at 35 Ill. Reg.~~____~~ _____, effective ~~__~~_____)

Section 229.112 Exemptions

Notwithstanding other provisions of this Part, the following emission units are exempt from the requirements of this Part:

a) Any combustor required to have a permit under Section 3005 of the Solid Waste Disposal Act, 42 ~~U.S.C.~~USC 6925;

b) Any municipal waste combustor that meets the applicability provisions for municipal waste combustors under Subparts Cb, Ea or Eb of 40 CFR 60;

c) Any pyrolysis unit (i.e., a unit that uses endothermic gasification to treat hospital waste or medical/infectious waste in order to render such waste harmless);

d) Any cement kiln firing hospital waste or medical/infectious waste; or

e) Any HMIWI that meets the applicability provisions for Standards of Performance for Hospital/Medical/Infectious Waste Incinerators under ~~Subpart Ec of 40 CFR 60.~~subpart Ec of 40 CFR 60.

~~e) Any HMIWI subject to the Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996, contained in Subpart Ec of 40 CFR 60.50c.~~

(Source: Amended at 35 Ill. Reg.~~____~~ _____, effective ~~_____~~__)

SUBPART C: COMPLIANCE SCHEDULES

Section 229.115 Compliance Schedules for HMIWIs That Will Continue to Operate

a) Before January 1, 2014, each owner or operator of an HMIWI~~,~~ as defined in Section 229.110 (a)(1) of this Part, subject to the emissions limits under

Section 229.125(a) or Section 229.126(a) of this Part, shall comply with all the applicable provisions of this Part according to the following schedules:

1~~a~~) Except as provided in subsection (a)(2~~)~~ ~~(b)~~ of this Section and unless another date is specified in the provisions of this Part, all owners or operators of HMIWIs shall be in compliance with all of the provisions of this Part by September 15, 2000.

2~~b~~) Except as provided in subsection (a)(3~~)~~ ~~(c)~~ of this Section, the owner or operator of an HMIWI may have up to September 15, 2002, to come into compliance with this Part. To avail themselves of this extended compliance timeframe, the owner or operator of an HMIWI shall:

A~~i~~) Submit its CAAPP application to the Agency, on or before November 15, 1999, requesting an extended compliance schedule, pursuant to Section 39.5(5)(d) of the Act, [415 ILCS 5/39.5(5)(d)]. This compliance schedule shall include documentation supporting the need for an extension, a final control plan for the HMIWI and incremental steps to be taken toward compliance with this Part that, at a minimum, meet the increments of progress specified in subsection (a)(2)(B) ~~(b)(2)~~ of this Section;

B~~2~~) Meet the following increments of progress by the dates indicated:

~~i~~A<u>i</u>) Finalize all contracts for the purchase of either pollution control equipment, process modification or control systems by February 29, 2000;

~~ii~~B<u>ii</u>) Commence the implementation of either the process modifications or the necessary construction or installation of air pollution control devices for the HMIWI by November 30, 2000;

~~iii~~C<u>iii</u>) Complete either the process modifications or the installation or construction of the new air pollution control equipment by August 31, 2001;

~~iv~~D<u>iv</u>) Perform initial startup of the retrofitted HMIWI by January 15, 2002; and

~~v~~E<u>v</u>) Complete the initial performance test in accordance with Section 229.142 of this Part within 180 days after initial startup.

3~~e~~) Any owner or operator of an HMIWI that fails to demonstrate compliance with this Part by September 15, 2002, shall cease operation of the HMIWI until compliance with the provisions of this Part is achieved.

4~~d~~) Notwithstanding subsection (a)(2) ~~(b)~~ of this Section, all owners or operators of HMIWIs shall be in full compliance with all of the HMIWI operator provisions of Subpart J of this Part by September 15, 2000.

b) On and after January 1, 2014, each owner or operator of an HMIWI, as defined in Section 229.110 (a)(1) or (a)(2) of this Part, and subject to the emissions limits under Section 229.125(c) of this Part~~,~~ as applicable, or Section 229.126(c) of this Part, shall comply with the applicable provisions of this Part according to the following schedules:

1) Except as provided in subsection <u>(b)(2)</u> of this Section and unless another date is specified in the provisions of this Part, all owners or operators of HMIWIs shall comply with all of the provisions of this Part by January 1, 2014.

2) Except as provided in subsection (b)(4) of this Section, the owner or operator of an HMIWI may have until October 6, ~~2014,~~2014 to come into compliance with the emissions limits under Section 229.125(c) or 229.126(c) of this Part. To avail ~~themselves~~itself of this extended compliance timeframe, the owner or operator of an HMIWI shall:

A) Submit its CAAPP application and construction permit to the Agency, on or before January 1, 2012, requesting an extended compliance schedule, pursuant to Section 39.5(5)(d) of the Act~~,~~ [415 ILCS 5/39.5(5)(d)]. This compliance schedule shall include documentation supporting the need for an extension, a final control plan for the HMIWI and incremental steps to be taken toward compliance with this Part that, at a minimum, meet the increments of progress specified in subsection (b)(2)(B) of this Section;

B) Meet the following increments of progress by the dates indicated:

i) Finalize all contracts for the purchase of ~~either~~ pollution control equipment, process modification or control systems by August 1, 2012;

ii) Commence the implementation of either the process modifications or the necessary construction or installation of air pollution control devices for the HMIWI by March 1, 2013;

iii) Complete either the process modifications or the installation or construction of the new air pollution control equipment by September 1, 2013;

iv) Achieve final compliance, which includes incorporating all process changes and/or completing retrofit construction as described in the final control plan, connecting the air pollution control equipment or process changes ~~such~~so that the unit is brought on line, and ensuring that all necessary process changes and air pollution control equipment are operating properly, no later than June 1, 2014;

v) Complete the initial performance test in accordance with Section 229.142 of this Part no later than October 6, 2014;

vi) Submit the results of the initial performance test and revised waste management plan to the Agency no later than 60 days following the initial performance test; and

vii) Submit notification to the Agency within 10 business days ~~of~~after completing (or failing to complete by the applicable date) each of the increments of progress specified in subsection (b)(2)(B) of this Section. The notification must be signed by the owner's or operator's representative responsible for the management of the HMIWI.

3) If a petition for compliance extension is granted, the owner or operator of an HMIWI, as defined in Section 229.110 (a)(1) or (a)(2), must continue to comply with the provisions of ~~their~~its current ~~CAAP~~CAAPP permit during the interim.

4) Any owner or operator of an HMIWI that fails to demonstrate compliance with this Part by October 6, ~~2014,~~2014 shall cease operation of the HMIWI until compliance with the provisions of this Part is achieved.

5) Notwithstanding subsection (b)(2) of this Section, all owners or operators of HMIWIs shall be in full compliance with all of the HMIWI operator provisions of Subpart J of this Part before January 1, 2014.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

Section 229.116 Compliance Schedules for HMIWIs That Will Shut Down

All owners or operators of HMIWIs that intend to permanently shut down their HMIWI as a means of complying with this Part shall:

a) Provide the Agency with written notice of their intention to permanently shut down their HMIWI, as follows:

1) On or before November 15, 1999, for an HMIWI as defined in Section 229.110 (a)(1) of this Part, subject to the emissions limits under Section 229.125(a) or Section 229.126(a) of this Part;

2) On or before January 1, 2013, except as provided for in Section 229.116(c), for an HMIWI as defined in Section 229.110(a)(2) of this Part, subject to the emissions limits under Section 229.125(c), as applicable, or Section 229.126(c) of this Part.

b) Take the following affirmative steps to demonstrate that the HMIWI has been rendered permanently inoperable by September 15, 2000, for an HMIWI as defined in Section 229.110(a)(1), or by January 1, 2014 for an HMIWI as defined in Sections 229.110(a)(2) of this Part:

~~a) Provide the Agency with written notice of their intention to permanently shut down their HMIWI on or before November 15, 1999; and~~

~~b) Take the following affirmative steps to demonstrate that the HMIWI has been rendered permanently inoperable by September 15, 2000:~~

1) Weld the primary chamber door shut;

2) Dismantle the HMIWI; or

3) Other means that reasonably demonstrate that the HMIWI is no longer functional.

c) Except as provided in subsection (c)(5) of this Section, owners or operators may have up to October 6, ~~2014,~~2014 to shut down their HMIWIs to avoid being subject to compliance with the emissions limits under Section 229.125(c) or 229.126(c). To avail themselves of this extended compliance timeframe, the owner or operator of an HMIWI shall:

1) Submit ~~their~~its application to the Agency by July 1, ~~2013,~~2013 requesting an extended compliance schedule, pursuant to Section 39.5(5)(d) of the Act~~,~~ [415 ILCS 5/39.5(5)(d)]. This compliance schedule shall include documentation of the analysis undertaken to support the need for an extension, including an explanation of why the timeframe up to October 6, 2014 is sufficient while the timeframe up to January 1, 2014 is not sufficient, and incremental steps to be taken toward compliance with applicable requirements of this Part~~;~~.

2) If an onsite alternative waste treatment technology is needed to be installed before the HMIWI is shut down, an application for compliance extension shall include the following elements of increments of progress and completion date for each step of progress:

A) Finalize contract with an alternative waste treatment technology vendor;

B) Initiate onsite construction or installation of alternative waste treatment technology;

C) Complete onsite construction or installation of alternative waste treatment technology; and

D) Take the steps described under subsection (b) of this Section to demonstrate that the HMIWI has been rendered permanently inoperable.

3) If an onsite alternative waste treatment technology is not needed to be installed before an HMIWI is shut down, an application for compliance extension shall include a plan for shut down. The plan for shut down shall include steps described under subsection (b) of this Section to demonstrate that the HMIWI has been rendered permanently inoperable.

4) If a petition for compliance extension is granted, the owner or operator of an HMIWI, as defined in Section 229.110 (a)(1) or (a)(2), must continue to comply with the provisions of ~~their~~its current ~~CAAP~~CAAPP permit during the interim.

5) Any owner or operator of an HMIWI that fails to demonstrate compliance with this Part by October 6, ~~2014,~~2014 shall cease operation of the HMIWI until compliance with the provisions of this Part is achieved.

6) Notwithstanding subsection (c)(1) of this Section, all owners or operators of HMIWIs shall be in full compliance with all of the HMIWI operator provisions of Subpart J of this Part by January 1, 2014.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

SUBPART D: CAAPP PERMIT REQUIREMENTS

Section 229.120 CAAPP Permit Requirements

a) All HMIWIs subject to the emissions limits in this Part shall operate pursuant to a CAAPP permit, as follows:

1) By September 15, 2000, for an HMIWI as defined in Section 229.110 (a)(1) of this Part; and

2) By January 1, 2014, for an HMIWI as defined in Section 229.110 (a)(1) or (a)(2) of this Part.

b) For any HMIWI subject to the emission limits in this Part that is first required to obtain a CAAPP permit because it is subject to the emission limits in this Part, the owner or operator shall submit a complete application for a CAAPP permit, as follows:

1) By September 15, 2000, except as provided for in Section 229.115(a)(2)(A) of this Part, for an HMIWI as defined in Section 229.110 (a)(1) of this Part; or

2) By January 1, 2014, except as provided for in Section 229.115(b)(2)(A) of this Part, for an HMIWI as defined in Section 229.110 (a)(1) or (a)(2) of this Part.

~~a) All HMIWIs subject to the emissions limits in this Part shall operate pursuant to a CAAPP permit by September 15, 2000.~~

~~b) For any HMIWI subject to the emission limits in this Part that is first required to obtain a CAAPP permit because it is subject to the emission limits in this Part, the owner or operator shall submit a complete application for a CAAPP permit by September 15, 2000, except as provided for in Section 229.115(b)(1) of this Part.~~

c) Upon submittal of a timely and complete CAAPP application, the owner or operator of an HMIWI shall not be in violation of the requirement, specified in subsection (a) of this Section, to have a CAAPP permit, to the extent provided in Section 39.5(5)(h) of the Act [415 ILCS 5/39.5(5)(h)].

d) For any HMIWI that currently has a CAAPP permit, the following conditions apply:

1) If the CAAPP permit has 3 or more years remaining on the permit term, the owner or operator of an HMIWI shall apply for revision to the CAAPP permit to incorporate the applicable requirements of this Part, as follows: ~~on or before November 15, 1999; or~~

A) On or before November 15, 1999, for an HMIWI as defined in Section 229.110 (a)(1) of this Part~~,~~; and

B) On or before January 1, 2013, for an HMIWI as defined in Section 229.110 (a)(1) or (a)(2) of this Part; or

2) If the CAAPP permit has less than 3 years remaining on the permit term, the CAAPP permit shall be revised to incorporate the applicable requirements of this Part, upon renewal of the permit.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

SUBPART E: ~~EMISSION~~ EMISSIONS LIMITS

Section 229.125 Emissions Limits for Small, Medium, and Large HMIWIs

~~a)~~The emission limits in this Section shall apply at all times to HMIWIs identified in Section 229.110(a) ~~at all times~~, except as provided in Section 229.110(b) of this Part~~,~~ and Section 229.126 of this Subpart ~~and Subpart F of this Part~~.

a) Before January 1, 2014, each owner or operator of a small, medium, or large HMIWI as defined in Section 229.110(a)(1) of this Part~~,~~ shall comply with the following emissions limits:

~~b) The emission limits for small, medium, and large HMIWIs are as follows:~~

~~HMIWI Emissions Limits~~

PollutantUnits

(7% oxygen, dry basis)~~SmallMediumLargeParticulate~~HMIWI EMISSIONS LIMITSSmallMediumLargeParticulate matterMilligrams per dry standard cubic meter (mg/dscm) (grains per dry standard cubic foot (gr/dscf))115 (0.05)69 (0.03)34 (0.015)Carbon monoxideParts per million by volume (ppmv)404040Dioxins/furansNanograms per dry standard cubic meter total dioxins/furans (ng/dscm) (grains per billion dry standard cubic feet (gr/109 dscf)) or ng/dscm TEQ (gr/109 dscf)125 (55) or 2.3 (1.0)125 (55) or 2.3 (1.0)125 (55) or 2.3 (1.0)Hydrogen chloride(ppmv) or percent reduction100 or 93%100 or 93%100 or 93%Sulfur dioxide(ppmv)555555Nitrogen oxides(ppmv)250250250Leadmg/dscm (grains per thousand dry standard cubic feet (gr/103 dscf)) or percent reduction1.2 (0.52) or 70%1.2 (0.52) or 70%1.2 (0.52) or 70%Cadmiummg/dscm (gr/103 dscf) or percent reduction0.16 (0.07) or 65%0.16 (0.07) or 65%0.16 (0.07) or 65%Mercurymg/dscm (gr/103 dscf) or percent reduction0.55 (0.24) or 85%0.55 (0.24) or 85%0.55 (0.24) or 85%

~~HMIWI EMISSION LIMITSPollutantUnits~~
~~(7% oxygen, dry basis)SmallMediumLargePMmg per dscm(grains per dscf) 115 (0.05)69 (0.03)34 (0.015)COppmv404040Dioxins/ FuransNanograms per dscm, total dioxins/furans (grains per billion dscf), or nanograms per dscm TEQ (grains per billion dscf)125 (55) or 2.3 (1.0)125 (55) or 2.3 (1.0)125 (55) or 2.3 (1.0)HClppmv or percent reduction100 or 93%100 or 93%100 or 93%SO2ppmv555555NOxppmv250250250Pbmg per dscm (grains per thousand dscf) or percent reduction1.2 (0.52) or 70%1.2 (0.52) or 70%1.2 (0.52) or 70%Cdmg per dscm (grains per thousand dscf) or percent reduction0.16 (0.07) or 65%0.16 (0.07) or 65%0.16 (0.07) or 65%Hgmg per dscm (grains per thousand dscf) or percent reduction0.55 (0.24) or 85%0.55 (0.24) or 85%0.55 (0.24) or 85%~~

b) No owner or operator of a small, medium, or large HMIWI subject to ~~emission~~ emissions limits listed under subsection (a) of this Section shall cause or allow any emissions that cause greater than 10 percent opacity, as measured on a 6-minute block average, according to Method 9, 40 CFR 60, ~~Appendix~~appendix A, incorporated by reference in Section 229.104(d) of this Part, from any stack used by an HMIWI.

c) On and after January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), as applicable, each owner or operator of a small, medium, or large HMIWI, as defined in ~~Sections~~Section 229.110(a)(1) and (a)(2) of this Part, shall comply with the following emissions limits, as applicable:

~~c) No owner or operator of a small, medium, or large HMIWI shall cause or allow any emissions that cause greater than 10 percent opacity, as measured on a 6-minute block average, according to Method 9, 40 CFR 60, Appendix A, incorporated by reference at Section 229.104(d) of this Part, from any stack used by an HMIWI.~~

~~HMIWI Emissions Limits~~
PollutantUnits
(7% oxygen, dry basis)~~SmallMediumLargeParticulate~~HMIWI EMISSIONS LIMITSSmallMediumLargeParticulate matterMilligrams per dry standard cubic meter (mg/dscm) (grains per dry standard cubic foot (gr/dscf))66 (0.029)46 (0.020)a 34 (0.015)b25 (0.011)Carbon monoxideParts per million by volume (ppmv)205.511Dioxins/furansNanograms per dry standard cubic meter total dioxins/furans (ng/dscm) (grains per billion dry standard cubic feet (gr/109

dscf)) or ng/dscm TEQ (gr/109 dscf)16 (7.0) or 0.013 (0.0057)0.85 (0.37) or 0.020 (0.0087)9.3 (4.1) or 0.054 (0.024)Hydrogen chloride(ppmv)44a 15b7.76.6Sulfur dioxide(ppmv)4.24.29.0Nitrogen oxides(ppmv)190190140Leadmg/dscm (grains per thousand dry standard cubic feet (gr/103 dscf))0.31 (0.14) 0.018 (0.0079)0.036 (0.016)Cadmiummg/dscm (gr/103 dscf)0.017 (0.0074) 0.013 (0.0057)0.0092 (0.0040)Mercurymg/dscm (gr/103 dscf)0.014 (0.0061)0.025 (0.011)0.018 (0.0079) a Emissions limits for HMIWIs as defined in Section 229.110(a)(1) of this Part.

b Emissions limits for HMIWIs as defined in Section 229.110(a)(2) of this Part.

d) No owner or operator of a small, medium, or large HMIWI subject to emission limits listed under subsection (c) of this Section shall cause or allow any emissions that cause greater than 6 percent opacity, as measured on a 6-minute block average, according to Method 9, 40 CFR 60, ~~Appendix~~appendix A, incorporated by reference at Section 229.104(d) of this Part, from any stack used by an HMIWI.

e) On and after the date on which the initial performance test is completed or required to be completed under Section 229.142 of this Part, whichever date comes first, no owner or operator of an HMIWI, as defined in Section 229.110 (a)(1) or (a)(2) of this Part and subject to the emissions limits under subsection (c) of this Section, shall cause to be discharged into the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points), enclosures of ash conveying systems, buildings, or other sources in excess of 5 percent of the observation period of 9 minutes per 3-hour period, according to Method 22, 40 CFR 60, ~~Appendix~~appendix A, incorporated by reference in Section 229.104(d) of this Part, except as provided by the following exclusions:

1) Visible emissions discharged inside buildings or enclosures of ash conveying systems; or

2) During maintenance and repair of ash conveying systems. Maintenance and/or repair shall not exceed 10 operating days per calendar quarter unless the owner or operator of an HMIWI makes a request to the Agency in writing for a longer period of time to complete maintenance and/or repair, and the Agency approves the owner's or operator's request in writing.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

Section 229.126 Emissions Limits For Rural HMIWIs

~~a)~~Notwithstanding the emissions limits set out in Section 229.125 of this Part, any rural HMIWI shall comply with the emissions limits set out in subsection (a) or (c) ~~(b)~~ of this Section. The emissions limits under this Section shall apply at all times, except as provided for in Section 229.110(b) ~~and Subpart F of this Part~~.

a) Before January 1, 2014, a rural HMIWI as defined in Section 229.110(a)(1)~~,~~ shall comply with the following emissions limits:

~~b) The emission limits for rural HMIWI are as follows:~~

PollutantUnits
(7% oxygen, dry basis)
~~HMIWI Emissions LimitsParticulate~~EMISSION LIMITSParticulate mattermg/dscm
(gr/dscf)197
(0.086)Carbon monoxideppmv40Dioxins/furansng/dscm total dioxins/furans (gr/109 dscf) or ng/dscm TEQ (gr/109 dscf)800 (350) or 15 (6.6)Hydrogen chlorideppmv 3100Sulfur dioxideppmv55Nitrogen oxidesppmv250Leadmg/dscm
(gr/103 dscf)10
(4.4)Cadmiummg/dscm
(gr/103 dscf)4
(1.7)Mercurymg/dscm
(gr/103 dscf)7.5
(3.3)

~~PollutantUnits~~
~~(7% oxygen, dry basis)EMISSION LIMITSPM mg per dscm (grains per dscf)197 (0.086)COppmv40Dioxin/~~
~~Furansnanograms per dscm total dioxins/furans (grains per billion dscf), or nanograms per dscm TEQ (grains per billion dscf)800 (350) or 15 (6.6)HClppmv3100SO2ppmv55NOxppmv250Pbmg per dscm (grains per thousand dscf)10 (4.4)Cdmg per dscm (grains per thousand dscf)4 (1.7)Hgmg per dscm (grains per thousand dscf)7.5 (3.3)~~

b) No owner or operator of a rural HMIWI subject to emissions limits listed under subsection (a) of this Section shall cause or allow any emissions that cause greater than 10 percent opacity, as measured on a 6-minute block average, according to Method 9, 40 CFR ~~Part~~ 60, ~~Appendix~~appendix A, incorporated by reference at Section 229.104(d) of this ~~Part~~Part, from any stack used by an HMIWI.

~~c) No owner or operator of a rural HMIWI shall cause or allow any emissions that cause greater than 10 percent opacity, as measured on a 6-minute block average, according to Method 9, 40 CFR Part 60, Appendix A, incorporated by reference at Section 229.104(d) of this Part, from any stack used by an HMIWI.~~

c) On and after January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), as applicable, a rural HMIWI, as defined in Section 229.110(a)(1) or (a)(2) of this Part, shall comply with the following emissions limits:

PollutantUnits
(7% oxygen, dry basis)~~Emissions LimitsParticulate~~EMISSION LIMITSParticulate mattermg/dscm
(gr/dscf)87
(0.038)Carbon monoxideppmv20Dioxins/furansng/dscm total dioxins/furans (gr/109 dscf) or ng/dscm TEQ (gr/109 dscf)240 (100) or 5.1 (2.2)Hydrogen chlorideppmv 810Sulfur dioxideppmv55Nitrogen oxidesppmv130Leadmg/dscm
(gr/103 dscf)0.50
(0.22)Cadmiummg/dscm
(gr/103 dscf)0.11
(0.048)Mercurymg/dscm
(gr/103 dscf)0.0051
(0.0022)

d) No owner or operator of a rural HMIWI subject to emissions limits listed under subsection (c) of this Section shall cause or allow any emissions that cause greater than 6 percent opacity, as measured on a 6 minute block average,

according to Method 9, 40 CFR ~~Part~~ 60, ~~Appendix~~appendix A, incorporated by reference at Section 229.104(d) of this Part, from any stack used by an HMIWI.

e) On and after the date on which the initial performance test is completed or required to be completed under Section 229.142 of this Part, whichever date comes first, no owner or operator of a rural HMIWI, as defined in Section 229.110 (a)(1) or (a)(2) of this Part, subject to the emissions limits under subsection (c) of this Section, shall cause to be discharged into the atmosphere visible emissions of combustion ash from ash conveying system (including conveyor transfer points), enclosures of ash conveying systems, buildings, or other sources in excess of 5 percent of the observation period of 9 minutes per 3-hour period, according to Method 22, 40 CFR 60, ~~Appendix~~appendix A, incorporated by reference at Section 229.104(d) of this Part, except as provided by the following exclusions:

1) Visible emissions discharged inside buildings or enclosures of ash conveying systems; or

2) During maintenance and repair of ash conveying systems. Maintenance and/or repair shall not exceed 10 operating days per calendar quarter, unless the owner or operator of an HMIWI makes a request to the Agency in writing for a longer period of time to complete maintenance and/or repair, and the Agency approves the owner's or operator's request in writing.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

SUBPART F: EXCEPTIONS FROM EMISSION LIMITS ~~(Repealed)~~

Section 229.130 Operation During Periods of Startup, Shutdown, or Malfunction (Repealed)

~~a) The emission limits specified in Subpart E of this Part do not apply to an HMIWI during periods of startup, shutdown or malfunction, if the requirements provided in subsections (b), (c) and (d) of this Section are met.~~

~~b) No waste shall be charged to an HMIWI during periods of startup, shutdown or malfunction.~~

~~c) The shutdown of any HMIWI shall proceed according to the following requirements:~~

~~1) For continuous HMIWIs, shutdown may commence no less than 2 hours after the last charge to an HMIWI;~~

~~2) For intermittent HMIWIs, shutdown may commence no less than 4 hours after the last charge to an HMIWI; and~~

~~3) For batch HMIWIs, shutdown may commence no less than 5 hours after the high air phase of combustion has been completed.~~

~~d) During periods of malfunction, the owner or operator of an HMIWI shall do all of the following:~~

~~1) Take all reasonable steps to ensure that an HMIWI operates within the parameters established for that HMIWI and to minimize excess emissions;~~

~~2) Continue monitoring all applicable parameters; and~~

~~3) Take appropriate corrective actions prior to resuming the charging of any waste to an HMIWI.~~

(Source: Repealed at ~~35~~33 Ill. Reg. ~~____~~ _____, effective _____)

SUBPART H: COMPLIANCE REQUIREMENTS

Section 229.142 Initial Performance Testing and Establishment of Operating Parameters for All HMIWIs

a) Before January 1, 2014, each owner or operator of an HMIWI~~,~~ as defined in Section 229.110 (a)(1) of this Part, subject to the emissions limits under Section 229.125(a) or Section 229.126(a) of this Part, shall comply with the following requirements:

~~The owner or operator of an HMIWI subject to the emissions limits under this Part shall comply with the following requirements:~~

1~~a~~) Except as provided in Section 229.115(a)(2)(B)(v~~)~~ ~~229.115(b)(2)(E)~~ of this Part, conduct an initial performance test on their HMIWI by September 15, ~~2000;~~ 2000.

2~~b~~) Except as provided in subsection (a)(3~~)~~ ~~(c)~~ of this Section, in the initial performance test, test for all pollutants limited pursuant to Subpart E of this Part~~;~~.

3~~c~~) During the initial performance test, rural HMIWIs are not required to test for HCl, Pb or Cd~~;~~.

4~~d~~) If an HMIWI is equipped with a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and wet scrubber, or a selective noncatalytic reduction system, establish the appropriate maximum and minimum operating parameter values indicated in Appendix B of this Part for the relevant control system during the initial performance test, provided that the performance test demonstrates compliance with the emission limits specified in Section 229.125 of this Part~~;~~.

5~~e~~) If air pollution control equipment other than a dry scrubber followed by a fabric filter, a wet scrubber, ~~or~~a dry scrubber followed by a fabric filter and a wet scrubber, or a selective noncatalytic reduction system is used to comply with the emission limits under Section 229.125 of this Part, the initial performance test may not be conducted until site-specific operating parameters that will be monitored to demonstrate compliance with this Part have been established by the Agency in a construction permit and approved by USEPA.

6~~f~~) For rural HMIWI, establish the maximum charge rate and minimum secondary chamber temperature as site-specific parameters during the initial performance

test, provided that the performance test demonstrates that the HMIWI is in compliance with the emission limits specified in Section 229.126 of this Part.

b) On and after January 1, 2014, each owner or operator of an HMIWI, as defined in Section 229.110 (a)(1) or (a)(2) of this Part, and subject to the emissions limits under Section 229.125(c)~~,~~ as applicable, or Section 229.126(c) of this Part, shall comply with the following requirements:

1) Except as provided in Section 229.115(a)(2)(B)(v) of this Part, conduct an initial performance test on ~~their~~its HMIWI by January 1, 2014.

2) Except as provided for in ~~paragraph (b)(6) of this~~ subsection (b)(6), in the initial performance test, test for all pollutants to demonstrate compliance with Section 229.125(c)~~,~~ or Section 229.126(c) emissions limits, as applicable, pursuant to Subpart E of this Part.

3) If an HMIWI is equipped with a dry scrubber followed by a fabric filter, a wet scrubber, a dry scrubber followed by a fabric filter and wet scrubber, or a selective noncatalytic reduction system, establish the appropriate maximum and minimum operating parameter values indicated in Appendix B of this Part for the relevant control system during the initial performance test, provided that the performance test demonstrates compliance with the emission limits specified in Section 229.125 or 229.126 of this Part.

4) If an air pollution control device other than a dry scrubber followed by a fabric filter, a wet scrubber, a dry scrubber followed by a fabric filter and a wet scrubber, or a selective noncatalytic reduction system is used to comply with the emission limits under Section 229.125 or Section 229.126 of this Part, the initial performance test may not be conducted until site-specific operating parameters that will be monitored to demonstrate compliance with this Part have been established by the Agency in a construction permit and approved by USEPA.

5) For a rural HMIWI that is not equipped with an air pollution control device, establish the maximum charge rate and minimum secondary chamber temperature as site-specific parameters during the initial performance test, provided that the performance test demonstrates that the HMIWI is in compliance with the emission limits specified in Section 229.126(c) of this Part.

6) The owner or operator of an HMIWI may use results of previous performance ~~test(s)~~tests for initial compliance demonstration with the applicable emissions limits, provided the following conditions are met:

A) The previous emissions ~~test(s) was~~tests were conducted using procedures and test methods listed in Section 229.140 of this Part~~,~~ or USEPA-accepted voluntary consensus standards;

B) The test results are certified as representative of current operations; and

C) The previous emissions ~~test(s) was~~tests were conducted no earlier than 1996.

7) The owner or operator of an HMIWI that cannot certify and /or whose previous performance test~~(s)~~ results do not demonstrate compliance with one or more of the revised emission limits must conduct another performance test for those pollutants.

8) The owner or operator of an HMIWI, as defined in Section 229.110(a)(1) or (a)(2) of this Part, and subject to the emissions limits under Section 229.125(c)~~,~~ as applicable, or Section 229.126(c) of this Part, as applicable, shall determine compliance with the visible emissions limit for fugitive emissions from ash handling in Sections 229.125(g) and 229.126(e) by conducting an initial performance test using Method 22, at 40 CFR 60, ~~Appendix~~appendix A, incorporated by reference at Section 229.104(d) of this Part.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

Section 229.146 Annual Testing for Opacity

Following the date on which the initial performance test is completed, as required by Section 229.142 of this Section, the owners or operators of all HMIWIs shall conduct an annual opacity test, in accordance with Section 229.140 of this Part. The opacity test schedules are as follows: ~~, by September 15 of each year.~~

a) By September 15 of each year~~,~~ for an HMIWI~~,~~ as defined in Section 229.110 (a)(1) of this Part~~,~~ and subject to the emissions limits under ~~subsection~~Section 229.125(a) or ~~subsection~~Section 229.126(a) of this Part; and

b) By January 1 of each year~~,~~ for an HMIWI, as defined in Section 229.110 (a)(1) or (a)(2) of this Part, and subject to the emissions limits under Section 229.125(c)~~,~~ as applicable, or Section 229.126(c) of this Part.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

Section 229.148 Annual Performance Testing for All ~~Small, Medium and Large~~ HMIWIs

Following the date on which the initial performance test is completed, as required by Section 229.142 of this Part, ~~all owners or operators of small, medium, or large HMIWIs~~ each owner or operator of an HMIWI, as applicable, shall conduct an annual performance test~~, by September 15 of each year~~ to determine compliance with the applicable PM, CO and HCl emission limits specified in Section 229.125~~(b)~~ or 229.126 of this Part, using the applicable test procedures and methods specified in Section 229.140 of this Part.

a) Annual performance test schedules are as follows:

1) Before January 1, 2014, each owner or operator of a small, medium, or large HMIWI as defined in Section 229.110(a)(1), subject to the emissions limits under Section 229.125(a) of this Part, shall complete an annual performance test by September 15 of each year; and

2) On and after January 1, 2014, an owner or operator of a small, rural, medium, or large HMIWI, as defined in Section 229.110(a)(1) or (a)(2), subject to the emissions limits under Section 229.125(c)~~,~~ as applicable, or in Section 229.126(c) of this Part, shall complete an annual performance test by January 1 of each year.

~~ba~~b) If all 3 annual performance tests over a 3-year period indicate compliance with the applicable emission limits for PM, CO, or HCl specified in Section 229.125~~(b)~~ of this Part, the owner or operator of an HMIWI may forego a performance test for that pollutant during the next 2 years. If the next

performance test conducted every third year indicates compliance with the emission limits for PM, CO, or HCl specified in Section 229.125~~(b)~~ of this Part, the owner or operator of an HMIWI may forego a performance test for that pollutant for an additional 2 years from the date of the previous performance test.

~~eb~~c) If any performance test indicates noncompliance with the respective emission limit, the owner or operator of an HMIWI shall conduct a performance test for that pollutant annually until all annual performance tests over a 3-year period indicate compliance with the respective emission limits.

d) The owner or operator of an HMIWI may use any of the following types of continuous emission monitoring systems (~~"CEMs"~~CEMS), as provided in Section 229.152 of this Part, to substitute for annual performance tests and parameter monitoring to demonstrate compliance with applicable ~~emission~~emissions limits:

1) PM CEMS: replace annual PM testing and opacity testing and monitoring of pressure drop across the wet scrubber, if applicable;

2) CO CEMS: replace annual CO testing and monitoring of minimum secondary chamber temperature;

3) HCl CEMS: replace annual HCl testing and monitoring of minimum HCl sorbent flow rate~~,~~ and minimum scrubber liquor pH.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

Section 229.150 Compliance with Operating Parameter Values

a) Following the date on which the initial performance test is completed, or is required to be completed under ~~as provided in~~ Section 229.142 of this Subpart, whichever date comes first ~~Part~~, an HMIWI, using a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber to comply with the emission limits of this Part~~,~~ shall not operate above any of the applicable maximum ~~parameters~~ or below any of the applicable minimum operating parameters values specified in Appendix B of this Part. All operating parameters shall be measured as a 3-hour rolling average (calculated each hour as a 3-hour rolling average of the previous 3 operating hours) at all times~~, except during periods of startup, shutdown, and malfunction (calculated each hour as a 3-hour rolling average of the previous 3 operating hours)~~. For batch HMIWIs, the charge rate shall be measured on a per batch basis.

b) Except as provided in Section 229.164 of this Subpart, for an HMIWI equipped with a selective noncatalytic reduction system, operation of the HMIWI above the maximum charge rate, below the minimum secondary chamber temperature, and below the minimum reagent flow rate simultaneously shall constitute a violation of the NOx emissions limit.

~~eb~~c) For HMIWIs using air pollution control equipment other than a dry scrubber followed by a fabric filter, a wet scrubber, or dry scrubber followed by a fabric filter and a wet scrubber~~,~~ to comply with the emission limits under Section 229.125 or Section 229.126 of this Part, following the date on which the initial performance test is completed, as provided in Section 229.142 of this Part, an HMIWI shall not operate above any applicable maximum or below any applicable minimum operating parameter values established in its CAAPP permit.

~~d~~d) Operating parameter limits do not apply during performance tests.

(Source: Amended at 35 Ill. Reg. ~~____~~ _____, effective _____)

Section 229.152 Compliance Requirements for HMIWIs using CEMS

The owner or operator of an HMIWI may use a CEMS to demonstrate compliance with any of the emission limits under Section 229.125~~(b)~~ or Section 229.126 of this Part, if provided for in its permit. ~~Any HMIWI that is allowed to use a CEMS to demonstrate compliance with the emission limits of this Part shall:~~

a) Any HMIWI that is allowed to use a CEMS to demonstrate compliance with the emission limits of this Part shall:

1~~a~~) Determine compliance with the applicable emission limits using a 12-hour rolling average, calculated each hour as the average of the previous 12 operating hours~~, not including startup, shutdown, or malfunction~~; and

2~~b~~) Operate all CEMS in accordance with the applicable procedures under ~~Appendices~~appendices B and F of 40 CFR 60, incorporated by reference at Section 229.104(e) of this Part.

b) In the case of CEMS for which USEPA has not published performance specifications, the option to use the CEMS takes effect on the date of publication of the performance specifications in the Federal Register or after site-specific operating parameters used to demonstrate compliance with this Part have been established by the Agency in a construction permit and approved by USEPA.

(Source: Amended at 35 Ill. Reg. ~~_____~~, effective _____)

Section 229.154 Violations by HMIWIs Equipped with a Dry Scrubber Followed by a Fabric Filter

Except as provided in Section 229.164 of this Subpart, for an HMIWI equipped with a dry scrubber followed by a fabric filter:

a) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a 3-hour rolling average) shall be a violation of the CO ~~emission~~emissions limit;

b) Simultaneous operation of an HMIWI above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxin/furan sorbent flow rate (each measured on a 3-hour rolling average) shall be a violation of the dioxin/furan ~~emission~~emissions limit;

c) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum HCl sorbent flow rate (each measured on a 3-hour rolling average) shall be a violation of the HCl ~~emission~~emissions limit;

d) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a 3-hour rolling average) shall be a violation of the Hg ~~emission~~emissions limit; ~~or~~

e) Use of the bypass stack ~~(except during startup, shutdown or malfunction)~~ at any time during operation of an HMIWI is a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg ~~emission~~emissions limits; ~~.~~

f) If a CO CEMS is used to determine compliance with a CO emissions limit, operation of the HMIWI above the CO emissions limit as measured by the CO CEMS shall be a violation of the emissions limit;

g) If a bag leak detection system is used, failure to initiate corrective action within one hour ~~of~~after the bag leak detection system alarm, or failure to operate and maintain the fabric filter ~~such~~so that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period, shall be a violation of the PM emissions limit;

h) If a bag leak detection system is used to demonstrate compliance with the opacity limit, failure to initiate corrective action within one hour ~~of~~after the bag leak detection system alarm shall be a violation of the opacity emissions limit;

i) If a CEMS is used to determine compliance with a PM, HCl, Pb, Cd, and/or Hg emissions ~~limits~~limit, operation of the HMIWI above the applicable emissions limit as measured by the CEMS shall be a violation of the emissions limit;

j) If a continuous automated sampling system is used, operation of the HMIWI above the dioxin/furan emissions limit as measured by the continuous automated sampling system shall be a violation of the dioxin/furan emissions limit; or

k) If a continuous automated sampling system is used, operation of the HMIWI above the Hg emissions limit as measured by the continuous automated sampling system shall be a violation of the Hg emissions limit.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

Section 229.156 Violations by HMIWIs Equipped with a Wet Scrubber

Except as provided in Section 229.164 of this Subpart, for an HMIWI equipped with a wet scrubber:

a) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum pressure drop across the wet scrubber or below the minimum horsepower or amperage to the system (each measured on a 3-hour rolling average) is a violation of the PM ~~emission~~emissions limit;

b) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a 3-hour rolling average) is a violation of the CO ~~emission~~emissions limit;

c) Simultaneous operation of an HMIWI above the maximum charge rate, below the minimum secondary chamber temperature and below the minimum scrubber liquor flow rate (each measured on a 3-hour rolling average) is a violation of the dioxin/furan ~~emission~~emissions limit;

d) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a 3-hour rolling average) is a violation of the HCl ~~emission~~emissions limit;

e) Simultaneous operation of an HMIWI above the maximum flue gas temperature and above the maximum charge rate (each measured on a 3-hour rolling average) is a violation of the Hg ~~emission~~emissions limit; ~~or~~

f) Use of the bypass stack ~~(except during startup, shutdown, or malfunction)~~ at any time during operation of an HMIWI is a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg ~~emission~~emissions limits;~~.~~

g) If a CO CEMS is used to determine compliance with a CO emissions limit, operation of the HMIWI above the CO emissions limit as measured by the CO CEMS shall be a violation of the emissions limit;

h) If a CEMS is used to determine compliance with a PM, HCl, Pb, Cd, and/or Hg emissions limit, operation of the HMIWI above the applicable emissions limit as measured by the CEMS shall be a violation of the emissions limit;

i) If a continuous automated sampling system is used, operation of the HMIWI above the dioxin/furan emissions limit as measured by the continuous automated sampling system shall be a violation of the dioxin/furan emissions limit; or

j) If a continuous automated sampling system is used, operation of the HMIWI above the Hg emissions limit as measured by the continuous automated sampling system shall be a violation of the Hg emissions limit.

(Source: Amended at 35 Ill. Reg. ~~____~~ _____, effective ~~___~~_____)

Section 229.158 Violations by HMIWIs Equipped with a Dry Scrubber Followed by a Fabric Filter and a Wet Scrubber

Except as provided in Section 229.164 of this Subpart, for an HMIWI equipped with a dry scrubber followed by a fabric filter and a wet scrubber:

a) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a 3-hour rolling average) is a violation of the CO ~~emission~~emissions limit;

b) Simultaneous operation of an HMIWI above the maximum fabric filter inlet temperature, above the maximum charge rate and below the minimum dioxin/furan sorbent flow rate (each measured on a 3-hour rolling average) is a violation of the dioxin/furan ~~emission~~emissions limit;

c) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a 3-hour rolling average) is a violation of the HCl ~~emission~~emissions limit;

d) Simultaneous operation of an HMIWI above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a 3-hour rolling average) is a violation of the Hg ~~emission~~emissions limit; or

e) Use of the bypass stack ~~(except during startup, shutdown, or malfunction)~~ at any time during operation of an HMIWI is a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg ~~emission~~emissions limits;~~.~~

f) If CO CEMS is used to determine compliance with a CO emissions limit, operation of the HMIWI above the CO emissions limit as measured by the CO CEMS shall be a violation of the emissions limit;

g) If a bag leak detection system is used, failure to initiate corrective action within one hour ~~of~~after the bag leak detection system alarm, or failure to operate and maintain the fabric filter ~~such~~so that the alarm is not engaged

for more than 5 percent of the total operating time in a 6-month block reporting period, shall be a violation of the PM emissions limit;

h) If a bag leak detection system is used to demonstrate compliance with the opacity limit, failure to initiate corrective action within one hour ~~of~~after the bag leak detection system alarm shall be a violation of the opacity emissions limit;

i) If CEMS is used to determine compliance with a PM, HCl, Pb, Cd, and/or Hg emissions limit, operation of the HMIWI above the applicable emissions limit as measured by the CEMS shall be a violation of the emissions limit;

j) If a continuous automated sampling system is used, operation of the HMIWI above the dioxin/furan emissions limit as measured by the continuous automated sampling system shall be a violation of the dioxin/furan emissions limit; or

k) If a continuous automated sampling system is used, operation of the HMIWI above the Hg emissions limit as measured by the continuous automated sampling system shall be a violation of the Hg emissions limit.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

Section 229.160 Compliance Requirements for Rural HMIWIs

a) Prior to January 1, 2014, the requirements set forth in subsections (c) through (e) of this ~~section~~Section shall apply to all rural HMIWIs subject to the emissions limits under Section 229.126 of this Part.

b) On and after January 1, 2014, the requirements set forth in subsections (c) through (e) of this ~~section~~Section shall apply to all rural HMIWIs that are not equipped with an air pollution control device and that are subject to the emissions limits under Section 229.126 of this Part.

~~ea~~c) Following the date on which the initial performance test is completed or is required to be completed under Section 229.142 of this Subpart, whichever date comes first, the owners or operators of ~~a~~ rural HMIWI shall not operate their HMIWI either above the maximum charge rate or below the minimum secondary chamber temperature measured as 3-hour rolling averages ~~at all times, except during periods of startup or shutdown~~ (calculated each hour as the average of the previous ~~a 3-hour rolling average of the previous~~ 3 operating hours) at all times.

d) Operating parameter limits do not apply during performance tests.

~~eb~~e) Except as provided in Section 229.164 of this Subpart, the simultaneous operation of a rural HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (calculated as a 3-hour rolling average) shall constitute a violation of the PM, CO and dioxin/furan emission limits.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

Section 229.162 Inspection Requirements for All ~~Rural~~ HMIWIs

a) Before January 1, 2014, each owner or operator of a rural HMIWI subject to the emission limits under Section 229.126 of this Part shall inspect the HMIWI according to the following schedule:

~~Each owner or operator of a rural HMIWI shall inspect the HMIWI according to the following schedule:~~

1) An initial inspection shall be conducted by September 15, 2000; and

2) An annual inspection shall be conducted by September 15 of each year thereafter.

b) Each equipment inspection shall be conducted to ensure the proper operation of the ~~rural~~ HMIWI and, at a minimum, shall consist of the following steps:

1) An inspection of all burners, pilot assemblies, and pilot sensing devices, cleaning the pilot flame sensor, as necessary;

2) An inspection of the primary and secondary chamber combustion air flow, adjusting, as necessary;

3) An inspection of the hinges and door latches, lubricating, as necessary;

4) An inspection of dampers, fans, and blowers;

5) An inspection of the HMIWI door and door gaskets;

6) An inspection of all HMIWI motors;

7) An inspection of the primary chamber refractory lining, cleaning, repairing or replacing the lining, as necessary;

8) An inspection of the incinerator shell for corrosion or hot spots;

9) An inspection of the secondary/tertiary chamber and stack, cleaning as necessary;

10) Where applicable, an inspection of the mechanical loader, including limit switches;

11) A visual inspection of the waste bed (grates), repairing or sealing, as necessary;

12) Where applicable, an inspection of air pollution control devices to ensure their proper operation;

13) Where applicable, an inspection of the waste heat boiler systems;

14) An inspection of all bypass stack components;

15) Calibration of thermocouples, sorbent feed systems and monitoring equipment; and

16) A general inspection of all equipment to ensure that it is maintained in good operating condition.

c) The owner or operator of an ~~a rural~~ HMIWI shall document that, during the burn cycle immediately following the inspection required by this Section, the HMIWI is operating properly and make any necessary adjustments.

d) All maintenance, adjustments, or repairs identified during the equipment inspection required under this Section shall be completed within 10 days after the inspection. The owner or operator of an HMIWI may have a longer period of time in which to complete any repairs identified as a result of the inspection required by this Section, provided that it makes this request to the Agency in writing, and the Agency approves the owner or operator of an HMIWI's request in writing.

e) ~~On and after January 1, 2014, the~~The owner or operator of a small, rural, medium, or large HMIWI subject to the emission limits under Section 229.125(c)~~,~~ as applicable, or Section 229.126 of this Part, shall inspect the HMIWI as outlined in subsection (b) of this Section, according to the following schedule:

1) An initial equipment inspection shall be conducted by January 1, 2014; and

2) An annual equipment inspection shall be conducted by January 1 of each year thereafter.

f) ~~On and after January 1, 2014, the~~The owner or operator of an HMIWI subject to the ~~emission~~emissions limits under Section 229.125(c)~~,~~ as applicable, or Section 229.126(c) of this Part, shall inspect the air pollution control ~~device(s)~~devices, according to the following schedule:

1) An initial air pollution control device inspection shall be conducted by January 1, 2014; and

2) An annual air pollution control device inspection shall be conducted by January 1 of each year thereafter.

g) Each air pollution control device inspection, as applicable, shall be conducted to ensure the proper operation of the device and, at a minimum, shall consist of the following steps:

1) Where applicable, an inspection of the thermocouples, sorbent feed systems, and any other monitoring equipment, adjusting applicable ~~calibration(s)~~calibrations, as necessary; and

2) A general inspection of the equipment to ensure that it is maintained in good operating condition.

h) All maintenance, adjustments, or repairs identified during an air pollution control device inspection required under this Section shall be completed within 10 days after the inspection. The owner or operator of an HMIWI may have a longer period of time in which to complete any repairs identified as a result of the inspection required by this Section, provided that it makes this request to the Agency in writing~~,~~ and the Agency approves the request in writing.

(Source: Amended at 35 Ill. Reg. ~~____~~ _____, effective _____)

SUBPART I: MONITORING REQUIREMENTS

Section 229.166 Monitoring Requirements for All ~~Small, Medium, and Large~~ HMIWIs

a) Each owner or operator of an HMIWI subject to the ~~emission~~emissions limits under Section 229.125(c)~~,~~ as applicable, or Section 229.126(c) of this Part, shall comply with requirements of this Section according to the following schedule:

1) Before January 1, 2014, for a small, medium or large HMIWI;

2) On and after January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), for a small, medium or large HMIWI~~,~~ and a rural HMIWI that is equipped with an air pollution control device~~(s)~~.

~~ba~~b) Once the initial performance test required by Section 229.142 of this Part has been performed, and the site-specific minimum and maximum operating parameter values have been established, the owner or operator of an ~~a small, medium or large~~ HMIWI, as applicable, shall continuously monitor those parameters.

~~cb~~c) The owner or operator of an ~~a small, medium or large~~ HMIWI, as applicable, shall comply with the following monitoring requirements:

1) Install, calibrate according to manufacturer's specifications, maintain, and operate devices or establish methods for monitoring the applicable maximum and minimum operating parameters specified in Appendix B of this Part (unless CEMS are used as a substitute for certain parameters as specified) ~~such~~so that these devices or methods measure and record values for these operating parameters at the frequencies indicated in Appendix B of this Part at all times~~, except during periods of startup and shutdown~~;

2) Install, calibrate according to manufacturer's specifications, maintain, and operate a device or establish a method for identifying the use of the bypass stack, including date, time, and duration of use;

3) If control equipment other than a dry scrubber followed by a fabric filter, a wet scrubber, ~~or~~ a dry scrubber followed by a fabric filter and a wet scrubber, or a selective noncatalytic reduction system is used to comply with the applicable ~~emission~~emissions limits under Section 229.125(c) ~~229.125(b),~~ as applicable, or Section 229.126(c) of this Part, install, calibrate according to manufacturer's specifications, maintain, and operate the equipment necessary to monitor the site-specific operating parameters developed and approved pursuant to Section 229.142(a)(5) or (b)(5) ~~Section 229.142 (c)~~ of this Part; and

4) Record monitoring data at all times during HMIWI operation, except during the periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be recorded for 75 percent of the operating hours per day ~~and~~ for 90 percent of the operating days per calendar quarter that an HMIWI is combusting hospital waste or medical/infectious waste.

d) If an HMIWI is equipped with an air pollution control device that includes a fabric filter and a PM CEMS is not used to demonstrate compliance, the owner or operator of the HMIWI may use a bag leak detection system to determine compliance with the PM emissions limit. The owner or operator shall meet the following requirements for each bag leak detection system installed:

1) Each triboelectric bag leak detection system may be installed, calibrated, operated, and maintained according to the

~~"~~"Fabric Filter Bag Leak Detection Guidance,~~"~~" as incorporated by reference in Section 229.104;

2) The bag leak detection system shall be certified by the manufacturer as being capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;

3) The bag leak detection system sensor shall provide an output of relative PM loadings;

4) The bag leak detection system shall be equipped with a device to continuously record the output signal from the sensor;

5) The bag leak detection system shall be equipped with an audible alarm system that sounds automatically when an increase in relative PM emissions over a preset level is detected. The alarm shall be located where it is easily heard by plant operating personnel;

6) For positive pressure fabric filter systems, a bag leak detector shall be installed in each baghouse compartment or cell;

7) For negative pressure or induced air fabric filters, a bag leak detector shall be installed downstream of the fabric filter;

8) If multiple bag leak detectors are required, the bag leak detection system's instrumentation and alarm may be shared among detectors;

9) The baseline output shall be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the ~~"~~"Fabric Filter Bag Leak Detection Guidance,~~"~~" as incorporated by reference in Section 229.104;

10) Following initial adjustment of the system, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted. Increasing the sensitivity by more than 100 percent or decreasing by more than 50 percent over a 365-day period is a violation, unless ~~such~~the adjustment follows a complete fabric filter inspection that demonstrates that the fabric filter is in good operating condition. Each adjustment shall be recorded;

11) ~~Maintain records~~Records of the results of each inspection, calibration, and validation check shall be maintained; and

12) The fabric filter must be operated and maintained ~~such~~so that the bag leak detection system alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; however, corrective action must be initiated within 1 hour ~~of~~after the alarm.

(Source: Amended at 35 Ill. Reg.____ _____, effective _____)

Section 229.168 Monitoring Requirements for Rural HMIWIs

a) Each owner or operator of a rural HMIWI subject to the ~~emission~~emissions limits under Section 229.126 of this Part shall comply with requirements of this Section according to the following schedule:

1) Before January 1, 2014, for a rural HMIWI; and

2) On and after January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), for a rural HMIWI that is not equipped with an air pollution control device~~(s).~~.

b) The owner or operator of each rural HMIWI shall comply with the following monitoring requirements:

1~~a~~) Install, calibrate according to manufacturer's specifications, maintain~~,~~ and operate a device measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute of operation;

2~~b~~) Install, calibrate according to manufacturer's specifications, maintain, and operate a device that automatically measures and records the date, time, and weight of each charge fed into an HMIWI; and

3~~c~~) Record monitoring data at all times during HMIWI operation, except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be recorded for 75 percent of the operating hours per day ~~and~~ for 90 percent of the operating hours per calendar quarter that an HMIWI is combusting hospital waste or medical/infectious waste.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

SUBPART K: WASTE MANAGEMENT PLAN REQUIREMENTS

Section 229.180 Waste Management Requirements for Commercial HMIWIs ~~Accepting Waste Generated Off-Site~~

a) The owner or operator of any commercial HMIWI that accepts hospital waste or medical/infectious waste generated off-site shall:

1) Provide hospital, medical or infectious waste customers with written information at least once a year concerning the availability of waste management practices for reducing the volume and toxicity of waste to be incinerated; ~~and~~

2) Conduct training and education programs in waste segregation for each of the company's waste generator customers;

3) Ensure that each waste generator customer prepares its own waste management plan that includes, at a minimum, the following elements:

A) Segregation of recyclable wastes such as paper products, glass, batteries and metals;

B) Segregation of non-recyclable wastes such as polyvinyl chloride plastics, pharmaceutical waste, and mercury-containing waste; and

C) Purchasing recycled or recyclable products~~.~~ ;

~~4~~24) Submit a waste management plan to the Agency, in accordance with Section 229.184(b) of this Part, that outlines the efforts that will be undertaken to implement the ~~requirements distribute information as specified~~requirementsspecified in subsections (a)(1) through (a)(3) of this Section. ~~and identifies the information that will be distributed.~~

b) Paper or electronic copies of the materials disseminated under this Section shall be made available to the Agency upon written request.

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

SUBPART L: RECORDKEEPING AND REPORTING REQUIREMENTS

Section 229.182 Recordkeeping Requirements

a) The owner or operator of an HMIWI subject to the ~~emission~~emissions limits under Subpart E of this Part shall maintain records of the following information:

1) The calendar date of each record;

2) The following data, where applicable:

A) Concentrations of all applicable pollutants listed in Section 229.125 (a)~~,~~ or (c), or in Section 229.126 (a) or (c) of this Part (as determined by the CEMS, if applicable), and any measurements of opacity as required under Section 229.125(b), (d), or (f) or Section 229.126(b) or (d);

~~Concentrations of all applicable pollutants listed in Section 229.125(b) or 229.126(b) of this Part (as determined by the CEMS, if applicable) and any measurements of opacity as required under Section 229.125(c) or 229.126(c);~~

B) HMIWI charge dates, times and weights, and hourly charge rates;

C) If a fabric filter is used, the fabric filter inlet temperatures during each minute of operation;

D) The amount and type of dioxin/furan sorbent used during each hour of operation;

E) The amount and type of Hg sorbent used during each hour of operation;

F) The amount and type of HCl sorbent used during each hour of operation;

G) If a selective noncatalytic reduction system is used to comply, the amount and type of NOX reagent used during each hour of operation;

H) If a selective noncatalytic reduction system is used to comply, the minimum secondary chamber temperature recorded during each minute of operation;

~~IG~~I) The secondary chamber temperatures recorded during each minute of operation;

~~JH~~J) The liquor flow rate to the wet scrubber inlet during each minute of operation;

~~KI~~K) The horsepower or amperage to the wet scrubber during each minute of operation;

~~LJ~~L) Any pressure drop across the wet scrubber system during each minute of operation;

~~MK~~M) The temperature at the outlet from the wet scrubber during each minute of operation;

~~NL~~N) The pH at the inlet to the wet scrubber during each minute of operation;

~~OM~~Q) Identification of any use of the bypass stack, including dates, times, and the duration of such use; ~~and~~

~~PN~~P) For sources complying with Section 229.166(c) ~~(b)(3)~~ of this Part, all operating parameter data collected ~~monitored~~; and

Q) If a bag leak detection system is used, maintain records of the system alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken, as applicable~~.~~;

3) Identification of any calendar days for which data on ~~emission~~emissions rates or operating parameters specified under subsection (a)(2) of this Section have not been obtained, with an identification of the ~~emission~~emissions rates or operating parameters not measured, reasons for not obtaining data, and a description of the corrective actions taken;

4) Identification of any malfunctions, including the calendar date, the time and duration, and a description of the malfunction and of the corrective action taken to remedy it;

5) Identification of calendar days for which data on ~~emission~~emissions rates or operating parameters specified under subsection (a)(2) of this Section exceeded the applicable limits, with a description of the exceedences, reasons for such exceedences, and a description of the corrective actions taken;

6) The results of the initial, annual, and any other subsequent performance tests conducted to determine compliance with the applicable emissions limits and/or to establish or re-establish operating parameters, as applicable, and a description, including sample calculations, of how the operating parameters were established or re-established, if applicable;

7) Records of calibration of any monitoring devices as required under Sections 229.166(c)(~~b~~)~~(~~1), (2) and (3) and 229.168 (b~~)(a)~~(1) and (2) of this Part; and

8) Identification of the names of all HMIWI operators who have met the criteria for qualification under Section 229.170 of this Part, including:

A) Documentation of training and the dates of the training; and

B) The date of the initial review and all subsequent annual reviews of the information specified in Section 229.172(a) of this Part, as required by Section 229.172(b) of this Part.

b) The owner or operator of an HMIWI claiming an exemption from the ~~emission~~emissions limits in this Part pursuant to Section 229.110(b) of this Part shall keep contemporaneous records identifying each period of time when only pathological waste, low-level radioactive waste, or chemotherapeutic waste is burned, including the calendar date and duration of such periods.

c) The owner or operator of an HMIWI claiming an exemption pursuant to Section 229.110(c) of this Part shall keep records on a calendar quarter basis demonstrating that only pathological waste, low-level radioactive waste, or chemotherapeutic waste is burned.

d) The owner or operator of a co-fired combustor claiming an exemption from the ~~emission~~emissions limits under Section 229.110(d) of this Part shall maintain records on a calendar quarter basis of the relative weight of hospital waste and/or medical/infectious waste, and of all other fuels or waste combusted.

e) The owner or operator of each HMIWI subject to the ~~emission~~emissions limits under Section 229.125(c)~~,~~ or Section 229.126 of this Part~~,~~ shall maintain records of the annual equipment inspection required under Section 229.162 of this Part~~.~~ ~~e) The owner or operator of each rural HMIWI shall maintain records of the annual equipment inspections required under Section 229.162 of this Part, any required maintenance, and any repairs not completed within 10 days after an inspection or the time frame established by the Agency~~.

f) The owner or operator of each HMIWI subject to the ~~emission~~emissions limits under Section 229.125(c)~~,~~ or 229.126(c) of this Part~~,~~ shall maintain records of the annual air pollution control device inspection required under Section 229.162 of this Part.

g) If a bag leak detection system is used, the owner or operator shall maintain records of the system alarm, the time of the alarm, the time corrective action was initiated and completed, a brief description of the cause of the alarm and the corrective action taken, as applicable.

h) The owner or operator of each HMIWI, ~~where~~when applicable, shall maintain records of any required maintenance, adjustments, or repairs identified during an inspection required under Section 229.162 of this Part not completed within 10 days after the inspection or the timeframe approved in writing by the Agency.

~~i~~~~f~~i) All records required under this Section shall be maintained onsite for a period of 5 years, in either paper copy or electronic format, unless an alternative format has been approved by the Agency in a permit condition.

~~j~~~~g~~j) All records required to be maintained pursuant to this Section shall be made available to the Agency upon request.

(Source: Amended at 35 Ill. Reg.____ _____, effective _____)

Section 229.184 Reporting Requirements

a) The facilities manager and the responsible official for the affected source shall certify each report required under this Section.

b) The owner or operator of an HMIWI shall submit to the Agency the results of any performance test conducted on the HMIWI within 60 days after conducting the performance test. The information submitted with the initial performance test required by Section 229.142 of this Part shall include:

1) Before January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), as applicable, the test data and values for the site-specific operating parameters established pursuant to Section 229.142(a)(4), (5) or (6), as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test for an HMIWI subject to the emissions limits under Section 229.125(a) or 229.126(a) of this Part;

~~The test data and values for the site-specific operating parameters established for an HMIWI pursuant to either Section 229.142(d), (e) or (f) of this Part, as applicable; and~~

2) On and after January 1, 2014, the test data and values for the site-specific operating parameters established pursuant to Section 229.142(b)(3), (4) or (5), as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test for an HMIWI subject to the emissions limits under Section 229.125(c)~~,~~ or Section 229.126(c) of this Part;

3) If a bag leak detection system is used, analysis and supporting documentation demonstrating conformance with guidance and specifications for bag leak detection systems in Section 229.166(d)(1); and

~~42~~4) A copy of the waste management plan required under Subpart K of this Part.

c) All owners or operators of HMIWIs shall submit the information specified under this subsection (c) to the Agency, as follows:

~~All owners or operators of HMIWIs shall submit the information specified under this subsection (c) to the Agency by September 15, 2001 and by September 15 of each year thereafter. Once an HMIWI is issued a CAAPP permit, the owner or operator of an HMIWI shall submit these reports semi-annually, in accordance with subsection (d) of this Section. The annual report shall include the following information:~~

1) By September 15, 2001, and by September 15 of each year thereafter, for an HMIWI subject to the emissions limits under Section 229.125(a) or 229.126(a) of this Part;

2) By January 1, 2014, and by January 1 of each year thereafter, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), as applicable, for an HMIWI subject to the emissions limits under Section 229.125(c) or (e)~~,~~ or Section 229.126(c) of this Part; and

3) The annual report required under subsection (c)(1) or (2) of this ~~subsection~~Section shall include the following information:

A ~~(c)(1))~~ Before January 1, 2014, the values for site-specific operating parameters established pursuant to Section 229.142(a)(4), (5) or (6) of this Part, as applicable;

B) On and after January 1, 2014, except as provided for in Section 229.115(b)(3) or Section 229.116(c)(4), as applicable, the values for site-specific operating parameters established pursuant to Section 229.142(b)(3), (4) or (5) of this Part, as applicable;

C~~(c)(2)~~) The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter, recorded for the calendar year being reported pursuant to Section 229.142(a)(4), (5) or (6), or Section 229.142(b)(3), (4) or (5) of this Part, as applicable; ~~and for the calendar year preceding the year being reported;~~

D) The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded pursuant to Section 229.142(a)(4), (5) or (6)~~,~~ or Section 229.142(b)(3), (4) or (5)~~,~~ of this Part, as applicable, for the calendar year preceding the year being reported, in order to provide the Agency with a summary of the performance of the affected facility over a 2-year period;

E~~(c)(3)~~) Any information recorded pursuant to Section 229.182(a)(3) through (5) of this Subpart for the calendar year being reported and for the calendar year preceding the year being reported;

F~~(c)(4)~~) If no exceedences or malfunctions were recorded under Section 229.182(a)(3) through (a)(5) of this Subpart for the calendar year being reported, a statement that no exceedences occurred during the reporting period; and

G~~(c)(5)~~) Any use of the bypass stack, the duration of use, the reason for malfunction, and the corrective actions taken.

d) Once an HMIWI is issued a CAAPP permit, the owner or operator of the HMIWI shall submit the reports required under subsection (c) of this Section ~~semi-annually~~semiannually. The semiannual reports must be submitted within 60 days following the end of the reporting period. The first semiannual reporting period ends on June 30 of each year and the second semiannual reporting period ends on December 31 of each year.

~~Once the owner or operator of an HMIWI is required to submit semiannual reports, these reports must be submitted within 60 days following the end of the reporting period. The first semiannual reporting period ends on March 15 of each year and the second semiannual reporting period ends on September 15 of each year.~~

e) The owner or operator of each rural HMIWI subject to the ~~emission~~emissions limits under Section 229.126(b) of this Part, shall submit an annual report containing all information listed in subsections (b) and (c) of this Section by no later than 60 days following the year in which the data was collected. Subsequent reports shall be sent no later than 12 calendar months following the previous report. Once the unit is subject to permitting requirements under the CAAPP, the owner or operator shall submit these reports semiannually in accordance with the schedule specified in subsection (d) of this Section.

(Source: Amended at 35 Ill. Reg. _____, _____, effective _____)

Section 229.APPENDIX B Operating Parameters to be Monitored and Minimum Measurement and Recording Frequencies~~.~~

An "~~x~~X" in any box in this matrix means that measurement of that parameter is required.

MINIMUM ~~FREQUENCYCONTROL~~FREQUENCYCONTROL SYSTEMOperating ParametersData MeasurementData RecordingDry Scrubber Followed by Fabric FilterWet ScrubberDry Scrubber Followed by Fabric Filter and Wet ScrubberSelective Noncatalytic Reduction SystemMaximum Charge Rate1ContinuousOnce per hourXXXXMaximum Fabric Filter Inlet TemperatureContinuousOnce per minuteXXMaximum Flue Gas TemperatureContinuousOnce per minuteXXMinimum Secondary Chamber TemperatureContinuousOnce per minuteXXXXMinimum Dioxin/Furan Sorbent Flow RateHourlyOnce per hourXXMinimum HCl Sorbent Flow RateHourlyOnce per hourXXMinimum Reagent Flow ~~RateHourly-Once~~RateHourlyOnce per hourXMinimum Hg Sorbent Flow ~~RateHourly-Once~~RateHourlyOnce per hourXXMinimum Pressure Drop Across the Wet Scrubber or Minimum Horsepower or Amperage to Wet ScrubberContinuousOnce per minuteXXMinimum Scrubber Liquor Flow RateContinuousOnce per hourXXMinimum Scrubber Liquor pHContinuousOnce per hourXX1For batch HMIWIs, record the charge per batch.

~~Operating Parameters to be Monitored and Minimum Measurement and Recording Frequencies. An "x" in any box in this matrix means that measurement of that parameter is required.~~

~~MINIMUM FREQUENCY CONTROL SYSTEMOperating ParametersData Meas-urementData RecordingDry Scrubber Followed by Fabric FilterWet ScrubberDry Scrubber Followed by Fabric Filter and Wet Scrubber Maximum1 Charge RateContinuousOnce per hourXXXMaximum Fabric Filter Inlet TemperatureContinuousOnce per minuteXXMaximum flue gas temperatureContinuousOnce per minuteXXMinimum secondary chamber temperatureContinuousOnce per minuteXXXMinimum Dioxin/ Furan Sorbent Flow RateHourlyOnce per hourXXMinimum HCl Sorbent Flow RateHourlyOnce per hourXXMinimum Hg Sorbent Flow RateHourlyOnce per hourXXMinimum Pressure Drop Across the Wet Scrubber or Minimum Horsepower or Amperage to Wet ScrubberContinuousOnce per minuteXXMinimum Scrubber Liquor Flow RateContinuousOnce per minuteXXMinimum Scrubber Liquor pHContinuousOnce per minuteXX 1For batch HMIWIs, record the charge per batch.~~

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

Section 229.APPENDIX C Reference Test Methods and Procedures for Performance Tests~~.~~

The following test methods and procedures shall be used as specified in Section 229.140(e) of this Part, when conducting any performance test for the purpose of demonstrating compliance with the ~~emission~~emissions limits established under this Part.

a) All performance tests shall consist of a minimum of 3 test runs conducted under representative operating conditions. The minimum sample time of 1 hour per test run shall be used unless otherwise indicated. In order to demonstrate compliance with the ~~emission~~emissions limits set forth in Subpart E of this Part, the arithmetic average of all 3 performance test runs shall be used.

b) Method 1, at 40 CFR 60, incorporated by reference at Section 229.104(d) of this Part, shall be used to select the sampling location and number of traverse points.

c) Method 2, at 40 CFR ~~60~~60, shall be used to determine average gas density, as well as to measure gas velocity.

d) Method 3, 3A, or 3B, at 40 CFR ~~60~~60, shall be used for gas composition analysis, including measurement of oxygen concentration. Method 3, 3A or 3B, at 40 CFR ~~60~~60, shall be used simultaneously with each of the other reference methods. As an alternative to Method 3B, ASME PTC-19-10-1981-Part 10 may be used.

~~d) Method 3 or 3A, at 40 CFR 60 shall be used for gas composition analysis, including measurement of oxygen concentration. Method 3 or 3A, at 40 CFR 60 shall be used simultaneously with each reference method.~~

e) The pollutant concentrations shall be adjusted to 7 percent oxygen using the following equation:

Cadj = Cmeas (20.9-7)/(20.9-%O2)

Where:

Cadj = pollutant concentration adjusted to 7 percent oxygen;Cmeas = pollutant concentration measured on a dry basis (20.9-7) = 20.9 percent oxygen - 7 percent oxygen (defined oxygen ~~correction~~corrective basis);20.9 = oxygen concentration in air, percent; and%O2 = oxygen concentration measured on a dry basis, percent.

f) Method 5, 26A, or 29, at 40 CFR ~~60~~60, shall be used to measure PM emissions. As an alternative, a PM CEMS may be used in determining compliance with PM emissions using a 12-hour rolling average, calculated each hour as the average of the previous 12 operating hours.

~~f) Method 5 or 29, at 40 CFR 60 shall be used to measure particulate matter emissions.~~

g) Method 7 or 7E, at 40 CFR ~~60~~60, shall be used to measure NOX emissions.

h) Method 6 or 6C, at 40 CFR ~~60~~60, shall be used to measure SO2 emissions.

~~ig~~i) Method 9, at 40 CFR ~~60~~60, shall be used to measure stack opacity. As an alternative, the use of a bag leak detection system or a PM CEMS to demonstrate compliance with the PM standards is considered demonstrative of compliance with the opacity requirements.

~~jh~~j) Method 10 or 10B, at 40 CFR ~~60~~60, shall be used to measure CO emissions. As an alternative, a CO CEMS may be used to measure CO emissions.

k) Method 22, at 40 CFR ~~60~~60, shall be used to measure fugitive ash emissions.

~~ii~~l) Method 23, at 40 CFR ~~60~~60, shall be used to measure total dioxin/furan emissions. As an alternative, the facility may elect to sample total dioxins/furans by installing, calibrating, maintaining, and operating a continuous automated sampling system for monitoring dioxin/furan emissions. The minimum sample time for Method 23 sampling shall be 4 hours per test run. If

the affected facility has selected the TEQ for dioxin/furans (set out in Appendix A of this Part), as provided under Section 229.125~~(b)~~ or 229.126~~(b)~~ of this Part, whichever is applicable, the following procedures shall be used to determine compliance:

1) Measure the concentration of each dioxin/furan tetra-through-octa-congener emitted using Method 23;

2) For each dioxin/furan congener measured in accordance with subsection (i)(1) of this Section, multiply the congener concentration by its corresponding TEQ factor specified in Appendix A of this Part; and

3) Sum the products calculated in accordance with subsection (i)(2) of this Section to obtain the total concentration of dioxin/furans emitted in terms of TEQ.

~~mj~~m) Method 26 or 26A, at 40 CFR ~~60~~60, shall be used to measure HCl emissions. As an alternative, an HCl CEMS may be used to measure HCl emissions. Before January 1, 2014, if ~~If~~ the affected facility has selected the percentage reduction standard for HCl as provided under Section 229.125(a)~~(b)~~ or 229.126(a)~~(b)~~ of this Part, whichever is applicable, the percentage reduction in HCl emissions (%RHCl) is computed using the following formula:

(%RHCl) = ((Ei-Eo)/Ei) x 100

Where:

%RHCl = percentage reduction of ~~HCl~~HCI emissions achieved;Ei = ~~HCl~~HCI emissions concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis); ~~andEo~~ = ~~HCl~~andEo=metal emissions concentration (Pb, Cd, or Hg) measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

~~nk~~n) Method 29, at 40 CFR ~~60~~60, shall be used to measure Pb, Cd, and Hg emissions. As an alternative, ASTM D6784-02 may be used to measure Hg emissions; a multi-metals CEMS or Hg CEMS may be used to measure Pb, Cd, and Hg emissions; or the facility may elect to sample Hg by installing, calibrating, maintaining, and operating a continuous automated sampling system for monitoring Hg emissions. Before January 1, 2014, ~~if If~~if the affected facility has selected the percentage reduction standards for metals as provided in Section 229.125(a) ~~(b)~~ or 229.126(a) ~~(b)~~ of this Part, whichever is applicable, the percentage reduction in emissions (%Rmetal) is computed using the following formula:

~~(%Rmetal) = ((Ei-Eo)/Ei) x 100~~

(%Rmetal) = ((Ei-Eo)/Ei) x 100

Where:

~~%Rmetal~~ = RMETAL=percentage reduction of metal emissions (Pb, Cd, or Hg) achieved;Ei = metal emissions concentration (Pb, Cd, or Hg) measured at the control device inlet, corrected to 7 percent oxygen (dry basis); ~~andEo~~ andEO= metal emissions concentration (Pb, Cd, or Hg) measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

(Source: Amended at 35 Ill. Reg. ____ _____, effective _____)

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Moved cell	
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Padding cell	

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