

## **REGULATION 6.41 Standards of Performance for Existing Medical Waste Incinerators**

### **Air Pollution Control District of Jefferson County Jefferson County, Kentucky**

**Relates To:** KRS Chapter 77 Air Pollution Control

**Pursuant To:** KRS 77 Chapter 77 Air Pollution Control

**Necessity And Function:** KRS 77.180 provides that the Air Pollution Control Board may make and enforce all needful orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of emissions from existing medical waste incinerators.

#### **SECTION 1 Applicability**

- 1.1 This regulation applies to each affected facility which means each unit for which construction, modification, or reconstruction commenced before the effective date of this regulation. Affected facilities which combine and combust MSW, solid waste, or hazardous waste with medical waste shall be subject to this regulation. Affected facilities which combust only MSW shall be subject to Regulation 7.76.
- 1.2 Physical or operational changes made to an existing unit to comply with this regulation shall be considered a modification or reconstruction and shall not subject an existing unit to Regulation 7.78.

#### **SECTION 2 Definitions**

Terms used in this regulation not defined herein shall have the meaning given them in Regulation 1.02.

- 2.1 "Affected facility" means a device for which construction, modification, or reconstruction commenced before the effective date of this regulation, that combusts material which, included in the waste stream, would be medical waste.
- 2.2 "Acid gases" means sulfur dioxide and hydrogen chlorine gases emitted from units.
- 2.3 "Afterburner" means an auxiliary burner for destroying unburned or partially burned combustion gases after they have passed from the combustion chamber.
- 2.4 "ASME" means the American Society of Mechanical Engineers.
- 2.5 "Biologicals" means a biological product used in prevention or treatment of disease.
- 2.6 "Bubbling fluidized bed incinerator" means a fluidized bed incinerator in which the majority of the bed material remains in the primary combustion zone.
- 2.7 "Burnout" means the percent of matter completely burned in the primary chamber of an affected facility.
- 2.8 "Chief facility operator" means the person in direct charge and control of the operation of an affected facility and who is responsible for daily on-site supervision, technical direction, management, and overall performance of the facility.
- 2.9 "Circulating fluidized bed incinerator" means a fluidized bed incinerator in which the majority of the bed material is carried out of the primary combustion zone and is transported back to the primary zone through a recirculation loop.
- 2.10 "Commercial solid waste" means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding household and

- industrial wastes. Commercial solid waste includes waste from medical facilities, schools, and other institutions that is not medical waste.
- 2.11 "Continuous emission monitoring system" (CEMS) means a monitoring system for continuously measuring and recording the emissions of a pollutant from an affected facility.
- 2.12 "Daily average" means the average of all hourly emission rates when the affected facility is operating and firing municipal solid waste, measured over a 24 hour period between 12:00 midnight and the following midnight.
- 2.13 "Dioxin or furans" means total tetra- through octa- chlorinated dibenzo-p-dioxins and tetra- through octa- chlorinated dibenzofurans.
- 2.14 "Ferrous metals" means metals and alloys containing iron. Ferrous metals include, but are not limited to, pieces of scrap metal and household appliances made of iron containing metals, including stoves, refrigerators, air conditioners, and other appliances. Ferrous metals shall not include whole automobiles or other vehicles or vehicle bodies.
- 2.15 "Field-erected" means assembled from components at a final site of operations.
- 2.16 "Four hour block average" means the average of all hourly emission rates when the affected facility is operating and combusting municipal solid waste measured over four hour periods of from 12:00 midnight to 4:00 a.m., 4:00 a.m. to 8:00 a.m., 8:00 a.m. to 12:00 noon, 12:00 noon to 4:00 p.m., 4:00 p.m. to 8:00 p.m., and 8:00 p.m. to 12:00 midnight.
- 2.17 "Hazardous waste" means any discarded material or material intended to be discarded or substance or combination of such substances intended to be discarded, in any form which, because of its quantity, concentration or physical, chemical or infectious characteristics, may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.
- 2.18 "Household battery" means a dry cell battery.
- 2.19 "Household solid waste" means solid waste, including garbage and trash generated by single and multiple family residences, hotels, motels, bunkhouses, ranger stations, crew quarters, and recreational areas such as picnic areas, parks, and campgrounds.
- 2.21 "Industrial waste" means a liquid, gaseous, or solid waste substance resulting from a process of industry, manufacture, trade, or business, or from the development, processing, or recovery of a natural resource.
- 2.22 "Large MSWI plant" means a MSWI plant with a capacity greater than 225 megagrams (250 tons) per day of municipal waste.
- 2.23 "Mass burn refractory incinerator" means an incinerator that combusts waste in a refractory wall furnace.
- 2.24 "Mass burn rotary waterwall incinerator" means an incinerator that combusts waste in a cylindrical rotary waterwall furnace.
- 2.25 "Mass burn waterwall incinerator" means an incinerator that combusts waste in a conventional waterwall furnace.
- 2.26 "Maximum unit load" means the maximum one hour load achieved when compliance with all applicable regulations is demonstrated or during a subsequent test demonstrating compliance with a higher unit load.
- 2.27 "Medical waste" means:
- 2.27.1 Cultures and stocks of infectious agents, including specimen cultures collected from

- medical and pathological laboratories, cultures and stocks of infectious agents from research and industrial laboratories, waste from the production of biologicals, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate, and mix cultures;
- 2.27.2 Waste human blood and blood products such as serum, plasma, and other blood components;
- 2.27.3 Pathological wastes, such as tissues, organs, body parts, and body fluids that are removed during surgery and autopsy;
- 2.27.4 All discarded sharps including, but not limited to, hypodermic needles, syringes, Pasteur pipettes, broken glass, scalpels, scalpel blades, glass vials, etc., used in patient care, autopsy, embalming, or which have come into contact with infectious agents during use in medical research or industrial laboratories;
- 2.27.5 Carcasses and body parts of animals that were exposed to pathogens in research, in production of biologicals, or in the in vivo testing of pharmaceuticals; and
- 2.27.6 Other wastes as may be designated by a permit issued by the District.
- 2.28 "Metals" means condensable metals emitted from units For purposes of this regulation, particulate matter shall serve as a surrogate for the measurement and control of metals.
- 2.29 "Modular excess air incinerator" means an incinerator that combusts waste and that is not field-erected and has multiple combustion chambers, all of which are designed to operate at conditions with combustion air amounts in excess of theoretical air requirements.
- 2.30 "Modular starved air incinerator" means an incinerator that combusts waste and that is not field erected and has multiple combustion chambers in which the primary combustion chamber is designed to operate at substoichiometric conditions.
- 2.31 "Municipal solid waste" (MSW) means household solid waste and commercial solid waste. Medical waste shall not be considered to be MSW and is regulated by Regulation 6.42 or 7.77.
- 2.32 "Municipal solid waste incinerator" (MSWI) or "municipal solid waste incinerator unit" (MSWI unit) means a device that combusts material which, if included in the waste stream, would be municipal waste. This includes, but is not limited to, field erected incinerators (with or without heat recovery), modular incinerators (starved air or excess air), boilers, (i.e., steam generating units), and furnaces (whether suspension-fired, grate-fired, mass-fired, or fluidized bed-fired).
- 2.33 "Multiple-chamber incinerator" means an incinerator consisting of at least two refractory lined combustion chambers (primary and secondary) in series, physically separated by refractory walls, and interconnected by gas passage ports or ducts.
- 2.34 "Normal" means a volumetric measurement at 32 °F and one atmosphere.
- 2.35 "Organics" means organic compounds emitted from units and includes dioxins or furans. Dioxin or furan shall serve as a surrogate for the measurement and control of organics.
- 2.36 "Particulate matter" means total particulate matter emitted from affected facilities.
- 2.37 "Particulate matter carryover" means particulate matter which is passed from the primary chamber of an incinerator into the flue gas stream.
- 2.38 "Plant" means one or more units at the same location for which construction, modification, or reconstruction is commenced on or after the effective date of this regulation.
- 2.39 "Plant capacity" means the aggregate unit capacity of all units at a plant for which construction, modification, or reconstruction is commenced on or after the effective date of

this regulation.

- 2.40 "Processed municipal solid waste or refuse-derived fuel" or "processed MSW or RDF" means MSW or RDF that has been processed to separate materials for recovery prior to combustion in a MSWI unit. MSW or RDF is considered to be processed MSW or RDF if an overall 40% or greater reduction by weight (annual average) of MSW is achieved through separation of recoverable materials. A maximum of 15% reduction (by weight) of overall MSW shall be attributed to separation of yard waste. The 40% or greater overall reduction requirement may be achieved by on-site mechanical separation, on-site manual separation, off-site mechanical separation, off-site manual separation, or a curb side source reduction or a materials separation (recycling) program, or a combination thereof.
- 2.41 "Recoverable materials" means paper, paperboard, ferrous metals, nonferrous metals, glass, plastics, household batteries, and yard waste.
- 2.42 "Refuse-derived fuel" (RDF) means a type of MSW produced by processing MSW through shredding and size classification. This includes all classes of RDF from low density fluff RDF through densified RDF fuel pellets.
- 2.43 "Refuse-derived fuel co-fired incinerator" or "RDF co-fired incinerator" means an incinerator that is designed to fire refuse-derived fuel simultaneously with other fuels.
- 2.44 "RDF spreader stoker" means a steam generating unit that combusts RDF in a semi-suspension firing mode using air-fed distributors.
- 2.45 "Same location" means the same or contiguous property that is under common ownership or control, including properties that are separated only by a street, road, highway, or other public right-of-way. Common ownership or control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, subdivision, or a combination thereof, including a municipality or other governmental unit, or a quasi-governmental authority (e.g., a public utility district or waste management district).
- 2.46 "Shift supervisor" means the person in direct charge and control of the operation of an affected facility and who is responsible for on-site supervision, technical direction, management, and overall performance of the affected facility during an assigned shift.
- 2.47 "Small MSWI plant" means a MSWI plant with a MSWI plant capacity of greater than 500 pounds per hour but less than or equal to 225 megagrams per day (250 tons per day) of municipal solid waste.
- 2.48 "Solid waste" means any garbage, refuse, sludge and other discarded material, including solid, liquid, semi-solid or contained gaseous material resulting from industrial, commercial, mining (excluding coal mining waste, coal mining by-products, refuse and overburden), agricultural operations, and from community activities, but does not include those materials, including, but not limited to, sand, soil, rock, gravel, or bridge debris extracted as a part of a public road construction project funded wholly or in part with state funds, recovered material, special waste as designated by KRS 224.50-760, solid or dissolved material in domestic sewage, manure, crops, crop residue, or a combination thereof which is placed on the soil for return to the soil as fertilizers or soil conditioners, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).
- 2.49 "Standard" means a volumetric measurement at 68 °F and one atmosphere.

- 2.50 "Uncontrolled hydrogen chloride emission rate" means the hydrogen chloride emission rate that would occur from the combustion of medical waste in the absence of hydrogen chloride emissions control.
- 2.51 "Uncontrolled sulfur dioxide emission rate" means the sulfur dioxide emission rate that would occur from the combustion of medical waste in the absence of sulfur dioxide emissions control.
- 2.52 "Unit" means an affected facility including, but not limited to, field erected incinerators (with or without heat recovery), modular incinerators (starved air or excess air), boilers (i.e., steam generating units), and furnaces (whether suspension-fired, grate-fired, mass-fired, or fluidized bed-fired).
- 2.53 "Unit capacity" means the maximum designed charging rate of the waste for an individual unit.
- 2.54 "Unit load" means the volume of steam produced, expressed in kilograms per hour (pounds per hour) of steam.
- 2.55 "Unprocessed MSW or RDF" means MSW or RDF that has not been processed to separate materials for recovery prior to combustion or for which less than 40% reduction by weight (annual average) of MSW is achieved as specified under processed MSW or RDF.
- 2.56 "Vehicle battery" means a wet lead-acid battery.
- 2.57 "Yard waste" means vegetative matter removed as a result of outdoor maintenance practices from residential and commercial yards, municipal parks, gardens, golf courses, and other similar areas, and includes, but is not limited to, grass trimmings, tree branches, straw, and leaves.

### **SECTION 3 Emission Standards**

- 3.1 On or after the date on which the initial performance test is completed or required to be completed by section 6, no owner or operator of an affected facility with a plant capacity of 500 pounds per hour or less shall cause to be discharged into the atmosphere from the affected facility:
  - 3.1.1 Particulate matter in excess of 229 milligrams per dry standard cubic meter (0.1 grains per dry standard cubic foot) of exhaust gas, corrected to 7% oxygen (dry basis); or
  - 3.1.2 Carbon monoxide in excess of 100 parts per million by volume corrected to 7% oxygen (dry basis); or
  - 3.1.3 Visible air contaminants in excess of 10% opacity.
- 3.2 On or after the date on which the initial performance test is completed or required to be completed by section 6, no owner or operator of an affected facility with a plant capacity greater than 500 pounds per hour but less than or equal to 250 tons per day, shall cause or allow to be discharged into the atmosphere from the affected facility:
  - 3.2.1 Particulate matter in excess of 183 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) of exhaust gas, corrected to 7% oxygen (dry basis);
  - 3.2.2 Carbon monoxide emissions in excess of 100 parts per million by volume corrected to 7% oxygen (dry basis);
  - 3.2.3 Hydrochloric acid (HCl) emissions in excess of the calculated adjusted significance level in Regulation 5.12;
  - 3.2.4 Sulfur dioxide (SO<sub>2</sub>) emissions in excess of 15% of the uncontrolled SO<sub>2</sub> emission rate (85% reduction by weight) on an hourly basis or 30 parts per million by volume,

- corrected to 7% oxygen (dry basis), whichever is less stringent. Excluded from this provision are emissions from affected facilities which combust only medical waste; or
- 3.2.5 Visible air contaminants in excess of 10% opacity.
- 3.3 On or after the date on which the initial performance test is completed or required to be completed by section 6, no owner or operator of an affected facility with a plant capacity greater than 250 tons per day shall cause or allow to be discharged into the atmosphere:
- 3.3.1 Particulate matter emissions in excess of 183 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) of exhaust gas corrected to 7% oxygen (dry basis);
- 3.3.2 Carbon monoxide emissions in excess of 100 parts per million by volume corrected to 7% oxygen (dry basis);
- 3.3.3 Hydrochloric acid (HCl) emissions in excess of 5% of the uncontrolled HCl emission rate (95% reduction by weight) on an hourly basis or 25 parts per million by volume, corrected to 7% oxygen (dry basis), whichever is less stringent;
- 3.3.4 Sulfur dioxide (SO<sub>2</sub>) emissions in excess of 15% of the uncontrolled SO<sub>2</sub> emission rate (85% reduction by weight) on an hourly basis or 30 parts per million by volume, corrected to 7% oxygen (dry basis), whichever is less stringent. Excluded from this provision are emissions from affected facilities which combust only medical waste; or
- 3.3.5 Visible air contaminants in excess of 10% opacity.

#### **SECTION 4 Standards for Operating Practices**

The requirements for unit operating practices in this section apply to all units.

- 4.1 No owner or operator of an affected facility that generates steam shall cause the facility to operate at a load level greater than 100% of the maximum unit load. An owner or operator of an affected facility who wishes to operate at a load greater than the maximum unit load may do so by conducting all applicable compliance tests to establish a higher maximum unit load.
- 4.2 No owner or operator of an affected facility shall burn medical waste except in a multiple-chamber incinerator with a solid hearth, or in a device found to be equally effective for the purpose of air contaminant control as determined by the District.
- 4.3 Temperature and residence time requirements for affected facilities equipped with a secondary chamber, while the affected facility is combusting medical waste are as follows:
- 4.3.1 The incinerator secondary chamber shall be maintained at a temperature of  $982 \pm 93^{\circ}\text{C}$  ( $1800 \pm 200^{\circ}\text{F}$ );
- 4.3.2 The minimum secondary chamber residence time shall be 1.0 seconds; and
- 4.3.3 The incinerator shall have interlocks or other process control devices to prevent operation of the incinerator until the conditions in sections 4.3.1, 4.3.2 and 4.4 are assured.
- 4.4 No owner or operator of an affected facility, other than a facility using a wet scrubber as a particulate matter control device, shall allow the temperature of the flue gases entering the particulate matter control device inlet to exceed  $149^{\circ}\text{C}$  ( $300^{\circ}\text{F}$ ) while the affected facility is combusting medical waste.
- 4.5 Owners or operators of affected facilities that choose to combine and combust MSW or RDF, hazardous waste, or solid waste with medical waste in a unit shall comply with:
- 4.5.1 The emission standards of section 3 and operating practices of this section; and
- 4.5.2 If the Owner or operator has applied for and has been issued a "materials separation or

combustion permit" by the State, separated materials covered under the materials separation or combustion permit may be combusted in the affected facility and may be credited toward the overall 40% materials separation requirement for processed MSW or RDF.

- 4.6 Owners or operators of affected facilities may combust processed MSW or RDF, or solid waste which has not been combined with medical waste in a unit, and shall comply with Regulation 6.41 or 7.78.
- 4.7 Owners or operators of affected facilities shall cause ash from affected facilities to be tested to determine the toxicity of the ash, using tests required in 401 KAR Chapter 31. Ash which is determined to be hazardous waste shall be disposed of according to the regulations of the Division of Waste Management. Ash which is determined to not be hazardous waste shall be disposed of in a landfill permitted by the Division of Waste Management.
- 4.8 Owners or operators of affected facilities that receive medical waste from generators that are noncontiguous to the incineration site shall comply with the operating requirements for contained landfills; i.e., shall implement a program at the facility for detecting and preventing the disposal of regulated hazardous waste as defined in 401 KAR Chapter 31 and polychlorinated biphenyls (PCBs) as defined in 40 CFR Section 761. This program shall include, at a minimum:
  - 4.8.1 Random inspections of incoming waste;
  - 4.8.2 Inspection of suspicious waste;
  - 4.8.3 Records of inspections;
  - 4.8.4 Training of facility personnel to recognize regulated hazardous waste;
  - 4.8.5 Procedures for notifying the proper authorities and the District if a regulated hazardous waste is discovered at the facility, and isolating same from waste stream; and
  - 4.8.6 Employee safety, health, training and equipment to be used in inspections.
  - 4.8.7 The owner or operator shall have a program to inspect all waste entering the source for combustion that is approved by the Kentucky Division of Waste Management. This program to exclude hazardous waste shall include:
    - 4.8.7.1 Random inspections in time, but uniformly distributed to all contributing waste sources based on volume received from each;
    - 4.8.7.2 Identification data concerning the hauler on the formal operating inspection record:
      - 4.8.7.2.1 The name of the driver;
      - 4.8.7.2.2 The name of the hauler;
      - 4.8.7.2.3 The address of the hauler;
      - 4.8.7.2.4 The name of the source of the waste;
      - 4.8.7.2.5 The address of the source of the waste;
      - 4.8.7.2.6 The weight and volume of the waste delivered;
      - 4.8.7.2.7 The waste characteristics, and
      - 4.8.7.2.8 The isolation of suspect waste and notification of authorities per section 4.8.5; and
    - 4.8.7.3 The owner or operator shall maintain a record of the inspections in accordance with the approved record keeping requirements of the Kentucky Division of Waste Management.
- 4.9 Owners or operators of affected facilities which have an incinerator without a secondary

chamber but are equipped with an afterburner operated at a temperature of  $982 \pm 93^{\circ}\text{C}$  ( $1800 \pm 200^{\circ}\text{F}$ ) may choose to meet a more restrictive opacity standard of 0% in lieu of meeting the secondary chamber requirement while the affected facility is combusting medical waste. All other emission standards listed in section 3 and the operating practices listed in this section shall apply.

## **SECTION 5 Operator Training**

The requirements for operator training apply to all units.

- 5.1 Each chief facility operator and shift supervisor of an affected facility shall successfully complete EPA's "Hospital Incinerator Operator Training Course".
- 5.2 No owner or operator of an affected facility shall cause or allow a unit to be operated unless the chief facility operator or shift supervisor who successfully completed the training course identified in section 5.1 is on duty at the affected facility at all times during periods of unit operation.
- 5.3 The owner or operator of an affected facility shall develop and update on an annual basis, and provide the District with one copy of a site specific operations manual that shall, at a minimum, address the following:
  - 5.3.1 Summary of the applicable standards under this regulation;
  - 5.3.2 Description of basic combustion theory applicable to a unit;
  - 5.3.3 Procedures for receiving, handling, and feeding waste;
  - 5.3.4 Unit start-up, shutdown, and malfunction procedures;
  - 5.3.5 Procedures for maintaining proper combustion air supply levels;
  - 5.3.6 Procedures for operating the unit within the standards established under this regulation;
  - 5.3.7 Procedures for responding to periodic upset or off- specification conditions;
  - 5.3.8 Procedures for minimizing particulate matter carry- over;
  - 5.3.9 Procedures for monitoring burnout;
  - 5.3.10 Procedures for handling ash;
  - 5.3.11 Procedures for monitoring unit emissions; and,
  - 5.3.12 Reporting and record keeping procedures.
- 5.4 The owner or operator of an affected facility shall establish a program for reviewing the operating manual annually with each person who has responsibilities affecting the operation of an affected facility including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane or load handlers.
- 5.5 The initial review of the operating manual, as specified under section 5.4, shall be conducted prior to the assumption of responsibilities affecting unit operation by a person required to undergo training under section 5.1. Subsequent reviews of the manual shall be carried out annually by each person required to undergo training.
- 5.6 The operating manual shall be kept in a readily accessible location for all persons required to undergo training under section 5.1. The operating manual and records of training shall be available for inspection by District personnel, upon request.
- 5.7 The owner or operator of each affected facility shall maintain documentation to support compliance with this section. The information shall be made available upon request, and shall include, at a minimum, a description of the instruction given, the date of the instruction, the signature of the person receiving the instruction, and copies of the certificates issued to the chief facility operator and shift supervisor documenting successful completion of the training

required in section 5.1.

## **SECTION 6 Compliance And Performance Testing**

- 6.1 On or before the completion of the compliance timetable in section 8 for an affected facility and at other times as may be required by the District, the owner or operator of an affected facility shall conduct performance tests according to Regulation 1.04 and this section and shall furnish the District a written report of the results of the performance tests. For standards listed in sections 3 and 4, the corresponding compliance and test methods listed in 40 CFR Part 60 Appendix A shall apply except that the length of time allowed for start-ups and shutdowns shall be three hours.
- 6.2 The owner or operator of an affected facility with a unit capacity of 500 pounds per hour or more shall install and maintain CEMS for oxygen and carbon monoxide. The owner or operator shall also install, calibrate, operate, and maintain an electronic data acquisition system that shall monitor the following parameters of proper unit functioning: the primary chamber temperature, the secondary chamber temperature, and the temperature of the flue gas stream at the inlet to the particulate matter air pollution control device and shall record the output of the device. Temperature shall be calculated in four hour block averages.
- 6.3 Additional CEMS requirements.
- 6.3.1 CEMS data, if required, shall be used to determine compliance with emission standards and operating practice standards.
- 6.3.2 At a minimum, CEMS data, if required, shall be obtained for 90% of the hours per day for 90% of the days per month that the unit is operated and combusting medical waste.
- 6.3.3 All valid CEMS data, if required, shall be used in calculating emission rates and percent reductions even if the minimum CEMS data requirements in this regulation are not met.
- 6.3.4 The procedures under 40 CFR Section 60.13 shall be followed for installation, evaluation, and operation of the CEMS.
- 6.3.5 If emission data from the CEMS are not obtained because of CEMS breakdown, repairs, calibration checks, or zero and span adjustments, emission data shall be obtained by using other monitoring systems as approved by the District or 40 CFR 60 Appendix A Methods 6, 6A, 6C, 7, 7E, 10 and 19, as appropriate, to provide necessary emission data for a minimum of 90% of the hours per day for 90% of the days per month the unit is operated and combusting medical waste.
- 6.3.6 CEMS shall conform to the applicable performance specifications in 40 CFR Part 60 Appendix B.
- 6.3.7 The requirements of 40 CFR Part 60 Appendix F shall be met in the operation of CEMS.
- 6.3.8 The owner or operator shall install and maintain an electronic data acquisition system that shall monitor and record the following parameters of proper unit operation:
- 6.3.8.1 Waste feed rate,
- 6.3.8.2 Ph values in the packed scrubber solution, if applicable, and
- 6.3.8.3 Time and duration of emergency by-pass of any emission control device.
- 6.3.9 The owner or operator shall maintain, operate, calibrate and audit a data logging system and telemetry system compatible with the District's electronic data retrieval monitoring system. If the source is required to install and maintain any CEM system. The owner or operator shall supply, at its own expense, a dedicated telephone access to the data logger.

## **SECTION 7 Reporting and Recordkeeping Requirements**

For standards listed in sections 3 and 4, the corresponding reporting and recordkeeping requirements shall apply.

- 7.1 The owner or operator of an affected facility subject to sections 3 and 4 shall maintain records of the following information for each affected facility:
  - 7.1.1 Calendar date that the data from performance tests or CEMS was obtained;
  - 7.1.2 Emission rates and parameters measured using the units and time bases required for demonstrating compliance;
  - 7.1.3 Identification of the operating periods that the calculated sulfur dioxide, nitrogen oxides, or carbon monoxide emission rates, opacity, or the operating parameters exceeded the applicable standards, with reasons for the exceedances and a description of corrective actions taken;
  - 7.1.4 Identification of operating periods for sulfur dioxide, nitrogen oxides, or carbon monoxide emissions, opacity or operational data have not been obtained, including reasons for not obtaining sufficient data and a description of the corrective actions taken;
  - 7.1.5 Identification of the times that sulfur dioxide, nitrogen oxides, or carbon monoxide emissions, opacity, or operational data have been excluded from the calculation of average emission rates or parameters and the reasons for excluding the data;
  - 7.1.6 The results of daily sulfur dioxide, nitrogen oxides, and carbon monoxide CEMs drift tests and accuracy assessments required in 40 CFR Part 60 Appendix F;
  - 7.1.7 The results of all applicable performance tests conducted to determine compliance with the mass particulate matter and hydrogen chloride standards; and
  - 7.1.8 Beginning the month after the date of the initial compliance tests, the amount (by weight) of medical waste received and combusted on a monthly basis at the affected facility.
- 7.2 If processed MSW or RDF is combusted in a unit, the recordkeeping requirements of 401 KAR 59:021 Section 11 regarding material separation shall apply for the portion of the waste that is processed MSW or RDF.
- 7.3 The owner or operator of an affected facility shall submit the initial performance test data, the performance evaluation of the CEMS using the applicable performance specifications in 40 CFR Part 60 Appendix B, and the maximum unit load within 60 days of completing the tests.
- 7.4 The owner or operator of an affected facility shall submit quarterly compliance reports to the District containing the information recorded under 401 KAR 59:023 Section 1 and 401 KAR 59:005 Section 3.(3) for all records required by this regulation which are applicable to the facility. Both a printed report and computer disks shall be formatted to the District's specifications. The reports shall be postmarked by the 30th day following the end of each calendar quarter.
- 7.5 Records of CEMS, steam flow, and temperature data shall be maintained for at least three years after date of recording and shall be available for inspection upon request.
- 7.6 Records showing the names of persons who have completed review of the operating manual and the documentation required by section 5.4, including the date of the initial review and all subsequent annual reviews, shall be maintained for at least three years after date of manual review and shall be made available for inspection upon request.
- 7.7 A description of the procedures employed for ensuring that unprocessed MSW or RDF is not combusted in an affected facility shall be maintained along with associated records to demonstrate use of the procedures, and shall be made available for inspection upon request.

- 7.8 Documentation demonstrating that ash disposal from an affected facility complies with 401 KAR 59:023 Section 4.(7) and has been submitted to the Division of Waste Management in a frequency required by the Division of Waste Management.

### **SECTION 8 Compliance Timetable**

- 8.1 Except as provided in section 8.2, planning, awarding of contracts and installation of equipment capable of attaining the level of emission standards on operating standards established in this regulation shall be completed within two years after the effective date of this regulation. Final compliance with this regulation, except as provided in section 8.2, should have been demonstrated by December 31, 1994.
- 8.2 Planning, awarding of contracts and installation of equipment and procedures capable of attaining the level of materials separation specified in section 4 were to have been completed by December 31, 1992. The initial demonstration of compliance with materials separation provisions (percent reduction) specified in Regulation 7.76 shall be completed by December 31, 1994. The training requirements in section 5.1 were to have been completed by February 7, 1992.

Adopted v1/10-20-93; effective 10-20-93.