

**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 13
MEDICAL WASTE INCINERATORS**

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REGULATION 11
HAZARDOUS POLLUTANTS
RULE 13
MEDICAL WASTE INCINERATORS

(Adopted January 16, 1991)

11-13-100 GENERAL

11-13-101 Description: The purpose of this rule is to control emissions of dioxins from medical waste incinerators.

11-13-102 Exemption, Crematoria: The provisions of this Rule do not apply to those incinerators which are exclusively crematoria of human or animal remains.

11-13-200 DEFINITIONS

11-13-201 Dioxins: Dibenzo-p-dioxins and dibenzofurans chlorinated in the 2,3,7, and 8 positions and containing 4,5,6, or 7 chlorine atoms. Expressed as 2,3,7,8, tetrachlorinated dibenzo-para-dioxin equivalents using current California Department of Health Services toxic equivalency factors.

11-13-202 Medical Facilities: Medical offices, dental offices, clinics, hospitals, skilled nursing facilities, research facilities, clinical laboratories, surgery centers, diagnostic laboratories, and other providers of health care.

11-13-203 Medical Waste Incinerators: Furnaces or other closed fire chambers that are used to dispose of wastes generated at medical facilities by burning.

11-13-300 STANDARDS

11-13-301 Emission Limitation: The emissions of dioxins from a medical waste incinerator shall not exceed 10 nanograms per kilogram of waste burned.

11-13-302 Operating Requirements: A person shall not operate a medical waste incinerator unless the following requirements are satisfied:

302.1 The flue gas temperature at the outlet of the air pollution control equipment shall not exceed 300°F, unless it has been demonstrated to, and approved in writing by the APCO that lower emissions of dioxins are achieved at a higher outlet temperature.

302.2 For single chamber incinerators, the combustion chamber shall be maintained at no less than 1,650°F. For multiple chamber incinerators, the primary combustion chamber shall be maintained at no less than 1,400°F and the secondary combustion chamber shall be maintained at no less than 1,650°F.

302.3 The incinerator design shall provide for a residence time of at least one second as specified in Section 11-13-602.

302.4 The bottom ash, fly ash and air pollution control equipment residuals shall be handled and stored in a manner that prevents entrainment into ambient air.

11-13-400 ADMINISTRATIVE REQUIREMENTS

11-13-401 Compliance Schedule:

401.1 No later than 90 days after adoption of this Rule, the owner or operator of a medical waste incinerator shall submit to the APCO an application for an Authority to Construct for the construction or modification of any equipment necessary to meet the requirements of Sections 11-13-301 and 11-13-302.

401.2 No later than 15 months after adoption of this Rule, the owner or operator of a medical waste incinerator shall be in compliance with all provisions of the Rule.

11-13-402 Shutdown Notification: Any person who intends to permanently cease operation of their medical waste incinerator shall notify the APCO of the shutdown date within 90 days after adoption of this Rule. The shutdown date shall be no later than six months after adoption of this Rule.

11-13-403 Demonstration of Compliance: Any person subject to this Rule shall conduct a minimum of two annual source tests as specified in Section 11-13-601, for the purpose of demonstrating compliance with Section 11-13-301. Annual source tests shall be conducted until at least two consecutive annual tests demonstrate compliance. Further source testing may be required by the APCO in accordance with Regulation 1-441.

11-13-404 Operator Certification: No person shall operate a medical waste incinerator unless each individual who operates or maintains the incinerator obtains either a certificate of training in medical waste incineration issued by the American Society of Mechanical Engineers within nine months of the commencement of the training program, or equivalent training as determined by the APCO. Copies of the training certificates for the operators shall be submitted to the District and the original certificates shall be made available for inspection at the facility.

11-13-500 MONITORING AND RECORDS

11-13-501 Monitoring: Any person subject to this regulation shall maintain a continuous data recording system which provides for each day of operation continuous recording of the following:

501.1 Primary and secondary combustion chamber temperatures.

501.2 Carbon monoxide concentration in exhaust gases.

501.3 Key operating parameters of the air pollution control equipment, as specified by the APCO.

501.4 Hourly waste charging rate.

501.5 Opacity of stack emissions, or other indicator of particulate matter which is approved by the APCO.

11-13-502 Recordkeeping: Any person subject to this Rule shall keep a log of maintenance records for the incinerator, air pollution control equipment, and monitoring equipment. Such records shall be retained on-site and made available for District inspection upon request.

11-13-600 MANUAL OF PROCEDURES

11-13-601 Determination of Emissions: Emissions of dioxins shall be measured as prescribed in ARB Test Method 428.

601.1 For purpose of determining compliance with Section 11-13-301, the source testing shall be conducted at the exhaust stack.

601.2 Source testing shall be conducted at the maximum waste firing capacity allowed by District permit conditions.

601.3 Source testing shall be conducted utilizing waste of a typical composition.

11-13-602 Determination of Residence Time: For the purpose of determining compliance with Section 11-13-302.3, residence time shall be calculated as follows:

$$Residence\ Time = \frac{V}{Q_c}$$

where

V = the internal volume of the incinerator, expressed in cubic feet, where the temperature is maintained at 1,650°F or greater.

Q_c = the combustion gas flow through V, expressed in actual cubic feet per second, as determined using the Manual of Procedures, Volume IV, ST-17 corrected to actual secondary combustion chamber temperature.