

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 2 AIR QUALITY (STATEWIDE)
PART 62 MUNICIPAL WASTE COMBUSTION

20.2.62.1 ISSUING AGENCY: Environmental Improvement Board.
[11/30/95; 20.2.62.1 NMAC - Rn, 20 NMAC 2.62.100 10/31/02]

20.2.62.2 SCOPE: All geographic areas within the jurisdiction of the Environmental Improvement Board.
[11/30/95; 20.2.62.2 NMAC - Rn, 20 NMAC 2.62.101 10/31/02]

20.2.62.3 STATUTORY AUTHORITY: Environmental Improvement Act, NMSA 1978, section 74-1-8(A)(4), and Air Quality Control Act, NMSA 1978, sections 74-2-1 et seq., including specifically, section 74-2-5(A), (B) and (C)(3).
[11/30/95; 20.2.62.3 NMAC - Rn, 20 NMAC 2.62.102 10/31/02]

20.2.62.4 DURATION: Permanent.
[11/30/95; 20.2.62.4 NMAC - Rn, 20 NMAC 2.62.103 10/31/02]

20.2.62.5 EFFECTIVE DATE: November 30, 1995.
[11/30/95; 20.2.62.5 NMAC - Rn, 20 NMAC 2.62.104 10/31/02]
[The latest effective date of any section in this Part is 10/31/02.]

20.2.62.6 OBJECTIVE: The objective of this Part is to establish requirements for emissions from, and design and operation of, municipal waste combustion units.
[11/30/95; 20.2.62.6 NMAC - Rn, 20 NMAC 2.62.105 10/31/02]

20.2.62.7 DEFINITIONS: In additions to the terms defined in 20.2.2 NMAC (Definitions), as used in this Part:

- A. "Continuous emission monitor"** means the total equipment required to sample and analyze emissions or process parameters.
 - B. "dscm"** means dry standard cubic meter with standard conditions being a temperature of 68 degrees Fahrenheit and a pressure of 29.92 inches Hg.
 - C. "dscf"** means dry standard cubic foot with standard conditions being a temperature of 68 degrees Fahrenheit and a pressure of 29.92 inches Hg.
 - D. "gr"** means grains.
 - E. "mg"** means milligrams.
 - F. "Municipal waste"** means all materials and substances discarded from residential dwellings and similar types of materials discarded from institutional, commercial, governmental, and industrial sources. The term does not include industrial process waste or hazardous wastes which are subject to regulation under Subtitle C of the Resource Conservation and Recovery Act, 42 USC 6901 et seq.
 - G. "Municipal waste combustion unit"** means an incinerator, furnace, or boiler which is used to dispose of municipal waste by combustion either alone or with fossil fuel.
 - H. "ng"** means nanograms.
 - I. "Opacity"** means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.
 - J. "Part"** means an air quality control regulation under Title 20, Chapter 2 of the New Mexico Administrative Code, unless otherwise noted; as adopted or amended by the Board.
 - K. "PCDD/PCDF"** means total tetra- through octa-chlorinated dibenzo-para-dioxins and dibenzofurans.
 - L. "Refuse-derived fuel"** means municipal waste which has been processed and shredded prior to use as a fuel.
- [11/30/95; 20.2.62.7 NMAC - Rn, 20 NMAC 2.62.107 10/31/02]

20.2.62.8 AMENDMENT AND SUPERSESSON OF PRIOR REGULATIONS: This Part amends and supersedes Air Quality Control Regulation ("AQCR") 2000 -- Municipal Waste Combustion filed November 16, 1990.

A. All references to AQCR 2000 in any other rule shall be construed as a reference to this Part.

B. The amendment and supersession of AQCR 2000 shall not affect any administrative or judicial enforcement action pending on the effective date of such amendment nor the validity of any permit issued pursuant to AQCR 2000.

[11/30/95; 20.2.62.8 NMAC - Rn, 20 NMAC 2.62.106 10/31/02]

20.2.62.9 DOCUMENTS: Documents cited in this Part may be viewed at the New Mexico Environment Department, Air Quality Bureau, Runnels Building, 1190 Saint Francis Drive, Santa Fe, NM 87505 [2048 Galisteo St., Santa Fe, NM 87505].

[11/30/95; 20.2.62.9 NMAC - Rn, 20 NMAC 2.62.108 10/31/02]

20.2.62.10 to 20.2.62.199 [RESERVED]

20.2.62.200 APPLICABILITY:

A. Affected Facility: The requirements of this Part apply to the owner or operator of any municipal waste combustion unit.

B. New Source Performance Standards: In addition to the requirements of this Part, any applicable federal regulation in 40 CFR Part 60 -- Standards of Performance for New Stationary Sources shall apply in full. Whenever there is a conflict between this Part and a federal counterpart, the more stringent requirement shall apply.

[11/30/95; 20.2.62.200 NMAC - Rn, 20 NMAC 2.62.200 - 201 10/31/02]

20.2.62.201 EMISSION LIMITS:

A. Emission Limits: The owner or operator shall not cause or allow any emission limit in Table 1 (20.2.62.213 NMAC) to be exceeded.

B. Compliance:

(1) Compliance with emission limits for sulfur dioxide and nitrogen dioxide shall be determined by continuous emission monitor measurements as calculated in the form of 24-hour daily averages.

(2) Compliance with the emission limit for carbon monoxide shall be determined by continuous emission monitor measurements as calculated in the form of 4-hour block averages.

(3) Compliance with the emission limits for particulate matter, PCDD/PCDF, total hydrocarbon, hydrogen chloride and metals shall be determined by manual tests conducted in accordance with 20.2.62.204 NMAC. For metals, the percent removal shall be calculated as the percent difference between the measured concentrations at the inlet and outlet of the air pollution control system.

(4) Compliance with the opacity limit in Table 1 (20.2.62.213 NMAC) shall be determined by continuous emission monitor measurements and 40 CFR Part 60, Appendix A, Method 9 as calculated in the form of 6-minute averages.

[11/30/95; 20.2.62.201 NMAC - Rn, 20 NMAC 2.62.300 - 301 10/31/02]

20.2.62.202 DESIGN AND OPERATIONAL REQUIREMENTS:

A. Operational Temperature:

(1) The combustion temperature as monitored at the location specified by subsection C of 20.2.62.203 NMAC shall be a minimum of 1800 degrees Fahrenheit for a 30-minute averaging period.

(2) Flue gas temperature as monitored at the location specified by subsection C of 20.2.62.203 NMAC shall be a maximum of 300 degrees Fahrenheit for a 30-minute averaging period.

B. Residence Time: All combustion gases shall be retained for at least 1.0 second at the required combustion temperature of subsection A or C of 20.2.62.202 NMAC at a location beyond the final secondary air injection port, or an alternative location specified by the Department if such location better represents the fully mixed height of the incinerator.

C. Equivalent Design: The Department may approve a combustion unit design which does not have a minimum temperature of 1800 degrees Fahrenheit and a residence time of at least 1.0 second if it determines the proposed design will achieve a combustion efficiency equivalent to or greater than a unit meeting the requirements of paragraph (1) of subsection A of 20.2.62.202 NMAC and subsection B of 20.2.62.202 NMAC.

D. Auxiliary Burner Capacity:

(1) Auxiliary burners shall be installed which can supply at least 60 percent of the maximum rated heat capacity of the combustion unit.

(2) Auxiliary burners shall be capable of meeting the required combustion temperature of subsection A or C of 20.2.62.202 NMAC during periods of startup, shutdown, and malfunction.

E. Turndown Restriction: Municipal waste shall not be burned in an amount outside the range of 80 to 100 percent of the hourly design-rated capacity of the combustion unit.

F. Automatic Waste Feed Cutoff: The municipal waste combustion unit shall include automatic waste feed cutoff mechanisms which stop waste feed to the unit if a continuous emission monitor records an exceedance of any emission limit in Table 1 (20.2.62.213 NMAC) for which compliance is based on continuous monitoring or the temperature requirements of subsection A or C of 20.2.62.202 NMAC.

[11/30/95; 20.2.62.202 NMAC - Rn, 20 NMAC 2.62.400 - 405 10/31/02]

20.2.62.203 MONITORING:

A. Emission Monitoring:

(1) Continuous emission monitors shall be installed, calibrated, maintained, operated, and continuously record data for the following:

- (a) oxygen;
- (b) carbon monoxide;
- (c) sulfur dioxide;
- (d) nitrogen dioxide; and
- (e) opacity.

(2) At least 45 days prior to initial startup, the owner or operator shall submit a report to the Department which describes for each monitor the location, specifications, procedures for calibration, operation, maintenance, data evaluation, and reporting. Monitoring equipment shall not be installed until the Department approves the report. The Department shall, within 45 days of receipt, approve or disapprove the subject report.

(3) The continuous emission monitors which measure oxygen, carbon monoxide, sulfur dioxide, and nitrogen dioxide shall complete a minimum of 1 cycle of operation for each successive 15-minute period. One-hour averages shall be calculated from 4 or more data points equally spaced over each 1-hour period.

(4) The continuous emission monitor which measures opacity shall complete a minimum of 1 cycle of operation for each successive 10 second period. Six-minute averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.

(5) Data recorded during periods of continuous emission monitor breakdown, repairs, calibration checks, and zero and span adjustments shall not be included in calculated data averages.

(6) Emission data shall be obtained from each continuous emission monitor which represents a minimum of 75 percent of all operational hours for each 24-hour period beginning at 12 midnight. During periods of continuous emission monitor breakdowns, repairs, calibration checks, and zero and span adjustments, emission data may be obtained by other monitoring systems or reference methods approved by the Department. Such other monitoring systems or reference methods must comply, at a minimum, with performance specifications as found in 40 CFR Part 60, Appendix B. Failure to meet the 75 percent data capture requirement of this section shall cause the combustion unit to be shutdown as required by subsection C of 20.2.62.206 NMAC.

(7) The owner or operator shall ensure each continuous emission monitor meets the requirements of 40 CFR Part 60, Appendix F -- Quality Assurance Procedures and shall submit to the Department all reports specified by such requirements.

B. Performance Evaluation:

(1) During or within 30 days of the initial emission tests required by paragraph (2) of subsection A of 20.2.62.204 NMAC, the owner or operator shall conduct a performance evaluation of each continuous emission monitor in accordance with the procedures of 40 CFR Part 60, Appendix B -- Performance Specifications.

(2) The performance evaluation required by paragraph (1) of subsection B of 20.2.62.203 NMAC shall be repeated on an annual basis or at additional times when the Department has reason to believe the monitor performance is inadequate.

(3) The owner or operator shall provide at least 30 days prior notice to the Department before conducting any performance evaluation.

(4) A written report of each performance evaluation shall be furnished within 30 days from the end of the test period to the Department.

C. Temperature monitors:

(1) Continuous temperature monitors shall be installed, calibrated, maintained, operated, and continuously record measurements at the following locations:

(a) within 1 meter of the final secondary air injection port or at a different location specified by the Department which better represents the fully mixed height of the combustion chamber; and

(b) at the inlet to the particulate matter air pollution control device.

(2) Temperature monitors shall take measurements at least every ten seconds from which 30-minute averages shall be calculated.

[11/30/95; 20.2.62.203 NMAC - Rn, 20 NMAC 2.62.500 - 502 10/31/02]

20.2.62.204 EMISSION TESTING:

A. Emission Testing Schedule:

(1) Emission testing shall be conducted quarterly for total particulate matter, fine particulate matter, total hydrocarbon, PCDD/PCDF, hydrogen chloride and all metals listed in Table 1 (20.2.62.213 NMAC).

(2) Within 60 days of first achieving the maximum firing rate for the combustion unit, but not more than 180 days from the date of initial startup, the first quarterly emission tests shall be conducted.

(3) The Department shall require the owner or operator to conduct additional tests if there is a reasonable basis to believe the facility is not in compliance with the provisions of this Part or any applicable permit condition.

(4) The Department or its representative may conduct unscheduled emission tests at any time during operating hours of the facility.

B. Emission Testing Procedures:

(1) Notice of the test date and a copy of the test protocol shall be given to the Department at least 30 days prior to the actual test date.

(2) A representative of the Department shall be given the opportunity to be present during all emission tests required by this Part.

(3) A written copy of all test results shall be furnished to the Department within 90 days from the test date.

(4) Emission tests shall be conducted utilizing the following methods:

(a) for total particulate matter -- 40 CFR Part 60, Appendix A, Method 5;

(b) for fine particulate matter -- California Air Resources Board, Method 501;

(c) for PCDD/PCDF -- 40 CFR Part 60, Appendix A, Method 23;

(d) for total hydrocarbon -- 40 CFR Part 60, Appendix A, Method 25A;

(e) for cadmium, chromium, and lead -- 40 CFR Part 60, Appendix A, Method 12;

(f) for arsenic -- 40 CFR Part 61, Appendix B, Method 108;

(g) for beryllium -- 40 CFR Part 61, Appendix B, Method 104;

(h) for mercury -- 40 CFR Part 61, Appendix B, Method 101A; and

(i) for hydrogen chloride -- 40 CFR Part 60, Appendix A, Method 26.

(5) The owner or operator may utilize test methods other than those in paragraph (4) of subsection B of 20.2.62.204 NMAC if the Department has approved the alternative method. The Department shall approve or disapprove proposed alternate test methods within 30 days of receipt of subject request.

[11/30/95; 20.2.62.204 NMAC - Rn, 20 NMAC 2.62.600 - 601 10/31/02]

20.2.62.205 RECORDKEEPING AND REPORTING:

A. Quarterly Report: The owner or operator shall submit a report containing the following information to the Department within 30 days from the end of each calendar quarter:

(1) the hourly average waste feed rate to each combustion unit;

(2) the 30-minute average temperature of the combustion unit and the inlet to the particulate matter control device;

(3) the hourly and 24-hour average concentrations in mg/dscm corrected to 7% O₂ of sulfur dioxide and nitrogen dioxide as measured by continuous emission monitors;

(4) the hourly and 4-hour average concentrations in mg/dscm corrected to 7% O₂ of carbon monoxide as measured by continuous emission monitors;

(5) the hourly average percent oxygen and 6-minute average opacity as measured by continuous emission monitors;

(6) the percent data capture for each 24-hour period for each continuous emission monitor;

(7) the hourly auxiliary fuel use per combustion unit;

- (8) the identification of all periods of startup, shutdown, and excess emissions; and
- (9) the reason for any excess emissions and the corrective action taken.

B. Records:

(1) Records shall be maintained for a period of three years from the date created by the owner or operator for all parameters in subsection A of 20.2.62.205 NMAC and made available upon request for inspection and copying by the Department during normal operating hours.

(2) All information submitted to the Department in quarterly reports or emission test reports, or any other information created or obtained by the Department regarding the municipal waste combustion unit shall be available for public inspection and copying during normal business hours.

[11/30/95; 20.2.62.205 NMAC - Rn, 20 NMAC 2.62.700 - 701 10/31/02]

20.2.62.206 STARTUP, SHUTDOWN, AND UPSET CONDITION:

A. Startup and Shutdown Procedure:

(1) Waste shall not be placed into the combustion unit during startup until the auxiliary burners have achieved the required combustion temperature of subsection A or C of 20.2.62.202 NMAC.

(2) During shutdown, auxiliary burners shall be utilized to maintain the required combustion temperature of subsection A or C of 20.2.62.202 NMAC until the carbon monoxide emission limit specified in 20.2.62.201 NMAC can be achieved without their use.

B. Upset Condition:

(1) The provisions of 20.2.7 NMAC (Excess Emissions During Malfunction, Startup, Shutdown, or Scheduled Maintenance) shall not apply to any municipal waste combustion unit.

(2) Prior to the failure of the system to meet the temperature requirements of subsection A or C of 20.2.62.202 NMAC or any emission limit in 20.2.62.201 NMAC for which compliance is based on continuous emission monitoring, a visual and audible alarm shall notify the operator. The operator shall implement all reasonable measures to correct the impending upset condition.

(3) Whenever the temperature requirements of subsection A or C of 20.2.62.202 NMAC or any emission limit in 20.2.62.201 NMAC for which compliance is based on continuous emission monitoring is exceeded, the operator shall take the following actions:

- (a) waste feed to the combustion unit shall automatically cut off and the unit be shutdown;
 - (b) notify the Department verbally of the exceedance within 4 hours of its occurrence or prior to 12 noon of the next business day should the exceedance occur during non-business hours;
 - (c) note in the operating record the time and date of the exceedance, when shutdown began, and when shutdown was complete;
 - (d) identify and correct the cause of the upset condition before resuming operation of the unit;
- and

(e) note in the operating record the corrective action taken and the time and date of startup.

C. Continuous Emission Monitor Malfunction: Whenever any required continuous emission monitor cannot meet the data capture requirement of paragraph (6) of subsection A of 20.2.62.203 NMAC, and the owner or operator does not obtain the required data from an alternate monitor or test method, the combustion unit shall be shutdown for the time necessary to comply with paragraph (6) of subsection A of 20.2.62.203 NMAC.

D. Disaster Plan for Catastrophic Failure: No permit shall be approved for the operation of a municipal waste incinerator until the Department has approved a plan prepared by the applicant for prevention of harm to the surrounding population and environment in the event of a catastrophic failure at the incinerator. The plan shall include, but not be limited to, measures for protecting that population from releases into the environment of significant emissions from the incinerator.

[11/30/95; 20.2.62.206 NMAC - Rn, 20 NMAC 2.62.800 - 803 10/31/02]

20.2.62.207 MANAGEMENT OF ASH:

A. Handling, Storage, and Transportation of Ash:

(1) All handling and storage of fly ash and bottom ash shall be conducted in a closed system which prevents ash from becoming airborne.

(2) Transportation of fly ash and bottom ash offsite shall be conducted in a manner which prevents the release of any amount of ash to the atmosphere.

B. Opacity of Ash Emissions: Handling, storage, and transportation of fly ash and bottom ash shall not result in a release to the atmosphere exceeding 0 (zero) percent opacity. Compliance with this requirement shall be determined by visual observation as specified in 40 CFR Part 60, Appendix A, Method 9.

C. Disposal of Ash:

(1) Disposal of fly ash and bottom ash shall be in compliance with the applicable requirements of New Mexico Solid Waste Management Regulations (20.9.1 NMAC).

(2) Transportation of Municipal Waste Combustion (MWC) ash:

(a) No transporter shall accept or transport MWC ash unless it has been treated or is securely covered to prevent release of fugitive dust;

(b) Transporters shall cover vehicles to prevent fugitive dust loss during transport; and

(c) Transporters shall line or seal vehicles in such a manner to prevent any leakage of liquids or fugitive dust during transport.

(3) MWC ash that is temporarily stored at generation site awaiting transportation must be stored in such a manner as to prevent fugitive dust emissions.

[11/30/95; 20.2.62.207 NMAC - Rn, 20 NMAC 2.62.900 - 902 10/31/02]

20.2.62.208 TRAINING:

A. Training Requirements:

(1) During all operating hours plant operations shall be supervised by an individual who has received certification by the American Society of Mechanical Engineers as an operator of a resource recovery facility.

(2) All plant personnel shall receive adequate training specific to their job function prior to assuming a starting or new position which shall include instruction in:

(a) operation and maintenance of equipment;

(b) response to upset conditions; and

(c) compliance with applicable environmental regulations and permit conditions.

B. Recordkeeping of Training: The following records shall be maintained and made available to the Department during normal operating hours:

(1) documentation of certification of operators as required by paragraph (1) of subsection A of 20.2.62.208 NMAC;

(2) a written description of the training program given to plant personnel; and

(3) a list of current employees and their job titles.

[11/30/95; 20.2.62.208 NMAC - Rn, 20 NMAC 2.62.1000 - 1001 10/31/02]

20.2.62.209 MATERIALS SEPARATION:

A. Materials Separation - Percent Reduction /requirement:

(1) The owner or operator shall separate materials from municipal waste prior to combustion such that an overall 25 percent or greater reduction by weight on annual basis is achieved.

(2) The percent reduction requirement in this section shall be met by separation of some or all of the following materials:

(a) Paper and paperboards;

(b) Ferrous metals;

(c) Nonferrous metals;

(d) Glass;

(e) Plastics;

(f) Household batteries; and

(g) Yard waste.

(3) A maximum of 10 percent reduction by weight shall be attributed to separation of yard waste.

(4) The percent reduction requirement may be achieved by mechanical or manual separation techniques either on or off-site and can include a community separation program.

B. Materials Separation - Compliance:

(1) The owner or operator shall record on a monthly basis the amount by weight of municipal waste combusted and the amount of separated materials by type and weight.

(2) The owner or operator shall calculate and record the percent reduction in municipal waste combusted by material separation for each month.

(3) Compliance with the annual percent reduction requirement in paragraph (1) of subsection A of 20.2.62.209 NMAC shall be determined by calculating the average of the monthly percent reduction amounts for the calendar year.

(4) By February 1 of each year, the owner or operator shall submit a report to the Department containing the monthly and annual average percent reduction calculations and results.

[11/30/95; 20.2.62.209 NMAC - Rn, 20 NMAC 2.62.1100 - 1101 10/31/02]

20.2.62.210 RISK ASSESSMENT:

A. Assessment of Risk: Each application for a permit to operate a municipal waste incinerator shall contain a formal assessment of risk to the population and the environment which may be affected by the incinerator. The factors which shall be addressed in the assessment shall include but not be limited to the quantity, volume, potency, toxicity, and hazardous nature of all substances emitted from the incinerator, the exposure pathways of those substances, potential receptors, including human populations, flora, and fauna, the proximity of the proposed incinerator to all human habitations, including but not limited to residences, hospitals, schools, day care centers, and work sites, and any other factors which may contribute to or determine the risks posed by the proposed incinerator.

B. Risk Assessment Evaluation: The assessment of risk prepared by the applicant shall be considered by the Department in its decision on the application, and shall be addressed in any written determination made by the Department.

[11/30/95; 20.2.62.210 NMAC - Rn, 20 NMAC 2.62.1200 - 1201 10/31/02]

20.2.62.211 LOCATION OF PUBLIC HEARINGS: Public hearings conducted subsequent to a permit application for construction of a municipal waste combustor shall be held in the geographic area most likely to be impacted by the source.

[11/30/95; 20.2.62.211 NMAC - Rn, 20 NMAC 2.62.1300 10/31/02]

20.2.62.212 OFF-SITE MONITORING REQUIREMENTS: The owner or operator shall monitor at the facility boundary, where the population is, and one or more miles beyond the facility in all directions, in order to determine the concentrations of materials being emitted from the incinerator at the points of exposure to the population. Meteorological data shall be monitored at the stack and in all four directions in order to provide a better basis for surface monitoring.

[11/30/95; 20.2.62.212 NMAC - Rn, 20 NMAC 2.62.1400 10/31/02]

20.2.62.213 MUNICIPAL WASTE COMBUSTION EMISSION LIMITS: TABLE 1.

Pollutant	Emission Limit (1)
Particulate Matter	
Total	0.01 gr/dscf
Fine (less than 2 microns)	0.008 gr/dscf
Sulfur Dioxide	80 mg/dscm
Hydrogen Chloride	40 mg/dscm
Carbon Monoxide	
Refuse-Derived Fuel	120 mg/dscm
All other designs	60 mg/dscm
Nitrogen Dioxide	100 ppmv
PCDD/PCDF	5 ng/dscm
Total Hydrocarbon (as CH ₄)	45 mg/dscm
Metals	
Arsenic	99% Removal
Beryllium	99% Removal
Cadmium	99% Removal
Chromium	99% Removal
Lead	99% Removal
Mercury	90% Removal
Opacity	10%

(1) The particulate matter emission limit is set at a condition of 12% CO₂. All other emission limits are set at 7% O₂.

[11/30/95; 20.2.62.213 NMAC - Rn, 20 NMAC 2.62.1500 10/31/02]

HISTORY OF 20.2.62 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed with the commission of public records-state records center and archives:
EIB/AQCR 2000, Air Quality Control Regulation 2000 - Municipal Waste Combustion, 11/16/90.

History of Repealed Material: [RESERVED]

Other History:

EIB/AQCR 2000, Air Quality Control Regulation 2000 - Municipal Waste Combustion, filed 11/16/90 was **renumbered** into first version of the New Mexico Administrative Code as 20 NMAC 2.62, Municipal Waste Combustion, filed 10/30/95.

20 NMAC 2.62, Municipal Waste Combustion, filed 10/30/95 was **renumbered, reformatted and replaced** by 20.2.62 NMAC, Municipal Waste Combustion, effective 10/31/02.