

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 2 AIR QUALITY (STATEWIDE)
PART 31 COAL BURNING EQUIPMENT - SULFUR DIOXIDE

20.2.31.1 ISSUING AGENCY: Environmental Improvement Board.
[11/30/95; 20.2.31.1 NMAC - Rn, 20 NMAC 2.31.100 10/31/02]

20.2.31.2 SCOPE: All geographic areas within the jurisdiction of the Environmental Improvement Board.
[11/30/95; 20.2.31.2 NMAC - Rn, 20 NMAC 2.31.101 10/31/02]

20.2.31.3 STATUTORY AUTHORITY: Environmental Improvement Act, NMSA 1978, section 74-1-8(A)(4) and (7), and Air Quality Control Act, NMSA 1978, sections 74-2-1 et seq., including specifically, section 74-2-5(A), (B) and (C).
[11/30/95; 20.2.31.3 NMAC - Rn, 20 NMAC 2.31.102 10/31/02]

20.2.31.4 DURATION: Permanent:
[11/30/95; 20.2.31.4 NMAC - Rn, 20 NMAC 2.31.103 10/31/02]

20.2.31.5 EFFECTIVE DATE: November 30, 1995.
[11/30/95; 20.2.31.5 NMAC - Rn, 20 NMAC 2.31.104 10/31/02]
[The latest effective date of any section in this Part is 10/31/02.]

20.2.31.6 OBJECTIVE: The objective of this Part is to establish sulfur dioxide emission standards for coal burning equipment.
[11/30/95; 20.2.31.6 NMAC - Rn, 20 NMAC 2.31.105 10/31/02]

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

A. "Commenced" means that an owner or operator has undertaken a continuous program of construction or that an owner or operator has entered into a binding agreement or contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction.

B. "Commercial operation" means operation within sixty days after achieving the maximum production rate at which the equipment will be operated but not later than 180 days after initial startup.

C. "Construction" means fabrication, erection, or installation of an affected facility.

D. "Excess emissions" means the emission of sulfur dioxide in excess of any applicable emission limitation of this Part.

E. "Existing coal burning equipment" means coal burning equipment that was fully constructed and operational or under construction prior to September 1, 1971.

F. "Existing coal burning station" means one or the combination of two or more units of existing coal burning equipment at one location.

G. "Modules" means pollution control devices that remove sulfur dioxide for the flue gas that can be operated independently of each other.

H. "New coal burning equipment or units" means coal burning equipment the construction of which is commenced after September 1, 1971 and the commercial operation of which is initiated as shown hereinafter:

(1) Vintage 1 -- coal burning equipment which began commercial operating between the period of December 31, 1976 to October 31, 1979;

(2) Vintage 2 -- coal burning equipment which began commercial operation between the period of November 1, 1979 to March 31, 1982;

(3) Vintage 3 -- coal burning equipment which began commercial operation between the period of April 1, 1982 to December 31, 1982;

(4) Vintage 4 -- coal burning equipment which is not Vintage 1, 2 or 3.

I. "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.
[11/30/95; 20.2.31.7 NMAC - Rn, 20 NMAC 2.31.107 10/31/02]

20.2.31.8 AMENDMENT AND SUPERSESION OF PRIOR REGULATIONS: This Part amends and supersedes Air Quality Control Regulation ("AQCR") 602 -- Coal Burning Equipment -- Sulfur Dioxide last filed on November 17, 1993.

A. All references to AQCR 602 in any other rule shall be construed as a reference to this Part.

B. The amendment and supersession of AQCR 602 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 602.

[11/30/95; 20.2.31.8 NMAC - Rn, 20 NMAC 2.31.106 10/31/02]

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

[11/30/95; 20.2.31.9 NMAC - Rn, 20 NMAC 2.31.108 10/31/02]

20.2.31.10 NMAC - 20.2.31.108 NMAC [RESERVED]

20.2.31.109 NEW EQUIPMENT: New coal burning equipment is subject to the following requirements:

A. The owner or operator of Vintage 4 new coal burning equipment having a power generating capacity in excess of 25 megawatts or a rated heat input of greater than 250 million British Thermal Units per hour (higher heating value) shall not permit, cause, suffer or allow sulfur dioxide emissions to the atmosphere in excess of 0.34 pounds per million British Thermal Units of heat input (higher heating value) averaged over a 3 hour period.

B. The owner or operator of Vintage 1, 2, or 3 new coal burning equipment having a power generating capacity in excess of 25 megawatts or a heat input of greater than 250 million British Thermal Units per hour (higher heating value) shall not permit, cause, suffer or allow sulfur dioxide emissions to the atmosphere in excess of 1.2 pounds per million British Thermal Units of heat input (higher heating value) averaged over a 3 hour period as determined by 20.2.31.111 NMAC, which emission limitation shall apply, effective January 1, 1983 and thereafter, to these vintage units.

C. The owner or operator of a station consisting of any combination of at least one Vintage 1, 2, or 3 new and existing coal burning equipment, after December 31, 1982, shall not permit, cause, suffer or allow sulfur dioxide emissions to the atmosphere in excess of 0.55 pounds per million British Thermal Units of heat input (higher heating value) averaged over a thirty day period, and in excess of 13,000 pounds per hour averaged over a three hour period, both determined on a total station basis. Existing coal burning equipment in a station with Vintage 1, 2, or 3 units must continue to meet the requirements of 20.2.31.110 NMAC.

D. If the owner or operator of a station consisting of any combination of at least one Vintage 1, 2, or 3 new and existing coal burning equipment, in the optimum operation of their sulfur dioxide equipment, cannot meet on a continuous basis with a two module operation per unit, excluding upset conditions, the 0.55 pounds per million British Thermal Units requirement, then in that event such station shall, after a showing of its inability to do so to the Board, in no event permit, cause, suffer or allow sulfur dioxide emissions to the atmosphere, in excess of 0.65 pounds per million British Thermal Units of heat input, averaged over a thirty day period, but shall continue to meet the 13,000 pounds per hour averaged over a three hour period that is required by subsection C of 20.2.31.109 NMAC. Additionally, existing coal burning equipment must continue to meet the requirements of 20.2.31.110 NMAC.

[11/30/95; 20.2.31.109 NMAC - Rn, 20 NMAC 2.31.109 10/31/02]

20.2.31.110 EXISTING EQUIPMENT:

A. The owner or operator of existing coal burning equipment shall not permit, cause, suffer or allow sulfur dioxide emissions to the atmosphere in excess of 28 percent on or after December 31, 1981 of that which is produced by the coal burning equipment averaged over any thirty-day period, if such coal burning equipment has a rated heat capacity greater than 3,000 million British Thermal Units per hour (higher heating value) and less than or equal to 5,000 million British Thermal Units per hour (higher heating value).

B. After December 31, 1984, The owner or operator of a coal burning station consisting of two or more units of existing coal burning equipment having a rated heat capacity greater than 250 million British Thermal Units per hour (higher heating value) shall not permit, cause, suffer or allow sulfur dioxide emissions to the atmosphere:

(1) In excess of 28 percent of that which is produced by such existing coal burning equipment, averaged over any thirty-day period, determined on a total station basis; or

(2) More than once per year, total sulfur dioxide emissions in excess of 17,900 pounds per hour, averaged over any three-hour period, determined on a total station basis.

C. Prior to December 31, 1984, the owner or operator of an existing coal burning station consisting of two or more units of existing coal burning equipment shall submit to the Department individual stack emission limitations expressed in pounds per hour for all stacks from which flue gases are released from existing coal burning equipment of the station such that total sulfur dioxide emissions from the station do not exceed 17,900 pounds per hour. Upon request of the owner or operator of an existing coal burning station, the Department may later approve alternative individual emission limitations for each stack serving existing coal burning equipment of the station as long as the total of the individual stack emission limitations from the station do not exceed 17,900 pounds per hour, averaged over any three-hour period. Until alternative individual stack emission limitations are approved by the Department, the previously approved individual emission limitations shall remain in effect.

[11/30/95; 20.2.31.110 NMAC - Rn, 20 NMAC 2.31.110 10/31/02]

20.2.31.111 COMPLIANCE:

A. Compliance with the emission limitations contained within this Part shall be determined by a method consistent with the manual method of sampling for sulfur dioxide set forth by the Environmental Protection Agency at 40 CFR, Part 60 Appendix A, Methods 1 through 4 and 6, except for the thirty-day average and the station requirements contained within subsections C and D of 20.2.31.109 NMAC, and subsection A and paragraph (1) of subsection B of 20.2.31.110 NMAC in which the determination of compliance shall be based upon continuous emissions monitoring as required by 20.2.31.112 NMAC. Compliance with the percentage removal requirements of 20.2.31.110 NMAC shall be determined based upon continuous monitoring of sulfur dioxide concentrations within the flue gases both prior to entering the sulfur dioxide removal system and at all locations at which sulfur dioxide emissions are released to the atmosphere, unless the Department has approved an alternative means of determining sulfur dioxide concentrations prior to the sulfur dioxide removal system.

B. Compliance with the pounds per hour station emission limitation contained within paragraph (2) of subsection B of 20.2.31.110 NMAC shall be determined as follows: Individual stacks serving existing coal burning equipment shall be sampled by use of the manual sampling method for sulfur dioxide referenced above. Emissions in excess of the approved individual emission limitation applicable to a specific stack shall be deemed a violation of this Part unless the owner or operator demonstrates to the satisfaction of the Department, by continuous stack emission monitoring or other means, that the total sulfur dioxide emissions from all stacks serving existing coal burning equipment within the station do not exceed 17,900 pounds per hour.

[11/30/95; 20.2.31.111 NMAC - Rn, 20 NMAC 2.31.111 10/31/02]

20.2.31.112 MONITORING:

A. The owner or operator of new or existing coal burning equipment subject to this Part shall not permit, cause, suffer or allow operation of the coal burning equipment without normally maintaining in good operating condition at least one monitor, approved by the Department, which shall continuously measure and record sulfur dioxide concentrations in the gases within each stack from which flue gases serving coal burning equipment are released to the atmosphere. All sampling points for monitoring sulfur dioxide concentrations shall be approved by the Department. Existing coal burning equipment having a rated heat capacity less than or equal to 5,000 million British Thermal Units per hour shall be equipped and operated with such continuous sulfur dioxide monitors as soon as practicable but in no case later than December 31, 1981. Existing coal burning equipment having a rated heat capacity greater than 5,000 million British Thermal Unit per hour shall be equipped and operated with such continuous sulfur dioxide monitors no later than December 31, 1984.

B. Coal burning equipment subject to the percentage removal requirements of 20.2.31.110 NMAC shall also continuously measure and record sulfur dioxide concentrations within the flue gases prior to their entering any sulfur dioxide removal system, unless the Department has approved an alternative means of determining sulfur dioxide concentrations within the flue gases prior to their entry into the sulfur dioxide removal system based upon a finding by the Department that continuous monitoring at such locations is infeasible or otherwise unreasonable.

C. Instruments and sampling systems installed and used pursuant to this section shall be calibrated in accordance with the methods prescribed by manufacturer's recommended zero adjustment and calibration check procedures at least once every 24-hours of operation, unless the instrument manufacturer specifies or recommends calibration checks more frequently; provided however, that no calibration and adjustments shall be required during the period when coal burning equipment is not operating. The reference method shall be consistent with the method

for manual sampling of sulfur dioxide specified in 20.2.31.111 NMAC. The owner or operator of coal burning equipment shall retain for a period of two years all raw data and quality assurance measurements and procedures. [11/30/95; 20.2.31.112 NMAC - Rn, 20 NMAC 2.31.112 10/31/02]

20.2.31.113 REPORTING AND RECORDKEEPING:

A. To aid the Department in determining compliance with this Part, persons owning or operating existing coal burning equipment subject to this Part shall, after the applicable date when continuous monitoring is required pursuant to 20.2.31.112 NMAC, submit quarterly reports to the Department for the periods January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31 of each year, each report to be received by the Department within forty-five days of the end of the quarterly period. The quarterly reports shall contain the following:

- (1) Hourly average of the concentrations of sulfur dioxide, expressed in parts per million, in the gases which are being emitted to the atmosphere, except for periods of instrument calibration and zero adjustments;
- (2) Hourly averages of the percent excess oxygen in the gases coming from the coal burning equipment;
- (3) Rate of heat input (higher heating value) into the coal burning equipment calculated for each day; and
- (4) Daily average or daily composite percent sulfur and heat content (higher heating value) of the coal utilized by the coal burning equipment determined for each day.

B. To aid the Department in determining compliance with this Part, persons owning or operating new coal burning equipment subject to 20.2.31.109 NMAC shall, after the date for compliance provided in 20.2.31.109 NMAC, submit quarterly reports to the Department for the periods January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31 of each year, each report to be received by the Department within forty-five days of the end of the quarterly period. The quarterly report shall contain the following:

- (1) A report of excess emissions, including the nature and cause of the excess emissions (if known), the magnitude of the excess emissions and the time period(s) when the excess emissions occurred. Excess emissions shall be reported for and in the units of both total station emission limits in subsection C of 20.2.31.109 NMAC;
- (2) Specific identification of each period of excess emissions that occur during startups, shutdowns, and malfunctions of the affected facility, including the nature and causes of any malfunctions and the corrective action taken or preventative measures taken;
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

C. Upon request, the Department may approve alternative methods of monitoring and reporting the information specified in subsection A of 20.2.31.113 NMAC.

[11/30/95; 20.2.31.113 NMAC - Rn, 20 NMAC 2.31.113 10/31/02]

20.2.31.114 PERFORMANCE TESTS: Instruments and sampling systems installed and used pursuant to 20.2.31.112 NMAC, shall be operated, installed and maintained in accordance with the performance specifications and other requirements set forth by the US EPA in 40 CFR Part 60, Appendix B. In the event of significant breakdown of the monitoring system, the owner or operator shall demonstrate to the Department after the repair work that the system continues to meet the applicable performance specifications. The Department may require the owner or operator to conduct a performance test of the equipment as specified in 40 CFR, Part 60, Appendix B, but not more frequently than once per year unless the Department has reason to believe that the continuous monitoring equipment is not operating within the applicable performance specifications. The Department may approve alternate means of verifying the performance of the continuous monitoring system. The Department may also perform independent audit on the continuous monitoring system utilizing the method specified in 20.2.31.111 NMAC. [11/30/95; 20.2.31.114 NMAC - Rn, 20 NMAC 2.31.114 10/31/02]

HISTORY OF 20.2.31 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.

AQCR 602, Coal Burning Equipment - Sulfur Dioxide, 04/04/72.

EIB/AQCR 602, Coal Burning Equipment - Sulfur Dioxide, 12/07/79.

EIB/AQCR 602, Coal Burning Equipment - Sulfur Dioxide, 11/24/80.
EIB/AQCR 602, Coal Burning Equipment - Sulfur Dioxide, 11/17/93.

History of Repealed Material: [RESERVED]

Other History:

EIB/AQCR 602, Coal Burning Equipment - Sulfur Dioxide, 11/17/93, was **renumbered** into first version of the New Mexico Administrative Code as 20 NMAC 2.31, Coal Burning Equipment - Sulfur Dioxide, filed 10/30/95. 20 NMAC 2.31, Coal Burning Equipment - Sulfur Dioxide, filed 10/30/95, was **renumbered, reformatted and replaced** by 20.2.31 NMAC, Coal Burning Equipment - Sulfur Dioxide, effective 10/31/02.