TITLE 20 ENVIRONMENTAL PROTECTION CHAPTER 2 AIR OUALITY (STATEWIDE)

PART 35 NATURAL GAS PROCESSING PLANT - SULFUR

20.2.35.1 ISSUING AGENCY: Environmental Improvement Board.

[11/30/95; 20.2.35.1 NMAC - Rn, 20 NMAC 2.35.100 10/31/02]

20.2.35.2 SCOPE: All geographic areas within the jurisdiction of the Environmental Improvement Board. [11/30/95; 20.2.35.2 NMAC - Rn, 20 NMAC 2.35.101 10/31/02]

20.2.35.3 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; 20.2.35.3 NMAC - Rn, 20 NMAC 2.35.102 10/31/02]

20.2.35.4 DURATION: Permanent.

[11/30/95; 20.2.35.4 NMAC - Rn, 20 NMAC 2.35.103 10/31/02]

20.2.35.5 EFFECTIVE DATE: November 30, 1995, except where a later date is cited at the end of a section.

[11/30/95; 20.2.35.5 NMAC - Rn, 20 NMAC 2.35.104 10/31/02; A, 11/10/07]

[The latest effective date of any section in this Part is 11/10/07.]

20.2.35.6 OBJECTIVE: The objective of this Part is to establish sulfur emission standards for natural gas processing plants.

[11/30/95; 20.2.35.6 NMAC - Rn, 20 NMAC 2.35.105 10/31/02]

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

- A. "Existing natural gas processing plant" means a gas processing plant the fabrication, erection or installation of which was commenced prior to July 1, 1974, and includes all vessels, boilers, heaters, compressors (engines and turbines), sweetening and regeneration units, dehydration units, piping, storage and loading facilities, sulfur recovery facilities, flares and any other facility connected with the processing or storage of field gas, sour residue gas, and other hydrocarbons associated with field gas.
- **B.** "New natural gas processing plant" means a natural gas processing plant, or part thereof the fabrication, erection, installation, or modification of which is commenced on or after July 1, 1974, and includes all vessels, boilers, heaters, compressors (engines and turbines), sweetening and regeneration units, dehydration units, piping, storage and loading facilities, sulfur recovery facilities, flares and any other facility connected with the processing or storage of field gas, sour residue gas and other hydrocarbons associated with field gas.
- **C.** "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.
- **D.** "Plant processes" includes but is not limited to fuel burning, including flaring of sour gas, and regeneration.
- **E.** "Sulfur" means elemental sulfur and the sulfur component of any mixture or compound. [11/30/95; 20.2.35.7 NMAC Rn, 20 NMAC 2.35.107 10/31/02]
- **20.2.35.8 AMENDMENT AND SUPERSESSION OF PRIOR REGULATIONS:** This Part amends and supersedes Air Quality Control Regulation ("AQCR") 621, -- Natural Gas Processing Plant -- Sulfur last filed February 8, 1983.
 - **A.** All references to AOCR 621 in any other rule shall be construed as a reference to this Part.
- **B.** The amendment and supersession of AQCR 621 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 621.

[11/30/95; 20.2.35.8 NMAC - Rn, 20 NMAC 2.35.106 10/31/02]

20.2.35.9 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; 20.2.35.9 NMAC - Rn, 20 NMAC 2.35.108 10/31/02]

20.2.35.10 to 20.2.35.108 [RESERVED]

20.2.35.109 EXISTING NATURAL GAS PROCESSING PLANTS:

- **A.** The owner or operator of an existing natural gas processing plant that releases an average of ten tons a day or greater of sulfur in plant processes and that has an off-gas stream that undiluted contains greater than 20 mole percent hydrogen sulfide shall not permit, cause, suffer or allow at any time sulfur emissions to the atmosphere in excess of 10 pounds of sulfur for every 100 pounds of sulfur released in plant processes.
- **B.** The owner or operator of an existing natural gas processing plant that releases an average of ten tons a day or greater of sulfur in plant processes and that has an off-gas stream that undiluted contains less than or equal to 20 mole percent hydrogen sulfide shall not permit, cause, suffer or allow at any time sulfur emissions to the atmosphere in excess of 12 pounds of sulfur for every 100 pounds of sulfur released in plant processes.
- C. The owner or operator of an existing natural gas processing plant that releases an average of 7.5 or more tons a day but less than 10 tons a day of sulfur in plant processes and has an off-gas stream that undiluted contains greater than 20 mole percent hydrogen sulfide shall not permit, cause, suffer or allow at any time sulfur emissions to the atmosphere in excess of 10 pounds of sulfur for every 100 pounds of the sulfur released in plant processes.
- **D.** The owner or operator of an existing natural gas processing plant that releases an average of 7.5 or more tons a day but less than 10 tons a day of sulfur in plant processes and has an off-gas stream that undiluted contains less than or equal to 20 mole percent hydrogen sulfide shall not permit, cause, suffer or allow sulfur emissions to the atmosphere in excess of 12 pounds of sulfur for every 100 pounds of sulfur released in plant processes.
- **E.** The owner or operator of an existing natural gas processing plant that sends residue gas containing greater than 0.25 grains hydrogen sulfide per 100 cubic feet of gas to a facility, other than the natural gas processing plant, for the purpose of residue gas purification; shall not permit, cause, suffer or allow sulfur emissions to the atmosphere, in excess of 10 pounds of sulfur for every 100 pounds of sulfur released in plant processes; unless the natural gas processing plant releases less than 2 1/2 tons a day of sulfur in plant processes.
- **F.** The owner or operator of an existing natural gas processing plant that is governed by a sulfur emission limitation of an Air Quality Control Regulation shall not permit, cause, suffer or allow gas coming off any off-gas sweetening regeneration unit or other sulfur releasing unit to be sent to a facility other than the natural gas processing plant for the purpose of sulfur recovery or disposal:
- (1) unless all the gas coming off a gas sweetening regeneration unit or other sulfur releasing unit is sent to the facility other than the natural gas processing plant, except mercaptan gas, and the amount of sulfur in the off-gas stream from fuel burning equipment does not exceed the quantity of sulfur that would exist if the sulfur content of the gas used for fuel was 10 grains of sulfur per 100 standard cubic feet of fuel gas; or
- (2) unless only a portion of the gas coming off a gas sweetening regeneration unit or other sulfur releasing unit is sent to the facility other than the natural gas processing plant; and
- (a) if the natural gas processing plant releases a average of 7.5 tons a day or greater of sulfur in plant processes and has an off-gas stream that undiluted contains greater than 20 mole percent hydrogen sulfide, sulfur emissions from the existing natural gas processing plant do not exceed 10 pounds of sulfur for every 100 pounds of sulfur that are released in plant processes but not sent for sulfur recovery or disposal to another facility; or
- (b) if the natural gas processing plant releases a average of 7.5 tons a day or greater of sulfur in plant processes and has an off-gas stream that undiluted contains less than or equal to 20 mole percent hydrogen sulfide, sulfur emissions from the existing natural gas processing plant do not exceed 12 pounds of sulfur for every 100 pounds of sulfur that are released in plant processes but not sent for sulfur recovery or disposal to another facility.

[11/30/95; 20.2.35.109 NMAC - Rn, 20 NMAC 2.35.109 10/31/02]

20.2.35.110 NEW NATURAL GAS PROCESSING PLANTS:

A. The owner or operator of a new natural gas processing plant that releases an average of five or more tons a day and less than twenty tons a day of sulfur in plant processes shall not permit, cause, suffer or allow

sulfur emissions to the atmosphere in excess of 10 pounds of sulfur for every 100 pounds of sulfur released in plant processes.

- **B.** The owner or operator of a new natural gas processing plant that releases an average of 20 or more tons a day and less than 50 tons a day of sulfur in plant processes shall not permit, cause, suffer or allow sulfur emissions to the atmosphere in excess of 4,000 pounds per day.
- C. The owner or operator of a new natural gas processing plant that releases an average of 50 tons a day or greater of sulfur in plant processes shall not permit, cause, suffer or allow sulfur emissions to the atmosphere in excess of 2 pounds of sulfur for every 100 pounds of sulfur released in plant processes.
- **D.** The owner or operator of a new natural gas processing plant that is governed by a sulfur emission limitation of an Air Quality Control Regulation shall not permit, cause, suffer or allow gas coming off any off-gas sweetening regeneration unit or other sulfur releasing unit to be sent to a facility other than the natural gas processing plant for the purpose of sulfur recovery or disposal:
- (1) unless all the gas coming off the gas sweetening regeneration unit or other sulfur releasing unit is sent to the facilities other than the natural gas processing plant, except mercaptan gas, and the amount of sulfur in the off-gas stream from fuel burning equipment does not exceed the quantity of sulfur that would exist if the sulfur content of the gas used for fuel was 10 grains of sulfur per 100 standard cubic feet of fuel gas; or
- (2) unless only a portion of the gas coming off the gas sweetening regeneration unit or other sulfur releasing unit is sent to the facility other than the natural gas processing plant; and
- (a) if the natural gas processing plant is a new natural gas processing plant that releases an average of five or more tons a day but less than twenty tons a day of sulfur in plant processes, sulfur emissions from the new natural gas processing plant do not exceed 10 pounds of sulfur for every 100 pounds of sulfur that are released in plant processes but not sent for sulfur recovery or disposal to another facility; or
- (b) if the natural gas processing plant is a new natural gas processing plant that releases an average of twenty tons a day or greater of sulfur in plant processes, sulfur emissions from the new natural gas processing plant do not exceed 2 pounds of sulfur for every 100 pounds of sulfur in plant processes but not sent for sulfur recovery or disposal to another facility.

[11/30/95; 20.2.35.110 NMAC - Rn, 20 NMAC 2.35.110 10/31/02]

20.2.35.111 STACK HEIGHT:

- **A.** The owner or operator of a natural gas processing plant shall not permit, cause, suffer or allow sulfur compounds to be emitted to the atmosphere unless the sulfur compound emission is from a stack of a sufficient physical height to prevent concentrations of sulfur compounds near ground level equal to or exceed any state or federal ambient air standard. The necessary physical stack height shall be determined by the following graph in 20.2.35.115 NMAC (Figure 1) or through the use of dispersion modeling approved by the department.
- **B.** If the natural gas processing plant is an existing natural gas processing plant, the requirements of this section shall not apply to that existing natural gas processing plant until January 1, 1977.
- **C.** By January 1, 1977, any person owning or operating an existing natural gas processing plant must file with the department the following:
 - (1) the height of all stacks from which sulfur is emitted;
 - (2) the quantity of the sulfur emitted from each stack;
 - (3) the exit gas temperature for each stack;
- (4) the total mass flow rate of the stack effluent gases (for flares, the total effluent mass flow rate shall consist of the stack effluent mass flow rate plus that amount of air required for complete combustion); and
- (5) any other information the department deems necessary to determine whether or not the physical height of any stack from which sulfur is emitted complies with the requirements of this subsection. [11/30/95; 20.2.35.111 NMAC Rn, 20 NMAC 2.35.111 10/31/02; A, 11/10/07]

20.2.35.112 RECORD KEEPING AND REPORTING REQUIREMENTS:

- **A.** To aid the Department in determining compliance with this Part, the owner or operator of a natural gas processing plant to which this Part applies shall submit to the Department quarterly reports in the months of January, April, July and October of each year containing the following information:
- (1) the sulfur content of feedstock entering the natural gas processing plant, determined no less frequently than three times per week; and no more frequently than once every twenty-four hours;
- (2) the sulfur content of all fuel burned in the plant and the amount of each type of fuel burned determined no less frequently than quarterly;

- (3) the sulfur content of the products produced by the natural gas processing plant determined no less frequently than weekly;
- (4) the sulfur content of the inlet and outlet gas stream or streams of the sulfur recovery plant determined no less frequently than quarterly; and
 - (5) the weight of the recovered sulfur determined no less frequently than weekly.
- **B.** If it appears necessary, the Department may require reports on a more frequent basis, but no more frequently than monthly.
- **C.** The Department may, upon the request of the owner or operator of a natural gas processing plant, alter the sampling periods specified in this section.

[11/30/95; 20.2.35.112 NMAC - Rn, 20 NMAC 2.35.112 10/31/02]

20.2.35.113 DECLINING EMISSION NATURAL GAS PROCESSING PLANTS:

- **A.** Subsections A, B, D and E of 20.2.35.109 NMAC, and 20.2.35.112 NMAC shall not apply to a natural gas processing plant that the Department has certified as a "declining emission natural gas processing plant".
- **B.** The department shall certify an existing natural gas processing plant as a "declining emission natural gas processing plant" and include in the certification a "sulfur release schedule" setting forth the maximum amounts of sulfur that may be released in plant processes in quarterly increments through January 1, 1980, if all of the following are met:
- (1) the sulfur released in plant processes in the plant will decrease to the extent that by January 1, 1980, less than 7.5 tons of sulfur per day will be released in plant processes;
- (2) the decrease in the amount of sulfur released in plant processes will be a continuous decrease due to reduction in the amount of sour feedstock into the plant;
- (3) the owner or operator of the plant has furnished a schedule to the Department detailing the projected decreases in sour feedstock that will result in the continuous decrease of sulfur released in plant processes to less than 7.5 tons by 1980;
- (4) the owner or operator of the plant has stated his intention to follow the submitted schedule setting forth the projected decreases in sour feedstock to the plant;
 - (5) the plant does not have a sulfur recovery plant;
- (6) the owner or operator of the plant has furnished to the Department all of the information requested in Subsection N [20.2.35.113 NMAC] and has certified the accuracy and completeness of the information furnished;
- (7) the Department has reviewed the application and all of the information submitted in support thereof, solicited and reviewed comments of the Oil Conservation Commission, and reviewed all comments received in writing from interested persons; and
- (8) the Department has determined, after considering the information specified in the above paragraphs and such other information as it may wish to consider, that the processing of sour feedstock by the plant will decrease according to the "sulfur release schedule" resulting in a continuous decrease of sulfur in plant processes to less than 7.5 tons per day by January 1, 1980.
- **C.** Application to the Department for certification as a "declining emission natural gas processing plant" must be filed with the Department no later than January 1, 1975, and contain the following:
 - (1) the applicant's name and address;
 - (2) date of the application;
 - (3) description of the facility for which the certification is sought;
- (4) detailed description, including sulfur content, of the feedstock into the plant and its sources at the time of application, for the preceding two years and projected through 1985;
- (5) the amount of sulfur released in plant processes, specifying each process and the amount of sulfur released in each process at the time of application, for the preceding two years and projected through 1985;
- (6) the amount of sulfur leaving the plant at the time of application, for the preceding two years and projected through 1985;
- (7) such additional information as the Department, after conferring with the Oil Conservation Commission, may require relating to reservoir data;
- (8) a "sulfur release schedule" setting forth the amounts of sulfur expected to be released in plant processes in quarterly increments through January 1, 1980; and
 - (9) such additional information as the Department may require.
- **D.** The owner or operator of a natural gas processing plant that is certified as a "declining emission natural gas processing plant" may petition the Department for a modification of the "sulfur release schedule". The Department may grant the petition for modification of the "sulfur release schedule" if all of the requirements of

subsection B of 20.2.35.113 NMAC are met. The petition should explain in detail the reasons why the modification is necessary and include supporting data and such additional information as the Department may require.

- **E.** The Department shall notify the applicant or petitioner and all interested persons who submitted written comments of the Department's action on the application for certification or petition for modification of the "sulfur release schedule" and the reasons therefore. The Department shall notify the applicant or petitioner by certified mail. If the Department denies certification or the petition for modification, the applicant or petitioner may appeal the decision of the Department to the Board by filing a petition for review within thirty days of the date of denial. If the Department grants the certification of the petition for modification, any interested person who submitted written comments opposing the certification or modification may appeal the decision of the Department to the Board by filing a petition for review within thirty days of the date of the granting of certification or modification.
- **F.** The owner or operator of a "declining emission natural gas processing plant" shall submit to the Department quarterly reports 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 45 days of the end of the quarterly period:
- (1) The amount of gas received into the plant for the three month period including the average sulfur content of the gas determined no less frequently than three times per week and no more frequently than once every twenty-four hours and the total amount of sulfur received into plant processes in the three month period;
- (2) the sulfur content of all fuel burned in the plant and the amount of each type of fuel burned determined no less frequently than weekly;
- (3) the amount and sulfur content of the products produced by the plant determined no less frequently than weekly;
- (4) the amount of sulfur released in plant processes, specifying each process and the amount of sulfur released in each;
- (5) the quantity of sulfur disposed of and the method of disposal determined no less frequently than weekly;
- (6) such information as the Department, after consulting with the Oil Conservation Commission, may require relating to new wells or re-worked wells from which the plant receives feedstock; and
- (7) such additional information as the Department may require, including but not limited to new recovery techniques being used in the field.
- (8) If it appears necessary, the Department may require reports on a more frequent basis, but no more frequently than monthly.
- **G.** The owner or operator of a "declining emission natural gas processing plant" that has for any quarterly report period exceeded by more than one thousand pounds the average daily amount of sulfur (averaged over the quarterly period) that was projected by the "sulfur release schedule" for that quarterly period shall submit to the Department within 30 days after the filing of the quarterly report information as to why the projected average daily sulfur emission rate was exceeded.
- **H.** The Department shall revoke any natural gas processing plant's certification as a "declining emission natural gas processing plant" if the natural gas processing plant exceeds by more than one thousand pounds for any two consecutive quarterly periods the amount of sulfur to be released in plant processes as set forth in the "sulfur release schedule" contained in the "declining emission natural gas processing plant" certification. The Department shall notify the owner or operator of the natural gas processing plant by certified mail of the revocation of the plant's certification as a "declining emission natural gas processing plant".
- I. The owner or operator of a natural gas processing plant whose certification as a "declining emission natural gas processing plant" has been revoked may appeal to the Environmental Improvement Board the Department's determination that the "declining emission natural gas processing plant" exceeded by more than one thousand pounds for two consecutive quarterly periods the amount of sulfur to be released in plant processes as set forth in the "sulfur release schedule" contained in the "declining emission natural gas processing plant" certification. A petition for review of the Department's determination must be filed with the board within twenty days of receipt of the certified notice of revocation.

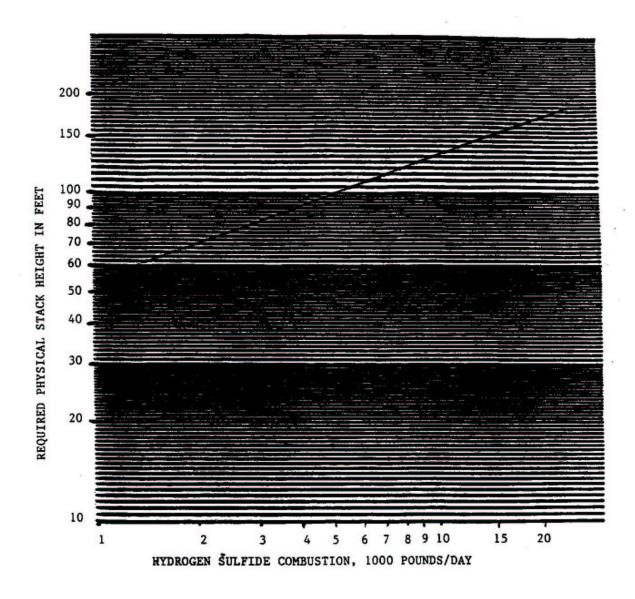
[11/30/95; 20.2.35.113 NMAC - Rn, 20 NMAC 2.35.113 10/31/02]

20.2.35.114 HEARINGS -- ACTIONS BY THE BOARD:

A. Upon receipt by the board of a petition for review pursuant to subsections E and I of 20.2.35.113 NMAC, the Secretary shall mail notice of hearing to the petitioner, all persons who have submitted written comments on the application, and all persons who have requested notice of hearings held pursuant to this subsection.

- **B.** At least seven days prior to the hearing date, the Secretary shall publish notice of the date, time, place, and subject of the hearing in a newspaper of general circulation in the county in which the facility is located and in a newspaper of general circulation in the state.
- **C.** Public hearings shall be held before the board not less than fifteen days and no more than forty-five days from the date the Secretary mails the notice of the hearing to the petitioner.
- **D.** Public hearings shall be held in Santa Fe unless the board and the petitioner agree upon another site in the state.
 - **E.** The board may designate a hearing officer to take evidence at the hearing.
- **F.** A record shall be made at each hearing, the cost of which shall be borne by the Department. Transcript costs shall be paid by those persons requesting transcripts. The cost of providing transcripts to the board members shall be borne by the Department.
- **G.** In the hearing, the technical rules of evidence and the rules of civil procedure shall not apply, but the hearings shall be conducted so that all relevant views are amply and fairly presented without undue repetition. The board may require reasonable substantiation of statements or records tendered and may require any view to be stated in writing when the circumstances justify.
- **H.** The board shall allow all persons a reasonable opportunity at a hearing to submit written and oral evidence and arguments, introduce exhibits, and cross-examine persons who testify.
 - **I.** A petitioner may represent himself at the hearing or be represented by any other individual.
- **J.** The board shall render its decision based upon the transcript of the hearing as soon as possible following the preparation of the transcript.
- **K.** The owner or operator of any plant whose certification as a "declining emission natural gas processing plant" has been revoked shall comply with the requirements of the applicable subsections of this section [sections of this Part] within twelve months after the revocation of certification becomes final.
- **L.** As used in subsections B, C, F, G, and I of 20.2.35.113 NMAC the sulfur released in plant processes shall include the sulfur content of any gas sent from the plant for further processing. [11/30/95; 20.2.35.114 NMAC Rn, 20 NMAC 2.35.114 10/31/02]

20.2.35.115 FIGURE 1 - REQUIRED STACK HEIGHT:



[11/30/95; 20.2.35.115 NMAC - Rn, 20 NMAC 2.35.115 10/31/02]

HISTORY OF 20.2.35 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 621-632, Air Quality Control Regulations - 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, and 632, 07/15/74.

AQCR 621, Air Quality Control Regulation 621 - Natural Gas Processing Plant - Sulfur, 02/08/83

History of Repealed Material: [RESERVED]

Other History:

AQCR 621, Air Quality Control Regulation 621 - Natural Gas Processing Plant - Sulfur, 02/08/83, was **renumbered** into first version of the New Mexico Administrative Code as 20 NMAC 2.35, Natural Gas Processing Plant - Sulfur, filed 10/30/95.

 $20\ NMAC\ 2.35, Natural\ Gas\ Processing\ Plant\ -\ Sulfur,\ filed\ 10/30/95\ was\ \textbf{renumbered},\ \textbf{reformatted}\ \ \textbf{and}\ \ \textbf{replaced}\ \ by\ 20.2.35\ NMAC,\ Natural\ Gas\ Processing\ Plant\ -\ Sulfur,\ effective\ 10/31/02.$