

STATE OF MINNESOTA
MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of Continental Nitrogen and Resources Corporation

Proceedings to Develop
and Implement a State Implementation
Plan for the Twin Cities Sulfur Dioxide
Nonattainment Area to Demonstrate,
Attain and Maintain Compliance with the
National Ambient Air Quality Standards
for Sulfur Dioxide as Required by the
Clean Air Act Section 110, 172, and 191
42 U.S.C. §§ 7410, 7502 and 7514.

FINDINGS AND
ORDER

The Minnesota Pollution Control Agency (MPCA), being fully advised in the premises, hereby adopts the following Findings and Order.

FINDINGS

1. The U.S. Environmental Protection Agency (EPA) is required by section 109 of the Clean Air Act (CAA), 42 U.S.C. § 7409, to promulgate national ambient air quality standards (NAAQS). The EPA has promulgated NAAQS to protect the public health (primary standards) and the public welfare (secondary standards). 40 CFR pt. 50 (1991).

2. Among other pollutants, EPA has promulgated NAAQS for sulfur dioxide. The primary NAAQS for sulfur dioxide is 0.03 parts per million (ppm) annual arithmetic mean and 0.14 ppm maximum 24-hour concentration, not to be exceeded more than once per year. 40 CFR pt. 50.4 (1991). The secondary NAAQS for sulfur dioxide is 0.5 ppm maximum three-hour concentration, not to be exceeded more than once per year. 40 CFR pt. 50.5 (1991).

3. Each state is obligated by section 110(a) of the CAA, 42 U.S.C. § 7410, to develop an implementation plan which provides for "implementation, maintenance, and enforcement" of the NAAQS promulgated by the EPA.

4. The EPA has promulgated requirements for implementation plans titled "Requirements for Preparation, Adoption and Submittal of Implementation Plans." 40 CFR pt. 51 (1990).

5. The MPCA is a statutory agency of the state of Minnesota, charged with the responsibility to administer and enforce laws and promulgate rules to prevent water, air and land pollution throughout the state of Minnesota. Minn. Stat. chs. 115, 115B and 116 (1990).

6. The MPCA is empowered to promulgate standards and rules for the prevention, abatement or control of air pollution related, without limitation, to "sources or emissions of air contamination or air pollution, to the quality or composition of such emissions, or to the quality of or composition of the ambient air or outdoor atmosphere or to any other matter relevant to the prevention, abatement or control of air pollution." Minn. Stat. § 116.07, subd. 4 (1990). See Minn. Stat. § 116.07, subd. 2 (1990).

7. The MPCA has the authority to enforce any statute or rule related to air pollution by, among other things, adopting, issuing, entering into or enforcing "reasonable orders, schedules of compliance and stipulation agreements." Minn. Stat. § 116.07, subd. 9 (1990).

8. Minn. Stat. § 115.071 (1990) provides that the provisions of chapters 115 and 116 and "all rules, standards, orders, stipulation agreements, schedules of compliance, and permits adopted or issued" by the MPCA may be enforced by criminal prosecution, action to recover civil penalties, injunction, action to compel performance, or other appropriate action. Specifically, in an action to compel performance of an order of the MPCA, the regulated party may be required "to do and perform any and all acts and things within the defendant's power which are reasonably necessary to accomplish the purposes of the order." Minn. Stat. § 115.071, subd. 5 (1990).

9. The MPCA has promulgated primary ambient air quality standards for sulfur dioxide of 0.03 ppm annual arithmetic mean and 0.14 ppm maximum 24-hour concentration, not to be exceeded more than once per year. Minn. Rules pt. 7005.0080 (1991). The MPCA has also promulgated secondary ambient air quality standards for sulfur dioxide of 0.5 ppm maximum three-hour concentration, not to be exceeded more than once per year in Air Quality Control Region 131. Minn. Rules pt. 7005.0080 (1991). AQCR 131 encompasses the seven county Twin Cities metropolitan area defined at 40 CFR pt. 81.27 (1991). Minn. Rules pt. 7005.0080 (1991).

10. AQCR 131 is classified as a nonattainment area for the primary NAAQS for sulfur dioxide. 40 CFR § 81.324 (1991).

11. The MPCA staff performed or reviewed and approved a computer modeling analysis of AQCR 131 to determine which sources are major contributors to the sulfur dioxide nonattainment status of AQCR 131. The computer modeling was conducted with ISCST Version 90346 and ISCLT Version 90008.

12. The computer modeling analysis for AQCR 131 shows that, among others, Continental Nitrogen and Resources Corporation is a potential significant contributor of sulfur dioxide emissions in AQCR 131. Continental Nitrogen and Resources Corporation is located at 12955 Courthouse Boulevard in the city of Rosemount, in Dakota County in the state of Minnesota. Continental Nitrogen and Resources Corporation is a sulfur dioxide emission source culpable for the nonattainment status of AQCR 131. Sulfur dioxide emissions from Continental Nitrogen and Resources Corporation's facility contribute to a violation of the primary and secondary NAAQS for sulfur dioxide.

13. Computer modeling shows that AQCR 131 will attain and maintain compliance with the sulfur dioxide NAAQS if: (a) Continental Nitrogen and Resources Corporation is operated in compliance with the requirements of this

Order; (b) other facilities receiving orders are operated in compliance with the conditions of their orders; and (c) all other facilities in the area are operated in compliance with the limits that apply under state rules.

14. Continental Nitrogen and Resources Corporation emits pollutants into the ambient air in sufficient quantities to require an air emission permit pursuant to Minn. Stat. § 116.081 (1990) and Minn. Rules pts. 7001.0030 and 7001.1210 (1991). On October 24, 1989, the MPCA issued air emission permit No. 319A-89-OT-2 to Continental Nitrogen and Resources Corporation authorizing the operation of its facility under specified terms and conditions. That permit remains in effect today, and is not suspended, revoked or superseded by the issuance of this Order. This Order imposes additional requirements on Continental Nitrogen and Resources Corporation as specified in Parts I through VII below, to assure that AQCR 131 will achieve and maintain compliance with the NAAQS for sulfur dioxide. To the extent there is a conflict between operating limitations authorized by the permit and this Order, Continental Nitrogen and Resources Corporation shall comply with the more stringent requirements.

ORDER

NOW, THEREFORE, IT IS ORDERED, for the purposes of demonstrating reasonable progress and attaining, demonstrating and maintaining compliance with the NAAQS for sulfur dioxide as set forth in 40 CFR pts. 50.4 and 50.5 (1991), Continental Nitrogen and Resources Corporation (Company) shall operate its Rosemount, Dakota County facility (Facility) in compliance with the following requirements and limitations:

I. FACILITY PROPERTY ACCESS RESTRICTIONS

If the Company does not combust any fuel oil, the requirements of this Part do not apply. After the effective date of this Order and prior to first combusting any fuel oil in the Emission Units described in Part II of this Order, the Company shall meet the following requirements for its property at the facility.

A. The Company shall limit access to the property with fencing that continuously encloses the boundaries of the Facility property, excluding access points. The Company shall limit access to the property with gates at each access point. The installation of fencing and gates was completed by the Company on May 20, 1992.

B. The Company shall inspect the fencing and gates, and shall repair and maintain the fencing and gates in order to comply with this Part I. The Company shall complete all repairs to the fencing and gates within 30 days after the Company has access to information that indicates repair is needed.

II. SULFUR DIOXIDE EMISSIONS CONTROL PLAN FOR THE FACILITY

A. General Operating and Maintenance Requirements. Exhibit 1, the Facility Description, which is appended to and incorporated as part of this Order, identifies the parameters used in the computer modeling performed to demonstrate that AQCR 131 will attain compliance with the sulfur dioxide NAAQS.

Except as specifically allowed or required elsewhere in this Order, the Company shall operate and maintain the process and control equipment described in Exhibit 1 according to the parameters set forth in Exhibit 1.

B. Emission Limitations. The emission units at the Facility that discharge sulfur dioxide emissions to the atmosphere are three boilers. Each of these sources is more fully described in Exhibit 1, pts 1.2.1 (Emission Point No. 1 - boiler 1); 1.2.2 (Emission Point No. 2 - boiler 2); and 1.2.3 (Emission Point No. 3 - boiler 3). The Company shall limit its emissions of sulfur dioxide from Emission Point Nos. 1, 2 and 3 to no more than 1.5 pounds per million British Thermal Units (lb/MMBtu). The basis for these limitations is 40 CFR Part 50 (1991).

C. Additional Operating Requirements.

1. Capacity Limitation. The Company may operate Boiler Nos. 1, 2 and 3, identified as Emission Point Nos. 1, 2 and 3 described in I.B. at or below the rated heat input, but may not operate them at greater than the rated heat input as described in Exhibit 1.

2. Fuel Restrictions.

a. The Company is authorized to burn only natural gas and No. 6 fuel oil in boiler Nos. 1, 2 and 3. The Company shall not burn No. 6 fuel oil with a sulfur content in excess of 1.5 percent by weight.

b. The Company shall not burn more than 16,000 gallons of No. 6 fuel oil per 24-hour period (midnight to midnight).

c. The Company shall not burn more than 70,833 gallons of No. 6 fuel oil per month on a monthly 12-month rolling average.

d. The Company shall not burn No. 6 fuel oil at more than two of the Emission Units described in Exhibit 1 at any one time.

D. Demonstration of Compliance with Emission and Operating Limitations.

The Company shall demonstrate compliance with sulfur dioxide emission limitations and operating requirements of Part II of this Order as follows:

1. Fuel Oil Sulfur Content and Heating Value. The Company shall obtain the No. 6 fuel oil sulfur content and heating value by sampling and analyzing the fuel in accordance with the following:

a. This part applies to each of the fuel oil tanks that supply fuel oil to the emission units that exhaust through Emission Point Nos. 1, 2 and 3.

b. Immediately after a fuel oil tank is filled and before any fuel oil is combusted, the Company shall collect a sample of fuel in the tank. The sample method shall be in accordance with ASTM Method D-270.

c. The Company shall analyze the fuel oil sample to determine the sulfur content of the fuel oil. The analysis shall conform to ASTM Method D-1552.

d. The Company shall analyze the fuel oil sample to determine the heating value of the fuel oil. The analysis shall conform to ASTM Method D-240.

e. If a partially empty fuel oil tank is refilled, the Company shall take a new sample and perform the analysis of the fuel in the tank upon filling using the procedures set forth in b through d of this Part D.1.

2. Amount of No. 6 Fuel Oil Used. On an hourly basis, the Company shall measure the total gallons of No. 6 fuel oil burned at each emission unit.

III. CHANGES NOT REQUIRING A MODIFICATION OF THIS ORDER

The Company is authorized to make changes to the Facility without obtaining a modification to this Order as long as the change does not do or result in any of the following:

- A. an exceedance of the limitations in Part II of this Order; or
- B. a physical change of the equipment that affects the stack parameters described in Exhibit 1.
- C. an exceedance of a maximum potential sulfur dioxide emission rate of 0.50 pounds per hour at any emissions unit.

IV. CHANGES REQUIRING A MODIFICATION OF THIS ORDER

Activities that do require a modification to this Order prior to commencing the modification include, but are not limited to:

- A. any decrease in the design stack gas volumetric flow rate below that contained in Exhibit 1;
- B. any decrease in the design stack gas exit temperature below that contained in Exhibit 1;
- C. any reduction in stack height below that contained in Exhibit 1;
- D. any increase in the stack exit diameter above that contained in Exhibit 1; or
- E. any construction or modification of structures that increase the effective structural dimensions as they are used in the building wake effects algorithm in the ISC Air Dispersion Model. This Part IV.E. only applies to the construction or modification of structures that are located within five structure heights of the boiler stacks and that result in a structural height greater than 38 feet above grade elevation.

V. RECORDKEEPING REQUIREMENTS

A. Record Maintenance

The Company shall keep and maintain all required documents, records, reports and plans identified in this Part V in a form suitable to allow the EPA or MPCA staff to determine the Facility's compliance with this Order. The Company shall maintain the information at its Facility in files which are easily accessible for inspection by EPA or MPCA staff.

B. Recordkeeping Requirements

1. Permanent Records. The Company shall permanently maintain all of the following information, as well as all amendments, revisions or modifications made to this information.

a. Property Boundary Fencing and Gates. The Company shall maintain a permanent record of the date fencing and gates were completely installed pursuant to Part I of this Order.

b. Design, Construction and Operation Information. The Company shall maintain a file or files of information on the design, construction and operation of each emission facility, emission source, fuel system, stack, structures pertinent to modeling for downwash, and any other information required to conduct sulfur dioxide ambient air quality modeling of emissions from the Facility. The file or files shall also include all information required to demonstrate that the equipment identified in Exhibit 1 is installed as described in that Exhibit. Where an activity has been undertaken pursuant to Part III of this Order, the file or files shall include a description of each activity and all information required to demonstrate that the activity complies with each applicable Part III requirement.

c. Copy of this Order. The Company shall maintain a file at the Facility that includes this Order and the Exhibits attached and incorporated by reference in this Order.

2. Non-Permanent Records. Notwithstanding any document retention policy to the contrary, the Company shall retain the information identified below for a minimum of six years following the date on which the information was received or generated by the Company. This retention period shall be automatically extended upon the written request of the Manager of the MPCA Air Quality Division (AQD Manager).

a. Property Access Records. The Company shall generate and maintain records containing information to demonstrate compliance with the facility property access restrictions requirements specified in Part I of this Order. At a minimum, the Company shall retain records containing the following information:

1) The date of inspection, name of the person conducting the inspection, identification of each section of fence and each gate inspected, and identification of each location where repair or maintenance is required; and

2) The date of repair or maintenance, a description of the repair and maintenance conducted, and the locations where repair and maintenance occurred.

The Inspection, maintenance and repair records shall be signed by the person conducting the inspection or overseeing the maintenance or repair.

b. Sulfur Dioxide Emissions and Operating Records. The Company shall generate and maintain records containing information to demonstrate compliance with the emission limitation and operating requirements specified in Part II of this Order. At a minimum, the Company shall retain records containing the following information:

1) The results of the fuel oil analyses for sulfur content (percent by weight) and heating value (million British Thermal Units per gallon), the date the fuel oil was sampled, and the methods used to sample the fuel oil and determine the sulfur content and heating value of the fuel oil; and

2) The number of gallons of fuel oil burned on an hourly basis for each of boiler Nos. 1, 2 and 3.

The sulfur dioxide emissions and operating records shall be signed by the person entering information into the record.

c. Excess Emissions and Noncompliance with Operating Requirements Records. The Company shall maintain files that record each exceedance of an emission limitation, fuel use limitation or other noncompliance with an operational requirement specified in this Order. For each period of exceedance or noncompliance, the record shall include a description of the exceedance or noncompliance, its cause, the magnitude of the exceedance, corrective action taken, and the date and time of commencement and cessation of the exceedance or noncompliance.

d. Reports Required by this Order. The Company shall maintain files containing the reports required by Part VI of this Order.

VI. REPORTING REQUIREMENTS

A. The reporting requirements in this Part apply when the Company intends to commence burning fuel oil in any of the Emission Units described in this Order. The Company shall notify the AQD Manager in writing within 15 days of starting to burn No. 6 fuel oil at the facility.

B. Notification of Changes to be Made Pursuant to Part III of this Order. Pursuant to Part III of this Order, the Company may undertake certain changes to the Facility without obtaining a modification of this Order. If the Company does make such a change, and if the physical change in any way affects sulfur dioxide emissions or their dispersion, the Company shall notify the AQD Manager in writing at least 30 days prior to undertaking the change. The notification shall describe the change and why it does not require a modification of the Order. The Company must also obtain a permit amendment prior to commencing construction if required by state or federal law.

C. Annual Reports

The Company shall submit to the AQD Manager each calendar year, a report that contains the following information: a record of data used in calculating and calculations of the annual sulfur dioxide emissions from each boiler described in Part II of this Order; and a summary record of excess sulfur dioxide emissions, exceedance of capacity limitation and fuel sulfur content limitations and noncompliance with operational restrictions. If no exceedances or noncompliance conditions occurred in the calendar year the Company shall state that no exceedances or noncompliance conditions occurred. Annual reports shall be postmarked within 60 days following the end of each calendar year.

D. Quarterly Reports

The Company shall submit reports each calendar quarter that provide the following information:

1. The percent sulfur content by weight and the heating value of the No. 6 fuel oil in million British Thermal Units per gallon;
2. The maximum amount of fuel oil burned on an hourly basis at each emission unit during the calendar quarters;
3. Summary of any exceedances of the emission limitation, capacity limitations and the sulfur content limitation during the calendar quarter. The Company shall provide an explanation of each exceedance which occurred. If no exceedances occurred, the Company shall state that no exceedances occurred, and;

The report shall be submitted by the 30th of the month following the monitored quarter. The Company shall state in its report if no No. 6 fuel oil was burned during the monitored quarter.

VII. GENERAL CONDITIONS

A. Notwithstanding any other provision of this Order, the Company must obtain a modification of this Order before it commences construction, modification or operation of equipment at the Facility that: (1) is different than allowed by Part II of this Order and (2) could result in additional sulfur dioxide emissions or changes to sulfur dioxide emission patterns assumed in the modeling conducted to attain, maintain and verify AQCR 131's compliance with the NAAQS for sulfur dioxide.

B. The Company shall not apply for a modification of this order, nor shall this Order be modified to allow the Company to construct any new major sulfur dioxide source or to make a "major modification" to any "major stationary source" at the Facility as those terms are defined in 40 CFR pt. 52.24 (1990), until after the EPA has approved Minnesota's Offset Rule or its equivalent, or until the area has been redesignated as attainment.

C. This Order does not relieve the Company of the obligation, in undertaking all actions required by this Order, to comply with all applicable local, state federal laws and regulation including, but not limited to, federal new source performance standards, and laws and regulations related to occupational safety and health. In the event there is a conflict in applicable federal or state or local laws or regulations, the more stringent of the conflicting provisions apply.

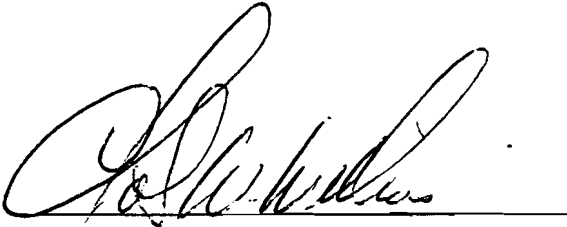
D. This Order shall be binding upon the Company and its respective officers, employees, successors and assigns. The Company shall provide a copy of this Order to any successor in interest prior to transfer of that interest, and shall simultaneously inform the MPCA that this notice has been given. Should the Company sell or otherwise convey or assign any of its right, title or interest in the Facility, such conveyance shall not release the Company from

any obligation imposed by this Order, unless the party to whom the right, title or interest has been transferred or assigned agrees in writing to fulfill the obligations of this Order and the MPCA approves such transfer or assignment. The MPCA shall not disapprove a transfer or assignment unless information demonstrates that the new owner lacks the ability to fulfill the obligation of this Order.

E. This Order mandates actions and establishes limits necessary for the Company to meet to attain, maintain and verify AQCR 131's compliance with the sulfur dioxide NAAQS. To the extent that any federal or state statute, rule, permit, order, stipulation agreement, consent decree or schedule of compliance now in force or subsequently issued imposes limits and requires actions additional to or more stringent than those required in this Order, the Company shall comply with the more stringent requirements of the federal or state statute, rule, permit, order, stipulation agreement, consent decree or schedule of compliance.

F. This Order is effective upon the date that it is signed by the MPCA Board Chair and by the Commissioner of the MPCA.

IT IS SO ORDERED BY THE MINNESOTA POLLUTION CONTROL AGENCY:



Charles W. Williams

Commissioner

Minnesota Pollution Control Agency

Date: 7/28/92



Dr. Daniel Foley

Chair

Minnesota Pollution Control Agency Board

Date: 7/28/92

EXHIBITS:

1. Facility Description

Control Equipment- None

Monitoring Equipment- Fuel Oil Flow Monitor

Stack Parameters- Height: 60 feet
 Inside Exit Diameter: 3.2 feet
 Flow Rate, acfm
 (for primary fuel): 19,520 @ 350 degrees F