AIR EMISSION PERMIT NO. 10900084- 002

IS ISSUED TO

Mayo Foundation

MAYO MEDICAL CENTER - ROCHESTER
200 1st Street Southwest
Rochester, Olmsted County, MN 55905

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit applications:

Permit Type	Action No.	Application Date	Issuance Date
Total Facility Operating Permit	-001	12/15/1995	11/24/04
Major Amendment	-002	02/07/2005, rev 06/10/2005	See below

This permit authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Federal; Pt 70/Major for NSR — Major Amendment
Issue Date: November 24, 2004 — Issue Date: September 12, 2005
Expiration: November 24, 2009
All Title I Conditions do not expire.

Conditions stating "Title I Condition: State Implementation Plan (SIP) for SO_2 NAAQS, 40 CFR pt. 50 and Minnesota SIP" or "Title I Condition: Minnesota SIP; 40 CFR § 50.5" are required to go through the federal State Implementation Plan approval process before the change becomes effective.

Richard J. Sandberg, Manager
Air Quality Permits Section
Industrial Division

for Sheryl A. Corrigan
Commissioner
Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	(651) 296-6300
Outside Metro Area	1-800-657-3864
TTY	(651) 282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

Mayo Clinic is a health care facility located in Rochester, Minnesota. The "facility" permitted in this document includes all buildings owned and/or operated by Mayo Foundation in downtown Rochester, Minnesota, located on contiguous property with the Franklin Heating Station, Rochester Methodist Hospital, and the Prospect Utility Plant.

The primary emission units at the facility consist of boilers fired on No. 6 fuel oil, No. 2 fuel oil, and/or natural gas, two paint booths (one of which can accommodate wood and metal sanding operations), diesel-powered generators, and cooling towers.

While Mayo Clinic – Rochester, MN is owned and operated by the Mayo Foundation, it is not contiguous with other Mayo facilities in Rochester (ie., St. Marys Hospital and the Waste Management Facility), and thus is a separate source under the New Source Review and Part 70 regulations. This permit is a Part 70 operating permit. The facility is an existing major source under New Source Review. No new modifications are approved through this permit (a previously approved modification to Boiler No. 2 at the Franklin Heating Station is included in the permit). The facility is not a major source of HAP emissions, by virtue of accepting a synthetic minor limit.

The facility is located in an area that was previously designated as non-attainment for $S0_2$. However, the area currently meets the ambient air quality standards, and was officially redesignated as a "maintenance" area on May 8, 2001. The facility has been subject to a federally enforceable permit (part of Minnesota's state implementation plan, or SIP, for attaining ambient air quality standards) containing requirements contributing to the correction of the non-attainment problem and the ultimate redesignation. The requirements of that permit have been incorporated into this permit as non-expiring Title I conditions. This permit will ultimately replace the existing permit and be incorporated into the SIP (separately from the permit issuance process).

AMENDMENT DESCRIPTION:

Reasonable Further Progress

This amendment (-002) makes reasonable further progress toward correcting the predicted exceedances of SO_2 ambient air standards, which were predicted though the modeling for the Rochester Public Utilities (RPU) Silver Lake Steam Sale Project (March 2003). That modeling, using Minneapolis/St. Paul meteorology, indicated potential SO_2 exceedances in the vicinity of Franklin Heating Station, which is part of the Mayo complex. Boilers and generators at Franklin Heating Station were determined to be responsible for the major portion of the model-predicted exceedances.

As part of reasonable further progress to address this, Mayo did additional modeling (with the same Minneapolis/St. Paul meteorology) and proposed revised limits on the boilers and generators at Franklin Heating Station. These proposed revisions include revised (lowered) limits on five of the twelve SO_2 emission limits, and 10 revised regression equations to govern SO_2 limits on the boilers, to replace 10 of the existing 12 regression equations.

Since some of the limits proposed to be revised are State Implementation Plan (SIP) limits (included in the State Implementation Plan for SO_2 emissions in the Rochester MN area), proposed changes to those limits cannot simply be made in the absence of a corresponding revision to the SIP. However, more restrictive limits can be added to the permit, and used to demonstrate compliance with the SIP conditions. Table 4, below, for a summary of the actual changes in SO_2 limits and regression equations which were made in the permit.

The permit also incorporates a change requested by U.S. Environmental Protection Agency (EPA) at the time of issuance of the Part 70 permit (-001), but which was not done at that time. EPA requires that a timeframe be associated with the SIP condition to report the calculated sulfur content of fuel oil in the oil tanks (GP001). That change is included in this permit action.

Future Modeling

MPCA and its contractors are preparing updated modeling information for future State Implementation Plan (SIP) revisions for SO_2 and PM_{10}.

On March 25, 2004, MPCA issued a request for work plans titled "Request for Work Plans – Air Dispersion Modeling: Initial Data Gathering for Rochester and Olmsted County State Implementation Plan Maintenance Areas (ROCSIPMA) for Sulfur Dioxide (SO_2) and Particulate Matter Less Than Ten Microns (PM_{10})".

MPCA has hired three (3) contractors to review and update modeling information for key facilities in Rochester, MN. MPCA selected Environmental Quality Management (EQM) to review and update modeling information for emission sources owned and operated by Mayo (Franklin Heating Station, St. Mary's Hospital, and Prospect Utility Plant), and IBM-Rochester. This work is scheduled to be done by June 30, 2005.

MPCA also is working with the EPA, Region V on model selection, meteorology, and related items. EPA Region V and MPCA have reached agreement that the future ROCSIPMA modeling will use meteorological data from Rochester instead of Minneapolis/St. Paul. EPA and MPCA agreed that for purposes of this permit amendment, to finish the modeling exercise for the RPU Steam Plant Project, the modeling could continue using the Rochester meteorological data.

MPCA may also use newer versions of AERMOD and related pre-processors (e.g., AERMAP, AERMET, and BPIP-PRIME) as well as revised land use land cover parameterizations.

Preliminary test runs using Rochester meteorological data indicate further SO_2 emission reductions may be necessary to protect ambient standards – particularly for above ground-level "flagpole" receptors at the downtown Holiday Inn. This is a contributing factor in the decision to allow continued use of Minneapolis/St. Paul meteorology to "finish" the RPU steam project modeling as associated with Mayo/Franklin Heating Station.

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item: **Total Facility**

What to do	Why to do it
DETERMINING IF A PROJECT/MODIFICATION IS SUBJECT TO NEW SOURCE REVIEW	hdr
These requirements apply where there is a reasonable possibility that a proposed project analyzed using the actual-to-projected-actual (ATPA) test and found to not be part of a major modification may result in a significant emissions increase. If the ATPA test is not used for a particular project, or if there is not a reasonable possibility that the proposed project could result in a significant emissions increase, then these requirements do not apply to that project. Please be advised that although you may determine that a modification is not subject to new source review, prior to beginning actual construction on the project, a permit amendment, recordkeeping, or notification may still be required under Minn. R. 7007.1150 - 7007.1500.	Title I Condition: 40 CFR Section 52.21(r)(6)
Before beginning actual construction on a project involving equipment other than electric utility steam generating units (EUSGUs) the Permittee shall document and maintain a record of the following information: 1. A description of the project; 2. Identification of the emission unit(s) whose emissions could be affected; 3. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded that were due to increases not associated with the modification and that the unit could have accommodated prior to the modification;	Title I Condition: 40 CFR Section 52.21(r)(6)
4. The Permittee shall monitor, from any non-EUSGU associated with the project, the actual emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using the ATPA test, and the potential emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using potential emissions. The Permittee shall calculate and maintain a record of the sum of the actual and potential emissions (if used in the analysis) of the regulated pollutant, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit that regulated NSR pollutant; and	continued from above
5. The Permittee must submit a report to the Agency if the annual summed (actual plus potential, if applicable) emissions exceed the projected values. Such report shall be submitted to the Agency within 60 days after the end of the year. The report shall contain: a. The name, address and telephone number of the facility b. The annual emissions (actual plus potential, as applicable, for each pollutant exceeding the preconstruction projection) c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection	continued from above
OPERATING REQUIREMENTS	hdr
The Permittee shall comply, and upon written request demonstrate compliance, with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient AIr Quality Standards, Minn. R. 7009.0010 to 7009.0080.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L, and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010 - 7009.0080
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and shall include a preventative maintenance program for that equipment, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
In the case of a conflict between an applicable requirement and the language of a permit term based on that applicable requirement, the underlying requirement supersedes any conflicting or otherwise non-conforming permit term language.	Minn. R. 7007.0800, subp. 2
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Performance Test Notifications and Submittals: Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements. Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Minn. Rs. 7017.2030, subp. 1-4, 7017.2018 and Minn. R. 7017.2035, subp. 1-2
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
RECORDKEEPING	hdr
Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
This permit shall not alter or affect the liability of an owner or operator for any violation of applicable requirements prior to or at the time of permit issuance.	Minn. R. 7007.1800(C)(2)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007. 1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007. 0800, subp. 5(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

REPORTING/SUBMITTALS	hdr
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3100
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Subject Item: **GP 001 Boilers 1, 2, 3 & 4 Franklin**

Associated Items: EU 024 Boiler 1 - Franklin

EU 025 Boiler 2 - Franklin

EU 026 Boiler 3 - Franklin

EU 027 Boiler 4 - Franklin

SV 004 Boilers Stack - Franklin

What to do	Why to do it
Amendments to Title I Conditions: If any permit requirement cited as "Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP" is amended, the amendment must first comply with procedures of Minn. R. 7007.0850 (Permit Application Notice and Comment) and Minn. R. 7007.0950 (EPA Review and Objection) applicable to major amendments to Part 70 permits.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
EMISSION AND OPERATING LIMITS - APPLY WITH OR WITHOUT CEMS USE	hdr
Sulfur Dioxide: less than or equal to the amount specified by the following equation when natural gas and fuel oil are combusted simultaneously (applies to EU024, EU026 and EU027) W = 2Y / (X + Y) = 2Y/100 = 0.02Y where: W = emission limit for sulfur dioxide, lbs/million Btu heat input 2 = allowable SO2 emission limit for liquid fossil fuels Y = percentage of total heat input from liquid fossil fuel X = percentage of total heat input from gaseous fossil fuels	Minn. R. 7011.0505, subp. 3(A)
Fuel Types Allowed: Emission Units 024, 026, and 027 (Boilers No. 1, 3, and 4) are allowed to burn natural gas, No. 6 fuel oil and No. 2 fuel oil. Emission Unit 025 (Boiler 2) is limited to natural gas and No. 2 fuel oil. No. 2 fuel oil and No. 6 fuel oil usage rates for Group 001 shall be measured by fuel flow meters. Hourly usage rates of No. 2 and No. 6 fuel oil shall be individually recorded, each hour that any fuel oil is combusted. The Permittee is authorized to install piping, pumps and related equipment so that No. 2 fuel oil stored in existing 4,000 or 150,000 gallon tanks can be used as fuel in any of the emission units in this Group.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Fuel Usage: No. 2 fuel oil may be used in Emission Units 024, 026, and 027 (Boilers No. 1, 3, and 4) only under the following conditions when No. 6 fuel oil would otherwise be used: a) During natural gas curtailment; b) During maintenance or modification of the natural gas supply lines and equipment; c) During complete interruption of natural gas service by the gas provider due to failure or emergency maintenance; d) During gas meter testing; e) During systems testing and fireman's training; and f) During maintenance of or in the event of the No. 6 fuel oil storage tanks and transfer system. The Permittee shall maintain a record of all occurrences of No. 2 fuel oil combustion in the fireman's log including the date, time and reason for the use of No. 2 fuel oil.	40 CFR Section 51.165(a)(1)(v)(C)(8) and (a)(1)(xxv) and interpretive memorandum (7/1/94); Pollution Control Project exempt from NSR; Minn. R. 7007.0800, subp. 4(C) and subp. 5
SO2 EMISSION LIMITS - NO CEMS	hdr
Sulfur Dioxide: less than or equal to 232 lbs/hour and less than or equal to the amount determined by Regression Equation 1 (Appendix B), as a 1-hour Average, when the diesel engines ing GP 006 are burning diesel fuel.	Minn. R. 7009.0020
Sulfur Dioxide: less than or equal to 266 lbs/hour and less than or equal to the amount determined by Regression Equation 2 (Appendix B), as a 1-hour Average, when the diesel engines in GP 006 are not burning diesel fuel.	Minn. R. 7009.0020
Sulfur Dioxide: less than or equal to 325 lbs/hour and less than or equal to the amount determined by Regression Equation 3A (Appendix B), as a 3-hour block Average, when the diesel engines in GP 006 are burning diesel fuel. This limit is more restrictive than, and therefore meets, the limit set by SIP for 3-hour average SO2 emissions using Regression Equation 3 when GP 006 generators are burning diesel fuel.	40 CFR Part 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L, and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010-7009.0080

Sulfur Dioxide: less than or equal to 360 lbs/hour and less than or equal to the amount determined by Regression Equation 4A (Appendix B), as a 3-hour block Average. This limit is more restrictive than, and therefore meets, the limit set by SIP for 3-hour average SO2 emissions using Regression Equation 4 when GP 006 generators are not burning diesel fuel.	40 CFR Part 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L, and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010-7009.0080
Sulfur Dioxide: less than or equal to 209 lbs/hour and less than or equal to the amount determined by Regression Equation 5A (Appendix B), as a 24-hour block Average, when the diesel engines in GP 006 are burning diesel fuel. This limit is more restrictive than, and therefore meets, the limit set by SIP for 24-hour average SO2 emissions using Regression Equation 5 when GP 006 generators are burning diesel fuel.	40 CFR Part 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L, and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010-7009.0080
Sulfur Dioxide: less than or equal to 258 lbs/hour and less than or equal to the amount determined by Regression Equation 6A (Appendix B), as a 24-hour block Average, when the diesel engines in GP 006 are not burning diesel fuel. This limit is more restrictive than, and therefore meets, the limit set by SIP for 24-hour average SO2 emissions using Regression Equation 6 when GP 006 generators are not burning diesel fuel.	40 CFR Part 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L, and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010-7009.0080
ALTERNATE LIMITS - APPLY WHEN SO2 CEMS IS USED	hdr
If the Permittee decides to install CEMs for SO2 and stack gas flowrate, the requirements in this section replace the requirements described above under "SO2 EMISSION LIMITS - NO CEMS" for establishing the limit on SO2 emissions.	Minn. R. 7007.0800, subp. 2
If the Permittee decides to install CEMs for SO2 and stack gas flowrate, the Permittee shall provide a demonstration of the correctness of the calculation of the regression equations to the MPCA. This demonstration may be coordinated with the CEM certification test required by this permit.	Minn. R. 7007.0800, subp. 2
CEMS Installation: Install, maintain, calibrate, and operate a SO2 continuous monitoring system which measures and records emissions in units of the standard.	Minn. R. 7007.0800, subp. 2 and Minn. R. 7017.1006
Sulfur Dioxide: less than or equal to 232 lbs/hour and less than or equal to the amount determined by Regression Equation 7 (Appendix B), as a 1-hour Average, when the diesel engines in GP 006 are burning diesel fuel.	Minn. R. 7009.0020
Sulfur Dioxide: less than or equal to 266 lbs/hour and less than or equal to the amount determined by Regression Equation 8 (Appendix B), as a 1-hour Average, when the diesel engines in GP 006 are not burning diesel fuel.	Minn. R. 7009.0020
Sulfur Dioxide: less than or equal to 325 lbs/hour and less than or equal to the amount determined by Regression Equation 9A (Appendix B), as a 3-hour Average, when the diesel engines in GP 006 are burning diesel fuel. This limit is more restrictive than, and therefore meets, the limit set by SIP for 3-hour average SO2 emissions using Regression Equation 9 when GP 006 generators are burning diesel fuel.	40 CFR Part 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L, and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010-7009.0080
Sulfur Dioxide: less than or equal to 360 lbs/hour and less than or equal to the amount determined by Regression Equation 10A (Appendix B), as a 3-hour Block Average, when the diesel engines in GP 006 are not burning diesel fuel. This limit is more restrictive than, and therefore meets, the limit set by SIP for 3-hour average SO2 emissions using Regression Equation 10 when GP 006 generators are not burning diesel fuel.	40 CFR Part 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L, and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010-7009.0080
Sulfur Dioxide: less than or equal to 209 lbs/hour and less than or equal to the amount determined by Regression Equation 11A (Appendix B), as a 24-hour Block Average, when the diesel engines in GP 006 are burning diesel fuel. This limit is more restrictive than, and therefore meets, the limit set by SIP for 24-hour average SO2 emissions using Regression Equation 11 when GP 006 generators are burning diesel fuel.	40 CFR Part 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L, and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010-7009.0080
Sulfur Dioxide: less than or equal to 258 lbs/hour and less than or equal to the amount determined by Regression Equation 12A (Appendix B), as a 24-hour Block Average, when the diesel engines in GP 006 not are burning diesel fuel. This limit is more restrictive than, and therefore meets, the limit set by SIP for 24-hour average SO2 emissions using Regression Equation 12 when GP 006 generators are not burning diesel fuel.	40 CFR Part 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L, and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010-7009.0080
RECORDKEEPING REQUIREMENTS - NO CEMS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Recordkeeping Requirements: The Permittee shall retain the following records for 5 years: 1) Calculations of the percent load on an hourly basis; 2) Calculations of the allowable hourly SO2 emission rate and the actual emission rate; 3) Calculations of the allowable 3-hour SO2 emission rate and the actual emission rate; 4) Calculations of the allowable 24-hour (calendar day) SO2 emission rate and the actual emission rate; and 5) Fuel supplier certifications and/or fuel sampling records.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP Minn. R. 7007.0800, subp. 5
Recordkeeping: The Permittee shall calculate the actual SO2 emission rate in lbs per hour using the following equation: Lbs SO2/hour = (2 x A x B x C) + (2 x D x E x F) where: 2 = lb of SO2 per lb S A = lb of sulfur per lb of No. 6 fuel oil B = gallons of No. 6 fuel actually burned per hour C = density of the No. 6 fuel in lb/gal D = lb of sulfur per lb of No. 2 fuel oil E = gallons of No. 2 fuel actually burned per hour F = density of the No. 2 fuel in lb/gal	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Each hour, the Permittee shall calculate and record the lbs/hour SO2 emission limit from the regression equation and the actual lbs/hour SO2 emissions. These records shall be readily accessible at all times.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Percent Load: The Permittee shall calculate % Load from Equation 1 in Appendix B. If the calculated percent Load is greater than 100, the Permittee shall use 100 in the regression equations to determine the lbs/hour SO2 limit. This ensures that the SO2 emission limit (in lbs/hour) will not exceed the modeled emission levels that demonstrated modeled compliance with ambient standards.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
RECORDKEEPING REQUIREMENTS - APPLY WHEN USING SO2 CEMS	hdr
If the Permittee decides to install CEMs for SO2 and stack gas flowrate, the requirements in this section replace the requirements described above under "RECORDKEEPING REQUIREMENTS - NO CEMS" for keeping records regarding SO2 emissions and limits.	Minn. R. 7007.0800, subp. 2
Each hour, the Permittee shall calculate and record the 1-hour SO2 emission limit using the regression equation, and record the 1-hour SO2 emission rate determined by the CEM.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Recordkeeping Requirements: The Permittee shall retain the following records for 5 years: 1) Calculations of the percent load on an hourly basis; 2) Calculations of the allowable hourly SO2 emission rate and the actual emission rate; 3) Calculations of the allowable 3-hour SO2 emission rate and the actual emission rate; and 4) Calculations of the allowable 24-hour (calendar day) SO2 emission rate and the actual emission rate.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
RECORDKEEPING - WITH OR WITHOUT USE OF CEMS	hdr
Daily Recordkeeping: The Permittee shall calculate and record the 24-hour average lbs/hour SO2 emission limit from the regression equation. The Permittee shall sum the 24 1-hour actual emission calculations for the previous calendar day and divide by 24. These calculations shall be completed and recorded daily for the previous day. These records shall be readily accessible at all times.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Daily Recordkeeping: The Permittee shall calculate and record the 3-hour average lbs/hour SO2 emission limits from the regression equation for the previous day. The Permittee shall sum the groups of three consecutive 1-hour actual emission calculations for the previous calendar day and divide by 3. These calculations shall be completed and recorded daily for the previous day. These records shall be readily accessible at all times.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Each 24-hour block period, the Permittee shall calculate and record the 24-hour SO2 emission limit using the regression equation, and record the 24-hour block average emission rate determined by the CEM.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Recordkeeping: The Permittee must obtain and maintain an analysis of the fuel oil burned in Emission Units 024, 025, 026, and 027 (Boilers 1, 2, 3, and 4) as follows: The Permittee shall obtain and retain fuel supplier certifications from the fuel supplier for each shipment of No. 6 and No. 2 fuel oil delivered to the facility, stating the guaranteed maximum sulfur content of the fuel delivered. By the end of the next business day after a fuel oil delivery, the Permittee shall calculate the sulfur content of the fuel in the tank using the sulfur content of the fuel in the tank prior to the delivery and calculating the new sulfur content of the tank after delivery. The Permittee shall collect a sample of No. 6 fuel oil from each No. 6 fuel oil storage tank once each year. The sample shall be analyzed for heating value and sulfur content. The sulfur content of the sample and the last calculated value of the sulfur content of the fuel oil in the tank shall be reported to the Agency.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
The sulfur content of the sample and the last calculated value of the sulfur content of the fuel oil in the tank shall be reported to the Agency (MPCA) in the semi-annual deviations report.	Minn. R. 7007.0800, subp. 6
Monitoring: The Permittee shall ensure that the most recently approved American Society of Testing and Materials (ASTM) methods are used to determine sulfur content and heating value of fuel oil samples.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
CEMS OPERATING REQUIREMENTS	hdr
If the Permittee decides to install CEMs for SO2 and stack gas flowrate, the Permittee shall notify the Agency at least 30 days before starting installation of the CEMs.	Minn. R. 7007.0800, subp. 2
CEMS Certification Test: due within 90 days after the due date of the first excess emission report.	Minn. R. 7017.1050, subp, 1
CEM Certification Test Pretest Meeting: due 7 days before CEM Certification Test	Minn. R. 7017.1060, subp. 3
The CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, and malfunction. This requirement to operate the monitor applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass the CEMS would endanger human health, safety, or plant equipment.	Minn. R. 7017.1090, subp. 1
Monitor downtime is a violation of subpart 1, except for reasonable periods of monitor downtime due to the following causes: A. damage to the monitoring system due to acts of God such as lightning strikes, tornadoes, or floods which render the monitor inoperative; B. sudden and not reasonably preventable monitor breakdowns C. scheduled monitor maintenance based on equipment manufacturer's recommended maintenance schedule which cannot reasonably be conducted when the emission unit is not operating; or D. unavoidable monitor downtime in order to conduct daily drift checks, calibration error audits, relative accuracy test audits, linearity checks, and cylinder gas audits which are required by a compliance document, applicable requirement, or by request of the Commissioner.	Minn. R. 7017.1090, subp. 2
The Permittee shall submit an excess emission report each calendar quarter. The report must be submitted even if there were no excess emissions, monitor downtime, or monitor bypasses during the quarter. The report shall be submitted on a form approved by the Commissioner within 30 days of the end of each calendar quarter.	Minn. R. 7017.1110, subp. 1
The excess emission report shall contain the information required by items A to C of this rule.	Minn. R. 7017.1110, subp. 2
The Permittee shall maintain a file of all of the following CEMS information at the emission facility in a form suitable for inspection for at least five years from the date of each record: each one-hour emission averge recorded by the CEMS; monitor certification test reports; excess emissions reports; cylinder gas audit reports; relative accuracy test audits; results of daily calibration drift checks; log of adjustments made to the CEMS and maintenace performed on the CEMS; and all other monitoring system information required by an applicable compliance document. The owner or operator shall also keep an updated copy of the facility's CEMS quality assurance plan on site.	Minn. R. 7017.1130
Maintain a written CEMS QA/QC program available in a form suitable for inspection.	Minn. R. 7017.1170, subp. 2
The facility owner or operator shall conduct daily calibaration drift assessments and make adjustments as needed according to the procedure listed in items A and B and Code of Federal Regulations, title 40, section 60.13(d)(1), for each pollutant concentration and diluent monitor. The calibration drift asessment shall be conducted on each monitor range. The span value specified in the applicable requirement or compliance document shall be used to determine the zero and span calibration points. If no span value is specified in the applicable requirement or compliance document, the owner or operator shall use a span value equivalnt to 1.5 times the emission limit.	Minn. R. 7017.1170, subp. 3

A. For an extractive CEMS, minimum drift assessment procedures shall include introducing applicable zero and span gas mixtures into the measurement system as near the probe as is practical. Gases within +/- two percent of tag value shall be used to perform the span (upscale) drift assessment. The span and zero gas mixtures shall be the same composition as specified in the applicable performance specification. B. For a nonextractive, in situ CEMS, minimum drift assessment procedures shall include upscale checks using a certified calibration gas cell or test cell which is functionally equivalent to a known gas concentration. The zero check may be performed by computing the zero value from upscale measurements or by mechanically producing a zero condition.	Minn. R. 7017.1170, subp. 3
Permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in Appendix B of this part. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.	Minn. R. 7017.1170, subp. 3
CEMS Cylinder Gas Audit (CGA): due before end of each calendar half-year following CEMS Cylinder Gas Audit (CGA) (initial CGA), except that a CGA is not required during any calendar half year in which a RATA was performed on the CEMS. The initial CGA is due within 180 days following the certification test. Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 4
CEMS Relative Accuracy Test Audit (RATA): due 365 days after CEM Certification Test. Additional RATA required before the end of each subsequent calendar year unless the relative accuracy is 15% or less, in which case the next RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 5
THE FOLLOWING SIP SO2 EMISSION LIMITS (NO CEMS) ARE APPLICABLE REQUIREMENTS, MET BY COMPLYING WITH THE MORE RESTRICTIVE LIMITS INCLUDED ABOVE	hdr
Sulfur Dioxide: less than or equal to 325 lbs/hour and less than or equal to the amount determined by Regression Equation 3 (Appendix B), as a 3-hour block Average, when the diesel engines in GP 006 are burning diesel fuel.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Sulfur Dioxide: less than or equal to 400 lbs/hour and less than or equal to the amount determined by Regression Equation 4 (Appendix B), as a 3-hour block Average, when the diesel engines in GP 006 are not burning diesel fuel.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Sulfur Dioxide: less than or equal to 209 lbs/hour and less than or equal to the amount determined by Regression Equation 5 (Appendix B), as a 24-hour block Average, when the diesel engines in GP 006 are burning diesel fuel.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Sulfur Dioxide: less than or equal to 258 lbs/hour and less than or equal to the amount determined by Regression Equation 6 (Appendix B), as a 24-hour block Average, when the diesel engines in GP 006 are not burning diesel fuel.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
THE FOLLOWING ALTERNATE SIP SO2 EMISSION LIMITS (USING CEMS) ARE APPLICABLE REQUIREMENTS, MET BY COMPLYING WITH THE MORE RESTRICTIVE LIMITS INCLUDED ABOVE	hdr
Sulfur Dioxide: less than or equal to 327 lbs/hour and less than or equal to the amount determined by Regression Equation 9 (Appendix B), as a 3-hour Block Average, when the diesel engines in GP 006 are burning diesel fuel.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Sulfur Dioxide: less than or equal to 401 lbs/hour and less than or equal to the amount determined by Regression Equation 10 (Appendix B), as a 3-hour Block Average, when the diesel engines in GP 006 are not burning diesel fuel.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Sulfur Dioxide: less than or equal to 209 lbs/hour and less than or equal to the amount determined by Regression Equation 11 (Appendix B), as a 24-hour Block Average, when the diesel engines in GP 006 are burning diesel fuel.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Sulfur Dioxide: less than or equal to 258 lbs/hour and less than or equal to the amount determined by Regression Equation 12 (Appendix B), as a 24-hour Block Average, when the diesel engines in GP 006 not are burning diesel fuel.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Subject Item: **GP 002 Boilers 1, 3 & 4 Franklin**

Associated Items: CE 001 Centrifugal Collector - High Efficiency

EU 024 Boiler 1 - Franklin

EU 026 Boiler 3 - Franklin

EU 027 Boiler 4 - Franklin

SV 004 Boilers Stack - Franklin

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input for each individual emission unit in GP002. The physical PTE of EU024 is 0.14 lbs/million Btu heat input. The controlled PTE of EU026 and EU027 is 0.028 lbs/million Btu heat input.	Minn. R. 7011.0510, subp. 1
Sulfur Dioxide: less than or equal to 2.0 lbs/million Btu heat input for each individual emission unit in GP002 when combusting fuel oil alone.	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity , except for one six-minute period per hour of not more than 60 percent opacity for each individual emission unit in GP002.	Minn. R. 7011.0510, subp. 2
CONTROL REQUIREMENTS (see subject item CE001 for further requirements)	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Subject Item: **GP 003 Generators 1, 2, 3 & 4 Prospect**

Associated Items: EU 058 Generator 1 - Prospect Plant

EU 059 Generator 2 - Prospect Plant

EU 060 Generator 3 - Prospect Plant

EU 061 Generator 4 - Prospect Plant

SV 009 Generator No 1 Stack - Prospect

SV 010 Generator No 2 Stack - Prospect

SV 011 Generator No 3 Stack - Prospect

SV 012 Generator No 4 Stack - Prospect

What to do	Why to do it
EMISSION & OPERATING LIMITS	hdr
Nitrogen Oxides: less than or equal to 3.84 lbs/million Btu heat input	Title I Condition: Limit to avoid classification of modification as major under 40 CFR Section 52.21
Sulfur Dioxide: less than or equal to 0.2 lbs/million Btu heat input	Title I Condition: Minn. R. 7007.0020 & 40 CFR Section 52.21(k) [to not cause or contribute to a violation of the State & Federal ambient air quality standards & the ambient air increments established in 40 CFR Section 52.21(c)]
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Limit on Hours of Operation: The sum of the four units' Operating Hours: less than or equal to 400 hours/year using 12-month Rolling Sum	Title I Condition: To avoid classification as a major mod under 40 CFR Section 52.21; Minn. R. 7007.0020 & 40 CFR 52.21(k) [to not cause or contribute to a violation of ambient air quality standards & ambient air increments of 40 CFR 52.21(c)]
Permitted Fuel: Diesel only	Title I Condition: Limit to avoid classification of modification as major under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2
Sulfur Content of Fuel: less than or equal to 0.2 percent by weight	Title I Condition: To avoid classification as a major mod under 40 CFR Section 52.21; Minn. R. 7007.0020 & 40 CFR 52.21(k) [to not cause or contribute to a violation of ambient air quality standards & ambient air increments of 40 CFR 52.21(c)]
RECORDKEEPING REQUIREMENTS	hdr
The Permittee shall obtain and retain fuel supplier certifications from the fuel supplier for each shipment of diesel fuel delivered to the facility certifying the sulfur content of the fuel is less than 0.2% by weight.	Title I Condition: Limit to avoid classification of modification as major under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 5
Recordkeeping Requirements: The Permittee shall retain the fuel supplier certifications and/or fuel sampling and analysis records for 5 years.	Title I Condition: Limit to avoid classification of modification as major under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 5
Recordkeeping: By the last day of the month, record the total hours of operation for the sum of the four generators and calculate and record the 12-month rolling sum.	Title I Condition: Limit to avoid classification of modification as major under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Subject Item: **GP 004 Paint, Wood Sanding, & Metal Sanding Booth - Franklin Paint Booth - Methodist Hospital**

Associated Items: CE 006 Fiberglass Filter w/Cardboard Frame

CE 007 Fiberglass Filter w/Cardboard Frame

EU 004 Paint Booth (5th floor) - Franklin

EU 006 Wood Sanding in Paint Booth (5th floor) - Franklin

EU 007 Metal Sanding in Paint Booth (5th floor) - Franklin

EU 009 Paint Booth - Methodist Hospital

SV 001 Paint, Wood Sanding & Metal Sanding Booth - Franklin

SV 002 Paint Booth - Methodist Hospital

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735. (Applies individually to each unit listed under GP004)	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity . This limit applies individually to each unit comprising GP004.	Minn. R. 7011.0715, subp. 1(B)
HAPs - Total: less than or equal to 5 tons/year using 12-month Rolling Sum basis calculated monthly, for the group. MSDS sheets or similar manufacturers' formulation data will be used to determine whether or not a given paint contains HAPs. Maintaining HAP-containing paint usage below 5 tpy will ensure that HAP emissions are less than 5 tpy from paint usage. If the HAP-containing paint usage exceeds 4.9 tons on a 12-month rolling sum basis, the facility can perform detailed emission calculations based on the actual HAP content of the paints to demonstrate that actual HAP emissions do not exceed 5 tpy. If this option is chosen, the calculations shall be based on MSDS sheets or other formulation data obtained from the paint manufacturers and actual paint usage data.	Title I Condition: Avoid major source status as defined under 40 CFR Section 63.2
RECORDKEEPING REQUIREMENTS	hdr
Paint Usage Monitoring and Recordkeeping: The Permittee shall keep monthly records of all paint used. These records shall include, but are not limited to, the VOC and HAP weight fraction and the total weight of each coating used. The VOC and HAP content of the coating shall be determined as specified under the Material Content condition listed below.	Title I Condition: Monitoring and Recordkeeping for limits taken to avoid major source status as defined under 40 CFR Section 63.2
Paint Usage Calculation: By the 15th day of each month the Permittee shall do the following: 1. Calculate, record, and maintain a monthly log of paint usage during the preceding month. 2. Calculate the combined 12-month rolling sum of paint usage for the previous 12 months using the monthly paint usage log. This number must be less than or equal to the specified paint usage limit of 5 tons per year. If paint usage exceeds 4.9 tons on a 12-month rolling sum basis, the facility shall perform detailed emission calculations based on the actual HAP content of the paints to demonstrate that actual HAP emissions do not exceed 5 tpy. The calculations shall be based on MSDS sheets or other formulation data obtained from the paint manufacturers and actual paint usage data. 3. All records shall be recorded and maintained at the facility.	Title I Condition: Monitoring and Recordkeeping for limits taken to avoid major source status as defined under 40 CFR Section 63.2 Minn. R. 7007.0800, subp. 5
Determination of Material Content for Emission Calculations to be submitted on the Emission Inventory Report: VOC and HAP contents of all materials shall be determined by using the Material Data Safety Sheets (MSDS) provided by the coating supplier or the laboratory or site formulation database, for each material used. If a range is provided for the VOC or single HAP content of a material, the Permittee shall use the maximum value of the range. The Permittee shall assume a 100 percent VOC content (by weight) if exact VOC contents is not available or are too difficult to obtain. The Division Manager reserves the right to require the Permittee to take samples of VOC and HAP containing materials and to conduct analysis to determine the VOC and HAP content per U.S. Environmental Protection Agency (EPA) reference methods. If the EPA reference method is used, the data from the reference method analysis shall supersede the MSDS.	Title I Condition: Monitoring and Recordkeeping for limits taken to avoid major source status as defined under 40 CFR Section 63.2 Minn. R. 7007.0800, subp. 5
CONTROL REQUIREMENTS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

The operation of this control device is not necessary in order for the proces and source to meet applicable emission limits. However, if the Permittee wishes to take credit for operation of this device for purposes of reporting actual emissions for the emissions inventory, then the Permittee must comply with the following requirements.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
In order to receive credit for the control efficiency of the filters, the hood/booth capture system must conform to the requirements listed in Minn. R. 7011.0070, subp. 1, and the Permittee must certify this for each hood/booth as specified in Minn. R. 7011.0070. subp. 3. Once the hoods are certified, the Permittee shall maintain a copy of each certification on site, as well as an annual record of fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method. Prior to this certification, the control efficiency (capture efficiency x panel efficiency) is considered to be 0%.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
Daily Inspections: Once each operating day, the Permittee shall visually inspect the condition of each panel filter with respect to alignment, saturations, tears, holes and any other condition that may affect the filter's performance. The Permittee shall maintain a daily written record of filter inspections.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
The Permittee shall operate and maintain the panel filters any time that any process equipment controlled by the panel filters are in operation.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Subject Item: **GP 005 Emergency Generators A, B & C - Methodist Hospital**

Associated Items: EU 011 Emergency Generator A - Methodist Hospital

EU 012 Emergency Generator B - Methodist Hospital

EU 013 Emergency Generator C - Methodist Hospital

SV 003 Generators Stack - Methodist Hospital

What to do	Why to do it
EMISSION LIMITS & OPERATING LIMITS	hdr
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Content of Fuel: less than or equal to 0.5 percent by weight	Minn. R. 7007.0800, subp. 2
RECORDKEEPING REQUIREMENTS	hdr
Hours of Operation: The Permittee shall maintain documentation on site that each unit is an emergency diesel generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, limiting operation to 500 hours per year.	Minn. R. 7007.0800, subp. 4 & 5
The Permittee shall obtain and retain fuel supplier certifications from the fuel supplier for each shipment of diesel fuel delivered to the facility certifying the sulfur content of the fuel is less than 0.5% by weight.	Minn. R. 7007.0800, subp. 5
Recordkeeping Requirements: The Permittee shall retain the fuel supplier certifications and/or fuel sampling and analysis records for 5 years.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Subject Item: **GP 006 Generators 4 & 5 - Franklin**

Associated Items: EU 028 Generator 4 - Franklin

EU 029 Generator 5 - Franklin

SV 005 No 4 Generator Stack - Franklin

SV 006 No 5 Generator Stack - Franklin

What to do	Why to do it
EMISSION & OPERATING LIMITS	hdr
Opacity: less than or equal to 20 percent opacity , once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
Sulfur Content of Fuel: less than or equal to 0.5 percent by weight	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Operating Hours: less than or equal to 1050 hours/year using 12-month Rolling Sum for the two units, combined.	Minn. R. 7007.0800, subp. 4 & 5 (limit assumed in calculating potential emissions)
The Permittee must have an analysis of the fuel oil burned in Emission Units 028 and 029 (diesel generators) using either Method 1 or 2 following: Method 1: The Permittee shall obtain and retain fuel supplier certifications from the fuel supplier for each shipment of No. 2 fuel oil delivered to the facility certifying the sulfur content of the fuel is less than 0.5% by weight. OR Method 2: The Permittee shall collect a sample of fuel oil after each fuel delivery, but no more than once per calendar day, from the fuel oil storage tank, fuel oil supply line, or other approved sampling locations on those days when fuel oil is burned in any of the boilers.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
RECORDKEEPING REQUIREMENTS	hdr
Monitoring: The Permittee shall ensure that the most recently approved American Society of Testing and Materials (ASTM) methods are used to determine sulfur content and heating value of fuel oil samples.	Title I Condition: State Implementation Plan (SIP) for SO2 NAAQS, 40 CFR pt. 50 and Minnesota SIP
Recordkeeping Requirements: The Permittee shall retain the fuel supplier certifications and/or fuel sampling and analysis records for 5 years.	Title I Condition: State Implementation Plan for Sulfur Dioxide; Minn. R. 7007.0800, subp. 5
Recordkeeping: By the 15th day of each month, calculate and record the total hours operated by the two generators during the previous month, and the 12 month rolling sum.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Subject Item: **GP 007 GEA & Echodyne Cooling Towers - Franklin**

Associated Items: EU 031 GEA Cooling Tower - Franklin

EU 033 Echodyne Cooling Tower - Franklin

SV 007 GEA Cooling Tower Vents (2) - Franklin

SV 008 Echodyne Cooling Tower Vent - Franklin

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735. This limit applies individually to each unit in GP007. For EU 031, the potential emissions at maximum capacity are 3.37 lb/hr, compared to a limit of 260.17 lb/hr (0.02 gr/dscf). For EU033, the potential emissions at maximum capacity are 6.32 lb/hr, compared to a limit of 498.43 lb/hr (0.02 gr/dscf).	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity . This limit applies individually to each unit GP007.	Minn. R. 7011.0715, subp. 1(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Subject Item: **EU 025 Boiler 2 - Franklin**

Associated Items: GP 001 Boilers 1, 2, 3 & 4 Franklin

SV 004 Boilers Stack - Franklin

What to do	Why to do it
EMISSION LIMITS FOR UNMODIFIED BOILER BURNING NATURAL GAS ONLY	hdr
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity , except that a maximum of 60% opacity shall be permissible for 4 minutes in any 60-minute period, and that a maximum of 40% opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0510, subp. 2
PREAUTHORIZED MODIFICATION	hdr
The Permittee is authorized to modify the boiler such that it is capable of combusting No. 2 fuel oil in addition to natural gas. At the time that this modification takes place, the Permittee shall comply with the remaining applicable portions of this section, depending on whether the modified boiler is subject to NSPS Subpart Dc or Subpart Db.	Minn. R. 7007.0150, subp. 1
Prior to commencing construction to add No. 2 fuel oil capability to this emission unit, the Permittee shall perform an evaluation of the associated increase in NOx emissions to determine whether or not such project would constitute a major modification under New Source Review (NSR) regulations. The evaluation shall be conducted using the current NSR calculation methodology and shall be submitted as part of the "Notification of the Date Construction Began" submittal. If the evaluation shows that the project would constitute a major modification under NSR, the necessary permit shall be obtained prior to commencing construction on the project.	Title Condition: To avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000
Sulfur Dioxide: less than or equal to 39 tons/year using 12-month Rolling Sum	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000
Recordkeeping: By the 15th day of each month, calculate and record the SO2 emissions from combustion of No. 2 fuel oil in EU025 during the previous month, using the calculation below, and the 12-month rolling sum for the previous 12 months. SO2(m) = 2 x A x B x C / 2000 where: SO2(m) = monthly SO2 emissions 2 = lb SO2 per lb S A = lb suflur per lb No. 2 fuel oil (obtained from fuel oil supplier or testing) B = gallons of No. 2 fuel oil burned during the month C = density of No. 2 fuel oil (lb/gal)	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000
Initial Performance Test: due 180 days after Initial Startup with No. 2 fuel oil, but not to exceed 60 days after achieving the maximum production rate at which the affected facility will be operated, to measure opacity as limited by NSPS Subpart Dc or Db.	40 CFR Section 60.8(a)
ALTERNATIVE LIMITS AND REQUIREMENTS FOR MODIFIED BOILER SUBJECT TO NSPS SUBPART Dc	hdr
Capacity: less than or equal to 95 million Btu's/hour for Heat Input Limit. Prior to commencing construction on modifications to this boiler to use No. 2 fuel oil, the Permittee shall submit to the MPCA a description of the physical limitation which will be constructed to permanently prevent the actual heat input to this boiler from exceeding 95 million Btu's/hour when combusting fuel oil or a combination of fuel oil and natural gas.	Minn. R. 7007.0800, subp. 2, to avoid requirements of 40 CFR pt. 60, subp. Db
Monitoring and Recordkeeping: The Permittee shall determine and record each hour, the amount of natural gas and No. 2 fuel oil combusted. The Permittee shall determine and record the hourly heat input rate based on fuel usage using the following equation: Heat Input = (1050 Btu/SCF X SCF natural gas/hr) + (140,000 Btu/gallon X gallons no. 2 oil/hr) where SCF = natural gas standard cubic feet	Minn. R. 7007.0800, subp. 4 and subp. 5 (most stringent, meets requirements set by 40 CFR Section 60.48c(g) and Minn. R. 7011.0570)
Sulfur Content of Fuel: less than or equal to 0.5 percent by weight	40 CFR Section 60.42c(d); Minn. R. 7011.0570
Opacity: less than or equal to 20 percent opacity using 6-minute Average , except for one 6-minute period per hour of not more than 27 percent opacity. This limit does not apply during periods of startup, shutdown, or malfunction, or while burning natural gas.	40 CFR Section 60.43c(c); Minn. R. 7011.0570

Recordkeeping: The Permittee shall obtain and maintain a fuel supplier receipt for each shipment of fuel oil delivered certifying what American Society of Testing and Materials (ASTM) specification applies to the shipment and that the sulfur content does not exceed 0.5% by weight.	40 CFR Section 60.42c(h)(1); Minn. R. 7011.0570
Initial Performance Test for Sulfur Dioxide: fuel supplier receipts for sulfur content of fuel as specified above to document the sulfur content of fuel as required by 40 CFR Section 60.42c(d).	40 CFR Section 60.44c(h); Minn. R. 7011.0570
ALTERNATIVE LIMITS AND REQUIREMENTS FOR MODIFIED BOILER SUBJECT TO NSPS SUBPART Db	hdr
Nitrogen Oxides: less than or equal to 0.1 lbs/million Btu heat input using 30-day Rolling Average . The nitrogen oxides standards apply at all times including periods of startup, shutdown and malfunction.	40 CFR Section 60.44b(a); 40 CFR Section 60.44b(h); Minn. R. 7011.0565
Fuel Oil - Sulfur Content of Fuel: less than or equal to 0.5 percent by weight using 30-day Rolling Average	40 CFR Section 60.42b(j); 40 CFR Section 60.42b(e); Minn. R. 7011.0565
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input using 30-day Rolling Average	40 CFR Section 60.41(b) (definition of very low sulfur fuel); meets limit set by 40 CFR Section 60.42b(a); 40 CFR Section 60.42b(e); Minn. R. 7011.0565
Opacity: less than or equal to 20 percent opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity. The opacity standard applies all times, except during periods of startup, shutdown or malfunction, or while burning natural gas.	40 CFR Section 60.43b(f); 40 CFR Section 60.43b(g); Minn. R. 7011.0565
Recordkeeping: The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	40 CFR Section 60.7(b)
Recordkeeping: The Permittee shall maintain records of the type and amount of each fuel combusted each day; calculate the annual capacity factor for each fuel for each calendar quarter. Annual capacity factor is calculated on a 12-month Rolling Average basis at the end of each calendar month.	40 CFR Section 60.49b(d); Minn. R. 7011.0565
COMS Installation: Install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity and recording the opacity emissions from Boiler No. 2 (EU025).	40 CFR Section 60.48b(a); Minn. R. 7011.0565
Sulfur Dioxide: The Permittee shall obtain and maintain at the facility fuel receipts from the fuel supplier which certify that fuel oil meets the definition of very low sulfur oil, as defined at 40 CFR Section 60.41b.	40 CFR Sections 60.42b(j) and 60.49b(r); Minn. R. 7011.0565
CEMS Installation: Install, maintain, calibrate, and operate a continuous monitoring system for measuring nitrogen oxides emissions and record the output of the system in the units of the standard (lb/million Btu).	40 CFR Section 60.48b(b); Minn. R. 7011.0565
Initial Performance Test: Conduct the performance test for nitrogen oxides by using the CEMS to determine the 30-day average emission rate, as described in the rule.	40 CFR Section 60.46b(e)(1); Minn. R. 7011.0565
Compliance Methods: Upon request, compliance with the NOX standards under 40 CFR Section 60.44b shall be determined through th e use of a 30-day performance test. During periods when performance tests are not requested, NOX emissions data collected pursuant to 40 CFR Section 60.44b(g)(1) or (2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports by will not be used to determine compliance with the NOX emission standards. A new 30-day rolling average emission rate is calculated each steam generating operating day as the average of all of the hourly NOX emission data for the preceeding 30 steam generating unit operating days.	40 CFR Section 60.46b(e)(4); Minn. R. 7011.0565
CONTINUOUS EMISSION MONITORING SYSTEM (CEMS) REQUIRED BY SUBPART Db	hdr
CEM Certification Test: due 180 days after Initial Startup, but not later than 60 days after achieving maximum capacity.	40 CFR Section 60.13(b)
CEM Certification Test: due 90 days after Excess Emissions/Downtime Reports (EER's) due date (first report) for COMS.	Minn. R. 7017.1050, subp. 1
CEM Certification Test Pretest Meeting: due 7 days before CEM Certification Test	Minn. R. 7017.1060, subp. 3
QA Plan: Develop and implement a written quality asurance plan that covers each EMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR 60, Appendix F, section 3.	40 CFR Section 60.13(a); 40 CFR Section 60.48b(e) and Minn. R. 7011.0565; Minn. R. 7017.1170, subp. 2
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test. If the relative accuracy is 15 percent or less, the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 5
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low level) and upscale (high-level) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. Appendix F shall be used to determine out-of-control periods for CEMS.	40 CFR Section 60.13(d)(1); Minn. R. 7017.1170, subp. 3

CEMS Cylinder Gas Audit (CGA): due before end of each calendar half-year following CEM Certification Test except during semiannual periods in which a RATA is conducted. Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR 60, Appendix F.	Minn. R. 7017.1170, subp. 4
Recordkeeping: The Permittee must retain records of all monitoring data and support information measurements including all performance evaluations, all continuous monitoring system or monitoring device calibration checks, adjustments and maintenance performed on the monitoring systems or devices in a form suitable for inspection for a period of five years from the date of all monitoring sample, measurement, or report. Records shall be kept at the source.	Minn. R. 7017.1130; 40 CFR Section 60.7(f)
CEMS Continuous Operation: Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all CEMS shall be in continuous operation.	40 CFR Section 60.13(e); Minn. R. 7017.1090
COMS Certification Test: due 180 days after Initial Startup, but no later than 60 days after achieving maximum capacity.	40 CFR Section 60.13(b)
The owner or operator must conduct and complete certification testing within 90 days after the due date of the first excess emissions report required for the COMS.	Minn. R. 7017.1050, subp. 1
COMS Certification Test Pretest Meeting: due 7 days before COMS Certification Test	Minn. R. 7017.1060, subp. 3
COMS QA/QC Plan: The Permittee shall develop and implement a written quality assurance plan which covers each COMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall be revised as needed in order to keep it up to date with the facility's current policies and procedures. The plan shall contain written procedures which should describe in detail complete, step-by-step procedures and operations for each of the following activities: A. calibration of a COMS; B. drift determination and adjustment of a COMS;	Minn. R. 7017.1210, subp. 1
C. preventative maintenance of the COMS, including the manufacturer's spare parts list for each COMS, and require that these parts be kept at the facility unless the commissioner gives written approval to exclude specific spare parts from the list. The commissioner may approve requested exclusions if the commissioner determines that it is not reasonable to keep a specific part on site after consideration of the consequences of a malfunction of the part, the likelihood of a malfunction, the time required to obtain the part, and other pertinent factors; D. data recording, calculations, and reporting; E. accuracy audit procedures; and F. program for corrective actions for a malfunctioning COMS.	continued from above
Attenuator Calibration: The owner or operator shall have an independent testing company conduct calibrations of each of the neutral density filters used in the calibration error audit according to the procedure in Code of Federal Regulations, title 40, part 60, appendix B, section 7.1.3., within the time frame of opacity stability guaranteed by the attenuator manufacturer. The manufacturer's guarantee of stability shall be on site available for inspection.	Minn. R. 7017.1210, subp. 4
COMS Continuous Operation: Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all COMS shall be in continuous operation.	40 CFR Section 60.13(e)
COMS Daily Calibration Drift (CD) Check: The Permittee must automatically, intrinsic to the opacity monitor, check the zero and upscale (span) calibration drifts at least once daily. The span value shall be between 60 and 80 percent. For COMS without automatic zero adjustments, the optical surfaces exposed to effluent gases must be cleaned before performing the drift adjustments. For COMS with automatic zero adjustments, the optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition as specified in 40 CFR Section 60.13(d)(2).	40 CFR Sections 60.13(d)(1), 60.13(d)(2), and 60.48b(e)(1); Minn. R. 7017.1210, subp. 2; Minn. R. 7007.0800, subp. 4
COMS Calibration Error Audit: due before end of each calendar half-year following COMS Certification Test. Conduct audits at least 3 months apart and no greater than 8 months apart.	Minn. R. 7017.1210, subp. 3
COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to six-minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the applicable averaging period.	Minn. R. 7017.1200

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Recordkeeping: The Permittee shall retain records of all monitoring data and support information measurements including all performance evaluations, all continuous monitoring system or monitoring device calibration checks, adjustments and maintenance performed on the monitoring systems or devices in a form suitable for inspection for a period of 5 years from the date of the montioring sample, measurement, or report. Records shall be kept at the source.	Minn. R. 7017.1130; 40 CFR Section 60.7(f)

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Subject Item: **EU 062 Prospect Distillate Fired Boiler**

Associated Items: SV 013 Boiler Stack - Prospect

What to do	Why to do it
EMISSION & OPERATING LIMITS	hdr
Opacity: less than or equal to 20 percent opacity using 6-minute Average , except for one 6-minute period per hour of not more than 27 percent opacity. This limit does not apply during periods of startup, shutdown, or malfunction.	40 CFR Section 60.43c(c); 40 CFR Section 60.43c(d); Minn. R. 7011.0570
Fuel Restriction: Limited to distillate fuel only.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21
Distillate Oil - Fuel Usage: less than or equal to 3500000 gallons/year using 12-month Rolling Sum	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21
Sulfur Content of Fuel: less than or equal to 0.05 percent by weight	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; meets the requirement of 40 CFR Section 60.42c(d)
The SO2 emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.	40 CFR Section 60.42c(i); Minn. R. 7011.0570
RECORDKEEPING REQUIREMENTS	hdr
The Permittee shall record and maintain records of the amount of distillate fuel oil combusted on a monthly basis. These records may consist of purchase records or receipts. Records must be maintained for at least two years.	40 CFR Section 60.13(i) and February 20, 1992 EPA memorandum to meet the requirements of 40 CFR Section 60.48c(g) and (i)
Recordkeeping: By the 15th day of each month, calculate and record the following: a. the total quanity of fuel oil combusted in the boiler during the previous month, and b. the total quanity of fuel oil combusted in the boiler during the previous 12 months (12-month rolling sum).	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21
Compliance with the emission limits or fuel oil sulfur limits may be determined based on a certification from the fuel supplier as described under 40 CFR Section 60.48c(f)(1).	40 CFR Section 60.42c(h); Minn. R. 7011.0570
The Permittee will obtain a fuel oil supplier certification for each shipment of fuel oil that states that the oil meets the definition of distillate oil in 40 CFR Section 60.41c. Each certification must show the sulfur content of the shipment of fuel oil.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; 40 CFR Section 60.48c(e)(11)
The Permittee will remove the distillate-fired boiler (EU062) from the facility upon commencement of steam being supplied to the Prospect Utility Plant and distributed to the Mayo campus.	Title I Condition: Minn. R. 7007.0020 and 40 CFR Section 52.21(k) [to not cause or contribute to a violation of the State and Federal ambient air quality standards and the ambient air increments established in 40 CFR Section 52.21(c)]
The owner or operator of each affected facility subject to the SO2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR Section 60.42c shall submit reports to the Administrator.	40 CFR Section 60.48c(d); Minn. R. 7011.0570
The Permittee shall keep records and submit reports as required under 40 CFR Section 60.48c(d), including the following information: (1) Calendar dates covered in the reporting period (2) - (10) Not applicable (11) Records of fuel supplier certification as described under 40 CFR Section 60.48c(f)(1). The report shall also include a certified statement signed by the owner or operator of the affected facility that the records of the fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.	40 CFR Section 60.48c(e); Minn. R. 7011.0570
The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.	40 CFR Section 60.48c(j); Minn. R. 7011.0570

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Subject Item: **CE 001 Centrifugal Collector - High Efficiency**

Associated Items: EU 026 Boiler 3 - Franklin

EU 027 Boiler 4 - Franklin

GP 002 Boilers 1, 3 & 4 Franklin

What to do	Why to do it
The operation of this control device is not necessary in order for the proces and source to meet applicable emission limits. However, if the Permittee wishes to take credit for operation of this device for purposes of reporting actual emissions for the emissions inventory, then the Permittee must comply with the following requirements.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
The Permittee shall operate and maintain the cyclone at all times that any process equipment controlled by the cyclone (listed above under Associated Items) is operating. The Permittee shall operate and maintain the cyclone in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
The Permittee shall operate and maintain the control device such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 80 percent control efficiency	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
The Permittee shall operate and maintain the control device such that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 80 percent control efficiency	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored cyclone is in operation.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading and whether or not the recorded pressure drop was within the range specified in this permit.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
Pressure Drop: greater than or equal to 0 inches of water column and less than or equal to 5 inches of water column , unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the cyclone or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the cyclone. The Permittee shall keep a record of the type and date of any corrective action taken for the cyclone.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)

TABLE B: SUBMITTALS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

AQ Permit Technical Advisor
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:
- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Unless another person is identified in the applicable Table, send all other submittals to:

AQ Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
CEM Certification Test Notification	due 30 days before CEM Certification Test	EU025
CEM Certification Test Plan	due 30 days before CEM Certification Test	EU025, GP001
CEM Certification Test Report - Microfiche Copy	due 105 days after CEM Certification Test	EU025, GP001
CEM Certification Test Report	due 45 days after CEM Certification Test	EU025, GP001
Computer Dispersion Modeling Information	due 1,096 days after 11/24/2004. Submit modeling data as specified in MPCA guidance for Modeling Information Requests (for PM10, NOX, and SO2). This modeling information is for data collection purposes, no modeling analysis is required at this time. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Total Facility
COMS Certification Test Notification	due 30 days before COMS Certification Test	EU025
COMS Certification Test Plan	due 30 days before COMS Certification Test	EU025
COMS Certification Test Report - Microfiche Copy	due 105 days after COMS Certification Test	EU025
COMS Certification Test Report	due 45 days after COMS Certification Test	EU025
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup on No. 2 fuel oil.	EU025
Notification of the Date Construction Began	due 30 days after Start Of Construction to add No. 2 fuel oil capability to this emission unit.	EU025
Notification of the date of Equipment Removal/Dismantlement	due 15 days after Equipment Removal and/or Dismantlement	EU062
Relative Accuracy Test Audit (RATA) Notification	due 30 days before CEMS Relative Accuracy Test Audit (RATA)	EU025, GP001

TABLE B: RECURRENT SUBMITTALS

09/12/05

Facility Name: Mayo Medical Center Rochester

Permit Number: 10900084 - 002

What to send	When to send	Portion of Facility Affected
COMS Calibration Error Audit Results Summary	due 30 days after end of each calendar quarter following COMS Calibration Error Audit	EU025
Cylinder Gas Audit (CGA) Results Summary	due 30 days after end of each calendar quarter following Cylinder Gas Audit	EU025
Cylinder Gas Audit (CGA) Results Summary	due 30 days after end of each calendar quarter following end of the calendar quarter in which the Audit was performed	GP001
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following permit issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER must contain all of the information requested in 40 CFR Section 60.7(c). The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunction.	EU025
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following permit issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER must contain all of the information requested in 40 CFR Section 60.7(c). The EER shall indicated all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunction.	EU025
Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	EU025
Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	GP001
Semiannual Deviations Report	due 30 days after end of each calendar half-year following permit issuance . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occured, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year following permit issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner, to both the Commissioner and the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX B: GP 001 EQUATIONS

Facility Name: Mayo Medical Center - Rochester
Permit Number: 10900084-002

Calculation of Percent Load (X)

Equation 1

$$X\ (\%\ Load) = 100 \times \frac{[(\frac{No.\ 6\ gallon}{hr}) \times (\frac{150{,}000\ Btu}{gal})] + [(\frac{NGSCF}{hr}) \times (\frac{1050\ Btu}{SCF})] + [(\frac{No.\ 2\ gallon}{hr}) \times (\frac{140{,}000\ Btu}{gallon})]}{\frac{333{,}000{,}000\ Btu}{hr}}$$

Where:
No. 6 gal = gallons of No. 6 fuel oil burned in Boilers No. 1, 3 and 4
NGSCF = Natural gas standard cubic feet burned in Boilers No. 1, 2, 3, and 4
No. 2 gal = gallons of No. 2 fuel oil burned in Boilers No. 1, 2, 3, and 4

Regression Equations

Regression Equation 1

$$Lbs/hour\ SO_2 = 440.5678 - 33.713368\ X + 1.258905\ X^2 - 0.0221617\ X^3 + [(1.89529 \times 10^{-4})\ X^4] - [(6.216155 \times 10^{-7})\ X^5]$$

where X = % Load of Group 001, when X ≥ 30% and < 100%
For X = 100%, X = 100
For X <30%, lbs/hour SO_2 = (lbs/hour SO_2 at X = 30)(X/30)

Regression Equation 2

$$Lbs/hour\ SO_2 = 172.4657 - 4.799675\ X + 0.1703866\ X^2 - 0.00178913\ X^3 + [(6.605703 \times 10^{-6})\ X^4]$$

where X = % Load of Group 001, when X ≥ 30% and < 100%
For X = 100%, X = 100
For X <30%, lbs/hour SO_2 = (lbs/hour SO_2 at X = 30)(X/30)

Regression Equation 3A

$$Lbs/hour\ SO_2 = 747.176023 - 65.654482\ X + 2.6084623\ X^2 - 0.0461308\ X^3 + [(3.819457 \times 10^{-4})\ X^4] - [(1.2000659 \times 10^{-6})\ X^5]$$

where X = % Load of Group 001, when X ≥ 30% and < 100%
For X = 100%, X = 100
For X <30%, lbs/hour SO_2 = (lbs/hour SO_2 at X = 30)(X/30)

Regression Equation 4A

$$Lbs/hour\ SO_2 = -224.639943 + 21.35106143\ X - 0.36728808\ X^2 + 0.00303156\ X^3 - [(9.0624561 \times 10^{-6})\ X^4]$$

where X = % Load of Group 001, when X ≥ 30% and < 100%
For X = 100%, X = 100
For X <30%, lbs/hour SO_2 = (lbs/hour SO_2 at X = 30)(X/30)

Regression Equation 5A

$$Lbs/hour\ SO_2 = 520.55140 - 36.8204131\ X + 1.35283834\ X^2 - 0.02221213\ X^3 + [(1.7061805 \times 10^{-4})\ X^4] - [(5.0068843 \times 10^{-7})\ X^5]$$

where X = % Load of Group 001, when X ≥ 30% and < 100%
For X = 100%, X = 100
For X <30%, lbs/hour SO_2 = (lbs/hour SO_2 at X = 30)(X/30)

Regression Equation 6A

$$\text{Lbs/hour } SO_2 = -662.6282148 + 67.1349496\ X - 2.11696027\ X^2 + 0.033478096\ X^3 - [(2.5792495 \times 10^{-4})\ X^4] + [(7.69324576 \times 10^{-7})\ X^5]$$

where X = % Load of Group 001, when X ≥ 30% and < 100%
For X = 100%, X = 100
For X <30%, lbs/hour SO_2 = (lbs/hour SO_2 at X = 30)(X/30)

Regression Equation 7

$$\text{Lbs/hour } SO_2 = 671.8081 - 0.0488057\ X + [(1.584654 \times 10^{-6})\ X^2] - [(2.44907 \times 10^{-11})\ X^3] + [(1.832364 \times 10^{-16})\ X^4] - [(5.26303 \times 10^{-22})\ X^5]$$

where X = flowrate (ACFM) from common boiler stack
X ≥ 34,888 and < 110,379
for X < 34,888 lbs/hour SO_2 = (lbs/hour at X = 34,888) (X/34,888)

Regression Equation 8

$$\text{Lbs/hour } SO_2 = 145.09172 - 0.00226428\ X + [(8.176554 \times 10^{-8})\ X^2] - [(7.085795 \times 10^{-13})\ X^3] - [(2.204054 \times 10^{-18})\ X^4]$$

where X = flowrate (ACFM) from common boiler stack
X ≥ 34,888 and < 110,379
for X < 34,888 lbs/hour SO_2 = (lbs/hour at X = 34,888) (X/34,888)

Regression Equation 9A

$$\text{Lbs/hour } SO_2 = 1231.83292 - 0.096774\ X + [(3.213385 \times 10^{-6})\ X^2] - [(4.900466 \times 10^{-11})\ X^3] + [(3.539852 \times 10^{-16})\ X^4] - [(9.774079 \times 10^{-22})\ X^5]$$

where X = flowrate (ACFM) from common boiler stack
X ≥ 34,888 and < 110,379
for X < 34,888 lbs/hour SO_2 = (lbs/hour at X = 34,888) (X/34,888)

Regression Equation 10A

$$\text{Lbs/hour } SO_2 = -282.056366 + 0.02219753\ X - [(3.615565 \times 10^{-7})\ X^2] + [(2.798122 \times 10^{-12})\ X^3] - [(7.85423 \times 10^{-18})\ X^4]$$

where X = flowrate (ACFM) from common boiler stack
X ≥ 34,888 and < 110,379
for X < 34,888 lbs/hour SO_2 = (lbs/hour at X = 34,888) (X/34,888)

Regression Equation 11A

$$\text{Lbs/hour } SO_2 = 229.829217 - 0.00766658\ X + [(2.4292585 \times 10^{-7})\ X^2] - [(2.65187 \times 10^{-12})\ X^3] + [(9.6510869 \times 10^{-18})\ X^4]$$

where X = flowrate (ACFM) from common boiler stack
X ≥ 34,888 and < 110,379
for X < 34,888 lbs/hour SO_2 = (lbs/hour at X = 34,888) (X/34,888)

Regression Equation 12A

$$\text{Lbs/hour } SO_2 = -246.8825 + 0.02299147\ X - [(4.5406345 \times 10^{-7})\ X^2] + [(4.204245 \times 10^{-12})\ X^3] - [(1.450813 \times 10^{-17})\ X^4]$$

where X = flowrate (ACFM) from common boiler stack
X ≥ 34,888 and < 110,379
for X < 34,888 lbs/hour SO_2 = (lbs/hour at X = 34,888) (X/34,888)

SIP Regression Equations (these equations are less restrictive than the corresponding equations in the previous section of Appendix B)

Regression Equation 3

$$\text{Lbs/hour } SO_2 = 272.2042 - 32.885496\ X + 1.839104\ X^2 - 0.0384732\ X^3 + [(3.5301 \times 10^{-4})\ X^4] - [(1.1877 \times 10^{-6})\ X^5]$$

where X = % Load of Group 001, when X ≥ 30% and < 100%
For X = 100%, X = 100
For X <30%, lbs/hour SO_2 = (lbs/hour SO_2 at X = 30)(X/30)

Regression Equation 4

$$\text{Lbs/hour } SO_2 = 980.8598 - 82.991667\ X + 2.979598\ X^2 - 0.0471137\ X^3 + [(3.5006 \times 10^{-4})\ X^4] - [(9.970125 \times 10^{-7})\ X^5]$$

where X = % Load of Group 001, when X ≥ 30% and < 100%
For X = 100%, X = 100
For X <30%, lbs/hour SO_2 = (lbs/hour SO_2 at X = 30)(X/30)

Regression Equation 5

$$\text{Lbs/hour } SO_2 = -781.00 + 71.852078\ X - 2.037781\ X^2 + 0.0281917\ X^3 - [(1.90495 \times 10^{-4})\ X^4] + [(5.04111 \times 10^{-7})\ X^5]$$

where X = % Load of Group 001, when X ≥ 30% and < 100%
For X = 100%, X = 100
For X <30%, lbs/hour SO_2 = (lbs/hour SO_2 at X = 30)(X/30)

Regression Equation 6

$$\text{Lbs/hour } SO_2 = -523.91 + 41.871645\ X - 0.833163\ X^2 + [(7.26395 \times 10^{-3})\ X^3] - [(2.33717 \times 10^{-5})\ X^4]$$

where X = % Load of Group 001, when X ≥ 30% and < 100%
For X = 100%, X = 100
For X <30%, lbs/hour SO_2 = (lbs/hour SO_2 at X = 30)(X/30)

Regression Equation 9

$$\text{Lbs/hour } SO_2 = 670.1254 - 0.0617589\ X + [(2.444266 \times 10^{-6})\ X^2] - [(4.13817 \times 10^{-11})\ X^3] + [(3.2021 \times 10^{-16})\ X^4] - [(9.26922 \times 10^{-22})\ X^5]$$

where X = flowrate (ACFM) from common boiler stack
X ≥ 34,888 and < 110,379
for X < 34,888 lbs/hour SO_2 = (lbs/hour at X = 34,888) (X/34,888)

Regression Equation 10

$$\text{Lbs/hour } SO_2 = 970.4049 - 0.0709409\ X + [(2.20629 \times 10^{-6})\ X^2] - [(3.02779 \times 10^{-11})\ X^3] + [(1.95714 \times 10^{-16})\ X^4] - [(4.85393 \times 10^{-22})\ X^5]$$

where X = flowrate (ACFM) from common boiler stack
X ≥ 34,888 and < 110,379
for X < 34,888 lbs/hour SO_2 = (lbs/hour at X = 34,888) (X/34,888)

Regression Equation 11

$$\text{Lbs/hour } SO_2 = -819.36 + 0.064791\ X - [(1.59705 \times 10^{-6})\ X^2] + [(1.92298 \times 10^{-11})\ X^3] - [(1.13243 \times 10^{-16})\ X^4] + [(2.61498 \times 10^{-22})\ X^5]$$

where X = flowrate (ACFM) from common boiler stack
X ≥ 34,888 and < 110,379

for X < 34,888 lbs/hour SO_2 = (lbs/hour at X = 34,888) (X/34,888)

Regression Equation 12

$$\text{Lbs/hour } SO_2 = -554.982 + 0.038064\ X - [(6.643551 \times 10^{-7})\ X^2] + [(5.097686 \times 10^{-12})\ X^3] - [(1.44771 \times 10^{-17})\ X^4]$$

where X = flowrate (ACFM) from common boiler stack
$X \geq 34{,}888$ and < 110,379
for X < 34,888 lbs/hour SO_2 = (lbs/hour at X = 34,888) (X/34,888)

APPENDIX C– Insignificant Activities

Facility Name: Mayo Medical Center - Rochester
Permit Number: 10900084-002

Insignificant Activities and Applicable Requirements

Minn. R. 7007.1300, subpart (except as noted)	Rule Description of the Activity	Applicable Requirement
3(F)	Cleaning operations: commercial laundries, not including dry cleaners and industrial launderers. • 2 laundry dryers at Charter House	Minn. R. 7011.0610
3(G)	Emissions from a laboratory, as defined in the subpart. • There are numerous laboratories throughout the Downtown Campus experimental study, teaching, testing of drugs, chemicals, and chemical compounds	Minn. R. 7011.0510/0515 + Minn. R. 7011.0610 + Minn. R. 7011.0710/0715
3(H)	Miscellaneous 3. brazing, soldering, or welding equipment • Various pieces of welding and soldering equipment are located around the campus	Minn. R. 7011.0610 + Minn. R. 7011.0710/0715
3(K)	Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not associated with primary production processes at the stationary source, such as spray painting of buildings, machinery, vehicles, and other supporting equipment. • A small paint booth at Charter House is used infrequently with spray paint in aerosol cans	Minn. R. 7011.0710/0715

Minn. R. 7007.1300, subpart (except as noted)	Rule Description of the Activity	Applicable Requirement
4	Emissions units with emissions less than all the following limits but not included in subpart 2: A. potential emissions of 5.7 pounds per hour or actual emissions of two tons per year of carbon monoxide; B. potential emissions of 2.28 pounds per hour or actual emissions of one ton per year for particulate matter, particulate matter less than ten microns, nitrogen oxide, sulfur dioxide, and VOCs; and C. for hazardous air pollutants, emissions units with: (1) potential emissions of 25 percent or less of the hazardous air pollutant thresholds listed in subpart 5; or (2) combined HAP actual emissions of one ton per year unless the emissions unit emits one or more of the following HAPs: carbon tetrachloride; 1,2-dibromo-3-chloropropane; ethylene dibromide; hexachlorobenzene; polycyclic organic matter; antimony compounds; arsenic compounds, including inorganic arsine; cadmium compounds; chromium compounds; lead compounds; manganese compounds; mercury compounds; nickel compounds; selenium compounds; 2,3,7,8-tetrachlorodibenzo-p-dioxin; or dibenzofuran. <u>Mayo Building</u> • Electrical Shop Parts Cleaner • Plumbing Shop Parts Cleaner • Hickman Cell • Fixer Tank A and B • Fixer Mix Tank • Fixer Holding Tank	Minn. R. 7011.0510/0515 + Minn. R. 7011.0610 + Minn. R. 7011.0710/0715 NOTE: All storage vessels (as defined at Minn. R. 7011.1500, subp. 11) are subject to Minn. R. 7011.1500-7011.1520

Minn. R. 7007.1300, subpart (except as noted)	Rule Description of the Activity	Applicable Requirement
4 (cont'd)	Siebens Building • Emergency Pump (0.39 MMBtu/hr gasoline Medical Sciences Building • Lead Pot • Lead Working • Lacquer Thinner • Ink Cleaning • Decalcifying • Degreasing • Sandblaster No. 1 • Sandblaster No. 2 • Ink Remover Use • Acetic Acid Use • Xylene Medical Sciences Building 6,000 gal Waste Solvent Tank Franklin Cabinet Shop • Lacquer Thinning • Gluing Franklin Heating Station • Two 150,000 gal No. 6 Fuel Oil Tanks • Three 4,500 gal No. 2 Fuel Oil Tanks • Flux Cleaning • Sandblaster • Parts Cleaner • Degreasing • Marley Cooling Tower (372 MGal/hr) • EU028's Cooling Tower (40 MGal/hr) • EU029's Cooling Tower (40 MGal/hr) College Apartments • Boiler (2.1 MMBtu/hr natural gas) Methodist Hospital • Parts Lubrication • 10,000 gal No.2 Fuel Oil Tank • Parts Washer	Minn. R. 7011.0510/0515 + Minn. R. 7011.0610 + Minn. R. 7011.0710/0715 NOTE: The 6,000 gallon waste solvent tank at the Medical Sciences Building is periodically subject to Minn. R. 7011.1500 – 7011.1520, depending on the contents of the tank at a given time.

Minn. R. 7007.1300, subpart (except as noted)	Rule Description of the Activity	Applicable Requirement
4 (cont'd)	• Gluing • Two Ethylene Oxide Sterilizers (For each, VOC PTE = 0.05 lb/hr, Ethylene Oxide PTE = 0.187 ton/yr) <u>Charter House</u> • Cooling Tower (0.48 MGal/hr) • Parts Cleaner <u>Ozmun Building</u> • 10,000 gal No. 2 Fuel Oil Tank • Fixed Emergency Generator (0.84 MMBtu/hr diesel fuel) • Portable Emergency Generator (0.84 MMBtu/hr diesel fuel) (Actual NOx = 0.013 ton/yr) • Two Natural Gas/Distillate Oil Fired Boilers (6.921 MMBtu/hr, each) (For each, NOx VOC PTE = 0.99 lb/hr) <u>Baldwin Building</u> • Printing Activities <u>Hilton Building</u> • Solvent Tank (VOC PTE = 0.031 lb/hr, HAP PTE = 0.180 ton/yr) <u>Prospect Utility Plant</u> • Cooling Tower (1080 MGal/yr) <u>Pavilion Building</u> • Boiler No. 1 (2.009 MMBtu/hr natural gas) • Boiler No. 2 (2.009 MMBtu/hr natural gas) • Diesel Emergency Generator (0.84 MMBtu/hr) • Natural Gas Emergency Generator (0.15 MMBtu/hr <u>Massey Building</u> • Boiler No. 1 (0.366 MMBtu/hr natural gas)	Minn. R. 7011.0510/0515 + Minn. R. 7011.0610 + Minn. R. 7011.0710/0715

Minn. R. 7007.1300, subpart (except as noted)	Rule Description of the Activity	Applicable Requirement
4 (cont'd)	• Boiler No. 2 (0.366 MMBtu/hr natural gas) • Boiler No. 2 (0.366 MMBtu/hr natural gas) <u>Cliffs House Apartments</u> • Boiler (0.525 MMBtu/hr natural gas) <u>Graham Building</u> • Boiler No. 1 (0.3 MMBtu/hr natural gas) • Boiler No. 2 (0.3 MMBtu/hr natural gas) <u>West Employee Ramp</u> • Emergency Generator (0.84 MMBtu/hr diesel fuel) <u>MRI Research Center</u> • North Boiler (0.36 MMBtu/hr) • South Boiler (0.288 MMBtu/hr)	
Minn. R. 7008.4110	<u>Processing operations</u> 2. Equipment venting particulate matter (PM) or particulate matter less than 10 microns (PM_{10}) inside a building, provided that emissions from the equipment are: a). filtered through an air cleaning system; and b). vented inside of the building 100% of the time. • 2nd Floor Franklin Carpenter Shop	Minn. R. 7011.0710/0715

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 10900084-002

This technical support document is intended for all parties interested in the permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp.1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the preliminary determination to issue the permit.

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 8062)
Mayo Foundation 200 First Street Southwest Rochester, MN 55905	Mayo Medical Center – Rochester, MN 200 First Street Southwest Rochester, MN 55905
Contact: Karl Corrigan Phone: (507) 284-2382	

1.2. Description of the Permitted Facility

Mayo Medical Center – Rochester, MN (Mayo Clinic) is a health care facility located in Rochester, Minnesota. The "facility" permitted in this document includes all buildings owned and/or operated by the Mayo Foundation in downtown Rochester, Minnesota, located on contiguous property with the Franklin Heating Station, Rochester Methodist Hospital, and the Prospect Utility Plant.

The non insignificant emission units at the facility consist of the following (see Appendix C to the permit for a listing of insignificant activities located at the Mayo facility):

Franklin Heating Station

- Three boilers, each capable of burning natural gas, No. 2 fuel oil, and No. 6 fuel oil (which includes small amounts of waste oil) (EU 024, EU 026, EU 027)
- One boiler capable of burning natural gas (and permitted to burn No. 2 fuel oil) (EU 025)
- One paint booth (EU 004)
- Wood sanding operations in paint booth (EU 006)
- Metal sanding operations in paint booth (EU 007)
- Two diesel-powered generators (EU 028, EU 029)
- Two cooling towers (EU 031, EU 033)

Rochester Methodist Hospital

- One paint booth (EU 009)
- Three diesel-powered emergency generators (EU 011, EU 012, EU 013)

Prospect Utility Plant

- Four diesel-powered emergency generators (EU 058, EU 059, EU 060, EU 061)
- One boiler capable of burning No. 2 fuel oil (EU 062)

Boilers 3 and 4 at the Franklin Heating Station are controlled by a multiclone control device. However, because the multiclone is not needed for compliance purposes, Mayo requested that provisions pertaining to its operation be removed from the Title V permit. Because operation of the multiclone is not required, the facility cannot account for its operation when calculating actual emissions for inventory purposes.

The Franklin Heating Station has an accordion filter control for the paint booth (which also includes wood and metal sanding operations). However, a hood capture efficiency has not been determined for the system. Therefore, the booth is considered to be uncontrolled for permitting and annual emissions inventory calculation purposes. The same is true for the paint booth at the Rochester Methodist Hospital.

While Mayo Clinic is owned and operated by the Mayo Foundation, it is not contiguous with other Mayo facilities in Rochester (ie., Saint Marys Hospital and the Waste Management Facility), and thus is a separate source under the New Source Review and Part 70 regulations. This permit is a Part 70 operating permit. The facility is an existing major source under New Source Review. No new modifications are approved through this permit (a previously approved modification to Boiler No. 2 at the Franklin Heating Station is included in the permit). The facility is not a major source of HAP emissions, by virtue of accepting a synthetic minor limit.

The facility is located in an area that was previously designated as non-attainment for SO_2. However, the area currently meets the ambient air quality standards, and was officially redesignated as "attainment" on May 8, 2001. The facility has been subject to a federally enforceable permit (part of Minnesota's state implementation plan, or SIP, for attaining ambient air quality standards) containing requirements contributing to the correction of the non-attainment problem and the ultimate redesignation. The requirements of that permit have been incorporated into this permit as non-expiring Title I conditions. This permit will ultimately replace the existing permit and be incorporated into the SIP (separately from the permit issuance process).

1.3 Description of any Changes Allowed with this Permit Issuance

Reasonable Further Progress

This amendment (-002) makes reasonable further progress toward correcting the predicted exceedances of SO_2 ambient air standards, which were predicted though the modeling for the Rochester Public Utilities (RPU) Silver Lake Steam Sale Project (March 2003). That modeling, using Minneapolis/St. Paul meteorology, indicated potential SO_2 exceedances in the vicinity of Franklin Heating Station, which is part of the Mayo complex. Boilers and generators at Franklin Heating Station were determined to be responsible for the major portion of the model-predicted exceedances.

As part of reasonable further progress to address this, Mayo did additional modeling (with the same Minneapolis/St. Paul meteorology) and proposed revised limits on the boilers and generators at Franklin Heating Station. These proposed revisions include revised (lowered) limits on five of the twelve SO_2

emission limits, and ten revised regression equations to govern SO_2 limits on the boilers, to replace 10 of the existing 12 regression equations.

Since some of the limits proposed to be revised are SIP limits (included in the State Implementation Plan for SO_2 emissions in the Rochester MN area), proposed changes to those limits cannot simply be made in the absence of a corresponding revision to the SIP. However, more restrictive limits can be added to the permit, and used to demonstrate compliance with the SIP conditions. Please see Table 4, below, for a summary of the actual changes in SO_2 limits and regression equations which were made in the permit.

The permit also incorporates a change requested by U.S. EPA at the time of issuance of the Part 70 permit (-001), but which was not done at that time. EPA requires that a timeframe be associated with the SIP condition to report the calculated sulfur content of fuel oil in the oil tanks (GP001). That change is included in this permit action.

Future Modeling

MPCA and its contractors are preparing updated modeling information for future State Implementation Plan (SIP) revisions for Rochester for SO_2 and PM_{10}.

On March 25, 2004, MPCA issued a request for work plans titled "Request for Work Plans – Air Dispersion Modeling: Initial Data Gathering for Rochester and Olmsted County State Implementation Plan Maintenance Areas (ROCSIPMA) for Sulfur Dioxide (SO_2) and Particulate Matter Less Than Ten Microns (PM_{10})".

MPCA has hired three (3) contractors to review and update modeling information for key facilities in Rochester, MN. MPCA selected Environmental Quality Management (EQM) to review and update modeling information for emission sources owned and operated by Mayo (Franklin Heating Station, St. Mary's Hospital, and Prospect Utility Plant), and IBM-Rochester. This work is scheduled to be done by June 30, 2005, or shortly thereafter.

MPCA also is working with the U.S. Environmental Protection Agency, Region V (USEPA Region V) on model selection, meteorology, and related items. USEPA Region V and MPCA have reached agreement that the future ROCSIPMA modeling will use meteorological data from Rochester instead of Minneapolis/St. Paul. However, EPA and MPCA agreed that for purposes of this permit amendment, to finish this modeling exercise for the RPU Steam Plant Project using the same Minneapolis/St. Paul meteorology as the RPU steam project modeling, but hereafter use Rochester meteorological data. MPCA may also use newer versions of AERMOD and related pre-processors (e.g., AERMAP, AERMET, and BPIP-PRIME) as well as revised land use land cover (LULC) parameterizations.

Preliminary test runs using Rochester meteorological data indicate further SO_2 emission reductions may be necessary to protect ambient standards – particularly for above ground-level "flagpole" receptors at the downtown Holiday Inn.

1.4. Facility Emissions:

Table 1 provides a summary of the total facility limited potential emissions. The potential emissions are unchanged from what was allowed through the original Part 70 permit, 10900084-001.

Table 1. Total Facility Potential to Emit Summary

	PM tpy	PM_{10} tpy	SO_2 tpy	NO_x tpy	CO tpy	VOC tpy	Sulfuric Acid Mist tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	407	348	3867	803	215	155	141	9	12
Total Facility Actual Emissions (2002)*	8	7	22	335	131	20	Not reported in emission inventory		

* Obtained from MPCA website database of the Minnesota Criteria Pollutant Emission Inventory.

Table 2. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD	YES		
Part 70 Permit Program	YES		
Part 63 NESHAP		YES	

2. Regulatory and/or Statutory Basis

New Source Review

The facility is an existing major source under New Source Review regulations. No physical changes are authorized by this permit.

National Ambient Air Quality Standards (NAAQS)

Because the facility was identified as a potentially-culpable source in the Rochester SO_2 nonattainment area, the facility is subject to limitations on fuel usage that restricts the SO_2 emissions from the facility. Changes to those requirements are not effective until incorporated into the SIP. The version of the permit that currently is part of the SIP and which contains the Title I SIP conditions, is included as Attachment 2 to this technical support document.

Part 70 Permit Program

The facility is a major source under the Part 70 permit program, since permitted emissions of CO, NO_X, PM, PM_{10}, and SO_2 exceed 100 tons per year.

New Source Performance Standards (NSPS)

Portions of the facility are subject to the following New Source Performance Standards contained in 40 CFR Part 60. Changes authorized by this permit do not affect that applicability.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility has accepted , through a previous permit, a limit on HAP emissions such that it is a non-major source under 40 CFR pt. 63.

Compliance Assurance Monitoring (CAM)

CAM does not apply at this time to the emissions units affected by the major amendment, for the following reasons:

- EU024, EU025, EU028, and EU029 are uncontrolled.
- EU026 and EU025 have particulate control, but the potential controlled PM and PM_{10} are less than 100 tpy.

Minnesota State Rules

Portions of the facility are subject to the following Minnesota Standards of Performance:

- Minn. R. 7011.0075 Control Equipment General Requirements
- Minn. R. 7011.0080 Monitoring and Recordkeeping For Listed Control Equipment
- Minn. R. 7011.0505 Determination of Applicable Standards of Performance
- Minn. R. 7011.0510 Standards of Performance for Existing Indirect Heating Equipment
- Minn. R. 7011.0515 Standards of Performance for New Indirect Heating Equipment (if Boiler No. 2 is altered to accommodate No. 2 fuel oil)
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment
- Minn. R. 7011.1505 – Standards of Performance for Storage Vessels
- Minn. R. 7011.2300 Standards of Performance for Stationary Internal Combustion Engines

Table 3 provides a summary of the applicable regulations and standards affected by this permit action.

Table 3. Regulatory Overview of Amendment

EU, GP, or SV	Applicable Regulations	Comments:
GP 001	40 CFR Part 50; Minn. Stat Sec. 116.07, subds. 4a and 9; 7007.0100, subps.7A, 7L, and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010 – 7009.0010 Title I – SIP conditions	Each of these units is subject to conditions contained in the State Implementation Plan for SO_2. Modeling has shown that lower limits and revised regression equations on the boiler SO_2 limits will not endanger ambient SO_2 standards. However, since the conditions are included in the SIP, they cannot be changed except in conjunction with a SIP change, or by adding new requirements that are more restrictive than the SIP requirements.

3. Technical Information

3.1 Proposed Revised SO_2 Emission Limits

Attachment 1 to this Technical Support Document is the documentation submitted by Mayo in support of the proposed revisions to the sulfur content limit and SO_2 regression equations for the Franklin Heating Station (FHS). You are encouraged to read Attachment 1, since it provides a good description of and explanation for the requested changes. As described previously, changes cannot be made to SIP limits in

the absence of a SIP revision. Limits or requirements that are more restrictive than the SIP conditions can be added to the permit, if compliance ensures compliance with the less restrictive SIP condition.

The proposed revised regression equations governing the FHS boiler SO_2 limits result in lower SO_2 ambient impacts than the existing regression equations. Nevertheless, those changes are added as new, more restrictive permit conditions; the existing SIP conditions remain in the permit in the absence of revising the SIP.

The following table summarizes the changes requested, and the changes actually made to the permit.

Table 4. Explanation of Changes Made

Requested Change	**Actual Change**	**Comments**
SO_2 Emission Limits when no CEMS are used		
Replace Regression Equations (RE) 2 with proposed new RE2. Change 1-hour average limit when generators are not operating from 285 lb/hr to 266 lb/hr.	Made changes as requested.	SO_2 limits governed by RE2 are not SIP limits. Change lowers overall limit and reduces 1-hour impact (see Attachment 1 graphic) when diesel engines are not operating.
Replace RE3 with proposed new RE3.	Added a new RE3A and a condition to comply with RE3A.	SO_2 limits governed by RE3 are SIP limits. SIP limit can't be changed. Instead, a more restrictive RE3A (applicant's proposed new RE3) is added. Change reduces 3-hour impact (see Attachment 1 graphic) when diesel engines are operating.
Replace RE4 with proposed new RE4. Change 3-hour average limit when generators are not operating from 400 lb/hr to 360 lb/hr.	Added a new RE4A and a condition to comply with RE4A and new (lowered) SO_2 hourly limit.	SO_2 limits governed by RE4 are SIP limits. SIP limit can't be changed. Instead, a more restrictive RE4A (applicant's proposed new RE4) is added, along with the proposed lower SO_2 hour limit. Change results in lower overall SO_2 hourly emissions and reduces 3-hour impact (see Attachment 1 graphic) when diesel engines are not operating.
Replace RE5 with proposed new RE5.	Added a new RE5A and a condition to comply with RE5A.	SO_2 limits governed by RE5 are SIP limits. SIP limit can't be changed. Instead, a more restrictive RE5A (applicant's proposed new RE5) is added. Change reduces 24-hour impact (see Attachment 1 graphic) when diesel engines are operating.

Requested Change	Actual Change	Comments
Replace RE6 with proposed new RE6.	Added a new RE6A and a condition to comply with RE6A.	SO_2 limits governed by RE6 are SIP limits. SIP limit can't be changed. Instead, a more restrictive RE6A (applicant's proposed new RE6) is added. Change reduces 24-hour impact (see Attachment 1 graphic) when diesel engines are not operating.
SO_2 Emission Limits when CEMS are used		
Replace RE8 with proposed new RE8. Change 1-hour average limit when generators are not operating from 285 lb/hr to 266 lb/hr.	Made changes as requested.	SO_2 limits governed by RE8 are not SIP limits. Change lowers overall limit and reduces 1-hour impact (see Attachment 1 graphic) when diesel engines are not operating.
Replace RE9 with proposed new RE9. Change 3-hour average limit when generators are operating from 327 lb/hr to 325 lb/hr.	Added a new RE9A and a condition to comply with RE9A and new (lowered) SO_2 hourly limit.	SO_2 limits governed by RE9 are SIP limits. SIP limit can't be changed. Instead, a more restrictive RE9A (applicant's proposed new RE9) is added, along with the proposed lower SO_2 hour limit. Change results in lower overall SO_2 hourly emissions and reduces 3-hour impact (see Attachment 1 graphic) when diesel engines are operating.
Replace RE10 with proposed new RE10. Change 3-hour average limit when generators are not operating from 401 lb/hr to 360 lb/hr.	Added a new RE10A and a condition to comply with RE10A and new (lowered) SO_2 hourly limit.	SO_2 limits governed by RE10 are SIP limits. SIP limit can't be changed. Instead, a more restrictive RE10A (applicant's proposed new RE10) is added, along with the proposed lower SO_2 hour limit. Change results in lower overall SO_2 hourly emissions and reduces 3-hour impact (see Attachment 1 graphic) when diesel engines are not operating.
Replace RE11 with proposed new RE11.	Added a new RE11A and a condition to comply with RE11A.	SO_2 limits governed by RE11 are SIP limits. SIP limit can't be changed. Instead, a more restrictive RE11A (applicant's proposed new RE11) is added. Change reduces 24-hour impact (see Attachment 1 graphic) when diesel engines are operating.
Replace RE12 with proposed new RE12.	Added a new RE12A and a condition to comply with RE12A.	SO_2 limits governed by RE12 are SIP limits. SIP limit can't be changed. Instead, a more restrictive RE12A (applicant's proposed new RE12) is added. Change reduces 24-hour impact (see Attachment 1 graphic) when diesel engines are not operating.

3.3 Periodic Monitoring

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

In evaluating the monitoring included in the permit, the MPCA considers the following:

- The likelihood of violating the applicable requirements;
- Whether add-on controls are necessary to meet the emission limits;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- The technical and economic feasibility of possible periodic monitoring methods; and
- The kind of monitoring found on similar units elsewhere.

Table 5 summarizes the periodic monitoring requirements for those emission units and associated limits which are affected by this permit action (-002).

Table 5. Periodic Monitoring

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
GP001	SO_2: limits vary with boiler load, based on regression equations (SIP limits and modeling limits)	Recordkeeping	Permit and SIP require determination of applicable limits based on boiler load. Regression equations are used for this. For 3-hour and 24-hour limits, limits and regression equations in the SIP remain in effect; when the new limits and regression equations are incorporated into the SIP, the existing SIP limits can be removed from the permit.

3.4 Insignificant Activities

Mayo Clinic has several operations which are classified as insignificant activities. These are listed in Appendix C to the permit. For a detailed discussion of the insignificant activities, see the Technical Support Document for Air Emission Permit No. 10900084-001.

3.5 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be tracked (e.g., limits, submittals, etc.), should be in Table A or B. The main reason is that the appendices are word processing sections and are not part of the tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. Staff must generate these.

3.6 Public and EPA Comments

Public Notice Period: 7/21/05 – 8/19/05
EPA 45-day Review Period: 7/21/05 - 9/6/05

No comments were received from the public during the public notice period, or from the EPA during their review period. No changes were made to the permit after beginning the public notice period.

4. Conclusion

Based on the information provided by Mayo Clinic, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 10900084-002 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Permit Team:

Permit Engineer	Toni Volkmeier
Enforcement	Greg Berger
Modeling Review	Dennis Becker
Peer Review	Amrill Okonkwo

Attachments:
1. Proposed Revised Sulfur Dioxide Emission Limits (Modeling Summary)
2. Copy of Existing Permit with Title I SIP Conditions