AIR EMISSION PERMIT NO. 16300005- 004

IS ISSUED TO

Northern States Power Company
For the
NSP - ALLEN S KING GENERATING PLANT
1103 King Plant Road
Oak Park Heights, Washington County, MN 55003

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

Permit Type	Application Date	Issuance Date	Permit Action No.
Total Facility Operating Permit	September 15, 1995	July 21, 1998	001
Major Amendment	December 12, 1997	March 5, 1999	002
Administrative Amendment	NA	June 26, 2000	003
Major Amendment	December 11, 2000, & August 4, 2003	See below	004

This permit authorizes the Permittee to construct and 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; Part 70 and Acid Rain

Issue Date: June 23, 2004

Expiration: July 21, 2003*
All Title I Conditions do not expire.

*The Permittee can continue to operate this facility after the expiration date of this permit per the provision under Minn. R. 7007.0450, subp. 3 (Title V Re-issuance application received on January 17, 2003).

Ann M. Foss
Major Facilities Section Manager
Majors and Remediation 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, not withstanding 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:

The Allen S. king Plant is a coal-fired electric utility located on Highway 95 in Oak Park Heights, Minnesota; the facility's mailing address in Bayport. The facility's emission units consists of boilers, fuel and ash storage and handling equipment, and emergency diesel engines. The facility's main power boiler (Boiler No. 1) is a coal-fired cyclone boiler with a generating capacity of 550 megawatts (MW) of electricity. Pollution control equipment on the main boiler consists of an electrostatic precipitator to control Particulate Matter (PM) emissions. Emissions from fuel and ash storage and handling equipment, which are potential sources of PM emissions are controlled using water and other dust suppressants, enclosures, and/or fabric filters.

Major Amendment Description:

This permit amendment authorizes replacement of an existing uncontrolled coal conveyor system (four conveyors) with a new conveyor system controlled by a fabric filter, allows replacement of the Oxygen monitoring requirement when combusting non-coal approved fuel-types with a Carbon Dioxide Continuous Emissions Monitoring System; changes the existing operating limit for the auxiliary boilers from an hourly limit to a limit of total fuel combusted per year; updates Continuous Opacity Monitoring requirements in the permit; and revises permit conditions to reflect the PM_{10} modeling analysis conducted for the entire facility.

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

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
OPERATIONAL LIMITS	hdr
Truck and hauler unloading stations: Control fugitive particulate emissions from the unloading of coal and petroleum coke from trucks or haulers by dust suppression methods so that emissions from such sources are minimized.	Minn. R. 7011.1105, subp. C
Operating practices: Clean up all coal spilled on roads or access areas as soon as practicable using methods that minimize the amount of dust suspended. Maintain air pollution control equipment in proper operating condition and utilize air pollution control systems as designed.	Minn. R. 7011.1105, subp. I
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
Comply with Fugitive Emissions Control Plan: Follow the actions and recordkeeping specified in the Fugitive Emissions Control Plan required in Table B. The plan may be amended by the Permittee with the Commissioner's approval. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive control plan, the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors as requested by the Commissioner.	Minn. R. 7007.0800, subp. 2
Operating and/or production limits may be placed on emission units based on operating conditions during compliance testing. Limits set as a result of a compliance test (conducted before or after permit issuance) apply until new operating/production limits are set following formal review of a performance test as specified by Minn. R. 7017.2025.	Minn. R. 7017.2025
Any stationary internal combustion engines at the facility, including those which qualify as insignificant activities under Minn. R. 7007.1300, must meet the performance standards set out in Minn. R. 7011.2300.	Minn. R. 7011.2300
Control Equipment Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. Inspect and maintain control equipment adequately to minimize breakdowns.	Minn. R. 7007.0800, subp. 14; Minn. R. 7007.0800, subp 16(J)
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)
Temporary boilers or engines may be brought on site for the purpose of providing steam, heat or electrical power in place of boilers or generators that are temporarily out of operation for less than one year. The temporary units may not be operated at the same time as the permanent units that they are meant to replace, except for up to 8 hours during start-up and shutdown transition periods. Temporary units must have potential emission rates in pounds/hour for all criteria pollutants that are less than permit emission limits and the potential emission rates of the permanent units that they are replacing. Temporary engines may be used on site that do not replace existing equipment if the use qualifies as an insignificant activity under Minn. R. 7007.1300, subp. 2(B).	Minn. R. 7007.0800, subp. 2
Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises, to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
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
MONITORING REQUIREMENTS	hdr
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(D)

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

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 required during periods when the process is shutdown, such as for system breakdowns, repairs, calibration checks, and zero and span adjustments (as applicable). Monitoring records should reflect any such periods of process shutdown.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment other than continous emission and opacity monitors (requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
TESTING REQUIREMENTS	hdr
Performance Test: Conduct all performance tests in accordance with Minn. R. ch. 7017, unless otherwise noted in Tables A, B, 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	Minn. R. 7017.2030, subp. 1-4 and Minn. R. 7017.2035, subp. 1-2
RECORDKEEPING, NOTIFICATIONS, AND SUBMITTALS	hdr
Recordkeeping and Reporting for Temporary Boilers and Engines: Keep the following records on-site: documentation of hours of operation of the temporary units, a statement for all periods of temporary unit operation that the replaced permanent unit is not also operating, and calculations demonstrating that emissions are less than or equal to emissions from the permanent units being replaced. Notify the Commissioner if temporary and permanent units are operated simultaneously, except as allowed by this permit. Make verbal notification within 2 days, and written notification with the semi-annual deviations report.	Minn. R. 7007.0800, subp. 2
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
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. ch. 7002

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Record keeping: Retain all records at the stationary source or at another site where the records are readily accessible 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 strip-chart 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)
Record keeping: 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)
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)
Application for Permit Amendment: If you need a permit amendment, submit 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 7007.1500
The permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
CRITERIA POLLUTANT MODELING	hdr
Parameters Used in Modeling: The parameters used in the modeling performed for determining emission and/or operational limits, if applicable for this facility are listed in Appendix I of this permit. If the Permittee intends to change any of these parameters, the Permittee must submit the revised parameters to the Commissioner and receive written approval before making any changes. The revised parameter information submittal must include, but is not limited to: the locations, heights and diameters of the stacks; locations and dimensions of nearby buildings; velocity and temperatures of the gases emitted; and the emission rates. The plume dispersion characteristics due to the parameter revisions must equal or exceed the dispersion characteristics modeled for this permit, and the Permittee shall demonstrate this in the proposal.	Minn. R. 7009.0020
Parameters Used in Modeling (continued): If the information does not demonstrate equivalent or better dispersion characteristics, or if a conclusion cannot readily be made about the dispersion, the Permittee must remodel. For changes that do not involve increase in an emission rate and that do not require a permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before making the change to any parameter. For changes involving increases in emission rates and that require a minor permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before making the change to any parameter. For changes involving increases in emission rates and that require a permit amendment other than a minor amendment, the proposal must be submitted prior to or with the permit amendment application. This is a state only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act.	Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **GP 001 Boiler Nos. 11 & 12**

Associated Items: EU 007 Boiler 11

EU 008 Boiler 12

What to do	Why to do it
Fuel Usage: less than or equal to 770 million cubic feet/year using 12-month Rolling Sum calculated monthly.	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21
By the last day of each month, record the total amount and type of fuel burnt in GP 001 for the previous month and calculate and record the total amount and type of fuel burnt in GP 001 for the previous 12-month period.	Title I Condition: recordkeeping to avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 5
Allowable fuel use: limited to natural gas and propane.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **GP 002 Emergency Generators**

Associated Items: EU 013 Emergency Engine Generator 1EEG-GEN-0002

EU 014 Emergency Engine Generator 1EEG-GEN-0003

What to do	Why to do it
Operating Hours: less than or equal to 816 hours/year using 12-month Rolling Sum calculated monthly.	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21
By the last day of each month, record the total hours of operation of GP 002 for the previous month and calculate and record the total hours of operation of GP 002 for the previous 12-month period.	Title I Condition: recordkeeping to avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **GP 003 Stockpiles, Pile Construction and Reclaim**

Associated Items: FS 003 North Live Coal Pile (1.4 acres)

FS 004 South Live Coal Pile (1.4 acres)

FS 005 Coal Stacker (2400 tons/hr)

FS 006 Coal Silo Unloading (2400 tons/hr)

FS 007 Coal Reclaim Hoppers (2400 tons/hr)

FS 009 Western Coal Pile (Wyoming) (3.8 acres)

FS 010 Western Coal Pile (Montana) (1.8 acres)

What to do	Why to do it
This requirement applies individually to each source in this group. Stockpiles, stockpile contruction and reclaiming: (1) control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emission are minimized. (2) in the alternative, use an underground bottom feed (plow) of coal to an underground conveyor system provided the exhaust gases from the enclosed spaces do not contain particulate matter in excess of 0.020 grains per dry standard cubic foot (gr/dscf).	Minn. R. 7011.1105 (F)(1) and (2)
Coal/Coke Handling Operating Hours: Winter 6:00 a.m. through 5:00 p.m. Spring 6:00 a.m. through 6:00 p.m. Summer 6:00 a.m. through 8:00 p.m. Fall 6:00 a.m. through 5:00 p.m.	Minn. R. 7009.0020
Recordkeeping: The Permittee is required to keep a log of daily Coal/Coke Handling Operating Hours.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **GP 004 Flite Conveyors (NSPS Subpart Y)**

Associated Items: CE 014 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 016 East Flite Conveyor (AFC-2A)

EU 017 East Flite Conveyor (AFC-2B)

EU 018 West Flite Conveyor (AFC-1A)

EU 019 West Flite Conveyor (AFC-1B)

SV 018 Flite Conveyor Dust Collector

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.02 grains/dry standard cubic foot	Minn. R. 7011.1105, subp. G(1)
Opacity: less than or equal to 20 percent opacity	40 CFR Section 60.252(c); Minn. R. 7011.1150, and Minn. R. 7011.1105, subp. G(2)
Particulate Matter < 10 micron: less than or equal to 0.008 grains/dry standard cubic foot	Minn. R. 7009.0020
B. OPERATIONAL LIMITS	hdr
Air Flow Rate: less than or equal to 16,000 actual cubic feet/minute . The Permittee shall keep the baghouse system design specifications showing the calculated maximum airflow on site.	Minn. R. 7005.0100, subp. 35a
Visible Emissions: The Permittee shall check the fabric filter stack (SV 018) for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation.	Minn. R. 7007.0800, subp. 2
C. MONITORING AND RECORDKEEPING	hdr
Pressure Drop: After the fabric filter has been in service for one week and before the end of first month, the Permittee shall observe the normal operating pressure drop and record it in the facility's Operation and Maintenance Plan.	Minn. R. 7007.0800, subp. 4
Monitoring Equipment: The Permittee shall install and maintain 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 fabricfilter is in operation.	Minn. R. 7007.0800, subp. 4
Recordkeeping of Visible Emissions and Pressure Drop (during inclement weather only): The Permittee shall record the time and date of each visible emission inspection/pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop (during inclement weather only) was within the range specified in the facility's Operation and Maintenance Plan.	Minn. R. 7007.0800, subp. 5
Operation and Maintenance: The Permittee shall maintain each piece of control equipment according to the manufacturer's specification, shall conduct inspections, and maintain documentation of those actions as required by Minn. R. 7011.0075, subp. 2(A) to 2(I).	Minn. R. 7011.0075, subp. 2
Operation of Control Equipment: The control equipment is considered listed control equipment under Minn. R. 7011.0060 to 7011.0080. Solid fuel handling equipment shall not be vented to the atmosphere when emissions are not controlled by pollution control equipment (CE 014). This emission unit is physically capable of operating without venting to the atmosphere, and therefore can operate when control equipment is not operational.	Minn. R. 7007.0800, subp. 2
Corrective Actions: The Permittee shall follow the O & M Plan for the fabric filter and take corrective action as soon as possible (within 24 hours) if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. The Permittee shall keep a record of the type and date of any corrective action taken for the fabric filter.	Minn. R. 7007.0800, subp. 4, 5, and 14
D. PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Startup to measure Opacity. Performance Test Pre-test Meeting: due 7 days before each performance test.	40 CFR Section 60.8; Minn. R. 7017.2020, subp. 1, and Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Performace Test Notifications and Submittals: Performance test is outlined in Tables A, B of the permit. See Table B for additional reqirements. Performance Test Notification (written): due 30 days before each Performance Test to measure Opacity Performance Test Plan: due 30 days before each Performance Test to measure Opacity Performance Test Pre-test Meeting: due 7 days before each Performance Test to measure Opacity Performance Test Report: due 45 days after each Performance Test to measure Opacity Performance Test Report - Microfiche Copy: due 105 days after each Performance Test to measure Opacity	40 CFR Section 60.8; Minn. R. 7017.2030, subp. 1-4; Minn. R. 7017.2035, subp. 1-2
E. NSPS GENERAL PROVISIONS - APPLICABLE TO EU 016, EU 017, EU 018, and EU 019 ONLY	hdr
Notification of any physical or operational change which increases emission rate: due 60 days (or as soon as practical) before the change is commenced within 180 days of completion of any physical or operational change subject to the control measures specified in 60.14(a), compliance with all applicable standards must be achieved.	40 CFR Section 60.7(a)(4); Minn. R. 7019.0100, subp. 1
Notification of Anticipated Date for Conducting Opacity Observations: due 30 days prior to observation date.	40 CFR Section 60.7(a)(4); Minn. R. 7019.0100, subp. 1
Recordkeeping: Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including; 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); Minn. R. 7019.0100, subp. 1
Recordkeeping: Maintain a file of all measurements, maintenance, reports and records for at least five years.	40 CFR Section 60.7(f); Minn. R. 7019.0100, subp. 1
Opacity Compliance: Demonstrate compliance with Opacity standards using Reference Method 9.	40 CFR Section 60.11; Minn. R. 7017.2015
No owner or operator shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard.	40 CFR Section 60.12

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **SV 001**

Associated Items: EU 001 Boiler 1

EU 012 Ash Silo

What to do	Why to do it
MONITORING REQUIREMENTS	hdr
Daily Calibration Error (CE) Test: conduct daily CE testing on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix.	40 CFR pt. 75, Appendix B, Section 2.1
Linearity and Leak Check Test (Acid Rain Program): due before end of each calendar quarter following CEM Certification Test . Conduct a quarterly linearity test on CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B.	40 CFR pt. 75, Appendix B, Section 2.2
Linearity Test Results Summary: due 30 days after end of each calendar quarter following Linearity and Leak Check Test (Acid Rain Program) if performed.	Minn. R. 7007.0800, subp. 2
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar half-year following CEM Certification Test . Conduct a RATA on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B. If the RATA results indicate a relative accuracy of 7.5% or less, the next RATA is not required for twelve (12) months.	40 CFR pt. 75, Appendix B, Section 2.3
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA)	Minn. R. 7007.0800, subp. 2
Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	Minn. R. 7007.0800, subp. 2
CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEMS according to the QA/QC procedure in 40 CFR pt. 75, Appendix B as amended.	40 CFR Section 75.21
Emissions Monitoring: The owner or operator shall measure SO2, NOx, and CO2 emissions, and exhaust gas flow rate, for each affected unit in accordance with 40 CFR Section 75.10.	40 CFR pt. 75
COMS Continuous Operation: Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all COMS shall be in continuous operation.	Minn. R. 7007.0800, subp. 2
COMS Daily Calibration Drift (CD) Check: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) opacity at least once daily. The COMS must be adjusted whenever the calibration drift (CD) exceeds twice the specifications of PS-1 of 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1000
COMS Calibration Error Audit: due before end of each calendar half-year following COMS Certification Test . Conduct audits at least 3 months apart but no greater than 8 months apart.	Minn. R. 7007.0800, subp. 2
The Report for COMS Calibration Error Audit: due 30 days after end of each calendar half-year following COMS Certification Test	Minn. R. 7007.0800, subp. 2
COMS Monitoring Data: Calculate each six-minute average period as follows: total the opacity values of each individual data point collected by the COMS for each one-minute period and divide the total by the number of data points. (The sum of the individual one-minute averages in the applicable averaging period must be determined and divided by the number of one-minute averages taken.) Round the resulting averages to the nearest one percent opacity. This resulting average is the six-minute opacity that shall be recorded by the monitoring system. There are ten individual six-minute consecutive averaging periods in each hour beginning on the clock hour and ending six minutes later.	Minn. R. 7017.1200, subp. 3
Recordkeeping: The owner or operator must retain records of all COMS monitoring data and support information for a period of five (5) years from the date of the monitoring sample, measurement or report. Records must be kept as required in Table A under the "Total Facility" subject item.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 001 Boiler 1**

Associated Items: CE 001 Electrostatic Precipitator - High Efficiency

CE 002 Electrostatic Precipitator - High Efficiency

MR 001

MR 002

MR 003

MR 004

MR 005

SV 001

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input	Minn. R. 7011.0510, subp. 1
Sulfur Dioxide: less than or equal to 1.6 lbs/million Btu heat input calculated as an annual average. By January 30th of each year, compute the annual average sulfur dioxide emission rate during the previous calendar year by averaging all hourly averages recorded over the previous calendar year. Determine hourly averages from data collected in accordance with 40 CFR pt. 75, subp. B, or using the missing data substitution procedures as set out in 40 CFR pt. 75, subp. D.	Minn. R. 7021.0050, subp. 5
Sulfur Dioxide: less than or equal to 3.0 lbs/million Btu heat input using 1-Hour Average	Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity using 6-minute Average except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0510, subp. 2
OPERATIONAL REQUIREMENTS	hdr
Allowed fuel types: bituminous and subbituminous coal, petroleum coke, wood, natural gas, used oil, non-hazardous petroleum-contaminated cleanup material, nonhazardous MGP waste, and cellulose-based, non-chlorinated, nonhazardous organic materials, including but not limited to paper and grain. Manufactured Gas Plant (MGP) waste is defined as tar-contaminated materials and gas purification residuals associated with past operation of gas manufacturing plants. MGP waste includes non-hazardous materials such as contaminated soils, sediments, oxide box filler material, and wood chips.	Minn. R. 7007.0800, subp. 2
Operation of control equipment CE 001 and CE 002 is not required when EU 001 is combusting only natural gas.	Minn. R. 7007.0800, subp. 2
BOILER OPERATING RATE REQUIREMENTS AND LIMITS	hdr
Boiler Alternative Operating Conditions for Performance Testing: Alternative Operating Conditions during testing are defined as 90% to 100% of the boiler's maximum normal (continuous) operating load or the maximum permitted operating rate, whichever is lower. The basis for this number must be included in the test plan. If testing is conducted at the alternative operating condition established, an operating limit will not be established as a result of performance testing. In no case will the new operating limit be higher than allowed by an existing permit condition.	Minn. R. 7017.2025, subp. 2(A) and 3(B)
Boiler Operating Conditions Not Meeting the Defined Operating Conditions During Performance Testing: If performance testing is not conducted at or above the established alternative operating condition, then the boiler operating rate will be limited on an 8-hour block average based on the following: (1) If the results of the performance test are greater than 80% of any applicable emission limit for which emissions are measured, then boiler operation will be limited to the tested operating rate. (2) If results are less than 80% of all applicable emission limits for which emissions are measured, boiler operation will be limited to 110% of the tested operating rate. In no case will the new operating limit be higher than allowed by an existing permit condition.	Minn. R. 7017.2025, subp. 3(B)
Short Term Emergency and Testing (STET) Operating hours limit: The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Documentation of all STET operation shall be maintained. The boiler must meet emission limits during STET operation.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

STET Operation Definition that Applies to Boilers that Meet or do Not Meet the Alternative Operating Condition for Performance Testing: If performance test results measure emissions at 80% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average operating rate achieved during that performance test. If performance test results measure emissions at greater than 80% any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100% of the average operating rate achieved during that performance test. In no case will STET operation be higher than allowed by an existing permit condition.	Minn. R. 7007.0800, subp. 2
MONITORING REQUIREMENTS	hdr
Use the SO2 CEM to measure SO2 emissions.	Minn. R. 7017.1000, subp. 1
Use the COM to measure opacity emissions in 1-minute averages as required in Minn. R. 7017.1200, subp. 3.	Minn. R. 7017.1200, subp. 3
Emissions Monitoring: measure SO2, NOx, and CO2 emissions, and exhaust gas flow rate, for each affected unit in accordance with 40 CFR Section 75.10.	40 CFR pt. 75
Daily Calibration Error (CE) Test: conduct daily CE testing on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix.	40 CFR pt. 75, Appendix B, Section 2.1
Linearity and Leak Check Test (Acid Rain Program): due before end of each calendar quarter following CEM Certification Test . Conduct a quarterly linearity test on CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B.	40 CFR pt. 75, Appendix B, Section 2.2
Linearity Test Results Summary: due 30 days after end of each calendar quarter following Linearity and Leak Check Test (Acid Rain Program) if performed.	Minn. R. 7007.0800, subp. 2
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar half-year following CEM Certification Test . Conduct a RATA on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B. If the RATA results indicate a relative accuracy of 7.5% or less, the next RATA is not required for twelve (12) months.	40 CFR pt. 75, Appendix B, Section 2.3
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA)	Minn. R. 7007.0800, subp. 2
The results of a performance test are not final until issuance of a review letter by MPCA, unless specified otherwise by Minn. R. 7017.2001-7017.2060.	Minn. R. 7007.2020, subp. 4
Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	Minn. R. 7007.0800, subp. 2
CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEMS according to the QA/QC procedure in 40 CFR pt. 75, Appendix B as amended.	40 CFR Section 75.21
COMS Continuous Operation: Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all COMS shall be in continuous operation.	Minn. R. 7007.0800, subp. 2
COMS Daily Calibration Drift (CD) Check: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) opacity at least once daily. The COMS must be adjusted whenever the calibration drift (CD) exceeds twice the specifications of PS-1 of 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1000
COMS Calibration Error Audit: due before end of each calendar half-year following COMS Certification Test . Conduct audits at least 3 months apart but no greater than 8 months apart.	Minn. R. 7007.0800, subp. 2
The Report for COMS Calibration Error Audit: due 30 days after end of each calendar half-year following COMS Certification Test	Minn. R. 7007.0800, subp. 2
COMS Monitoring Data: Calculate each six-minute average period as follows: total the opacity values of each individual data point collected by the COMS for each one-minute period and divide the total by the number of data points. (The sum of the individual one-minute averages in the applicable averaging period must be determined and divided by the number of one-minute averages taken.) Round the resulting averages to the nearest one percent opacity. This resulting average is the six-minute opacity that shall be recorded by the monitoring system. There are ten individual six-minute consecutive averaging periods in each hour beginning on the clock hour and ending six minutes later.	Minn. R. 7017.1200, subp. 3
Recordkeeping: The owner or operator must retain records of all COMS monitoring data and support information for a period of five (5) years from the date of the monitoring sample, measurement or report. Records must be kept as required in Table A under the "Total Facility" subject item.	Minn. R. 7007.0800, subp. 5
REQUIREMENTS FOR BURNING WASTE OR FUELS OTHER THAN COAL, WOOD, PETROLEUM COKE, OR NATURAL GAS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

The feed rate of MGP waste must not exceed 2 percent of total fuel mass (total fuel mass includes the mass of MGP waste used as fuel). The combined feed rate of MGP waste, used oil, petroleum-contaminated materials, and any fuels other than coal, wood, petroleum coke, and natural gas must not exceed 5 percent of total fuel mass (total fuel mass includes the mass of all other fuels in addition to coal, wood, petroleum coke, and natural gas).	Minn. R. 7007.0800, subp. 2
Monitoring and Record Keeping: when combusting MGP waste, used oil, petroleum-contaminated materials, or any other fuels other than coal, wood, petroleum coke and natural gas, monitor and record the following: 1) the daily quantity, by weight, of MGP waste, used oil, petroleum-contaminated materials, or any other fuels mixed with coal, once each day; and 2) boiler operating capacity once each hour in pounds of steam per hour.	Minn. R. 7007.0800, subp. 2
Minimum Operating Load: operate EU 001 at 50% or greater capacity when combusting MGP waste, used oil, petroleum-contaminated materials, or any other fuels other than coal, wood, petroleum coke, and natural gas, except that up to 2,000 pounds of on-site generated petroleum-contaminated rags may be placed in the boiler prior to startup. If EU 001 undergoes an emergency shutdown or emergency load reduction to below 50% capacity, immediately cease adding MGP waste, used oil, petroleum-contaminated materials, or any fuels other than petroleum coke, wood, or natural gas to the coal, until EU 001 again achieves 50% capacity. Fuels already mixed with coal and enroute to the boiler prior to the emergency may be burned after the emergency with EU 001 operating at less than 50% capacity. The permittee must take all feasible and prudent steps to minimize the amount of coal mixed with other fuels, except as allowed above, which are combusted when EU 001 operates at less than 50% capacity.	Minn. R. 7007.0800, subp. 2
Manage MGP waste in accordance with a MGP Waste Management Plan which has been reviewed and approved by the Commissioner. The plan must specify how NSP will ensure that the waste is non-hazardous, how MGP waste will be delivered, stored, and transported on-site from storage to the boiler, the methods which will be used to track and ensure compliance with the maximum feed rate limit and minimum oxygen limit, and how the Permittee will ensure that optimum combustion conditions are maintained. Submit any proposed changes of the MGP Waste Management Plan to the Commissioner for review and approval prior to implementing the changes.	Minn. R. 7007.0800, subp. 2
Do not combust waste from an MGP cleanup site unless treatment and disposal via combustion in a utility boiler is the chosen management alternative approved by the Commissioner for that site, after considering the recommendations from the MGP Remediation Advisory Committee. Notify the Commissioner at least 7 days prior to receiving MGP waste from a cleanup site from which waste has not been previously burned at the King Plant. Include in the notification the name and location of the MGP cleanup site and the name and date of the document or documents which identify the MGP waste management alternatives and the approved alternative for the site.	Minn. R. 7007.0800, subp. 2
The concentration of the pollutants listed below in MGP waste, as measured in accordance with the approved MGP Waste Management Plan, must not exceed the following limits: Pollutant — Limit (ppm) Arsenic 12 Cadmium 20 Chromium 100 Mercury 1 Lead 100 Selenium 20 Silver 100	Minn. R. 7007.0800, subp. 2
Comply with Minn. R. ch. 7045 for management of used oil. Maintain on-site records which demonstrate that used oil is managed as required by Minn. R. ch. 7045.	Minn. R. 7007.0800, subp. 2
Combustion rate limit for petroleum-contaminated waste materials: Do not combust more than 1000 cubic yards per week of soils, sorbents, wood and other nonhazardous combustible materials contaminated with petroleum products. This does not include MGP waste.	Minn. R. 7007.0800, subp. 2
ACID RAIN PROGRAM REQUIREMENTS	hdr
Hold allowances as of the allowance transfer deadline, in the unit's compliance subaccount, not less than the total annual emissions of sulfur dioxide for the previous calendar year. Takes effect January 1, 2000. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.	40 CFR Section 72.9(c)(1)(i); 40 CFR Section 72.9(g)(4)

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Comply with the applicable Acid Rain emissions limitation for sulfur dioxide. Takes affect January 1, 2000.	40 CFR Section 72.9(c)(1)(ii); 40 CFR Section 72.9(g)(4)
NOx Averaging Plan Beginning January 1, 2000 either: Maintain an annual average NOx emission rate of 1.05 lbs/MMBtu and limit the annual heat input to less than or equal to 34,000,000 MMBtu per year. OR Maintain a Btu-weighted annual average emission rate in lbs/MMBtu, averaged over the units specified in the NOx averaging plan, that is less than or equal to the Btu-weighted annual average emission rate averaged over the same units had they each been operated during the same period of time in compliance with the applicable emission limitations in 40 CFR Sections 76.5, 76.6, or 76.7. Units covered in the plan are: Plant — Boiler ID# Allen S. King — 1 Black Dog — 3,4 High Bridge — 3,4,5,6 Minnesota Valley — 4 Riverside — 6,7,8 Sherburne County — 1,2,3	40 CFR Section 76.11
Certify Acid Rain Program submittals. Each submission under the Acid Rain Program shall be submitted, signed, and certified by the designated representative or the alternative designated representative for all sources on behalf of which the submission is made in accordance with 40 CFR Section 72.21.	40 CFR Section 72.21; 40 CFR Section 72.22
Apply for Acid Rain Program Permit reissuance: The designated representative shall submit a complete Acid Rain permit application for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain Permit in accordance with 40 CFR Section 72.30(c).	40 CFR Section 72.30(c)
Keep on site or readily accessible at another site each of the following documents for a period of 5 years from the date the document is created: the certificate of representation, all emission monitoring information, copies of all reports, compliance certifications, and other submissions or records made under the Acid Rain Program, and copies of all documents used to complete an acid rain permit application.	40 CFR Section 72.9(f)(l)
PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Permit Issuance to measure particulate matter emissions. Record and submit a summary of data collected simultaneously by the COM for each PM test run.	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months following Initial Performance Test to measure particulate matter emissions. The tests shall be conducted at an interval not to exceed 60 months between test dates. Record and submit a summary of data collected simultaneously by the COM for each PM test run, including opacity averages in 6-minute increments.	Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 002 Boiler 2**

Associated Items: SV 002

What to do	Why to do it
Sulfur Dioxide: less than or equal to 1.6 lbs/million Btu heat input	Minn. R. 7011.0510, subp. 1
Total Particulate Matter: less than or equal to 0.05 lbs/million Btu heat input	Minn. R. 7009.0020; Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity using 6-minute Average except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0510, subp. 2
Allowable fuel types: limited to natural gas and distillate fuel oil.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 003 Coal Gallery**

Associated Items: CE 003 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 003

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity . If opacity exceeds 20 percent, then action must be taken to control exhaust gases so that either (1) particulate matter emissions do not exceed 0.020 gr/dscf, or (2) opacity does not exceed 20 percent.	Minn. R. 7011.1105 (G)
Solid fuel handling equipment shall not be vented to the atmosphere when emissions are not controlled by pollution control equipment (CE 003). This emission unit is physically capable of operating without venting to the atmosphere, and therefore can operate when control equipment is not operational.	Minn. R. 7007.0800, subp. 2
Check for visible emissions (during daylight hours) from the control equipment (CE 003) once per day on two non-consecutive days each calendar week.	Minn. R. 7007.0800, subp. 4
Corrective Actions: If visible emissions (VEs) are observed, determine the cause and take corrective actions as soon as possible to eliminate the VEs. Corrective action may be in the form of discontinuing venting emissions to the atmosphere through CE 003.	Minn. R. 7007.0800, subp. 2
Recordkeeping: Record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
Particulate Matter < 10 micron: less than or equal to 0.008 grains/dry standard cubic foot	Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 004 Transfer House 1**

Associated Items: CE 004 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 005 Dust Suppression by Water Spray

SV 004

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity . If opacity exceeds 20 percent, then action must be taken to control exhaust gases so that either (1) particulate matter emissions do not exceed 0.020 gr/dscf, or (2) opacity does not exceed 20 percent.	Minn. R. 7011.1105 (G)
Solid fuel handling equipment shall not be vented to the atmosphere when emissions are not controlled by pollution control equipment (CE 004). This emission unit is physically capable of operating without venting to the atmosphere, and therefore can operate when control equipment is not operational.	Minn. R. 7007.0800, subp. 2
Check for visible emissions (during daylight hours) from the control equipment (CE 004) once each calendar week.	Minn. R. 7007.0800, subp. 4
Corrective Actions: If visible emissions (VEs) are observed, determine the cause and take corrective actions as soon as possible to eliminate the VEs. Corrective action may be in the form of discontinuing venting emissions to the atmosphere through CE 004.	Minn. R. 7007.0800, subp. 2
Recordkeeping: Record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
Particulate Matter < 10 micron: less than or equal to 0.008 grains/dry standard cubic foot	Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 005 Coal Crusher House**

Associated Items: CE 006 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 005

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity . If opacity exceeds 20 percent, then action must be taken to control exhaust gases so that either (1) particulate matter emissions do not exceed 0.020 gr/dscf, or (2) opacity does not exceed 20 percent.	Minn. R. 7011.1105 (G)
Solid fuel handling equipment shall not be vented to the atmosphere when emissions are not controlled by pollution control equipment (CE 006). This emission unit is physically capable of operating without venting to the atmosphere, and therefore can operate when control equipment is not operational.	Minn. R. 7007.0800, subp. 2
Check for visible emissions (during daylight hours) from the control equipment (CE 006) once each calendar week.	Minn. R. 7007.0800, subp. 4
Corrective Actions: If visible emissions (VEs) are observed, determine the cause and take corrective actions as soon as possible to eliminate the VEs. Corrective action may be in the form of discontinuing venting emissions to the atmosphere through CE 006.	Minn. R. 7007.0800, subp. 2
Recordkeeping: Record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
Particulate Matter < 10 micron: less than or equal to 0.008 grains/dry standard cubic foot	Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 006 Railcar Unloading**

Associated Items: CE 007 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 008 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 006

SV 007

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity . If opacity exceeds 20 percent, then action must be taken to control exhaust gases so that either (1) particulate matter emissions do not exceed 0.020 gr/dscf, or (2) opacity does not exceed 20 percent.	Minn. R. 7011.1105 (H)
Railcar unloading: When the amount of coal unloaded by rail is 200,000 tons per year or greater, unload railcars only within a permanent building or structure.	Minn. R. 7011.1105 (H)
Solid fuel handling equipment shall not be vented to the atmosphere when emissions are not controlled by pollution control equipment (CE 007, CE 008, and CE 009).	Minn. R. 7007.0800, subp. 2
Check for visible emissions (during daylight hours) from the control equipment (CE 007, CE 008, and CE 009) once each calendar week.	Minn. R. 7007.0800, subp. 4
Corrective Actions: If visible emissions (VEs) are observed, determine the cause and take corrective actions as soon as possible to eliminate the VEs.	Minn. R. 7007.0800, subp. 2
Recordkeeping: Record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken. Records must be kept on an individual basis for each control equipment unit.	Minn. R. 7007.0800, subp. 5
Particulate Matter < 10 micron: less than or equal to 0.008 grains/dry standard cubic foot	Minn. R. 7009.0020
Operating Hours: less than or equal to 4,383 hours/year using 12-month Rolling Sum calculated monthly. Applies individually to each of the vents (SV 006 and SV 007)	Minn. R. 7009.0020
Railcar Unloading Hours: Winter 6:00 a.m. through 5:00 p.m. Spring 6:00 a.m. through 6:00 p.m. Summer 6:00 a.m. through 8:00 p.m. Fall 6:00 a.m. through 5:00 p.m.	Minn.R. 7009.0020
Recordkeeping of Coal Unloading Hours: The Permittee is required to keep a daily log of coal unloading operation hours.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 007 Boiler 11**

Associated Items: GP 001 Boiler Nos. 11 & 12

SV 008

What to do	Why to do it
EMISSION LIMITS	hdr
Particulate Matter < 10 micron: less than or equal to 0.037 lbs/million Btu heat input	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21
Nitrogen Oxides: less than or equal to 0.1 lbs/million Btu heat input	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21
Opacity: less than or equal to 20 percent opacity	Minn. R. 7007.0800, subp. 2 (negotiated limit)
OPERATING LIMITS	hdr
Allowable fuel use: limited to natural gas and propane.	Minn. R. 7007.0800, subp. 2
TESTING REQUIREMENTS	hdr
Initial Performance Test: due 222 days after 07/21/1998 to measure NOx emissions Completed on January 19, 1999.	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each year following Initial Performance Test to measure NOx emissions. The NOx emissions tests shall be conducted at an interval not to exceed 12 months between test dates. If NOx emission test results are less than 90 percent of the NOx limit for two or more consecutive years, then the test frequency may be reduced to once every three years. If a performance test measures NOx emissions at greater than 90 percent of the NOx limit, testing frequency shall revert back to the original yearly basis until the permittee is again able to meet the criteria for a three-year test frequency.	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7017.2020, subp. 1
Performance Test Notification Frequency: If the NOx emissions test frequency is reduced from annual to once every three years, the permittee shall submit a notification in lieu of each annual test, 30 days before the date that testing was required to be conducted. The notification shall state the percentage of the NOx emission limit that emissions were measured at during each of the previous two performance tests.	Minn. R. 7017.2030, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 008 Boiler 12**

Associated Items: GP 001 Boiler Nos. 11 & 12

SV 009

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 0.037 lbs/million Btu heat input	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21
Nitrogen Oxides: less than or equal to 0.1 lbs/million Btu heat input	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21
Opacity: less than or equal to 20 percent opacity	Minn. R. 7007.0800, subp. 2 (negotiated limit)
Allowable fuel use: limited to natural gas and propane.	Minn. R. 7007.0800, subp. 2
Initial Performance Test: due 180 days after 07/21/1998 to measure NOx emissions Completed on January 19, 1999.	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 36 months following Initial Performance Test to measure NOx emissions. The NOx emissions tests shall be conducted at an interval not to exceed 36 months between test dates.	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 010 Transfer House 2**

Associated Items: CE 011 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 011

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 0.008 grains/dry standard cubic foot	Minn. R. 7009.0020
Opacity: less than or equal to 20 percent opacity . If opacity exceeds 20 percent, then action must be taken to control exhaust gases so that either (1) particulate matter emissions do not exceed 0.020 gr/dscf, or (2) opacity does not exceed 20 percent. Note PM limit based on Minn. R. 7007.0800, subp. 2 that also applies to EU 010.	Minn. R. 7011.1105 (G)
Solid fuel handling equipment shall not be vented to the atmosphere when emissions are not controlled by pollution control equipment (CE 011). This emission unit is physically capable of operating without venting to the atmosphere, and therefore can operate when control equipment is not operational.	Minn. R. 7007.0800, subp. 2
Check for visible emissions (during daylight hours) from the control equipment (CE 011) once each calendar week.	Minn. R. 7007.0800, subp. 4
Corrective Actions: If visible emissions (VEs) are observed, determine the cause and take corrective actions as soon as possible to eliminate the VEs. Corrective action may be in the form of discontinuing venting emissions to the atmosphere through CE 011.	Minn. R. 7007.0800, subp. 2
Recordkeeping: Record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 011 Transfer House 5**

Associated Items: CE 012 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 012

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 0.008 grains/dry standard cubic foot	Minn. R. 7009.0020
Opacity: less than 20 percent opacity	40 CFR Section 60.252(c); meets opacity requirement in Minn. R. 7011.1105(G).
Solid fuel handling equipment shall not be vented to the atmosphere when emissions are not controlled by pollution control equipment (CE 012). This emission unit is physically capable of operating without venting to the atmosphere, and therefore can operate when control equipment is not operational.	Minn. R. 7007.0800, subp. 2
Check for visible emissions (during daylight hours) from the control equipment (CE 012) once each calendar week.	Minn. R. 7007.0800, subp. 4
Corrective Actions: If visible emissions (VEs) are observed, determine the cause and take corrective actions as soon as possible to eliminate the VEs. Corrective action may be in the form of discontinuing venting emissions to the atmosphere through CE 012.	Minn. R. 7007.0800, subp. 2
Recordkeeping: Record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
Performance Test: due 180 days after 07/21/1998 to measure opacity. The performance test must comply with the requirements of 40 CFR Sections 60.8 and 60.254. Completed on 10/21/1998.	40 CFR Section 60.8; Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 012 Ash Silo**

Associated Items: CE 001 Electrostatic Precipitator - High Efficiency

CE 002 Electrostatic Precipitator - High Efficiency

SV 001

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot unless required to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1.A.
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1.B.

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 013 Emergency Engine Generator 1EEG-GEN-0002**

Associated Items: GP 002 Emergency Generators

SV 013

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity . Opacity shall not exceed 20% for more than 10 seconds once operating temperatures have been obtained.	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
Fuel type is limited to distillate fuel oil with a maximum sulfur content of 0.5% by weight.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 014 Emergency Engine Generator 1EEG-GEN-0003**

Associated Items: GP 002 Emergency Generators

SV 014

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity . Opacity shall not exceed 20% for more than 10 seconds once operating temperatures have been obtained.	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
Fuel type is limited to distillate fuel oil with a maximum sulfur content of 0.5% by weight.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **EU 015 Boiler 13**

Associated Items: SV 017

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity using 6-minute Average except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0515, subp. 2
Nitrogen Oxides: less than or equal to 0.13 lbs/million Btu heat input	Minn. R. 7007.0800, subp. 2
Fuel Usage: limited to natural gas and propane	Minn. R. 7007.0800, subp. 2
Recordkeeping: By the last day of each month, record the amount of natural gas and propane combusted during the previous month in EU 015. Records may be in the form of fuel bills or meter readings.	40 CFR Section 60.13(i) to comply with 40 CFR Section 60.48c(g) and (i)
Notify: due 7 days after Startup (Written notification of startup to initiate tracking of the Initial Performance Test Requirement)	Minn. R. 7007.0800, subp. 2
Initial Performance Test: due 180 days after Startup to measure NOx emissions.	Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

Subject Item: **FS 012 Coal Yard Traffic (15 trips/hr; 0.64 miles/trip)**

Associated Items: CE 013 Dust Suppression by Water Spray

What to do	Why to do it
Access areas, roads, parking facilities (1) Install asphalt or concrete surfaces or chemical agents on all active truck haul roads of the coal handling facility when the coal throughput by truck is 200,000 tons or greater. All paved roads and areas shall be cleaned to minimize the discharge to the atmosphere of fugitive particulate emissions. Such cleaning shall be accomplished in a manner which minimizes resuspension of particulate matter. Access areas surrounding coal stockpiles and parking facilities which are located within a coal handling facility shall be treated with water, oils, or chemical agents.	Minn. R. 7011.1105 (A)

TABLE B: SUBMITTALS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

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:

Permit Technical Advisor
Permit Section
Air Quality 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:

Supervisor
Compliance Determination Unit
Air Quality 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

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

What to send	When to send	Portion of Facility Affected
Acid Rain Permit Application for NOx	due before 01/01/98 in accordance with 40 CFR Section 76.9(b)(2).	EU001
Computer Dispersion Modeling Protocol	due 1,096 days after 07/21/1998 for PM-10, SO2, and NOx. The protocol will describe the proposed modeling methodology and input data in accordance with all requirements of 40 CFR pt. 51, App W. The protocol may be based on proposed operating conditions under the next permit term. Completed in 2002.	Total Facility
Computer Dispersion Modeling Results	due 1,462 days after 07/21/1998 Completed in 2002.	Total Facility
Fugitive Control Plan	due 60 days after Permit Issuance for review and approval by the Commissioner. The plan must identify all fugitive emission sources, and primary and contingent control measures, and specify actions needed to ensure that the control efficiencies modeled for fugitive emission sources are achieved. The plan is fully enforceable part of this permit. The control measures included in the plan must include the requirements of Minn. R. 7011.1105.	Total Facility
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup. The Permittee submitted notifications for EU 016 and EU 019.	GP004
Notification of the Date Construction Began	due 30 days after Start Of Construction. Submit the name and number of each unit and the date construction of each unit began. The Permittee submitted notifications for EU 016 and EU 019.	GP004
Notification of the Date Construction Began	due 60 days before Start Of Construction (or as soon as practicable) of Replacements. Submit the name and number of each unit and the date of construction of the replacement parts of each unit begun. The Permittee submitted notifications for EU 016 and EU 019.	GP004
Testing Frequency Plan	due 60 days after Initial Performance Test for NOx. The plan shall specify a testing frequency based on the initial performance test data and MPCA performance test frequency guidance. Future performance tests based on year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required on written approval of MPCA per Minn. R. 7017.2020, subp. 1.	EU015
Testing Frequency Plan	due 60 days after Initial Performance Test to measure Opacity.	GP004

TABLE B: RECURRENT SUBMITTALS

06/24/04

Facility Name: NSP - Allen S King Generating Plant

Permit Number: 16300005 - 004

What to send	When to send	Portion of Facility Affected
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 shall indicate all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	EU001
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 shall indicate all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	SV001
Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance . The first report covers January 1 - June 30. The second report covers July 1 - December 31.	Total Facility
Compliance Certification Report (Acid Rain Program)	due 60 days after end of each calendar year starting 01/01/00 an annual compliance certification report for the unit in accordance with 40 CFR Section 72.90(a). The report shall include all information required by 40 CFR Sections 72.90(b) and 72.90(c)	EU001
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance . This is the annual compliance certification report, covering all deviations experienced during the calendar year.	Total Facility

Subject Item: **Total Facility Limitations**

What to do	Why to do it
Labeling Requirements: The Permittee shall permanently affix the manufacturer's serial number to each piece of equipment for tracking purposes within 60 days of permit issuance. If the serial number is not available, a unique number shall be assigned to the equipment. The number can be affixed by placard, stencil or other means. The number shall be maintained so that it is readable and visible at all times from a safe distance.	To qualify for this general permit under Minn. R. 7007.1100 and Minn. R. 7007.0800, subp. 2
Equipment List Inventory: The Permittee shall maintain a written list of each piece of equipment on site. The list shall include: the type of equipment, serial number (or assigned number if not available) and dates of installation, modification and reconstruction, all applicable Standard of Performance for New Stationary Sources for subpart Dc Kb, and JJ records and all National Emission Standard for Hazardous Air Pollutants(NESHAP) halogenated solvent cleaners, internal combustion engines, industrial boilers, institutional/commercial boilers, process heaters, engine test facilities, paint stripper uses and miscellaneous metal parts and products for surface coating requirements, if applicable. The list shall be updated to include any new, modified or changed equipment just before making a change. Notation of these two evaluations shall be done before making every modification or change: In the notification: 1. Re-evaluate whether you still qualify for this general permit 2. Re-evaluate whether you still are able to keep the 12-month rolling sum of your actuals below 90 tons for Particulate Matter less than 10 um in size (PM_{10}), 99 tons for Nitrogen Oxides (NO_x), Carbon Monoxide (CO), Sulfur Dioxide(SO_2) Lead (Pb), and 241 tons for Volatile Organic Compounds (VOC). If the answer is no to either then you must apply for a Part 70 permit that would authorize the modification or change and operation of the total stationary source before making the modification or change. See form provided by the Commissioner in Appendix J.	To qualify for this general permit under Minn. R. 7007.1100 and Minn. R. 7007.0800, subp. 2
Compliance Management Plan: The Permittee shall submit to the MPCA the compliance management plan with 60 days of the issuance of this permit. If the Permittee adds any new, modified or changed equipment, the Permittee will update this plan and submit it to the MPCA within seven days before the change. See form provided by the Commissioner in Appendix M.	To qualify for this general permit under Minn. R. 7007.1100 and Minn. R. 7007.0800, subp. 2
Name change in ownership or operational control: The Permitee shall submit to the MPCA the Air Emission General Permit Administrative Changes Form (GP-01) within 7 days of name change in ownership or operational control the company. See form provided by the Commissioner in Appendix N.	To qualify for this general permit under Minn. R. 7007.1100 and Minn. R. 7007.0800, subp. 2

What to do	Why to do it
Environmental Assessment Worksheet (EAW): The Permittee shall not begin actual construction of any single project or projects that are connected or phased actions which will cause a total increase in actual emissions of greater than 99 tons of VOC per year without first completing an EAW. "Connected actions" and "phased action" have the meanings given in Minn. R. 4410.0200, subps. 9b and 60.	Minn. Stat. § 116D.04, subd. 2b and Minn. R. 4410.4300, subp. 15
Type of Emission Units Allowed: The stationary source shall not have any emission units other than the following process operations and emission units: spray guns, spraying and coating booths, degreasers, cleaning of surfaces, abrasive blasting, acid cleaning surfaces, fuel storage, boilers, catalytic or thermal afterburner, fabric filters, wall filters, bag houses, internal combustion engine (generators), burnoff ovens, furnaces, ovens, water wash paint booths, dip tanks, soldering, welding, brazing, space heaters, storage tanks, engine testing, screen printing, injection molding, stenciling and/or any of the insignificant activities listed in Minn. R. 7007.1300.	To qualify for this general permit under Minn. R. 7007.1100, and Minn. R. 7007.0800, subp. 2
Prevention of Significant Deterioration: The stationary source shall not be one of the Prevention of Significant Deterioration (PSD) source categories listed in Minn. R. 7007.0200, subp 2(B)(1)-(26)	To remain a non-major source under 40 CFR § 52.21 and Minn. R. 7007.3000
Carbon Monoxide: The Permittee shall not emit a 12-month rolling sum of more than 99 tons of CO. See form provided by the Commissioner in Appendix I.	To qualify for this general permit under Minn. R. 7007.1100 and to remain a non-major source under 40 CFR § 52.24.
Nitrogen Oxides and Lead: The Permittee shall not emit a 12-month rolling sum of more than 99 tons each of NO_x and Pb. See form provided by the Commissioner in Appendix I.	To qualify for this general permit under Minn. R. 7007.1100, and Minn. R. 7007.0800, subp. 2
Sulfur Dioxide: The Permittee shall not emit a 12-month rolling sum of more than 99 tons of SO_2.	To qualify for this general permit under Minn. R. 7007.1100 and to remain a non-major source under 40 CFR § 52.24.

What to do	Why to do it
Particulate Matter less than Ten Micron: The Permittee shall not emit a 12-month rolling sum of more than 90 tons of PM_{10}. (The PM_{10} emissions from the combustion sources were taken into account when determining the PM_{10} limit). See form provided by Commissioner in Appendix I.	To qualify for this general permit under Minn. R. 7007.1100, and to remain a non-major source under 40 CFR § 52.24.
Volatile Organic Compounds: The Permittee shall not emit a 12-month rolling sum of more than 241 tons of VOCs. (The VOCs emissions from the combustion sources were taken into account when determining the VOC limit.) See form provided by Commissioner in Appendix I.	To qualify for this general permit under Minn. R. 7007.1100 and to remain a non-major source under 40 CFR § 52.21 and Minn. R. 7007.3000
New Source Performance Standards: If applicable, boilers, storage tanks or cold cleaning machine operations at the stationary source shall comply with the NSPS.	40 CFR pt. 60, subp. Dc, Kb or JJ, Minn. R. 7011.0570, Minn. R. 7011.1520(C) and Minn. R. 7007.0800, subp. 2
National Emission Standards for Hazardous Air Pollutants: If applicable, the stationary source shall comply with the NESHAP standard for halogenated solvent cleaners, internal combustion engines, industrial boilers, institutional/commercial boilers, process heaters, miscellaneous metals part and products for surface coating, engine test facilities, paint stripper users. Sources which are subject to any other NESHAP for a source category in 40 CFR pt. 63, or constructed or reconstructed major HAP sources under section 112(g) of the Clean Air Act, are not eligible for this General Permit.	40 CFR pt. 63 and Minn. R. 7007.0800, subp. 2
Lead Containing Materials Prohibited: The Permittee shall not use painting and coating materials that contain lead after 60 days of the issuance of this permit.	To qualify for this general permit under Minn. R. 7007.1100, and Minn. R. 7007.0800, subp. 2
Fuel Usage: The Permittee shall only use distillate oil, natural gas, LPG and gasoline fuels in combustion sources.	To qualify for this general permit under Minn. R. 7007.1100, and Minn. R. 7007.0800, subp. 2
Air Pollution Control Equipment: The Permittee shall comply with the control equipment rule for all fabric filters, wall filters, bag houses, catalytic and thermal afterburners at the stationary source.	Minn. R. 7011.0060-0080 and Minn. R. 7007.0800, subp. 2

What to do	Why to do it
Fugitive Dust Control: The Permittee shall use water on exposed surfaces i.e. unpaved roads to control fugitive particulate emissions.	To qualify for this general permit under Minn. R. 7007.1100, and Minn. R. 7007.0800, subp. 2
Capture Efficiency Requirement for Particulate Matter Control Equipment: For spraying/coating and blasting cleaning operations which are totally enclosed, the Permittee shall claim a capture efficiency of 100% of uncontrolled particulate matter emissions. Total enclosure means the spraying/blast cleaning is conducted in a booth or room with all doors, windows, and access opening closed, and a ventilation system in operation. One side or access opening may consist of a curtain of overlapping plastic panels or sliding doors. All other spray coating and blast cleaning operations shall use a capture efficiency of 80%.	To qualify for this general permit under Minn. R. 7007.1100 and Minn. R. 7011.0060-0080
Collection Efficiency Requirement for Particulate Matter Control Equipment: The Permittee shall use particulate matter control equipment with all spraying/coating or blasting operations with a collection efficiency greater than or equal to 92%.	To qualify for this general permit under Minn. R. 7007.1100 and Minn. R. 7011.0060-0080
Hood Certification and Record keeping: If the control device does not have a total enclosure as defined in the above, the Permittee shall use a hood that conforms to the rules requirements listed in Minn. R. 7011.0080, subp. 1, and certifies this as required in Minn. R. 7011.0070, subp. 3. The Permittee shall maintain a copy of this on site, as well as the annual record of the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method, if applicable.	To qualify for this general permit under Minn. R. 7007.1100 and Minn. R. 7011.0060-0080
Equipment Inventory List: Submit the updated list by December 31,every year. See form provided by the Commissioner in Appendix J.	To qualify for this general permit under Minn. R. 7007.1100
Emission Inventory: Submit an emission inventory report by April 1st every year	Minn. R. 7019.3000 - 7019.3010
Forms approved by the Commissioner(Deviations Reporting Forms, Annual Compliance Certification, Emissions Worksheets, Equipment Inventory List Form, Initial Notification Report, Compliance Report and Annual Report)	See Appendices H, I, J, K and L

Subject Item: **Total Facility**

What to do	Why to do it
Record keeping: Retain all records at the stationary source for a period of 5 years from the date of monitoring, emission calculations, sampling, measurement, or reporting. Records which must be retained at the stationary source include all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports and records 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 (A) and (C)
Submittals: All submittals required by this permit must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Submittals which must be provided on forms approved by the Commissioner are noted in Tables A, B and/or C. All submittals must be postmarked or received by the date specified in the tables.	Minn. R. 7007.0800, subp. 6
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800 subp. 4 (D) and Minn. R. 7011.0075
Notification of Deviations Endangering Human Health or the Environment Report: As soon as possible after a discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviations from permit conditions which could endanger human health or the environment.	Minn. R. 7007.0800, subp. 6 (A)
Notification of Deviations Endanger Human Health or the Environment Report: -Within 2 working days of discovery, notify the Commissioner in writing of any deviation from the 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 not been corrected; 3. whether or not 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. 7007.0800, subp. 6 (A)

What to do	Why to do it
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.	
Semiannual Deviations Reports: A mid-year report, covering deviations which occurred during the period from January 1 through June 30, is due by July 30 of each year. An end-of-year report, covering deviations which occurred during the period from July 1 through December 31, is due by January 30 of each year. The report must be submitted even if there were no deviations for the reporting period. See form approved by the Commissioner, in Appendix H.	Minn. R. 7007.0800, subp. 6 (A)
Shutdown Notification: Notify the Commissioner at least 24 hours in advance of shutdown of any control equipment or process equipment if the shutdown would cause an increase in the emission 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 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. 1
Breakdown Notification: 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 would cause an increase in the emission 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 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. 2
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) and Minn. R. 7011.0705.
Circumvention: The Permittee is prohibited from installing or using 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
General Conditions: The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16

What to do	Why to do it
Risk Management Plan: The Permittee may be required to submit a Risk Management Plan (RMP) under the federal rule, 40 CFR 68 which was promulgated on June 20, 1996. The rule requires each owner or operator of a stationary source, at which a regulated substance is present above a threshold quantity in a process to design and implement an accidental release prevention program. The RMP must be submitted to a centralized location as specified by US EPA. The Permittee shall obtain the RMP submittal information at http://www.epa.gov/swercepp or call 1-800-424-9346. These requirements must be complied with no later than the latest of the following dates: (1) June 21, 1999; (2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or (3) The date on which a regulated substance is first present above a threshold quantity in a process.	40 CFR 68
Emission Fees: Due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005-7002.0095
Monitoring Equipment Calibration: Annually calibrate all monitoring equipment (any requirements apply 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 process or control equipment connected to that process is not necessary during periods when the process is shutdown, such as for system breakdowns, repairs, calibration checks, and zero and span adjustments, as applicable. Monitoring records should note any such periods of process shutdown.	Minn. R. 7007.0800, subp. 4 (D)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment on site. The Permittee shall operate and maintain the control equipment according to manufacturer's specifications. The Permittee shall comply with the Operation and Maintenance Plan.	Minn. R. 7007.0800, subp. 14 and subp. 16 (J)
Annual Compliance Certification: due 30 days after end of each calendar year (January 30) following Permit Issuance (for the previous calendar year). See form provided by the Commissioner in Appendix H.	Minn. R. 7007.0800, subp. 6 (C)
Inspections: Upon presentation of credentials allow the Agency, or its representative, to enter the Permittee's premises, to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9
Fugitive Emissions: The Permittee shall 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. The Permittee must also comply will all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Table A, B, and /or C.	Minn. R. 7017.2001-7017.2060

What to do	Why to do it
Annual Report, if applicable: Submit the updated list by February 1st every year. See form provided by the Commissioner in Appendix K.	Appendix K; 40 CFR § 63.468 (f); Minn. R. 7001.7200
Emission Inventory: Submit an emission inventory report by April 1st every year.	Minn. R. 7019.3000 - 7019.3010
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 federally enforceable.	Minn. R. 7030.0010-7030.0080
Source Specific Requirements: Comply with the source-specific requirements in Appendix G	See Appendix G

FOR BOILERS THAT USE NATURAL GAS ONLY AND SUBJECT TO NSPS, SUBPART Dc

Subject Item:	SV 100	Boilers **(Constructed, modified or reconstructed after June 9, 1989 with a maximum design heat input capacity 10-100 MMBtu/hr).**

What to do	Why to do it
Opacity: less than or equal to 20% opacity; except for one-six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0570 and Minn. R. 7011.0515, subp. 2

FOR BOILERS USING NATURAL GAS AND DISTILLATE OIL, AND SUBJECT TO NSPS SUBPART Dc.

Subject Item:	SV 100	Boilers **(Constructed, modified or reconstructed after June 9, 1989, with a maximum design heat input capacity 10-100 MMBtu/hr).**

What to do	Why to do it
Opacity: With the maximum heat input capacity of **100 million BTU per hour or less, but greater than or equal to 30 million BTU per hour;** less than or equal 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity.	40 CFR § 60.43c (c) and Minn. R. 7011.0570
Opacity Testing: Conduct initial opacity performance test as required under 40 CFR § 60.8 using U.S. Environmental Protection Agency (EPA) Reference Method 9 within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit, if applicable.	40 CFR § 60.45 c (a)(7) and Minn. R. 7011.0570
Opacity Test data: Submit opacity limit performance test data from the stack emission tests conducted using Method 9 to MPCA within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit, if applicable.	40 CFR § 60.47 c (b) and Minn. R. 7011.0570

Opacity: less than or equal to 20% opacity; except for one-six-minute period per hour of not more than 60 percent opacity. **(For Boilers with maximum heat input capacity less than 30 million BTU per hour, but greater than or equal to 10 million BTU per hour.)**	Minn. R. 7011.0515, subp. 2, and Minn. R. 7011.0570

The tables in the general permit issued to individual sources include either the requirements for Air Quality Control Region (AQCR) 131 or for sources outside the AQCR 131, depending on the location of the source. The AQCR 131 comprises of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties.

Boilers placed in operation after January 31, 1977, not subject to NSPS and located within the Minneapolis-St. Paul Air Quality Control Region (NEW INDIRECT HEATING STANDARDS)

Subject Item:	SV 100	Boilers **(Maximum design heat input capacity of 100 MMBtu/hr)**

What to do	Why to do it
PM: less than or equal to 0.4 pounds per BTU using a 3-hour rolling average	Minn. R. 7011.0515, subp. 1, and 7011.0550
SO_2: less than or equal to 1.6 pounds per BTU using a 3-hour rolling average	Minn. R. 7011.0515, subp. 1, and 7011.0550
Opacity: less than or equal to 20% opacity; except for one-six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0515, subp. 2

Boilers placed in operation after January 31, 1977, not subject to NSPS and located outside the Minneapolis-St. Paul Air Quality Control Region (NEW INDIRECT HEATING STANDARDS).

Subject Item:	SV 100	Boilers **(Maximum design heat input capacity of 100 MMBtu/hr)**

What to do	Why to do it
PM: less than or equal to 0.4 pounds per BTU using a 3-hour rolling average	Minn. R. 7011.0515, subp. 1 and 7011.0550
SO_2: less than or equal to 2.0 pounds per BTU using a 3-hour rolling average	Minn. R. 7011.0515, subp. 1 and 7011.0550
Opacity: less than or equal to 20% opacity; except for one-six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0515, subp. 2

Boilers placed in operation before January 31, 1977, not subject to NSPS, and located within the Minneapolis-St. Paul Air Quality Control Region (EXISTING INDIRECT HEATING STANDARDS)

Subject Item:	SV 100	Boilers **(Maximum design heat input capacity of 100 MMBtu/hr)**

What to do	Why to do it
PM: less than or equal to 0.4 pounds per million BTU using a 3-hour rolling average	Minn. R. 7011.0510, subp. 1, and 7011.0545
SO_2: less than or equal to 1.6 pounds per million BTU using a 3-hour rolling average	Minn. R. 7011.0510, subp. 1, and 7011.0545
Opacity: less than or equal to 20% opacity except for one-six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0510, subp. 2

Boilers placed in operation before January 31, 1977, not subject to NSPS, and located outside the Minneapolis-St. Paul Air Quality Control Region (EXISTING INDIRECT HEATING STANDARDS).

Subject Item:	SV 100	Boilers **(Maximum design heat input capacity of 100 MMBtu/hr)**

What to do	Why to do it
PM: less than or equal to 0.4 pounds per million BTU using a 3-hour rolling average	Minn. R. 7011.0510, subp. 1 and 7011.0545
SO_2: less than or equal to 2.0 pounds per BTU using a 3-hour rolling average	Minn. R. 7011.0510, subp. 1, and 7011.0545
Opacity: less than or equal to 20% opacity; except for one-six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0510, subp. 2

Ovens and furnaces located within the Minneapolis-St. Paul Air Quality Control Region. (NEW AND EXISTING DIRECT HEATING STANDARDS)

	SV	
Subject Item:	200	Ovens
	300	Furnaces

What to do	Why to do it
PM: less than or equal to 0.3 grains per dry standard cubic foot unless required to reduce emissions to less than or equal to either the amount allowed by Minn. R. 7011.0700 to 7011.0735.	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20% opacity except for one-six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
SO_2: less than or equal to 2.0 pounds per million BTU using a 3-hour rolling average	Min. R. 7011.0610, subp. 2.A.(2)

Ovens and furnaces located outside the Minneapolis-St. Paul Air Quality Control Region. (NEW AND EXISTING DIRECT HEATING STANDARDS).

	SV	
Subject Item:	200	Ovens
	300	Furnaces

What to do	Why to do it
PM: less than or equal to 0.3 grains per dry standard cubic foot unless required to reduce emissions to less than or equal to either the amount allowed by Minn. R. 7011.0700 to 7011.0735.	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20% opacity except for one-six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
SO_2: less than or equal to 4.0 pounds per million BTU using a 3-hour rolling average	Minn. R. 7011.0610, subp. 2 (B)

Internal combustion engines located within the Minneapolis-St. Paul Air Quality Control Region

Subject Item:	SV 400	Internal Combustion Engines **(Limited to a maximum 100 Million BTU per hour)**

What to do	Why to do it
SO_2: less than or equal to 0.5 pounds per million Btu actual heat input using a 3-hour rolling average.	Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20% opacity once operating temperature have been attained. (Visible air contaminants)	Minn. R. 7011.2300, subp. 1

Internal combustion engines located outside the Minneapolis-St. Paul Air Quality Control Region

Subject Item:	SV 400	Internal Combustion Engines **(Limited to a maximum of 100 Million BTU per hour)**

What to do	Why to do it
SO2: less than or equal to 0.5 pounds per million Btu actual heat input using a 3-hour rolling average.	Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20% opacity once operating temperature have been attained. (Visible air contaminants)	Minn. R. 7011.2300, subp. 1

Painting/coating booths placed in operation before July 9, 1969. (EXISTING PROCESS EQUIPMENT)

Subject Item:	SV 500	Painting/Coating Booths

What to do	Why to do it
PM: less than or equal to 0.3 grains per dry standard cubic foot unless required to reduce emissions to less than or equal to either the amount allowed by Minn. R. 7011.0730, or the concentration allowed by Minn. R. 7011.0735.	Minn. R. 7011.0710, subp. 1(A), Minn. R. 7011.0730; Minn. R. 7001.0735
Opacity: less than or equal to 20% opacity except for one-six-minute period per hour of not more than 60% opacity.	Minn. R. 7011.0710, subp. 1(B)

Painting/coating placed in operation after July 9, 1969. (NEW PROCESS EQUIPMENT)

Subject Item:	SV 500	Painting/Coating Booths

What to do	Why to do it
PM: less than or equal to 0.3 grains per dry standard cubic foot unless required to reduce emissions to less than or equal to either the amount allowed by Minn. R. 7011.0730 or the concentration allowed by Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A); Minn. R. 7011.0730; Minn. R. 7011.0735
Opacity: less than or equal to 20% opacity.	Minn. R. 7011.0715, subp. 1(B)

Degreasers placed in operation before July 9, 1969. (EXISTING PROCESS EQUIPMENT)

Subject Item:	SV 600	Degreasers

What to do	Why to do it
PM: less than or equal to 0.3 grains per dry standard cubic foot unless required to reduce emissions to less than or equal to either the amount allowed by Minn. R. 7011.0730, or the concentration allowed by Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A); Minn. R. 7011.0730; Minn. R. 7011.0735
Opacity: less than or equal to 20% opacity except for one-six-minute period per hour of not more than 60% opacity.	Minn. R. 7011.0710, subp. 1(B)

Degreasers placed in operation after July 9, 1969. (NEW PROCESS EQUIPMENT)

Subject Item:	SV 600	Degreasers

What to do	Why to do it
PM: less than or equal to 0.3 grains per dry standard cubic foot unless required to reduce emissions to less than or equal to either the amount allowed by Minn. R. 7011.0730, or the concentration allowed by Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A); Minn. R. 7011.0730; Minn. R. 7011.0735
Opacity: less than or equal to 20% opacity.	Minn. R. 7011.0710, subp. 1(B)

Abrasive blasting booths placed in operation before July 9, 1969. (EXISTING PROCESS EQUIPMENT)

Subject Item:	SV 700	Abrasive Blasting Booths

What to do	Why to do it
PM: less than or equal to 0.3 grains per dry standard cubic foot unless required to reduce emissions to less than or equal to either the amount allowed by Minn. R. 7011.0730, or the concentration allowed by Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A); Minn. R. 7011.0730; Minn. R. 7011.0735
Opacity: less than or equal to 20% opacity except for one-six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0710, subp. 1(B)

Abrasive blasting booths placed in operation after July 9, 1969. (NEW PROCESS EQUIPMENT)

Subject Item:	SV 700	Abrasive Blasting Booths

What to do	Why to do it
PM: less than or equal to 0.3 grains per dry standard cubic foot unless required to reduce emissions to less than or equal to either the amount allowed by Minn. R. 7011.0730, or the concentration allowed by Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A); Minn. R. 7011.0730 ; Minn. R. 7011.0735
Opacity: less than or equal to 20% opacity.	Minn. R. 7011.0710, subp. 1(B)

Subject Item:	EU 100 200 300 400	 Boilers Ovens Furnaces Internal Combustion Engines

What to do	Why to do it
Fuel usage: Limit the fuel usage for the combination of natural gas, distillate oil, liquefied petroleum and gasoline such that NO_x and CO emissions are less than a 12-month rolling sum of 99 tons. **Refer to Appendix G for the limiting equation 1.**	Title I Condition: Limit to avoid classification as a major source or modification under 40 CFR § 52.21; 40 CFR pt. 51, Appendix S, where applicable; Minn. R. 7007.3000
Record Keeping: The calculations shall be done by the **15th day of each month.** Maintain all records of fuel usage calculations, including the 12-month rolling sum on a monthly basis. **(You need to calculate your 12-month rolling sum fuel usage limit every month by calculating a one month total and adding it to the sum of each month's total from the previous 11 consecutive months. If you do not have an actual operating history, use Table A in the Appendix G to calculate your NOx and CO emissions.**	Title I Condition: Record keeping for limit to avoid classification as a major source or modification under 40 CFR § 52.21; 40 CFR pt. 51, Appendix S, where applicable; Minn. R. 7007.3000

FOR BOILERS THAT USE NATURAL GAS ONLY

Subject Item:	EU 100	Boilers (**Constructed, modified or reconstructed after June 9, 1989, with a maximum design heat input capacity 10-100 MMBtu/hr.)**

What to do	Why to do it
Reporting: Submit notification of construction or reconstruction: postmarked no later than 30 days after the start of construction as defined in 40 CFR § 60.2.	40 CFR § 60.48c (a) and Minn. R. 7011.0570
Reporting: Submit notification of actual startup: postmarked within 15 days after such date.	40 CFR § 60.48 c (a) and Minn. R. 7011.0570
Reporting: Submit notification of the design heat input capacity of the boiler postmarked within 15 days of actual startup date.	40 CFR § 60.48 c (a) and Minn. R. 7011.0570
Reporting: Submit notification of fuels to be combusted postmarked within 15 days of actual startup date.	40 CFR § 60.48 c (a) and Minn. R. 7011.0570
Reporting: Submit the anticipated annual capacity factor (actual heat input/potential heat input) postmarked within 15 days of actual startup date.	40 CFR § 60.48 c (a) and Minn. R. 7011.0570
Record Keeping: Record and maintain records of the amount of fuel combusted monthly basis. The report shall be in form of fuel bills or meter reading, or equivalent form as approved by the Commissioner.	40 CFR § 60.48 c (g), Minn. R. 7011.0510 and EPA's memo dated February 20, 1992.

FOR BOILERS USING DISTILLATE OIL

Subject Item:	EU 100	Boilers **(Constructed, modified or reconstructed after June 9, 1989, with a maximum design heat input capacity 10-100 MMBtu/hr.)**

What to do	Why to do it
SO_2: By definition, distillate oil contains a maximum of 0.5% (by weight) sulfur.	40 CFR § 60.42c (d), Minn. R. 7011.0570, and ASTM definition
SO_2 Compliance: Certification based on fuel supplier certification: 1. The name of the fuel supplier 2. Fuel supplier statement that the fuel complies with the definition of distillate oil.	40 CFR § 60.42c (h) and Minn. R. 7011.0570
Performance Test Pre-Test Meeting: 7 days before performance test date.	Minn. R. 7017.2030, subp. 4
Performance Test Notification: At least 30 days prior to the test.	40 CFR § 60.8 (d) and Minn. R. 7011.0570

Reporting : Submit notification of construction or reconstruction: postmarked no later than 30 days after the start of construction as defined in 40 CFR 60.2.	40 CFR § 60.48c (a) and Minn. R. 7011.0570
Reporting: Submit notification of actual startup: postmarked within 15 days after such date.	40 CFR § 60.48c (a) and Minn. R. 7011.0570
Reporting: Submit notification of fuels to be combusted postmarked within 15 days of the actual startup date.	40 CFR § 60.48c (a) and Minn. R. 7011.0570
Reporting: Submit the anticipated annual capacity factor (actual heat input/potential heat input) postmarked within 15 days of actual startup date.	40 CFR § 60.48c (a) and Minn. R. 7011.0570
Reports: Submit reports quarterly which must include: 1. Fuel supplier certifications 2. A certified statement that the records of the fuel supplier certifications submitted represent all of the fuel combusted in that quarter. The initial quarterly report shall be postmarked by the 30th day of the third month following the completion of the **initial performance test**. Each subsequently quarterly report shall be postmarked by the 30th day following the end of the reporting period.	40 CFR § 60.48c (e)(11) and Minn. R. 7011.0570
Reports: Submit fuel supplier certification stating the following: 1. Name of the oil supplier 2. A statement that the oil complies with the specification under the definition of distillate oil.	40 CFR § 60.48c (f) (1) and Minn. R. 7011.0570
Record Keeping: Record and maintain records of the amount of fuel combusted monthly basis. The record shall be in form of fuel bills or meter reading, for example.	40 CFR § 60.48c (g); Minn. R. 7011.0570 and EPA's memo dated February 20, 1992.

Subject Item:	EU 500 700	 Painting/Coating Booths Abrasive Blasting Booth

What to do	Why to do it
PM_{10}: PM_{10} emissions not to exceed a 12-month rolling sum of 90 tons. **Refer to Appendix G for the limiting equation 2.**	Title I Condition: Limit to avoid classification as a major source or modification under 40 CFR § 52.24
Record Keeping: The calculations shall be done by the **15th day of each month**. Maintain all records of PM_{10} emissions calculations including the 12-month rolling sum on a monthly basis. **(If you do not have an actual operating history, use Table B in Appendix G to calculate your PM_{10} emissions).**	Title I Condition: Record keeping for limit to avoid classification as a major source or modification under 40 CFR § 52.24

Subject Item:	EU 500 600 800	 Painting/Coating Booths Degreasers Dip tanks
	TK 100	Distillate oil, LPG and Gasoline Tanks that **do not qualify as an insignificant activities.**

What to do	**Why to do it**
VOC usage: VOC usage not to exceed on a 12-month rolling sum of 241 tons. **Refer to Appendix G for the limiting equation 3.**	Title I Condition: Limit to avoid classification as a major source or modification under 40 CFR § 52.21 and Minn. R. 7007.3000.
Record Keeping: Once each day, calculate and record the following for the previous day: A. The weight of VOC containing materials used; B. The VOC content in pounds per gallon of each coating/solvent used. In addition all Materials Safety Data Sheet (MSDS) for each shipment, purchase orders and invoices necessary to verify the type and quantity used. **By the 15th day of each month calculate and record the following:** C. Total gallons of each coating/solvent used during the previous month; D. The sum total VOC usage during the previous month (multiply the VOC content of each coating/solvent by the monthly coating/solvent usage (in pounds), sum the results, then convert total pounds to tons); E. Total VOC usage 12-month rolling sum **(Calculate your 12-month rolling sum VOC usage limit every month by calculating a one month total and adding it to the sum of each month's total from the previous 11 consecutive months. If you do not have an actual operating history, Table C in the Appendix G to calculate your VOC emissions.**	Title I Condition: Record keeping for limit to avoid classification as a major source or modification under 40 CFR § 52.21 and Minn. R. 7007.3000.

The following National Emission Standards for Halogenated Solvent Cleaning Machines (40 CFR pt. 63, subp. T) apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform or any combination with these solvents, in a concentration greater than five weight percent and the holding capacity of a container for cleaning process is greater than two gallons.

(**New Source:** constructed or reconstructed after November 29, 1993)
(**Existing Source:** constructed or reconstructed on or before November 29, 1993. This includes machines constructed or reconstructed on or before November 29, 1993 that did not use halogenated HAP solvent liquid or vapor on December 2, 1994, when they commence using such liquid or vapor.

Subject Item:	EU 600	Each batch vapor, in-line vapor, and in-line cold cleaning machine

What to do	Why to do it
New Source: Must be in compliance with all applicable requirements listed below immediately upon startup or by December 2, 1994.	40 CFR § 63.460 (c); Minn. R. 7011.7200
Existing Source: Must be in compliance with all applicable requirements listed below by December 2, 1997 or 60 days after commencing use of halogenated HAP solvent if the existing cleaning machine did not use halogented HAP solvent on December 2, 1994.	40 CFR § 63.460 (d); Minn. R. 7011.7200
Existing or New Machines: Each cleaning machine shall meet the following design or operational requirements: 1. either employ an idling and downtime mode cover according to 40 CFR 63.463(a)(1)(i) or operate in a reduced room draft according to 2. have a freeboard ratio of 0.75 or greater; 3. have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts; and 4. if the machine uses a lip exhaust, it must have a properly designed and maintained carbon absorber that meets the requirements of 40 CFR § 63.463(e)(2)(vii).	40 CFR § 63.463 (a); Minn. R. 7011.7200

Existing or New Vapor Machines: Each vapor cleaning machine shall meet the following additional design requirements: 1. equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils; 2. equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser; and 3. have a primary condenser.	40 CFR § 63.463 (a)p; Minn. R. 7011.7200

*Existing or New Machine*s: Each cleaning machine shall monitor the hoist speed (HS) as described as follows: 1. Determine the HS by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes. 2. The monitoring shall be conducted each month for the first year. If no exceedance occurs for the first 12 months, the frequency may be changed to quarterly. 3. If an exceedance occurs during quarterly monitoring, the monitoring frequency shall return to monthly until another 12 months without an exceedance occurs. 4. If the Permittee can demonstrate that the hoist cannot exceed a speed of 11 ft/min. the HS monitoring shall be done each quarter at all times.	40 CFR § 63.466 (c); Minn. R. 7011.7200
Existing or New Vapor Machines: The Permittee shall either comply with a control combination option in Appendix K (7) of this permit or achieve and maintain a idling emission limit of 0.045 lb./hr/sq. ft.	Appendix K; 40 CFR § 63.463 (b) a; Minn. R. 7011.7200
Existing or New In-line Cleaning Machines: The Permittee shall either comply with a control combination option in Appendix K (8) of this permit or achieve and maintain an idling emission limit of 0.021 lb./hr/sq. ft.	Appendix K; 40 CFR § 63.463 (c); Minn. R. 7011.7200
Compliance with the NESHAP: If the Permittee chooses to comply with an idling emission limit under 40 CFR § 63.463(f), the Permittee must do the following: 1. Conduct an initial performance test using the Reference Method 307 to demonstrate compliance with the applicable idling emission limit and to establish parameters that will be monitored and to demonstrate compliance. The Permittee shall submit a test report in accordance with Minn. R. 7017.2035. 2. A Permittee employing the control devices in Appendix K (5) of this permit to meet the idling emission limit shall comply with the applicable control device requirement (performance, monitoring, and recordkeeping) in Appendix K (5) of this permit. 3. A Permittee using control devices which are not listed in Appendix K (5) of this permit shall indicate whether the exceedance of the parameters that are monitored to determine whether it would be classified as an immediate exceedance or whether a 15 days repair period would be allowed and the monitoring frequency for each control. The information must be submitted in the initial test report for approval by the MPCA.	40 CFR § 63.463 (f); § 63.465, § 63.466 (f); Minn. R. 7011.7200, 7017.2035
Compliance with the NESHAP: The Permittee shall meet the performance, monitoring and recordkeeping requirement for the control devices used to comply with this NESHAP standard as outlined in Appendix K (5) of this Permit.	40 CFR § 63.463; § 63.465, § 63.466, § 63.467 and Minn. R. 7011.7200

Control Combination Options: The Permittee using a control combination option in Appendix K (7) or Appendix K (8) or complying with the idling emission limit shall maintain the following applicable records in written or electronic form for the lifetime of the machine: 1. Owner's manual, or if not available, written maintenance and operating procedures, for the machine and control equipment. 2. Installation date of the machine and its control devices. 3. Dwell time for each part or parts basket. 4. Records of the halogenated HAP solvent content for each solvent used in the machine. 5. (idling emission limit) - records of the initial performance test, including the idling emission rate and values of the monitoring parameters measured during the test.	40 CFR § 63.467 and Minn. R. 7011.7200
Control Combination Options: The Permittee using a control options in Appendix K (7) or Appendix K (8) or complying with the idling emission limit shall maintain following applicable records in written or electronic form for a period of 5 years: 1. Applicable monitoring and recordkeeping requirement in Appendix K (5) of this permit. 2. Information on the actions taken to comply with a selected control option or idling emission limit, which shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels. 3. Estimates of annual solvent consumption for each solvent cleaning machine; and 4. the weekly measurement of the halogenated HAP solvent concentration in the carbon absorber exhaust.	40 CFR § 63.467 and Minn. R. 7011.7200
The Permittee shall use the forms in Appendix K of this permit, when submitting an initial notification report compliance report, exceedance report and annual report as mentioned below. For an exceedance report the Permittee shall use the Deviation Reporting Form (DRF-2).	40 CFR § 63.468; Minn. R. 7007.0800
Initial Notification Report for New Sources Only: Prior to construction or reconstruction of a new degreaser unit, the Permittee shall submit an initial notification report as soon as practicable before the construction or reconstruction is planned to commence.	Appendix K (1); 40 CFR § 63.468; Minn. R. 7007.0800, subp. 2
Compliance Report for New Sources: must be submitted to the MPCA no later than 150 days after startup or May 1, 1995, whichever is later. *Compliance Report for Existing Sources:* must be submitted to the MPCA no later than May 1, 1998.	Appendix K (4) 40 CFR § 63.468(c) Minn. R. 7011.7200;
Annual Report: Using the form in Appendix K (6), the Permittee shall submit an annual report by February 1 of the year following the one for which the report is being made.	Appendix K (6); 40 CFR § 63.468(f); Minn. R. 7011.7200
Exceedance Report: Using the Deviation Reporting Form (DRF-2) in Appendix H, the Permittee shall submit an exceedance report semiannually. However, once an exceedance has occurred the Permittee shall submit the exceedance report 30 days following the end of that quarter.	DRF-2, Appendix H; 40 CFR § 63.468(h); Minn. R. 7011.7200

Existing or New Machines Operational Practices: When applicable, each cleaning machine shall meet the following work and operational practices requirements. 1. Control air disturbances across the cleaning machine opening by either employing idling and downtime mode cover or reduced room draft. 2. The parts baskets or the parts being cleaned in an open-top batch vapor cleaning machine shall not occupy more than 50% of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 3 feet per minute or less. 3. Any spraying operation shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air. 4. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from the machine. 5. Parts baskets or parts shall be removed from the machine after dripping has stopped. 6. During startup of the machine, the primary condenser shall be turned on before the sump heater. 7. During shutdown of the machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off. 8. The solvent shall be transferred to and from the machine using threaded or other leak proof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface. 9. When a control option includes control equipment, it shall be maintained as recommended by the manufacturers of the equipment. 10. Each operator shall complete and pass the applicable sections of the test (See Appendix L of this permit), if requested during an inspection by the MPCA. 11. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container. 12. Sponges, fabric, wood, and paper products shall not be cleaned.	40 CFR § 63.463 (d); Minn. R. 7011.7200

Subject Item:	EU 600	Each Cold Batch Cleaning machine: (*New Source:* constructed or reconstructed after 11/29/93) (*Existing Source:* constructed or reconstructed on or before or 11/29/93 or existing non-halogenated solvent cleaning machine on 12/2/94, becomes a halogenated solvent machine)

What to do	Why to do it
New Source: Must be in compliance with applicable requirements listed below immediately upon startup or by December 2, 1994.	40 CFR § 63.460 (c); Minn. R. 7011.7200
Existing Source: Must be in compliance with applicable requirements listed below by December 2, 1997.	40 CFR § 63.460 (d); Minn. R. 7011.7200
Immersion Batch Cold Solvent Cleaning Machine: The Permittee shall employ a tightly fitting cover which shall be closed at all times except during parts entry and removal and **either** employ a water layer at a minimum thickness of 2.5 centimeters (1.0 inch) on the surface of the solvent within the cleaning machine, **or** a freeboard ratio of 0.75 or greater.	40 CFR § 63.462(a); Minn. R. 7011.7200
Remote-Reservoir Batch Cold Solvent Cleaning Machine: The Permittee shall employ a tightly fitting cover over the solvent sump that shall be closed at all times except during the cleaning of parts.	40 CFR § 63.462(b); Minn. R. 7011.7200
The Permittee shall use the form in Appendix K of this permit, when submitting an initial notification report or compliance report.	40 CFR § 63.462 (d), § 63.468; Minn. R. 7007.0800
Initial Notification Report for New Sources Only: Prior to construction or reconstruction of a new cleaning machine, the Permittee shall submit an initial notification report as soon as practicable before the construction or reconstruction is planned to commence.	Appendix K (2); 40 CFR § 63.468; Minn. R. 7007.0800, subp. 2
Compliance Report for New Source: must be submitted to the MPCA no later than 150 days after startup or May 1, 1995, whichever is later. *Compliance Report for Existing Source:* must be submitted to the MPCA no later than May 1, 1998.	Appendix K (3); 40 CFR § 63.468(c); Minn. R. 7011.7200

What to do	Why to do it
Immersion Batch Cold Solvent Cleaning Machine where the *choice of control option is a freeboard ratio,* and Remote-Reservoir Batch Cold Solvent Cleaning Machine: The Permittee shall comply with the following work and operational practice requirements: 1. All waste solvent shall be collected and stored in closed containers. The closed container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. 2. If a flexible hose or flushing device is used, flushing shall be performed only within the freeboard area of the solvent cleaning machine. 3. The solvent cleaned parts shall be drained for 15 seconds or until dripping has stopped, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while draining. 4. The owner or operator shall ensure that the solvent level does not exceed the fill line. 5. Spills during solvent transfer shall be wiped up immediately. The wipe rags shall be stored in a closed container. 6. When an air or pump-agitated solvent bath is used, the owner or operator shall ensure that the agitator is operated to produce a rolling motion of the solvent but not observable splashing against tank walls or parts being cleaned. 7. The Permittee shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 132 feet per minute, as measured between 3.3 and 6.6 feet upwind and at the same elevation as the tank lip. 8. Sponges, fabric, wood, and paper products shall not be cleaned.	40 CFR § 63.462(b); Minn. R. 7011.7200

Storage tanks placed in operation after July 23, 1984, and subject to NSPS. This permit authorizes only storage tanks less than 151 cubic meters (39, 890 gallons).

Subject Item:	TK 100	Storage Tanks **(Constructed, modified or reconstructed after July 23, 1984).**

What to do	Why to do it
Record keeping: Maintain records showing the dimension of the storage tank and an analysis showing the capacity of the storage tanks.	40 CFR § 60.116b (b); Minn. R. 7011.1520 (C)

Storage tanks placed in operation on July 7, 1969, to June 11, 1973.

Subject Item:	TK 100	Storage Tanks (Storage capacity of greater than 7,571 liters (2, 000 gallons) and less than or equal to 246,405 liters (65,000 gallons).

What to do	Why to do it
The storage tank shall be equipped with a permanent submerged fill pipe.	Minn. R. 7011.1505, subp. 2(B)

Storage tanks placed in operation after June 11, 1973, and not subject to NSPS. This permit authorizes only storage tanks less than 151 cubic meters (39, 890 gallons).

Subject Item:	TK 100	Storage Tanks (Storage capacity of greater than 7,571 liters (2, 000 gallons) and less than or equal to 151,412 liters (40,000 gallons).

What to do	Why to do it
The storage tank shall be equipped with a permanent submerged fill pipe.	Minn. R. 7011.1505, subp. 3 (B)

This carat (<>) means to input a numerical number according to the design of the fabric filter. The Permittee shall record this data in the Operation and Maintenance (OM) plan within 30 days after permit issuance or 30 days after installation of any new control equipment for which there are such operating parameter requirements.

Subject Item:	CE 100	Fabric Filters
Associated Item:	EU 500	Spray Booths

What to do	Why to do it
Operation and Maintenance of Fabric Filter: The Permittee shall operate and maintain the fabric filter according to the control equipment manufacturer's specifications, shall conduct inspections, and maintain documentation of those actions as required by Minn. R. 7011.0075, subp. 2(A) to 2(I).	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Pressure Drop: Maintain greater than or equal to <> inches of water column and less than or equal to <> inches of water column.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Record keeping of Pressure Drop. The Permittee shall record pressure drop once every 24 hours, if spray booth in operation and whether or not the recorded pressure drop was within the range specified in the compliance management plan. If it is not within the range, then it will be considered a deviation.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Visible Emissions: The Permittee shall check the fabric filter stack (SV ###) for any visible emissions once each day of operation during daylight hours.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 5
Record keeping of Visible Emissions (VE): The Permittee shall keep records on the time and date of VE inspections, and whether or not any VEs were observed.	
Record keeping of corrective actions: The Permittee shall follow the OM plan for the fabric filter and take corrective actions as soon as possible to eliminate any problem associated with this control equipment as follows: • if visible emissions are observed; • if the recorded pressure drop is outside the required operating range; or • if the fabric filter or any of its components are found during the inspections to need repair, The Permittee shall keep a record of the type an date of any corrective actions taken.	Minn. R. 7007.0800, subp. 5

The Permittee shall record this data in the Operation and Maintenance (OM) plan within 30 days after permit issuance or 30 days after installation of any new control equipment for which there are such operating parameter requirements.

Subject Item:	CE 200	Wall/Panel Filters
Associated Item:	EU 500	Spray Booths

What to do	Why to do it
Operation and Maintenance of Wall/Panel Filter: The Permittee shall operate and maintain the wall/panel filter according to the control equipment manufacturer's specifications, shall conduct inspections, and maintain documentation of those actions as required by Minn. R. 7011.0075, subp. 2(A) to 2(I).	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Daily Inspections: Once each operating day, if the spray booth in operation, the Permittee shall visually inspect the condition of each wall/panel filter with respect to alignment, saturation, tears, holes and any other matter than may affect the filter's performance. The Permittee shall maintain a daily written record of filter inspections.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
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. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Recordkeeping of corrective actions: If the filters or any of their components are found during the inspections to need repair, the Permittee shall follow the O & M Plan for the wall/panel filter and take corrective action as soon as possible. The Permittee shall keep a record of the type and date of any corrective action taken for each filter	Minn. R. 7007.0800, subp. 5

This carat (<>) means to input a numerical number according to the design of the Catalytic Oxidizer. The Permittee shall record this data in the Operation and Maintenance (OM) plan within 30 days after permit issuance or 30 days after installation of any new control equipment for which there are such operating parameter requirements.

Subject Item:	CE 400	Catalytic Oxidizer
Associated Item:	EU 500	Spray Booths

What to do	Why to do it
Operation and Maintenance of Catalytic Oxidizer: The Permittee shall operate and maintain the Catalytic Oxidizer according to the control equipment manufacturer's specifications, shall conduct inspections, and maintain documentation of those actions as required by Minn. R. 7011.0075, subp. 2(A) to 2(I).	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Volatile Organic Compounds: greater than or equal to <95/57> percent efficiency	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Temperature: The Permittee shall maintain a minimum inlet temperature of <> and a minimum outlet temperature of <> when operating.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Catalyst Reactivity: The Permittee shall verify the catalyst reactivity per the manufacturer's specifications and shall maintain a record of the results.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
The Permittee shall maintain either a continuous hard copy readout of the inlet and outlet temperatures or maintain a hard copy of manual readings taken at least every 15 minutes.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Record keeping of Corrective Actions: If the temperature is below the minimum specified by this permit or if the catalytic oxidizer or any of its components are found during the inspections to need repair, the Permittee shall follow the O & M Plan for the oxidizer and take corrective action as soon as possible. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4

This carat (<>) means to input a numerical number according to the design of the thermal oxidizer. The Permittee shall record this data in the Operation and Maintenance (OM) plan within 30 days after permit issuance or 30 days after installation of any new control equipment for which there are such operating parameter requirements.

Subject Item:	CE 300	Thermal Oxidizer
Associated Item:	EU 500	Spray Booths

What to do	Why to do it
Operation and Maintenance of Thermal Oxidizer: The Permittee shall operate and maintain the Thermal Oxidizer according to the control equipment manufacturer's specifications, shall conduct inspections, and maintain documentation of those actions as required by Minn. R. 7011.0075, subp. 2(A) to 2(I).	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Volatile Organic Compounds: greater than or equal to <95/57> percent efficiency	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Temperature: The Permittee shall maintain a minimum combustion temperature of <> F when operating.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
The Permittee shall maintain either a continuous hard copy readout of the inlet and outlet temperatures or maintain a hard copy of manual readings taken at least every 15 minutes.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Record keeping of corrective actions: If the temperature is below the minimum specified by this permit or if the thermal oxidizer or any of its components are found during the inspections to need repair, the Permittee shall follow the O & M Plan for the oxidizer and take corrective action as soon as possible. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4

This carat (<>) means to input a numerical number according to the design of the thermal afterburner. The Permittee shall record this data in the Operation and Maintenance (OM) plan within 30 days after permit issuance or 30 days after installation of any new control equipment for which there are such operating parameter requirements.

Subject Item:	CE 400	Thermal Afterburner
Associated Item:	EU 200	Burn-off Oven

What to do	Why to do it
Operation and Maintenance of Thermal Oxidizer: The Permittee shall operate and maintain the Thermal Oxidizer according to the control equipment manufacturer's specifications, shall conduct inspections, and maintain documentation of those actions as required by Minn. R. 7011.0075, subp. 2(A) to 2(I).	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Volatile Organic Compounds: greater than or equal to <95/57> percent efficiency	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Temperature: The Permittee shall maintain a minimum combustion temperature of <> F when operating.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
The Permittee shall maintain either a continuous hard copy readout of the inlet and outlet temperatures or maintain a hard copy of manual readings taken at least every 15 minutes.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Record keeping of corrective actions: If the temperature is below the minimum specified by this permit or if the thermal oxidizer or any of its components are found during the inspections to need repair, the Permittee shall follow the O & M Plan for the oxidizer and take corrective action as soon as possible. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4

This carat (<>) means to input a numerical number according to the design of the fabric filter. The Permittee shall record this data in the Operation and Maintenance (OM) plan within 30 days after permit issuance or 30 days after installation of any new control equipment for which there are such operating parameter requirements.

Subject Item:	CE100	Fabric Filter
Associated Item:	EU 700	Abrasive Blasting Booths

What to do	Why to do it
Operation and Maintenance of Fabric Filter: The Permittee shall operate and maintain the fabric filter according to the control equipment manufacturer's specifications, shall conduct inspections, and maintain documentation of those actions as required by Minn. R. 7011.0075, subp. 2(A) to 2(I).	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Pressure Drop: Maintain greater than or equal to <> inches of water column and less than or equal to <> inches of water column.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Record keeping of Pressure Drop. The Permittee shall record pressure drop once every 24 hours, if blasting booth in operation and whether or not the recorded pressure drop was within the range specified in the compliance management plan. If it is not within the range, then it will be considered a deviation.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 4
Visible Emissions: The Permittee shall check the fabric filter stack (SV ##) for any visible emissions once each day of operation during daylight hours.	Minn. R. 7011.0080; Minn. R. 7007.0800, subp. 5
Record keeping of Visible Emissions(VE): The Permittee shall keep records on the time and date of VE inspections, and whether or not any VEs were observed.	
Record keeping of corrective actions: The Permittee shall follow the OM plan for the fabric filter and take corrective actions as soon as possible to eliminate any problem associated with this control equipment as follows: • if visible emissions are observed; • if the recorded pressure drop is outside the required operating range; or • if the fabric filter or any of its components are found during the inspections to need repair, The Permittee shall keep a record of the type an date of any corrective actions taken.	Minn. R. 7007.0800, subp. 5

TABLE B: SUBMITTALS

Table B lists the submittals you must send to the Commissioner. Table B is divided into two sections, for source-specific submittal requirements and for submittals required of all Permittees. Source-specific submittals are further organized as either one-time only or recurrent requirements. You may also be subject to additional reporting requirements contained in the compliance schedule located in Table C of this permit.

Return complete permit application to:
Minnesota Pollution Control Agency
Air Quality Permit Technical Assistant
520 Lafayette Road North,
St. Paul, Minnesota 55155-4194.

Send all other submittals to:
Minnesota Pollution Control Agency
Air Quality Compliance Tracking Coordinator,
520 Lafayette Road North,
St. Paul, Minnesota 55155-4194.

SOURCE-SPECIFIC SUBMITTALS--ONE-TIME SUBMITTALS OR NOTIFICATIONS:

When to send	What to send	Portion of facility affected
Due 180 days before expiration of existing permit	**Application for Permit Reissuance**	Total Facility
Installation of a New cleaning machine that is subject to the halogenated solvent NESHAP	**Initial Notification Report**	Emission Unit 600 Series
Due no later than a 150 days after startup of New cleaning machine subject to the halogenated solvent NESHAP	**Compliance Report**	Emission Unit 600 Series
Due no later than May 1, 1998, for Existing cleaning machines subject to the halogenated solvent NESHAP	**Compliance Report**	Emission Unit 600 Series
Due 60 days after permit issuance	**Compliance Management Plan**	Total Facility
Due 7 days before making a change to the facility	**Compliance Management Plan Update**	Emission Unit
Due within 7 days of the name change in ownership or operational control of the company.	**Air Emission General Permit Administrative Change**	Total Facility

SOURCE-SPECIFIC SUBMITTALS-- ONE-TIME SUBMITTALS OR NOTIFICATIONS:

When to send	What to send	Portion of facility affected
Notification of the Date Construction Began	**due 30 days after start of construction**	Emission Unit 100 Series
Notification of Actual Date of Initial Startup	**due 15 days after initial startup**	Emission Unit 100 Series
Notification of Design Heat Input, Fuels and Anticipated Annual Capacity Factor	**due 15 days after initial startup to be submitted with the notification of the actual date of initial startup. The notification shall include the design heat input capacity, identification of fuels to be combusted, and the annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.**	Emission Unit 100 Series

SOURCE-SPECIFIC SUBMITTALS--RECURRENT SUBMITTALS:

When to send	What to send	Portion of facility affected
At least semiannually (January 30, July 30); see Table C	**Compliance Schedule Progress Reports** Submit progress reports relative to the Compliance Schedule contained in Table C on a form approved by the Commissioner. Progress reports will not be needed upon completion of all activities contained in the schedule.	Emission Unit 100 Series
Semi-annually: January 30, July 30	**Deviations Reports** To be submitted on a form approved in Appendix H, with a summary of *all* instances of deviations from permit conditions. Submit the January 30 report with your annual Compliance Certification. If there are no deviations during a report period, the Permittee shall submit the report stating there are no deviations.	Total Facility
Annually: January 30, for the previous calendar year	**Annual Compliance Certification** To be submitted on a form approved by the Commissioner, in Appendix H.	Total facility
Annually: January 30, for the previous calendar year	**Equipment Inventory List**	Total facility
Annually: April 1, for the previous calendar year	**Emissions Inventory Report**	Total facility
Annually: Within 60 days of receipt of an MPCA bill	**Emission Fees**	Total facility
Semi-annually: January 30, July 30; If applicable, Quarterly: 30 days at the end of each quarter	**Exceedance Report**	Emission Unit 600 Series
Annually: February 1, for the previous calendar year	**Annual Report for cleaning machines subject to the halogenated solvent NESHAP**	Emission Unit 600 Series

TABLE C: COMPLIANCE SCHEDULE

Table C contains the compliance schedule as required by Minn. R. 7007.0500, subp. 2, Item K. You must complete the actions required in Table C by the dates listed in the table. This applies only to stationary sources out of compliance at the time of permit issuance to the source.

Subject Item:	EU100	Boiler **(Subject to NSPS 40 CFR pt. 60, subp. Dc)**

Citation	Corrective action	When to complete this action
40 CFR § 60.7 and Minn. R. 7019.0100, subp. 1	**Notifications**: Submit notifications of construction and initial startup for all boilers.	Within 60 days of the permit issuance.
40 CFR § c (a)(7) and Minn. R. 7019.0100, subp. 1	**Performance Test:** Conduct a performance test on each boiler constructed, reconstructed, or modified after June 9, 1989, for which a performance test has not been completed, if applicable. The performance test must be conducted in accordance with the procedures contained in Minn. R. 7017.2001 -7017.2060.	Within 180 days of the permit issuance.
40 CFR § 60.42 c(f)(1) and Minn. R. 7019.0100, subp. 1	**Fuel Certification**: Submit fuel certification including the name of the oil supplier and a statement that the oil complies with the specification under the definition of distillate oil.	Within 60 days of the permit issuance.

Subject Item:	TK100	Storage Tank **(Subject to NSPS 40 CFR 60 subpart Kb)**

Citation	Corrective action	When to complete this action
40 CFR 60.116b(b) and Minn. R. 7011.1520 (C)	**Record keeping** - Records showing the dimension of the storage tank and an analysis showing the capacity of the storage tank.	Within 30 days of the permit issuance.

Subject Item:	EU 500	Painting/coating Booths

Citation	Corrective action	When to complete this action
To qualify for this general permit under Minn. R. 7007.1100 and 7007.0800, subp. 2	**Notification**: Submit notification of the date that you discontinued using painting and coating materials that contained lead.	Within 60 days of the permit issuance.
To qualify for this general permit under Minn. R. 7007.1100 and 7007.0800, subp. 2	**Notification:** Submit notification of the date of installation of particulate matter pollution control equipment.	Within 60 days of the permit issuance.

APPENDIX G: SOURCE-SPECIFIC

1. The Limitation for Combustion Sources (Indirect heating sources and Internal combustion Engines) based on a 12-month monthly rolling sum.

NO_x and CO emissions are less than 100 tons based on a 12-month rolling sum. The emissions during a given month total and a 12-month rolling sum are calculated using the following equation 1:

Equation 1:

$$NO_x \text{ (or CO)} = 0.0005 \times [(EF \times Q)_{ng} + (EF \times Q)_{lpgb} + (EF \times Q)_{lpgp} + (EF \times Q)_{do}]_{ihs} \text{ pounds/month}$$
$$+[(EF \times Q)_{ng} + (EF \times Q)_{do} + (EF \times Q)_{g}]_{rice} \text{ pounds/month (lb/mon)}$$

where:

EF = emission factor (see Table 6.2 and 6.3)
Q = actual quantity of fuel burned per month (use the units that are appropriate to the emission factor for each fuel type.)
ng = natural gas
lpgb = liquefied petroleum gas(butane)
lpgp = liquefied petroleum gas (propane)
do = distillate oil
g = gasoline
ihs = indirect heating source
rice = reciprocating internal combustion engines
0.0005 = conversion factor, ton/lb

Table 6.2

Industrial Indirect Heating Sources				
Emission Factor				
Pollutant	**Natural Gas ($lb/MMft^3$)**	**LPG - Butane (lb/1000 gal)**	**LPG - Propane (lb/1000 gal)**	**Distillate Oil (lb/1000 gal)**
PM	13.7	0.6	0.6	2
PM_{10}	13.7	0.6	0.6	2
SO_x	0.6	0.09S	0.10S	144S
NO_x	140	21	19	25
VOC	2.784	0.6	0.5	0.2
CO	61	3.6	3.2	5
Pb	-	-	-	0.0

Table 6.3

Industrial Reciprocating Internal Combustion Engines			
Emission Factors			
Pollutant	**Natural Gas ($lb/MMft^3$)**	**Distillate Oil (Diesel) (lb/1000 gal)**	**Gasoline (lb/1000 gal)**
PM	10.0	33.5	6.47
PM_{10}	10.0	32.0	6.2
SO_x	0.6	31.2	5.31
NO_x	3400.0	469.0	102.0
VOC	82.9	32.1	147.7
CO	430.0	102.0	3940.0
Pb	-	-	-

Notes:

(1) PM = Particulate Matter
PM_{10} = Particulate Matter less than 10 microns in aerodynamic diameter
SO_2 = Sulfur Dioxide
NO_x = Oxides of Nitrogen
VOC = Volatile Organic Compounds
CO = Carbon Monoxide
Pb = Lead
MM = Million
Btu = British thermal unit
lbs = pounds
ft^3 = cubic feet
gal = gallons

(2) Natural Gas heating value is 1, 050 Btu/standard cubic foot.
LPG heating value is 94,000 Btu/gal.
Gasoline heating value is 130,000 Btu/gal.
Distillate Oil (Diesel) heating value is 140,000 Btu/gal

(3) S for Distillate Oil: Weight percent sulfur in oil. S indicates that the weight percent of sulfur in the oil should be multiplied by the value given. The maximum weight percent sulfur allowed in Minnesota is 0.5 percent.

(4) S for LPG: Sulfur content expressed on grams/1000 cubic foot gas vapor. S is assumed to be 15 grams/1000 cubic feet vapor which is equivalent to 0.02 percent sulfur by weight.

Permittee With No Operating Records Prior to Issuance of this Permit: For emission limits based on a 12-month rolling sum, the Permittee shall calculate the 12-month rolling sum on a monthly basis. For the first 12 months of operation, the Permittee shall use the following Table A below:

TABLE A

Number of Months in Operation	Cumulative NO_x/CO Emission Limit During First 12 Months of Operation (ton)
1	20.0
2	27.2
3	34.4
4	41.6
5	48.8
6	56.0
7	63.2
8	70.4
9	77.6
10	84.8
11	92.0
12	99.0

2. The Limitation for PM_{10} Based on a 12-month rolling sum

Permittee with Operating Records. The PM_{10} emissions based on a 12-month rolling sum in Equation 2 of this permit, the Permittee shall calculate the 12-month rolling sum on a monthly basis. For the first 12 months of operation, the Permittee shall use its actual operating history prior to issuance of this permit.

Equation 2:

Equation 2a, for sources which qualify for 100 percent capture efficiency and collection efficiency of 92 percent and greater.

$$PM10 = \left[\left(P_c \times t_1 \times \left((100 - \%control)/100\right)\right) + \left(P_d \times t_2 \times \left((100 - \%control)/100\right)\right)\right] \times 0.0005 \text{ ton / mon}$$

Equation 2b, for sources with 80 percent capture efficiency and collection efficiency of 92 percent and greater.

$$PM10 = \left[\left(0.8P_c \times t_1 \times \left((100 - \%control)/100\right)\right) + \left(0.8P_d \times t_2 \times \left((100 - \%control)/100\right)\right)\right] \times 0.0005 \text{ ton / mon} + 0.2P_c \times t_1 \times 0.0005 \text{ton / mon} + 0.2P_d \times t_2 \times 0.0005 \text{ton / mon}$$

where:

P_c = uncontrolled particulate emissions from the painting/coating, pounds/hour (lb/ hr)
t_1 = operating hours of the painting/coating operation during the month, hour/month (hr/mon)
P_d = uncontrolled particulate emissions from blasting, lb/hr
t_2 = monthly operating hours of the blasting operation, hr/mon
%control = overall control efficiency of the particulate control equipment.
0.0005 = conversion factor, ton/pounds (ton/lbs)

Emissions factors for PM_{10} emissions from abrasive blasting obtained from Volume I of STAPPA-ALAPCO "Air Quality Permits" are given in Table 6.6.

Table 6.6

	Emission Factor	
Abrasive	**lb PM / lb abrasive**	**lb PM_{10} / lb PM**
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	0.010

Permittee With No Operating Records Prior to Issuance of this Permit: For emission limits based on a 12-month rolling sum, the Permittee shall calculate the 12-month rolling sum on a monthly basis. For the first 12 months of operation, the Permittee shall use the following Table B below:

TABLE B

Number of Months in Operation	Cumulative PM_{10} Emission Limit During First 12 Months of Operation (ton)
1	20.0
2	26.5
3	33.0
4	39.5
5	46.0
6	52.5
7	59.0
8	65.5
9	72.0
10	78.5
11	84.0
12	90.0

3. Permittee With Operating Records. The VOC usage limitation based on a 12-month rolling sum, the Permittee shall calculate the 12-month rolling sum on a monthly basis as specified in Equation 3. For the first 12 months of operation, the Permittee shall use its actual operating history prior to issuance of this permit.

Equation 3:

$$\text{VOC} = \left[\left(\sum A_i V_i\right) + \left(\sum B_j Z_j\right)\right] \times \left[(100 - \%\text{control}) / 100\right] \times 0.0005 + C\,(0.0005)$$

where:
i = denotes each separate material used for painting/coating
j = denotes each separate material used for cleanup
A_i = amount of VOC containing materials used for painting/coating as purchased, lb/month
V_i = percent of VOC in A_i as applied, %wt
B_j = amount of VOC containing materials used for cleaning as purchased, lb/month
Z_j = percent of VOC in B_i as applied, %wt
%control = overall control efficiency VOC control equipment; use 95% for total enclosure and 57% for hood
C_i = VOC emissions for the storage tanks, lb/month
0.0005 = conversion factor, ton/lb

Permittee With No Operating Records Prior to Issuance of this Permit: The emission limits based on a 12-month rolling sum, the Permittee shall calculate the 12-month rolling sum on a monthly basis. For the first 12 months of operation, the Permittee shall use the following Table C below:

TABLE C:

Number of Months in Operation	Cumulative VOC Usage Limit During First 12 Months of Operation (ton)
1	50.0
2	67.3
3	84.5
4	101.8
5	119.0
6	136.3
7	153.5
8	170.8
9	188.0
10	206.0
11	223.0
12	241.0

APPENDIX H - DEVIATIONS REPORTING FORMS

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

DEVIATION REPORTING FORM DRF-2

DEVIATIONS IDENTIFIED BY PERIODIC MONITORING SYSTEMS OR THROUGH RECORDKEEPING

12/00

Use this form to record and report deviations that are identified by *Periodic Monitoring Systems or Recordkeeping.*. "Periodic Monitoring System" means a monitoring system in which the monitor's output is not recorded continuously.

GENERAL FACILITY INFORMATION

Facility Name: _____AQ Facility ID: _____

Report Covers From _____ To: _____ of _____(year).

DESCRIPTION OF DEVIATIONS - Provide the following information regarding each individual deviation identified by a periodic monitoring system. Be sure to report any deviations which occurred during monitor downtime or monitor bypasses.

Date of Deviation	Emission Unit ID No.	Monitor ID No.	Cite Permit Condition Which Was Deviated From	Description of Deviation and Corrective Action Taken

DESCRIPTION OF MONITOR DOWNTIME - Provide the following information regarding each period when a periodic monitoring system did not record required data.

Date and Time of Missed Record	Monitor ID No.	Emission Unit ID No.	Pollutant or Parameter Monitored	Cause of the Monitor Downtime and Corrective Action Taken

SUMMARY OF DEVIATIONS AND MONITOR DOWNTIME - Provide the following summary information. Fill out a separate row of the table *for each monitor*.

Monitor ID No.	Total Number of Readings Taken	Total Number of Readings Indicating Deviations	Percent of Readings Indicating Deviations	Total No. of Readings Missed	Total Percentage of Readings Missed

DEVIATIONS DISCOVERED THROUGH RECORDKEEPING: In the following section, list each deviation that was discovered through recordkeeping (e.g. your fuel use records indicate that you exceeded your fuel use limits). Provide at least the date(s) of each deviation; level of deviation; emission unit and the cause of each deviation.

1. _____

2. _____

3. _____

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

_____ _____

Signature of Responsible Official | Printed Name of Person Signing

_____ _____

Title | Date

Note: The individual signing must meet the definition of "responsible official" in Minn. R. 7007.0100, subp. 21.

Forward To: Air Quality Compliance Tracking Coordinator
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

REPORTING FORM **CR-04**

ANNUAL COMPLIANCE CERTIFICATION REPORT

12//00

GENERAL FACILITY INFORMATION

Facility Name: _____

AQ Facility ID Number: _____

This certification report covers the period of January 1-December 31, _____

REPORTS THAT WERE SUBMITTED TO THE MPCA AND WHICH INCLUDED DEVIATIONS

☐ Check here if no deviations have been reported. Only list below reports which included deviations.

Type of Deviation Report	Period Covered by Report	Date of Cover Letter Accompanying Report

CERTIFICATION

I certify under penalty of law that I have reviewed this facility's compliance status with respect to *all* permit conditions for the above specified calendar year. I have determined, to the best of my knowledge, that this facility has been in continuous compliance with all permit conditions with the exception of those requirements listed in the above deviations report(s) which have been submitted to the Air Quality Compliance Tracking Coordinator at the Minnesota Pollution Control Agency (MPCA):

_____ _____
Signature of Responsible Official Printed Name of Person Signing

_____ _____
Title Date

Note: The individual signing must meet the definition of "responsible official" in Minn. R. 7007.0100, subp. 21.

Forward To:

Air Quality Compliance Tracking Coordinator
Minnesota Pollution Control Agency
520 Lafayette Road North
Saint Paul, Minnesota 55155-4194

Mr. George Czerniak, Chief
Air Enforcement & Compliance Assurance Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

APPENDIX I

AQ Facility ID No:._____ Facility Name:_____YEARLY NO_x EMISSIONS WORKSHEET

	Month	Year	IHS Natural Gas (SCF/mo) (C1)	IHS Butane (gallons/mo) (C2)	IHS Propane (gallons/mo) (C3)	IHS Diesel Fuel (gallons/mo) (C4)	RICE Natural Gas (SCF/mo) (Q1)	RICE Diesel Fuel (gallons/mo) (Q2)	RICE Gasoline (gallons/mo) (Q3)	NOx Emissions * (ton/mo)	(ton/yr)	Permit Limit: NOx Emissions (ton)	(ton)**
											--		
											--		
											--		
											--		
											--		
											--		
											--		
											--		
											--		
											--		
1											--	99	20.0
2												99	27.2
3												99	34.4
4												99	41.6
5												99	48.8
6												99	56.0
7												99	63.2
8												99	70.4
9												99	77.6
10												99	84.8
11												99	92.0
12												99	99.0

***** NO_x emissions (ton/mo) = $0.0005\ [(0.00014C_1 + 0.021C_2 + 0.019C_3 + 0.025C_4) + (0.0034Q_1 + 0.469Q_2 + 0.102Q_3)]$

** Permit limit for first 12 month if no operating records.

AQ Facility ID No:._____ Facility Name:_____YEARLY CO EMISSIONS WORKSHEET

	Month	Year	IHS Natural Gas (SCF/mo) (D1)	IHS Butane (gallons/mo) (D2)	IHS Propane (gallons/mo) (D3)	IHS Diesel Fuel (gallons/mo) (D4)	RICE Natural Gas (SCF/mo) (F1)	RICE Diesel Fuel (gallons/mo) (F2)	RICE Gasoline (gallons/mo) (F3)	CO Emissions * (ton/mo)	(ton/yr)	Permit Limit: CO Emissions (ton)	(ton)**
											--		
											--		
											--		
											--		
											--		
											--		
											--		
											--		
											--		
1											--	99	20.0
2												99	27.2
3												99	34.4
4												99	41.6
5												99	48.8
6												99	56.0
7												99	63.2
8												99	70.4
9												99	77.6
10												99	84.8
11												99	92.0
12												99	99.0

***** CO emissions (ton/mo) = $0.0005\ [(0.000035D_1 + 0.0036D_2 + 0.0032D_3 + 0.005D_4) + (0.00043F_1 + 0.102F_2 + 3.94F_3)]$

** Permit limit for first 12 month if no operating records.

AQ Facility ID No.:_____ Facility Name:_____ **YEARLY PM_{10} EMISSIONS WORKSHEET**

	Month	Year	Total Monthly PM_{10} emissions from painting/coating (ton/month)	Total Monthly PM_{10} emissions from blasting (ton/month)	PM_{10} Emissions from MISC. Sources (ton/month)	Total Monthly PM_{10} Emissions * (ton/month)	Permit Limit: PM_{10} Emissions (current month plus the previous 11 months). This number has to be less than or equal to 90 tons (tons)	(tons)**
1								20.0
2								26.5
3								33.0
4								39.5
5								46.0
6								52.5
7								59.0
8								65.5
9								72.0
10								78.5
11								84.0
12								90.0

* PM Emissions (ton/mo) = Add the emissions from painting/coating, blasting and the miscellaneous sources (see equation 2 on page 45)

** Permit Limit for the first 12 month, if no operating records

MONTHLY VOC USAGE WORKSHEET

AQ Facility ID No.:_____ Record For: (month/year)
Facility Name:_____ Date Prepared: (day/month/year)

Coating/Solvent	VOC Content (lb/gallons)	Usage Total (gallons)	Monthly VOC Usage (lbs/month)		
				Total Monthly VOC Usage (ton/month)	l2-month rolling sum VOC Usage (tons)

AQ Facility ID No.:_____ Facility Name:_____**YEARLY VOC EMISSIONS WORKSHEET**

	Month	Year	Total Monthly VOC Usage from painting/coating (ton/month)	Total Monthly VOC Usage from cleaning (ton/month)	VOC Emissions from Storage Tanks (ton/month)	Total Monthly VOC Emissions * (ton/month)	Permit Limit: VOC Emissions (current month plus the previous 11 months). This number has to be less than or equal to 241 tons (tons)	(tons)**
1								50.0
2								67.5
3								84.5
4								101.8
5								119.0
6								136.3
7								153.5
8								170.8
9								188.0
10								206.0
11								223.0
12								241.0

* VOC Emissions (ton/mo) = Add the emissions from painting/coating, cleaning , storage tanks and miscellaneous sources. (see equation 3 on page 47)

** Permit Limit for the first 12 month, if no operating records

APPENDIX J

EQUIPMENT INVENTORY LIST FORM

AQ Facility ID No.:_____ Facility Name:_____

Type of Equipment	Serial Number	Manufacturer	Date of construction (MM/DD/YY)	Date of Installation (MM/DD/YY)	Is the unit subject to NSPS? (Attach a copy of the notifications)	Is the unit affected by NESHAP? (Attach a copy of the notifications)	Did you re-evaluate to determine if you still qualify for this permit?	Did you re-evaluate to determine if your actuals will be below the thresholds in the permit?

APPENDIX K

1. National Emission Standard for Hazardous Air Pollutants (NESHAP) for Degreasers Initial Notification Report for New Cleaning Machine

AQ Facility ID No.: _____
AQ File No:_____
Owner/Operator: _____ Date:_____
Last Name, First Name, Middle Initial
Company Name:_____
Mailing Address:_____
Street City State Zip
Equipment Location Address:_____
Street City State Zip

Cleaning Machine Summary
Identification Number Description

1. Type of machine intended for construction /reconstruction (check one):
   _____Batch vapor _____Cold in-line _____ Vapor in-line
2. Solvent/air interface area:_____ square meters or _____square inches
3. Intended controls:
   _____Freeboard ratio of 1.0 _____Carbon adsorber _____ Freeboard refrigeration device
   _____ Reduced room draft _____Super-heated vapor _____ Dwell
   _____Working-mode cover _____Other _____ (control)
4. Proposed construction or reconstruction commencement date:_____
5. Expected construction or reconstruction completion date:_____
6. Anticipated date of initial startup:_____
7. Anticipated compliance approach:
   _____Basic equipment standard _____Idling emission standard _____Alternative standard
8. Estimate of halogenated HAP* solvent consumption:_____kilograms/year (pounds/year)

* HAP refers to Hazardous Air Pollutants (specifically: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride and chloroform)

2. National Emission Standard for Hazardous Air Pollutants (NESHAP) for Degreasers Initial Notification Report for Batch Cold Cleaning Machine (New Source)

AQ Facility ID No.: _____
AQ File No:_____
Owner/Operator: _____ Date:_____
Last Name, First Name, Middle Initial
Company Name:_____
Mailing Address:_____
Street City State Zip
Equipment Location Address:_____
Street City State Zip

Information Required **Per** Cleaning Machine (Make copies for additional machines as necessary)

1. Cleaner Identification Number:_____
2. Cleaning Machine Type (check one): _____Immersion _____Remote-Reservoir
3. Solvent/air interface area:_____
4. Machine installation date:_____
5. Any existing controls:_____
6. Anticipated equipment control combination compliance approach (check one):
   _____Cover and water layer _____Cover with work Practices _____Cover and a 0.75 freeboard ratio or greater with work practices
7. Annual solvent consumption estimate:_____kilograms/year or_____pounds/year
8. Proposed construction or reconstruction commencement date:_____
9. Expected construction or reconstruction completion date:_____
10. Anticipated date of initial startup:_____

3. National Emission Standard for Hazardous Air Pollutants (NESHAP) for Degreasers
Compliance Report for Batch Cold Cleaning Machine

AQ Facility ID No.: _____
AQ File No:_____
Owner/Operator: _____ Date:_____
Last Name, First Name, Middle Initial
Company Name:_____
Mailing Address:_____
Street City State Zip
Equipment Location Address:_____
Street City State Zip

Cleaning Machine Summary

Identification Number	Description

Information Required **Per** Cleaning Machine (Make copies for additional machines as necessary)

1. Cleaner Identification Number:_____
2. Cleaning Machine Type (check one): _____Immersion _____Remote-Reservoir
3. Method of Compliance (check one):
   _____Cover and water layer _____Cover with work Practices _____Cover and a 0.75 freeboard ratio or greater with work practices
4. This batch cold cleaner complies with the rule.

_____ _____
Signature of Owner/Operator Date

4. National Emission Standard for Hazardous Air Pollutants (NESHAP) for Degreasers
Initial Statement of Compliance for Cleaning Machines Complying with the Equipment Standard

AQ Facility ID No.: _____
AQ File No:_____
Owner/Operator: _____ Date:_____
Last Name, First Name, Middle Initial
Company Name:_____
Mailing Address:_____
Street City State Zip
Equipment Location Address:_____
Street City State Zip

Cleaning Machine Summary

Identification Number	Description

1. Type of machine (check one): _____Batch vapor _____In-line
2. Solvent/air interface area_____square meters or _____square feet
3. Equipment standard compliance method chosen:
   _____Control combination _____Idling emissions limit (**attach idling emission limit test report)**

4. Control equipment used to comply with the rule:
   _____Freeboard ratio of 1.0 _____Carbon adsorber _____ Freeboard refrigeration device
   _____ Reduced room draft _____Super-heated vapor _____ Dwell
   _____Working-mode cover _____Other _____ (control)

5. This cleaning machine complies with the rule.

_____ _____
Signature of Owner/Operator Date

5. Performance, Monitoring, Recordkeeping and Requirement for Control Devices

Control Device	Performance Requirement	Exceed-ance (*)	Monitoring and Recording Requirements
Freeboard refrigeration device	The chilled air blanket temperature measured at the center of the air blanket, shall not be greater than 30% of the solvent's boiling point.	**A**	The Permittee shall use thermocouple or thermometer to monitor the temperature at the center of the air blanket during the idling mode and record the results on a weekly basis.
Reduced room draft	1. Ensure the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 50 ft/min at any time, either by *controlling room parameters* or using an *enclosure*. 2. Establish and maintain the operating conditions under which the wind speed was demonstrated to be 50 ft/min. or less.	**A** **B**	<u>*Controlling room parameters*</u> - • The Permittee shall conduct an initial monitoring test of the windspeed and of room parameters (i.e. redirecting fans, closing doors and windows, etc.), using the following procedure: a. The windspeed shall be measured within 6 inches above the top of the freeboard area of the solvent cleaning machine. b. The direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located. c. Orient a velometer in the direction of the wind current at each of the 4 corners of the machine. d. Record the reading for each corner and average the values obtained at each corner and record the average wind speed. • Using the above procedure, the Permittee shall monitor and record the windspeed on a quarterly basis, and monitor and record the room parameters established during the initial monitoring test on a weekly basis. <u>*Partial or total enclosure*</u> - • The Permittee shall conduct an initial monitoring rest, thereafter monthly monitoring tests of the windspeed as follows: determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located and record the maximum wind speed. On a monthly basis the Permittee shall also record the results of the visual inspection to ensure the enclosure is free of cracks, holes and other defects.

Working - mode cover	1. Ensure that the cover opens only for part entrance and removal and completely covers the cleaning machine opening when closed.	**B**	The Permittee shall conduct a visual inspection to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects. The Permittee shall record the results on a monthly basis.
	2. Ensure that the cover is maintained free of cracks, holes, and other defects.	**A**	
Idling - mode cover	1. Ensure that the cover is in place whenever parts are in the machine and completely covers the cleaning machine openings when in place.	**B**	The Permittee shall conduct a visual inspection to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects. The Permittee shall record the results on a monthly basis.
	2. Ensure that the cover is maintained free of cracks, holes, and other defects.	**A**	
Dwell	1. The Permittee shall determine the dwell time for each part or parts basket, or determine the maximum dwell time using the most complex part type or parts basket, using the following procedure: 1) determine the amount of time for the part or parts basket to cease dripping once placed in the vapor zone. The part or parts basket shall be at room temperature before being placed in the vapor zone. 2) The proper dwell time for parts to remain in the free board area above the vapor zone is no less than 35% of the time determined in 1). The Permittee shall record the dwell time for each part or parts basket.	**B**	
	2. Ensure that, after cleaning, each part is held in the machine freeboard area above the vapor zone for the dwell time determined as above.	**B**	On a monthly basis, the Permittee shall monitor and record the actual dwell time by measuring the period of time that parts are held within the freeboard area of the solvent cleaning machine after cleaning.

Superheated vapor system	1. The solvent vapor at the center of the superheated vapor zone is at least 10 F above the solvent's boiling point.	**A**	The Permittee shall use a thermometer or thermocouple to monitor the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode and record the results on a weekly basis.
	2. Ensure that the manufacturer's specifications for determining the superheated vapor system is followed.	**B**	
	3. Ensure that parts remain within the superheated vapor for at least the minimum proper dwell time.	**B**	
Carbon absorber	1. The concentration of HAP shall not exceed 100 ppm.	**A**	The Permittee shall measure and record the concentration of HAP solvent in the exhaust of the carbon absorber weekly with a calorimetric detector tube. The measurement shall be conducted while the solvent cleaning machine is in the working mode and is venting to the carbon absorber using the following procedures: 1) Use a calorimetric detector tube designed to measure a concentration of 100 ppmv of solvent in air to an accuracy of plus or minus 25 ppmv. 2) Use the tube in accordance with the manufacturer's instruction. 3) A sampling port shall meet the minimum requirement for EPA method 1 of the 40 CFR part 60, Appendix A.
	2. The cleaning machine shall be used at all times with its associated carbon absorber.	**B**	
	3. The lip exhaust is located above the solvent cleaning machine cover so that the cover closes below the lip exhaust level.	**B**	

(*)Exceedances - A:

1. Out of compliance with requirement and are not corrected within 15 days of detection.
2. Adjustments or repairs shall be made to the solvent cleaning system or control device to reestablish required levels.
3. The parameter must be remeasured immediately upon adjustment or repair and demonstrated to be within required limits.

(*)Exceedances - B: Out of compliance with requirement.

6. National Emission Standard for Hazardous Air Pollutants (NESHAP) for Degreasers Annual Report

AQD Facility ID No.: _____
AQD File No:_____
Owner/Operator: _____ Date:_____
Last Name, First Name, Middle Initial
Company Name:_____
Mailing Address:_____
Street City State Zip
Intended Equipment
Location Address:_____
Street City State Zip

Cleaning Machine Summary

Identification Number	Description

Information Required Per Cleaning Machine

Cleaner Identification Number:_____

Check compliance option chosen and fill out appropriate report requirements.

❑ Control Options

All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the required operator test.

Previous Year's Solvent Consumption _____ kilogram/year (or pounds/year)

❑ Alternative Standard

Cleaning machine size:

Solvent-air interface area _____ square meters (or square feet)
or
Solvent cleaning capacity _____ cubic meters (or cubic feet)

Average monthly solvent consumption _____ kilogram (or pounds)

Three month rolling average emission estimates (attach calculations)

1. _____ kg (or lb) From _____ To _____
Date Date

2. _____ kg (or lb) From _____ To _____
Date Date

3. _____ kg (or lb) From _____ To _____
Date Date

Submit completed copies of this report to:
Minnesota Pollution Control Agency
Air Quality Compliance Tracking Coordinator
St. Paul, Minnesota 55155-4194

_____ _____
Signature Date

7. Control Combination for Batch Vapor Solvent Cleaning Machines

A Solvent/Air Interface Area of 1.21 Square Meters (13 Square Feet) or less			
Options	**Control Combinations**	**Options**	**Control Combinations**
1	Working - mode cover Freeboard ratio of 1.0 Superheated vapor	**6**	Freeboard refrigeration device Freeboard ratio of 1.0
2	Freeboard refrigeration device Superheated vapor	**7**	Freeboard refrigeration device Dwell
3	Working - mode cover Freeboard refrigeration device	**8**	Reduced room draft Dwell Freeboard ratio of 1.0
4	Reduced room draft Freeboard ratio of 1.0 Superheated vapor	**9**	Freeboard refrigeration device Carbon absorber
5	Reduced room draft Freeboard refrigeration device	**10**	Freeboard ratio of 1.0 Superheated vapor Carbon absorber

A Solvent/Air Interface Area of More than 1.21 Square Meters (13 Square Feet)			
Options	**Control Combinations**	**Options**	**Control Combinations**
1	Freeboard refrigeration device Freeboard ratio of 1.0 Superheated vapor	**5**	Freeboard refrigeration device Reduced room draft Superheated vapor
2	Reduced room draft Dwell Freeboard refrigeration device	**6**	Freeboard refrigeration device Reduced room draft Freeboard ratio of 1.0
3	Working - mode cover Freeboard refrigeration device Superheated vapor	**7**	Freeboard refrigeration device Superheated vapor Carbon absorber
4	Freeboard ratio of 1.0 Reduced room draft Superheated vapor		

8. Control Combinations for Inline Solvent Cleaning Machines

Existing Inline Machines		New Inline Machines	
Options	**Control Combinations**	**Options**	**Control Combinations**
1	Freeboard ratio of 1.0 Superheated vapor	**1**	Freeboard refrigeration device Superheated vapor
2	Freeboard ratio of 1.0 Freeboard refrigeration device	**2**	Freeboard refrigeration device Carbon absorber
3	Dwell Freeboard refrigeration device	**3**	Superheated vapor Carbon absorber
4	Dwell Carbon absorber		

APPENDIX L: Test of Solvent Cleaning Procedures

Please Circle the correct answer(s) to the below questions.

General Questions:

1. What is the maximum allowable speed for parts entry and removal?

   A) 8.5 meters per minute (28 feet per minute).
   B) 3.4 meters per minute (11 feet per minute).
   C) 11 meters per minute (36 feet per minute).
   D) No limit.

2. How do you ensure that parts enter and exit the solvent cleaning machine at the speed required in the regulation?

   A) Program on computerized hoist monitors speed.
   B) Can judge the speed by looking at it.
   C) Measure the time it takes the parts to travel a measured distance.

3. Identify the sources of air disturbances.

   A) Fans
   B) Open Doors
   C) Open Windows
   D) Ventilation vents
   E) All of the above

4. What are the three operating modes?

   A) Idling, working and downtime.
   B) Precleaning, cleaning, and drying
   C) Startup, shutdown, off
   D) None of the above

5. When can parts or parts baskets be removed from the solvent cleaning machine?

   A) When they are clean.
   B) At any time
   C) When dripping stops
   D) Either A or C is correct

6. How must parts be oriented during cleaning?

   A) It does not matter as long as they fit in the parts basket.
   B) So that the solvent pools in the cavities where the dirt is concentrated.
   C) So that solvent drains from them freely.

7. During startup, what must be turned on first, the primary condenser or the sump heater?

   A) Primary condenser
   B) Sump heater
   C) Turn both on at same time
   D) Either A or B is correct

8. During shutdown, what must be turned off first, the primary condenser or the sump heater?

   A) Primary condenser
   B) Sump heater
   C) Turn both off at same time
   D) Either A or B is correct

9. In what manner must solvent be added to and removed from the solvent cleaning machine?

   A) With leak proof couplings
   B) With the end of the pipe in the solvent sump below the liquid solvent machine?
   C) So long as the solvent does not spill, the method does not matter.
   D) A and B

10. What must be done with waste solvent and still and sump bottoms?

    A) Pour down the drain.
    B) Store in closed container
    C) Store in a bucket
    D) A or B

11. What type of materials are prohibited from being cleaned in solvent cleaning machines using Halogenated HAP solvents?

    A) Sponges
    B) Fabrics
    C) Paper
    D) All of the above

Control Device Specific Questions: Select the control device for your company and answer the questions to the selected control devices only.

[ ] **Freeboard Refrigeration Device**

1. What temperature must the Freeboard Refrigeration Device achieve?

   A) Below room temperature
   B) 50 degrees Fahrenheit

C) Below the solvent boiling point
D) 30 percent of the solvent's boiling point

[ ] **Working-Mode Cover**

2. When can a cover be open?

A) While parts are in the cleaning machine
B) During parts entry and removal
C) During maintenance
D) During measurements for compliance purposes
E) A and C
F) B, C and D

3. Covers must be maintained in what condition?

A) Free of holes
B) Free of cracks
C) so that they completely seal cleaner opening
D) All of the above

[ ] **Dwell**

4. Where must the parts be held for the appropriate dwell time?

A) In the vapor zone
B) In the freeboard area above the vapor zone
C) Above the cleaning machine
D) In the immersion sump

Answer Key

General Questions

1. B
2. A or C
3. E
4. A
5. C
6. C
7. A
8. B
9. D
10. B
11. D

Control Device Specific Questions

1. D
2. F
3. D
4. B

APPENDIX M:

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

MPCA USE ONLY
Date Received:
Staff Reviewer:
Date Reviewed:

12/01/00

COMPLIANCE MANAGEMENT PLAN
FOR
GENERAL MANUFACTURING PART 70 GENERAL PERMIT

PART I
Facility Information

Complete this section of the form only once for your facility

AQ Facility ID No.:

AQ File No.:

Facility Name:

Facility Address:

Reporting Period (the preceding calendar year):

PART II
Facility Terms and Conditions

Repeat this form as necessary to include all emission units on site and update as necessary to include new equipment.

Applicable Emissions Limitations and /or Control Requirements

Specify the operation (s) and/or equipment which constitute this emission unit or group units are listed in the following table along with applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit or group shall not exceed the listed limitations, and the listed control measures shall be empolyed.

EU or SV	Operations and/or Equipment	Applicable Rules / Requirements	Applicable Emissions Limitations/Control Measures	Monitoring, Record Keeping and/ or Testing
EU 100				

EU or SV	Operations and/or Equipment	Applicable Rules / Requirements	Applicable Emissions Limitations/Control Measures	Monitoring, Record Keeping and/ or Testing

APPENDIX N

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

GENERAL PERMIT FORM GP-01
AIR EMISSION GENERAL PERMIT
ADMINISTRATIVE CHANGES
12/2000

Use this document to identify administrative changes that have occurred at your facility and to notify the Minnesota Pollution Control Agency to update your records. Complete all of the information in the first box. Only complete the boxes that have changed. Mark "no change" in the box if there are no changes.

1. Who can we call if we have questions about the information completed on this document?

NAME: _____ PHONE: _____

FACILITY NAME: _____

FACILITY PERMIT NUMBER: _____

2. Mailing address for the facility.

☐ **No change in mailing address**

NEW FACILITY MAILING ADDRESS:

MAILING ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

FACILITY NAME: _____

3. Permit contact name, telephone number, billing contact name.

☐ **NO CHANGE IN CONTACT NAMES OR NUMBERS**

NEW PERMIT CONTACT NAME: _____ TITLE: _____

NEW PHONE NUMBER: _____ **NEW** FAX NUMBER: _____

NEW BILLING CONTACT NAME: _____

NEW PHONE NUMBER: _____ **NEW** FAX NUMBER: _____

4. Name of the Facility.

☐ **NO CHANGE IN FACILITY NAME**

PREVIOUS FACILITY NAME: _____

NEW FACILITY NAME: _____

5. Change in Ownership.

☐ **NO CHANGE IN OWNERSHIP**

1. FACILITY PERMIT NUMBER: _____

2. FACILITY NAME: _____

3. FACILITY LOCATION:

STREET ADDRESS: _____

CITY: _____ MN ZIP CODE: _____ COUNTY: _____

MAILING ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

4. CORPORATE/COMPANY OWNERSHIP:

PREVIOUS CORPORATE/COMPANY NAME: _____

NEW CORPORATE/COMPANY NAME: _____

MAILING ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

5. LEGALLY RESPONSIBLE OFFICIAL FOR THIS PERMIT/FACILITY:

MR/MS: _____ PHONE: _____

TITLE: _____ FAX: _____

MAILING ADDRESS (CHECK ONE):

☐ CORPORATE/COMPANY OWNER ☐ FACILITY MAILING ☐ FACILITY STREET

☐ OTHER (SPECIFY): _____

6. CONTACT PERSON FOR THIS PERMIT:

MR/MS: _____ PHONE: _____

TITLE: _____ FAX: _____

MAILING ADDRESS (CHECK ONE):

☐ CORPORATE/COMPANY OWNER ☐ FACILITY MAILING ☐ FACILITY STREET

☐ OTHER (SPECIFY): _____

CONTINUED ON NEXT PAGE

5. Change in Ownership, continued

7. ALL BILLINGS FOR ANNUAL FEES SHOULD BE ADDRESSED TO:

MR/MS: _____ PHONE: _____

TITLE: _____ FAX: _____

MAILING ADDRESS (CHECK ONE):

☐ CORPORATE/COMPANY OWNER ☐ FACILITY MAILING ☐ FACILITY STREET

☐ OTHER (SPECIFY): _____

CERTIFICATION:

I am applying for change of ownership/operational control. I am willing to comply with the terms of the existing permit.

Person certifying this permit application:

MR./MS. _____

TITLE: _____

PHONE: _____ FAX: _____

SIGNATURE: _____ DATE: _____

DATE TRANSFER OF OWNERSHIP OCCURRED: _____

Has the facility moved to a different location since the permit was issued?

If yes, obtain the appropriate permit application forms. A facility is required to apply for a new permit when it moves to a different location. The permit at the previous location should be voided by completing form VR-01, Request to Void an Air Emission Permit.

Does the facility continue to qualify for the permit that is currently issued?

If not, obtain the appropriate air emission permit application forms. A facility is required to apply for the appropriate permit when it no longer qualifies for the current permit.

You can receive copies of the forms mentioned in this document:

- Download from the Minnesota Pollution Control Agency WEB site - www.pca.state.mn.us
- Call the Document Coordinator at (651) 282-5843 and ask for the appropriate forms.

Return this document if any of the above administrative changes have been made:

Permit Technical Advisor
Air Quality
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155

Please do not return this document if none of the above administrative changes have been made.

The Minnesota Pollution Control Agency appreciates your efforts in providing up-to-date information about your Facility. If you have any questions, please feel free to contact the MPCA Customer Assistance Center at (651) 282-5844 or 1-800-646-6247.

The Small Business Assistance Program staff is available to help small businesses (100 employees or less) with any questions about air emission permits. Staff can be reached by calling (651) 282-6143 or 1-800-657-3938.

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 16300005-004

This Technical Support Document (TSD) is for all the interested parties of the permit. The purpose of this document is to set forth the legal and factual basis for the permit conditions, including references to the applicable statutory or regulatory provisions.

1. General Information

1.1. Applicant and Stationary Source Location:

Owner/Operator Address and Phone Number (list both if different)	Facility Address (SIC Code: 4911)
Northern States Power Company d/b/a Xcel Energy 414 Nicollet Mall RSQ 8 Minneapolis, MN 55401	1103 King Plant Road Bayport, MN 55003 Washington County Contact: Richard Rosvold (612) 330-2807

1.2. Description Of The Facility

The Allen S. King Plant is a coal-fired electric utility located on Highway 95 in Oak Park Heights, Minnesota; the facility's mailing address is in Bayport. The facility's emission units consist of boilers, fuel and ash storage and handling equipment, and emergency diesel engines. The facility's main power boiler (Boiler No. 1) is a coal-fired cyclone boiler with a generating capacity of 550 megawatts (MW) of electricity. Pollution control equipment on the main boiler consists of an electrostatic precipitator to control Particulate Matter (PM) emissions. Emissions from fuel and ash storage and handling equipment which are potential sources of PM emissions are controlled using water and other dust suppressants, enclosures, and/or fabric filters.

1.3 Description of the Activities Allowed By This Permit Action

This permit amendment authorizes replacement of an existing coal conveyor system (four conveyors) with a new conveyor system and add a dust collector (fabric filter), delete the oxygen monitoring requirement when combusting non-coal approved fuel-types, revise the existing operating limit for two auxiliary boilers from an hourly basis to total fuel combusted per year, update Continuous Opacity Monitoring requirements, and revise permit conditions to reflect the PM_{10} modeling analysis conducted for this facility.

This is a Major Amendment to Federal Part 70 and Acid Rain Total Facility Permit.

1.4. Facility Emissions:

Table 1. Emissions Associated With the Modification in tons/year

Pollutant	PM	PM_{10}	SO_2	NO_X	VOCs	CO
*PTE of Flite Conveyors	12.0	12.0	0.0	0.0	0.0	0.0

*PTE = Potential-To-Emit
PM = Particulate Matter
PM_{10} = PM smaller than 10 microns
SO_2 = Sulfur Dioxide
NO_X = Nitrogen Oxides
VOCs = Volatile Organic Compounds
CO = Carbon Monoxide

Table 2. Permit Action Classification

Classification	Major/Affected Source	*Synthetic Minor	*Minor
PSD (list pollutant)			PM, PM_{10}
Part 70 Permit Program (list pollutant)			PM_{10}

* Refers to potential emissions that are less than those specified as major by 40 CFR 52.21, 40 CFR pt. 51 Appendix S, and 40 CFR pt. 70.

2. Regulatory and/or Statutory Basis

Summary Regulatory and/or Statutory Basis of the Emission or operational Limit

Regulatory Overview of Units Affected by the Modification

Table 3. Regulatory Overview

Item	Applicable Regulations	Comments
GP 004; EU 016, EU 017, EU 018, and EU 019; CE 014 SV 018	40 CFR § 60.250 – 60.254; Minn. R. 7011.1150. Minn. R. 7011.1105, subp. G (1) and (2) 40 CFR § 60.8; Minn. R. 7017.2020, subp. 1, and Minn. R. 7017.2030, subp. 4	Standards of Performance for Coal Preparation Plants; Opacity less than or equal to 20% Opacity. Standards of Performance for Certain Coal Handling Facilities: PM emission limit, Opacity; Visible Emissions/ Pressure Drop Monitoring and Recordkeeping Requirements. Initial Performance Test Requirements to measure Opacity. EU 016 and EU 019 are installed at this time; and the Permittee sent notifications required under NSPS.

3. Technical Information

The Minnesota Pollution Control Agency (MPCA) staff received Major Permit Amendment Applications for NSP d/b/a Xcel Energy – Allen S. King Generating Plant. Upon review of the application submitted, MPCA staff concurred with the Permittee's determination that the proposed change at this facility is "An Installation or Modification of NSPS Affected Facility Not Subject to New Source Review (NSR)". The Construction Authorization Letter to begin construction on the proposed modification: installation of new flite conveyors controlled with a dust collector was sent on January 30, 2001. Construction is authorized under Minn. R. 7007.1500, subp. 3a. (B), and is effective on the date of this letter (January 30, 2001).

New Source Performance Standards (NSPS) Applicability: Flite Coal Conveyors are subject to NSPS Subpart Y- Standards of Performance for Coal Preparation Plants; 40 CFR § 60.250-254.

Standards of Performance for Certain Coal Handling Facilities: Minn. R. 7011.1105, subp. G(1) and (2):PM emission limit of 0.02 gr/dscf, and Opacity not greater than 20 percent Opacity.

For fabric filter monitoring and recordkeeping requirements in this permit, "Technical Guidance Document: Compliance Assurance Monitoring ", Revised Draft, August 1998, was referenced.

Based on the emission limit of 0.02 gr/dscf for PM and PM_{10} pollutants, and airflow rate of 16,000 acfm for the two emission units vented to the fabric filter.

PM and PM_{10} emissions = 16000 cf/min @ 0.02 grains/dscf * 1 lb/7000 grains * 60 min/hr = 2.74 lb/hr or 12.01 tons/yr each pollutant.

Comment letters received: The City of Oak Park Heights sent a comment letter on May 3, 2004, requesting a public hearing, and addition of permit conditions related to city issues, and also requested that the permit be re-noticed, as the facility address in the notice was not correct. The MPCA staff requested the city to clarify the scope of the public hearing, the city responded with another letter saying that a formal public hearing with public notice must be done. After consulting the AG's office on these issues, the MPCA manager decided to send a response letter to the City of Oak Park Heights. EPA received the letters. Copies of letters are in Delta and the AQ file for this facility.

4. Conclusion

Based on the information provided by NSP d/b/a Xcel Energy – Allen S. King Generating Plant, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 16300005-004 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: John S. Chikkala, Steve Sommer, and Betsy Randt

Attachments: Project on hold letter dated 6/27/01
NSPS Applicability Determination Letter to EPA dated 10/30/01
NSPS Subpart Y letter to Xcel Energy dated 1/15/02