

AIR EMISSION PERMIT NO. 07500003-007
Major Amendment

IS ISSUED TO

Cliffs Natural Resources

Northshore Mining – Silver Bay
10 Outer Drive
Silver Bay, Lake County, MN 55614

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

Permit Type	Application Date	Issue Date	Action
Total Facility Operating Permit	January, 17, 1995	February 24, 2004	001
Administrative Amendment	April 8, 2004	September 28, 2004	002
Major Amendment	May 17, 2004		
Major Amendment	October 25, 2004	March 22, 2006	003
Major Amendment	January 24, 2006	July 14, 2006	004
Major Amendment	July 10, 2009	See Below	007
Administrative Amendments	August 29, 2006		

This permit amendment supersedes Air Emission Permit No. 07500003-004, and authorizes the Permittee to operate and modify 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.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the SIP under 40 CFR § 52.1220 and as such as are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Permit Type: Federal; Pt 70/Major for NSR **Major Amendment**
Issue Date: February 24, 2004 **Issue Date:** January 20, 2010
Expiration Date: February 24, 2009* – Title I Conditions do not expire.

* The Permittee may continue to operate this facility after the expiration date of the permit, per the provision under Minn. R. 7007.0450, subp. 3. (Title V Reissuance Application was received August 28, 2008.)

Don Smith, P.E., Manager
Air Quality Permits Section
Industrial Division

for Paul Eger
Commissioner

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NOTICE TO THE PERMITTEE:

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

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

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

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

PERMIT SHIELD:

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

FACILITY DESCRIPTION:

Cleveland-Cliffs, Inc. is the parent company of both Northshore Mining Company and Silver Bay Power Company. Northshore Mining Company operates a taconite processing plant at the Silver Bay facility. Silver Bay Power Company operates a power plant at the Silver Bay facility to provide electricity for the taconite processing operations and the grid. The three companies are the Permittee of this Title V permit for the Silver Bay facility (AQ File No. 27A).

The Silver Bay facility was originally built in the mid-1950s by Reserve Mining Company and was briefly owned by Cyprus Minerals from 1989 to 1994 (Northshore was purchased in 1994 by Cleveland Cliffs, Inc.). Northshore (Reserve Mining at the time) was the first taconite operator in Minnesota. The Silver Bay facility is located on the north shore of Lake Superior.

Through a company owned, 47-mile railroad, the Northshore plant receives crushed ore that has been processed in the primary and secondary crushers at the Peter Mitchell Mine, near Babbitt, Minnesota. The taconite plant further crushes the ore in tertiary crushers, dry cobs the ore (removes the larger non-metallic chunks of ore with magnetic separation of the un-concentrated ore), and then concentrates the iron content from roughly 25 percent to 65 percent in a series of ball mills, rod mills, magnetic concentrators and froth flotation cells. The iron concentrate is then mixed with a variety of binders and fluxing agents (i.e., limestone/dolomite mixture) and formed into small balls referred to as green balls. The green balls are then fired in traveling grate furnaces and indurated into taconite pellets. The pellets are shipped through the Great Lakes system to blast furnaces in the lower Great Lakes and made into a variety of steel products.

Air emission units at the Silver Bay facility (taconite plant and power plant) consist of electric generating boilers, steam heating boilers, rail car unloading, crushed ore storage bins, tertiary crushers, dry cobbles, coarse tailings handling operations, additive storage and handling operations, indurating furnaces, and fired pellet handling and screening. In addition, there are fugitive emission sources at the plant that consist of haul roads, concentrate storage piles, taconite pellet cooling piles, taconite pellet storage piles, pellet transfer operations, pellet ship loadout operations, coal piles, fluxstone piles, coal/fluxstone handling operations, coal ash handling operations, and tailings basin operations.

Fabric filters are used to control particulate matter emissions from the two large power boilers. Fabric filter dust collectors are used to collect particulate matter emissions from the rail car unloading operations, tertiary crushers, dry cobbles, coarse tailings handling operations, pellet screening for the hearth layer, and the additive storage and handling operations. The various crushed ore storage bins are controlled with either fabric filters (cartridge filters, CE 030 and CE 031) or multiclones (all 22 of these are located at the concentrator building, CE 032 through CE 053). The indurating furnaces are controlled with wet-walled electrostatic precipitators to collect particulate matter as well as sulfur dioxide, acid gases, and various other air pollutants. Furnace discharges and indoor pellet screening are controlled with type N rotoclones. Pellet screening, estimated at 600,000 long tons per year, at the pellet yard is allowed (FS 017). This will be performed either by Northshore personnel or a contractor.

AMENDMENT DESCRIPTION:

This permit action is a major amendment to replace the rail car unloading equipment, adjust the required pressure drop range in the Pellet Plant's Hearth Layer baghouse, and to adjust the due dates for CEMS and Performance Tests for units which are currently shut down.

This permit action also incorporates an administrative amendment to extend the deadline for submittal of the O&M plan to align with the MACT requirements.

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-1

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

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
A. OPERATIONAL REQUIREMENTS	hdr
The authorization to commence construction of the Furnace 5 Reactivation Project (under PER-003) expires July 7, 2007. Keep records of the dates of installation and startup on site. An application for an extension may be made by the Permittee following the Administrative Amendment provisions in Minn. R. 7007.1400, as applicable, or other applicable provisions in Minn. R. ch. 7007.	Title I Condition: 40 CFR Section 52.21(r)(2); Minn. R. 7007.3000
Prior to Initial Startup (reactivation) of Furnace 5 (EU 634), and fine crushers 4 and 104 (EU 011 and EU 020), the Permittee shall render inoperable all emission units associated with the iron nugget pilot plant (PDRDP). These were numbered EU 630-633 in the Title V permit issued 2/24/2004.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
Prior to Initial Startup (reactivation) of a concentrator line from the group of EU 033-041, the multiclone collector shall be replaced by a fabric filter. Prior to Initial Startup (reactivation) of Furnace 5 (EU 634), and fine crushers 4 and 104 (EU 011 and EU 020), multiclone collectors on four currently operating concentrator lines from the group of EU 042 and EU 044-052 shall be replaced by fabric filters. Prior to Initial Startup (reactivation) of any additional concentrator lines, beyond the first two, from the group of EU 033-041, all remaining multiclones from the group of EU 042 and EU 044-052 shall be replaced by fabric filters. All multiclones on operating concentrator lines shall be replaced by fabric filters by December 31, 2006.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
Prior to Initial Startup (reactivation) of any of the last five concentrator lines from the group of EU 033-041, one of the following three options must be done to ensure modeled compliance with ambient air quality standards and PSD increments: 1. The top of the dry cobber stacks (SV 021-025) shall be raised five meters above their current height; or 2. The final five concentrator lines shall be vented inside the building, through a fabric filter equipped with a post HEPA quality filter; or 3. The Permittee shall re-model emissions to demonstrate compliance.	(continued) Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
Parameters Used in Modeling: The stack heights, emission rates, and other parameters used in the modeling for this permit are listed in the Appendix. Prior to making changes, the Permittee shall submit to the Commissioner for approval a proposal with any revisions of these parameters and must wait for a written approval before making such changes. The information submitted must include, at a minimum, the locations, heights and diameters of the stacks, locations and dimensions of nearby buildings, the velocities and temperatures of the gases emitted, and emission rates, as well as fugitive source emission rates, locations, dimensions, release heights, and, if applicable, initial dispersion parameters.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7009.0020; Minn. R. 7011.0150; Minn. R. 7007.0100; Minn. R. 7007.0800, subps. 2 & 4
The plume dispersion characteristics due to the revisions of the information must be equivalent to or better than the dispersion characteristics modeled in the most recent air quality impacts analysis. The Permittee shall demonstrate this equivalency in the proposal. 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 re-model. For changes that do not require a permit amendment or require a minor permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before beginning actual construction on the stack or associated emission unit. For changes that require a permit amendment other than a minor amendment, the proposal must be submitted with the permit application.	(continued) Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7009.0020; Minn. R. 7011.0150; Minn. R. 7007.0100; Minn. R. 7007.0800, subps. 2 & 4
For any future re-modeling (or new modeling) subject to 40 CFR Section 52.21 (Prevention of Significant Deterioration, PSD) or Minn. R. ch. 7009 (Minnesota Ambient Air Quality Standards), the Permittee shall follow all applicable rules or regulations.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7009.0020; Minn. R. 7011.0150; Minn. R. 7007.0100; Minn. R. 7007.0800, subps. 2 & 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-2**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

EIS Required. The Permittee is prohibited from initiating construction of any proposed commercial scale ITmk3 plant at the Silver Bay facility and the Peter Mitchell mine until an Environmental Impact Statement (EIS) under Minn. R. chapter 4410 has been prepared for the proposed commercial scale ITmk3 plant, the EIS process under Minn. R. chapter 4410 has been completed and any applicable regulatory permitting process has been completed in regard to construction initiation.	Minn. R. ch. 4410
<p>Comply with Subpart RRRRR - National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing:</p> <p>a. For an existing affected source, comply with each emission limitation, work practice standard, and operation and maintenance requirement that applies to the source no later than October 30, 2006;</p> <p>b. For a new affected source with an initial startup date on or before October 30, 2003, comply with each emission limitation, work practice standard, and O&M requirement that applies to the source by October 30, 2003;</p> <p>c. For a new affected source with an initial startup date after October 30, 2003, comply with each emission limitation, work practice standard, and O&M requirement that applies to the source upon initial startup.</p> <p>Also comply with applicable requirements of 40 CFR 63, General Provisions.</p>	<p>40 CFR 63.9580 to 63.9652; Tables to Subpart RRRRR of 40 CFR 63; 40 CFR 63, subp. A; Minn. R. 7011.7000</p>
<p>Comply with Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants: Industrial, Commercial, and Institutional Boilers and Process Heaters:</p> <p>a. Submit an Initial Notification not later than March 12, 2005 or within 120 calendar days after a boiler or process heater becomes subject to Subpart DDDDD, whichever is later.</p> <p>b. For an existing affected source, comply with applicable requirements no later than, September 13, 2007;</p> <p>c. For a new affected source with an initial startup date on or before January 13, 2003, comply with applicable requirements by January 13, 2003;</p> <p>d. For a new affected source with an initial startup date after January 13, 2003, comply with requirements upon initial startup.</p> <p>Also comply with applicable requirements of 40 CFR 63, General Provisions.</p>	<p>40 CFR 63.7480 to 63.7585; Tables to Subpart DDDDD of 40 CFR 63; 40 CFR 63, subp. A; Minn. R. 7011.7000</p>
Comply with the O&M Plan: Follow the actions and recordkeeping specified in the O&M plan. The plan may be amended by the Commissioner's written approval.	Minn. R. 7007.0800 subps. 14 & 16(J)
Comply with the Fugitive Control Plan for the Silver Bay Facility: Follow the actions and recordkeeping specified in the plan. The plan may be amended 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, then the Permittee may be required to amend the fugitive control plan. Note that the required fugitive dust control actions during Mile Post 7 tailings basin area operations, found in Appendix B of this permit, are a special set of requirements for this permit, which is excluded from the fugitive control plan for the Silver Bay Facility.	<p>Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0100; Minn. R. 7007.0800, subp. 2; Minn. R. 7011.0150; Minn. R. 7009.0020</p>
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 the requirements in Appendix B, which contains fugitive dust control actions required during Mile Post 7 tailings basin area operations.	Minn. R. 7007.0800, subps. 4(D), 14, & 16(J)
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
Air Pollution Control Equipment: Operate all pollution control equipment, and associated monitoring equipment, whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subps. 2 & 16(J)
<p>With respect to fibers, the air quality standards at or beyond the property line of the Silver Bay facility to which the Permittee shall adhere, consistent with the determination of the Minnesota Supreme Court, are:</p> <p>a. Fibers in the ambient air shall be below a medically significant level;</p> <p>b. The ambient air shall contain no more fibers than that level ordinarily found in the ambient air of a control city such as St. Paul;</p> <p>c. The fibers in the ambient air shall be maintained below a level which is injurious to human health or welfare in violation of Minn. Stat. Sec. 116.06 (3); and</p> <p>d. Such other standards which now or in the future may be applied to the Permittee's fiber emissions.</p> <p>The MPCA recognizes that the above fiber level standards or measurements applicable to fiber emissions emanating from the Permittee's operations are to be determined in the future to a degree which approaches reliable scientific and medical precision.</p>	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-3**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

The control city standard set forth in paragraph (b) was found by the federal courts to be based on a reasonable medical theory. Any future fiber level standards applied pursuant to paragraphs (a), (c) and (d) must likewise be based on a reasonable medical theory.	(continued) Minn. R. 7007.0800, subp. 2
"Fibers," for the purpose of this permit, are defined as chrysotile and amphibole mineral particles with 3-to-1 or greater aspect ratios.	
The Permittee shall comply with the TSP Compliance Plan attached to this permit as Appendix D.	Minn. R. 7007.0800, subps. 4(D), 14, & 16(J)
B. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Operating and/or production limits will 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
C. MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment: On newly installed, upgraded or reactivated control equipment, install or make needed repairs to monitoring equipment so that it is operational upon initial startup of the associated control equipment and emission unit.	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
Daily Visible Emission Checklists for the O&M Plan: All stacks equipped with dry control equipment must appear individually in at least one of the Daily Visible Emission Checklists. Observations and observation dates, weather condition codes, whether and what corrective action(s) had been taken, and observer's ID must be included in the checklists. Appendix C provides explanations for the checklists and an example checklist.	Minn. R. 7007.0800, subps. 4(D), 14, & 16(J)
Check visible emissions from GP 003 through GP 013, SV 005, SV 043, and SV 097 once daily when in operation during daylight hours. Use the daily visible emission checklists in the O&M Plan (see Appendix C for detail) as a means to indicate when appropriate corrective actions in the O&M Plan should be taken.	Minn. R. 7007.0800, subps. 4(D), 14, & 16(J)
Daily Visible Emission Checklists for the Fugitive Control Plan at the Silver Bay Facility: FS 001 through FS 017 and FS 019 must appear individually in at least one of the Daily Visible Emission Checklists. Observations and observation dates, weather condition codes, whether and what corrective action(s) had been taken, and observer's ID must be included in the checklists. Appendix C provides explanations for the checklists.	Minn. R. 7007.0800, subps. 4(D), 14, & 16(J)
Observe fugitive dust sources FS 001 through FS 017 and FS 019 once daily during daylight hours. Use the daily visible emission checklist(s) in the fugitive dust control plan (see Appendix C for detail) as a means to indicate when appropriate corrective actions in the fugitive control plan are taken.	Minn. R. 7007.0800, subps. 4(D), 14, & 16(J)
Visible Emissions Training: The Permittee shall (1) ensure that one plant employee obtain an initial EPA Method 9 certification and be recertified every three years or (2) employ a similarly certified contractor. This person will train other plant employees to perform the daily visible emission check as detailed in the O&M Plan and Fugitive Control Plan.	Minn. R. 7007.0800, subps. 4(D), 14, & 16(J)
Ambient Air Quality Monitoring: The Permittee shall continue to operate TSP and PM-10 ambient air quality monitors at the existing sites, in accordance with the MPCA approved ambient monitoring plans and MPCA Exhibit M. The Permittee shall continue to operate fiber ambient air monitors at Stations 1 (Beaver Bay) and 7 (Silver Bay) at a monitoring frequency of one sample per 21 days, while meeting other requirements in the existing, MPCA approved ambient monitoring plans and MPCA Exhibit M.	Minn. R. 7007.0800, subps. 4(D) & 16(J)
D. RECORDKEEPING REQUIREMENTS	hdr
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-4**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Recordkeeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. These records shall be kept for a period of five years from the date that the change was made. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.	Minn. R. 7007.1200, subp. 4
Contractors: The Permittee shall retain records on site of all contractors allowed on site that include any crushers, screens and conveyors. The Permittee shall also retain records on site of all contractors whose operations would require an Air Emission Permit from the MPCA. The records shall include the contractor's company name, MPCA air emissions permit number, short description of activities undertaken by the contractor, estimate of emissions or materials handled and the dates the contractor was on site. The record shall be updated at least monthly. The Permittee shall evaluate if the activities of any contractor required NSR permitting prior to the contractor performing such activities. If a contractor has its own permit, but it is determined that the contractor is under the common control of the taconite plant then the contractor's permit does not shield the taconite plant or the contractor from the NSR & Part 70 modification regulations or enforcement actions.	Minn. R. 7011.0800 subp. 2
E. REPORTING	hdr
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
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
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
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance, to be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 - 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 - 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-5**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

F. MISCELLANEOUS	hdr
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150-7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 - 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
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
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-6**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 001 Power Boilers**Associated Items:** CE 001 Fabric Filter - High Temperature, i.e., T>250 Degrees F

CE 002 Fabric Filter - High Temperature, i.e., T>250 Degrees F

CM 001 Boiler 1, EU001, Opacity, 6-min avg.

CM 008 Boiler 2, EU002, Opacity, 6-min avg.

EU 001 Power Boiler 1

EU 002 Power Boiler 2

SV 001 Power House Unit #1

SV 002 Power House Unit #2

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input . This limit applies individually to both EU 001 and EU 002.	Minn. R. 7011.0510, subp. 1
PM < 10 micron: less than or equal to 0.036 grains/dry standard cubic foot for EU 001 and 0.046 grains/dry standard cubic foot for EU 002.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Sulfur Dioxide: less than or equal to 4.0 lbs/million Btu heat input when burning coal, and less than or equal to 2.0 lb/million Btu when burning oil. This limit applies individually to both EU 001 and EU 002 and is less stringent than the Title I Condition below.	Minn. R. 7011.0510, subp. 1
The Permittee shall restrict the sulfur content of coal so that SO2 emission from each power boiler does not exceed 2.5 lb SO2/million BTU on 1-hour average, 2.0 lb SO2/million BTU on 3-hour average, 1.8 lb SO2/million BTU on 24-hour average, and 1.5 lb SO2/million BTU based on annual average (these restrictions apply individually to both EU 001 and EU 002). The Permittee shall restrict the sulfur content of any grade of commercial fuel oil so that SO2 emission from EU 001 does not exceed 0.5 lb SO2/million BTU. Note that this Title I Condition is more stringent than the Sulfur Dioxide limit, above.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. This limit applies individually to both EU 001 and EU 002.	Minn. R. 7011.0510, subp. 2
B. OPERATIONAL REQUIREMENTS	hdr
Fuel Limits: The Permittee shall combust only natural gas or coal in this group. Distillate fuel oil is also allowed for EU 001.	Minn. R. 7007.0800, subp. 2
For each unit in GP 001 to not be an affected unit subject to the requirements of the federal Acid Rain Program, 40 CFR 72.6(b)(4)(i), each unit in GP 001 shall retain the cogeneration qualifying facility status, as per the Public Utility Regulatory Policies Act of 1978; and shall be restricted in supplying electricity to any utility power distribution system to, on a three-year rolling average basis: 1) less than or equal to one-third of its potential electrical output capacity, and 2) less than or equal to 219,000 MWe-hrs actual electric output (on a gross basis).	Minn. R. 7007.0800, subp. 2
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 1,080 days after 07/22/2004 and every three years thereafter to measure PM/PM10 emissions from one stack on a rotating basis in GP 001.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test: due 1,800 days after 07/22/2004 and every five years thereafter to measure SO2 emissions from one stack on a rotating basis in GP 001.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4
D. CONTINUOUS OPACITY MONITORING (COM)	hdr
Continuous Opacity Monitoring: The Permittee shall use CM 001 for SV 001 and CM 008 for SV 002 to measure opacity.	Minn. R. 7017.1000, subp. 1; Minn. R. 7007.0800, subp. 2
Continuous Operation: Except for system startups, shutdowns, breakdowns, repairs, calibration checks, and zero and span adjustments, the Permittee shall operate CM 001 continuously when venting exhaust gas from EU 001 through SV 001, and operate CM 008 continuously when venting exhaust gas from EU 002 through SV 002.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-7**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

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. CM 001 and CM 008 must be adjusted whenever the calibration drift exceeds twice the specification of PS-1 of 40 CFR 60, Appendix B.	Minn. R. 7017.1000
COMS Calibration Error Audit: due before half-year starting 07/14/2006 . Conduct three point calibration error audits at least 3 months apart but no greater than 8 months apart. Filter values used shall correspond to approximately 11%, 20%, and 37% opacity.	Minn. R. 7007.0800, subp. 2
COMS Monitoring Data: The Permittee shall reduce all COMS data to 6-minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the 6-minute averaging period.	Minn. R. 7007.0800, subp. 2
Recordkeeping: The Permittee must retain records of all COMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, or report. Records shall be kept at the source.	Minn. R. 7007.0800, subp. 5
E. SO2 EMISSION MONITORING REQUIREMENTS	hdr
Fuel Properties Monitoring: The Permittee shall obtain, from the supplier for each fuel shipment, a certificate that specifies sulfur content (in percent sulfur by weight) and heating value of the fuel (in BTU per lb). For any shipment received without the certificate, the Permittee shall sample the shipment for analysis of sulfur content and heating value.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
<p>Fuel Usage & Sulfur Dioxide Emission Rate Monitoring: By the fifteenth day of each calendar month, the Permittee shall collect recorded fuel usage rate (U, in tons) for the previous calendar month, calculate and record (at the time of calculation) the sulfur dioxide emission for the previous month as follows:</p> $E = U * S * 2$ <p>where:</p> <p>E = SO2 emissions in tons for the previous month, U = Tons of coal used for the previous month, S = percent by weight of sulfur in coal, based on most current supplier certification, 2 = molar ratio of sulfur dioxide to sulfur</p> <p>This method of Fuel Usage & sulfur Dioxide Emission Rate Monitoring may be changed by the MPCA, upon a written notification from the Permittee that the sulfur content in the coal exceeded 0.50%.</p>	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-8**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 002 Process Boilers**Associated Items:** EU 003 Process Boiler 1

EU 004 Process Boiler 2

SV 003 Process Boiler #1 & #2

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input . This limit applies individually to both EU 003 and EU 004.	Minn. R. 7011.0510, subp. 1
PM < 10 micron: less than or equal to 0.024 lbs/million Btu heat input . This limit applies individually to both EU 003 and EU 004.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Sulfur Dioxide: less than or equal to 2.0 lbs/million Btu heat input when burning oil. This limit applies individually to both EU 003 and EU 004 and is less stringent than the Title I Condition below.	Minn. R. 7011.0510, subp. 1
The Permittee shall restrict the sulfur content of any grade of commercial fuel oil so that SO2 emission does not exceed 0.21 lb SO2/million BTU. This limit applies individually to both EU 003 and EU 004. Note that this Title I Condition is more stringent than the Sulfur Dioxide limit, above.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. This limit applies individually to both EU 003 and EU 004.	Minn. R. 7011.0510, subp. 2
B. OPERATIONAL REQUIREMENTS	hdr
Fuel Limits: The Permittee shall combust only natural gas or distillate fuel oil in this group.	Minn. R. 7007.0800, subp. 2
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Resuming Operation to measure SO2 emission from one process boiler, when it is fired with distillate fuel oil. The Permittee shall also sample and analyze the fuel for sulfur content, heating value, and density.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 180 days after Resuming Operation to measure PM and PM10 emission and Opacity from either EU 003 or EU 004.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4
D. SO2 EMISSION MONITORING REQUIREMENTS	hdr
Fuel Properties Monitoring: The Permittee shall obtain, from the supplier for each fuel shipment, a certificate that specifies sulfur content (in percent sulfur by weight) and heating value of the fuel (in BTU per lb). For any shipment received without the certificate, the Permittee shall sample the shipment for analysis of sulfur content and heating value.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-9**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 003 Crude Ore Rail Car 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

EU 007 West Car Dump

EU 008 East Car Dump

SV 007 East Car Dump

SV 008 East Car Dump

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.0025 grains/dry standard cubic foot and also for Total Particulate Matter. This limit applies individually to both EU 007 and EU 008, and is more stringent than the limits below.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.02 grains/dry standard cubic foot	40 CFR Section 60.382(a)(1); Minn. R. 7011.2700
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to both EU 007 and EU 008. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 7 percent opacity. This limit applies individually to both EU 007 and EU 008, and is more stringent than the limit below.	40 CFR Section 60.382(a)(2); Minn. R. 7011.2700
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. This limit applies individually to both EU 007 and EU 008.	Minn. R. 7011.0710, subp. 1(B)
Opacity: less than or equal to 10 percent opacity for any process fugitive emissions from EU 007 or EU 008.	40 CFR Section 60.382(b); Minn. R. 7011.2700
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) for SV 007 and SV 008 once daily using a Daily Visible Emission Checklist.	Minn. R. 7007.0800, subps. 4, 5 & 14
Fabric Filter Pulse Rate Monitoring: Monitor and record individually for CE 007 and CE 008 once each week when in operation the cleaning cycle pulse rate. The pulse rate shall be greater than or equal to 15 seconds per pulse. Once the operating range is established it becomes an enforceable part of this permit unless it is changed as a result of performance testing. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 1,800 days after 07/22/2004 and every five years thereafter to measure PM/PM10 emissions from one stack on a rotating basis in GP 003.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-10**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 004 Crushed Ore Storage**Associated Items:** CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 010 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 009 Fine Crusher Bin Storage - West

EU 010 Fine Crusher Bin Storage - East

SV 009 Fine Crusher Bin Storage - W

SV 010 Fine Crusher Bin Storage - E

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.0025 grains/dry standard cubic foot and also for Total Particulate Matter. This limit applies individually to both EU 009 and EU 010 and is more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to both EU 009 and EU 010. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%. This limit applies individually to both EU 009 and EU 010.	Minn. R. 7011.0710, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) for SV009 and SV 010 once daily using a Daily Visible Emission Checklist.	Minn. R. 7007.0800, subps. 4, 5 & 14
Fabric Filter Pulse Rate Monitoring: Monitor and record individually for CE 009 and CE 010 once each week when in operation the cleaning cycle pulse rate. Once the operating range is established it becomes an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due by April 15, 2006 to measure PM and PM10 emissions from one stack in GP 004.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-11**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 005 Tertiary Crushing**Associated Items:** CE 011 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

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

CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

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

CE 017 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 018 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 019 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 020 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 011 Crusher Line 4

EU 012 Crusher Line 3

EU 013 Crusher Line 2

EU 014 Crusher Line 1

EU 017 Crusher Line 101

EU 018 Crusher Line 102

EU 019 Crusher Line 103

EU 020 Crusher Line 104

SV 011 Fine Crushing Line 4

SV 012 Fine Crushing Line 3

SV 013 Fine Crushing Line 2

SV 014 Fine Crushing Line 1

SV 017 Fine Crushing Line 101

SV 018 Fine Crushing Line 102

SV 019 Fine Crushing Line 103

SV 020 Fine Crushing Line 104

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.0025 grains/dry standard cubic foot and also for Total Particulate matter. This limit applies individually to each unit in this group and is more stringent than the limit below.	Title I Condition: 40 CFR Sections 52.21(k)&(j) for EU 011 and EU 020 BACT Limits; Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to each unit in this group. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%. This limit applies individually to each unit in this group.	Minn. R. 7011.0710, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) for each unit in this group once daily using one or more Daily Visible Emission Checklists.	Minn. R. 7007.0800, subps. 4, 5 & 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-12**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Fabric Filter Pulse Rate Monitoring: Monitor and record individually for each CE in this Group once each week when in operation the cleaning cycle pulse rate. The pulse rate shall be greater than or equal to 37 seconds per pulse. Once the operating range is established it becomes an enforceable part of this permit unless it is changed as a result of performance testing. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
<p>Performance Test: due before end of each calendar year starting 07/14/2006 to measure PM and PM10 emissions from two stacks on a rotating basis in this group. The performance testing frequency may be relaxed from two per year to two per three years according to the following conditions:</p> <p>a. The Permittee has demonstrated three (3) consecutive years that the PM or PM10 emission limit has not been exceeded; and</p> <p>b. The performance test result shall not be greater than 90% of the limit.</p> <p>If a subsequent performance test result is greater than 90% of the PM or PM10 emission limit, then the testing frequency shall revert back to the original yearly basis until subsequent yearly testing produces three consecutive annual performance test results which satisfy the criteria listed above; at that time, the testing may again be two per three years.</p>	<p>Title I Condition: 40 CFR Section 52.21(k), and (j) for EU 011 and EU 020 BACT Limits;</p> <p>Minn. R. 7007.3000;</p> <p>Minn. R. 7017.2020, subp. 1</p>
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-13**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 006 Crushed Ore Conveying**Associated Items:** CE 015 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 016 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 015 Crushed Ore Conveyors - West

EU 016 Crushed Ore Conveyors - East

SV 015 Crushed Ore Conveyors - W

SV 016 Crushed Ore Conveyors - E

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.0025 grains/dry standard cubic foot and also for Total Particulate Matter. This limit applies individually to both EU 015 and EU 016 and is more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to both EU 015 and EU 016. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%. This limit applies individually to both EU 015 and EU 016.	Minn. R. 7011.0710, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) for SV015 and SV 016 once daily using a Daily Visible Emission Checklist.	Minn. R. 7007.0800, subps. 4, 5 & 14
Fabric Filter Pulse Rate Monitoring: Monitor and record individually for CE 015 and CE 016 once each week when in operation the cleaning cycle pulse rate. The pulse rate shall be greater than or equal to 35 seconds per pulse. Once the operating range is established it becomes an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due by December 15, 2005 to measure PM and PM10 emissions from one stack in this group.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due by December 15, 2005 to measure opacity from one stack in this group.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-14**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 007 Dry Cobbing & Conveying

Associated Items:

CE 021 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 022 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 023 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 024 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 025 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 021 Dry Cobbing

EU 022 Dry Cobbing

EU 023 Dry Cobbing

EU 024 Dry Cobbing

EU 025 Dry Cobbing

SV 021 Dry Cobber - West

SV 022 Dry Cobber - East

SV 023 Dry Cobber - West Center

SV 024 Dry Cobber - Center

SV 025 Dry Cobber - East Center

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.0052 grains/dry standard cubic foot and also for Total Particulate Matter. This limit applies individually to each unit in this group and is more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to each unit in this group. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%. This limit applies individually to each unit in this group.	Minn. R. 7011.0710, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) for each unit in this group once daily using one or more Daily Visible Emission Checklists.	Minn. R. 7007.0800, subps. 4, 5 & 14
Fabric Filter Pulse Rate Monitoring: Monitor and record individually for each CE in this Group once each week when in operation the cleaning cycle pulse rate. The pulse rate shall be greater than or equal to 30 seconds per pulse. Once the operating range is established it becomes an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due by December 15, 2005 to measure PM and PM10 emissions from one stack in this group; due by February 15, 2008 to measure PM and PM10 emissions from another stack in this group.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due by December 15, 2005 to measure opacity from one stack in this group.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-15**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 008 Coarse Tails Handling**Associated Items:** CE 026 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 027 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 028 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 029 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 026 Coarse Tails Conveying

EU 027 Coarse Tails Conveying

EU 028 Coarse Tails Transfer

EU 029 Coarse Tails Loadout

SV 026 Tails Belts

SV 027 Tails Belts

SV 028 Tails Belts

SV 029 Tails Belts

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.0025 grains/dry standard cubic foot and also for Total Particulate Matter. This limit applies individually to each unit in this group and is more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to each unit in this group. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%. This limit applies individually to each unit in this group.	Minn. R. 7011.0710, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) for each unit in this group once daily using one or more Daily Visible Emission Checklists.	Minn. R. 7007.0800, subps. 4, 5 & 14
Fabric Filter Pulse Rate Monitoring: Monitor and record individually for each CE in this Group once each week when in operation the cleaning cycle pulse rate. The pulse rate shall be greater than or equal to 31 seconds per pulse. Once the operating range is established it becomes an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due by December 15, 2005 to measure PM and PM10 emissions from one stack in this group.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due by December 15, 2005 to measure opacity from one stack in this group.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-16**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 009 Concentrator Bins - W or E; with Cartridge Collectors**Associated Items:** CE 269 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 270 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 030 West Transfer Bin

EU 031 East Transfer Bin

SV 030 Concentrator Transfer Bin - W

SV 031 Concentrator Transfer Bin - E

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.0020 grains/dry standard cubic foot and also for Total Particulate Matter. This limit applies individually to each unit in this group and is more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to both EU 030 and EU 031. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%. This limit applies individually to both EU 030 and EU 031.	Minn. R. 7011.0710, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) for each unit in this group once daily using one or more Daily Visible Emission Checklists.	Minn. R. 7007.0800, subps. 4, 5 & 14
Gas Stream Pressure Drop: Monitor and record individually for each CE at least once every day when in operation. The pressure drop shall be greater than or equal to 2 inches of water. Once the operating range is established it becomes an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due by December 15, 2005 to measure PM and PM10 emissions from one stack in this group.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due by December 15, 2005 to measure opacity from one stack in this group.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-17**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 010 Concentrator Bins

Associated Items:

CE 033 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 034 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 035 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 036 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 037 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 038 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 039 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 040 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 041 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 042 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 044 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 045 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 046 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 047 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 048 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 049 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 050 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 051 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 052 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 053 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 033 West Storage Bin #2

EU 034 West Storage Bins #3

EU 035 West Storage Bins #4

EU 036 West Storage Bins #5

EU 037 West Storage Bin #6

EU 038 West Storage Bin #7

EU 039 West Storage Bin #8

EU 040 West Storage Bin #9

EU 041 West Storage Bin #10

EU 042 West Storage Bin #11

EU 044 East Storage Bin #101

EU 045 East Storage Bin #102

EU 046 East Storage Bin #103

EU 047 East Storage Bin #104

EU 048 East Storage Bin #105

EU 049 East Storage Bin #106

EU 050 East Storage Bin #107

EU 051 East Storage Bin #108

EU 052 East Storage Bin #109

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-18**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Associated Items:

- EU 053 East Storage Bin #110
- SV 033 Conc Bin - Section 2
- SV 034 Conc Bin - Section 3
- SV 035 Conc Bin - Section 4
- SV 036 Conc Bin - Section 5
- SV 037 Conc Bin - Section 6
- SV 038 Conc Bin - Section 7
- SV 039 Conc Bin - Section 8
- SV 040 Conc Bin - Section 9
- SV 041 Conc Bin - Section 10
- SV 042 Conc Bin - Section 11
- SV 044 Conc Bin - Section 101
- SV 045 Conc Bin - Section 102
- SV 046 Conc Bin - Section 103
- SV 047 Conc Bin - Section 104
- SV 048 Conc Bin - Section 105
- SV 049 Conc Bin - Section 106
- SV 050 Conc Bin - Section 107
- SV 051 Conc Bin - Section 108
- SV 053 Conc Bin - Section 110
- SV 276 Conc Bin - Section 109

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.0030 grains/dry standard cubic foot and also for Total Particulate Matter. This limit applies individually to each unit in this group and is more stringent than the limit below. This limit shall apply individually to all operating concentrator lines after 12/31/2006. Prior to that time, up to four concentrators from the group of EU 042 and EU 044-052, may be subject to a different limit of less than or equal to 0.063 grains/dry standard cubic foot, unless more than two concentrators from the group of EU 033-041 are operating.	Title I Condition: 40 CFR Section 52.21(k), and (j) for EU 033-041 BACT Limits; Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to each unit in this group. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%. This limit applies individually to each unit in this group.	Minn. R. 7011.0710, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) for each unit in this group once daily using one or more Daily Visible Emission Checklists.	Minn. R. 7007.0800, subps. 4, 5 & 14
Gas Stream Pressure Drop: Upon installation of monitoring equipment, monitor and record individually for each fabric filter at least once every day when in operation. Once the operating range is established it becomes an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-19**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Initial Performance Test: due by April 15, 2006 to measure PM and PM10 emissions from one stack in this group equipped with a fabric filter.	Title I Condition: 40 CFR Section 52.21(k), and (j) for EU 033-041 BACT Limits; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due by April 15, 2006 to measure opacity from one stack in this group.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-20**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 012 Additive Handling & Storage - West (by SV locations)**Associated Items:** CE 072 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 073 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 074 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 075 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 076 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 072 West Additive Bin 2

EU 073 West Additive Bin 1

EU 074 West Additive Blending 1 & 2

EU 075 West Additive Blending 3 & 4

EU 076 West Additive Blending 5 & 6

SV 072 West Pel Bentonite Storage 2

SV 073 West Pel Bentonite Storage 1

SV 074 Fce 1,2 Bentonite Day Bin & Air Slide

SV 075 Fce 3,4 Bentonite Day Bin & Air Slide

SV 076 Fce 5,6 Bentonite Day Bin & Air Slide

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.010 grains/dry standard cubic foot and also for Total Particulate Matter. This limit applies individually to each unit in this group and is more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to each unit in this group. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%. This limit applies individually to each unit in this group.	Minn. R. 7011.0710, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) for each unit in this group once daily using one or more Daily Visible Emission Checklists.	Minn. R. 7007.0800, subps. 4, 5 & 14
Gas Stream Pressure Drop: Upon installation of monitoring equipment, monitor and record individually for each CE at least once every day when in operation. The differential pressure shall be greater than or equal to 1 inches water column. Once the operating range is established it becomes an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan. (Note these baghouses are shaker style units that do not employ a cleaning cycle pulse for bag cleaning.)	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 1,800 days after 01/31/2005 and every five years thereafter to measure PM and PM10 emissions from two stacks on a rotating basis in the pool of GP 012 and GP 013.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test: due 1,800 days after 01/31/2005 and every five years thereafter to measure opacity from two stacks on a rotating basis in the pool of GP 012 and GP 013.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-21**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 013 Additive Handling & Storage - East (by SV locations)**Associated Items:** CE 077 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 078 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 079 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 080 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 081 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 082 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 083 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 084 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 077 East Additive Blending - Fce 11 Day Bin

EU 078 East Additive Blending - Fce 11 Air Slide

EU 079 East Additive Blending - Fce 12 Day Bin

EU 080 East Additive Blending - Fce 12 Air Slide

EU 081 East Additive Bins 3-4

EU 082 East Additive Bins 5-6

EU 083 East Additive Unload

EU 084 East Additive Unload, Supplemental

SV 077 Furnace 11 Day Bin Collector

SV 078 Furnace 11 Air Slide Collector

SV 079 Furnace 12 Day Bin Collector

SV 080 Furnace 12 Air Slide Collector

SV 081 East Pel Ben Storage Bin 3,4

SV 082 East Pel Ben Storage Bin 5,6

SV 083 Bentonite Unloading Collector

SV 084 Supplemental Ben Unload Col

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.010 grains/dry standard cubic foot and also for Total Particulate Matter. This limit applies individually to each unit in this group and is more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to each unit in this group. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%. This limit applies individually to each unit in this group.	Minn. R. 7011.0710, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) for each unit in this group once daily using one or more Daily Visible Emission Checklists.	Minn. R. 7007.0800, subps. 4, 5 & 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-22**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Gas Stream Pressure Drop: Upon installation of monitoring equipment, monitor and record individually for each CE at least once every day when in operation. The differential pressure shall be greater than or equal to 0.1 inches water column. Once the operating range is established it becomes an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan. (Note these baghouses are shaker style units that do not employ a cleaning cycle pulse for bag cleaning.)	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 1,800 days after 01/31/2005 and every five years thereafter to measure PM and PM10 emissions from two stacks on a rotating basis in the pool of GP 012 and GP 013.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test: due 1,800 days after 01/31/2005 and every five years thereafter to measure opacity from two stacks on a rotating basis in the pool of GP 012 and GP 013.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-23**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 014 Pellet Indurating Furnaces

Associated Items:

- CE 101 Electrostatic Precipitator - High Efficiency
- CE 102 Electrostatic Precipitator - High Efficiency
- CE 103 Electrostatic Precipitator - High Efficiency
- CE 104 Electrostatic Precipitator - High Efficiency
- CE 105 Electrostatic Precipitator - High Efficiency
- CE 111 Electrostatic Precipitator - High Efficiency
- CE 112 Electrostatic Precipitator - High Efficiency
- CE 113 Electrostatic Precipitator - High Efficiency
- CE 114 Electrostatic Precipitator - High Efficiency
- CE 115 Electrostatic Precipitator - High Efficiency
- CE 261 Electrostatic Precipitator - High Efficiency
- CE 262 Electrostatic Precipitator - High Efficiency
- CE 263 Electrostatic Precipitator - High Efficiency
- CE 271 Electrostatic Precipitator - High Efficiency
- CE 272 Electrostatic Precipitator - High Efficiency
- CE 273 Electrostatic Precipitator - High Efficiency
- EU 100 Furnace 11 Hood Exhaust #1101, #1102, & #1103
- EU 104 Furnace 11 Waste Gas #1105 & #1104
- EU 110 Furnace 12 Hood Exhaust #1201, #1202, & #1203
- EU 114 Furnace 12 Waste Gas #1205 & #1204
- EU 262 Furnace 6 H.E./W.G. #601, #602, & #603
- EU 634 Fce 5 HE-WG #501; #502; #503
- SV 101 Furnace 11 Hood Exhaust
- SV 102 Furnace 11 Hood Exhaust
- SV 103 Furnace 11 Hood Exhaust
- SV 104 Furnace 11 Waste Gas
- SV 105 Furnace 11 Waste Gas
- SV 111 Furnace 12 Hood Exhaust
- SV 112 Furnace 12 Hood Exhaust
- SV 113 Furnace 12 Hood Exhaust
- SV 114 Furnace 12 Waste Gas
- SV 115 Furnace 12 Waste Gas
- SV 261 Furnace 6 Hood Exhaust-Waste Gas
- SV 262 Furnace 6 Hood Exhaust-Waste Gas
- SV 263 Furnace 6 Hood Exhaust-Waste Gas
- SV 266 Fce 5 HE-WG #501;#502;#503
- SV 267 Fce 5 HE-WG #501;#502;#503
- SV 268 Fce 5 HE-WG #501;#502;#503
- SV 270 Fce 11 Hood Exhaust Bypass

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-24**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Associated Items: SV 271 Fce 11 Waste Gas Bypass

SV 272 Fce 12 Hood Exhaust Bypass

SV 273 Fce 12 Waste Gas Bypass

SV 274 Fce 5 HE-WG Bypass

SV 275 Fce 6 HE-WG Bypass

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.020 grains/dry standard cubic foot and also for Total Particulate Matter for EU 100 and EU 110 individually; less than or equal to 0.01 grains/dry standard cubic foot for EU 104, EU 114 individually; less than or equal to 0.01 grains/dry standard cubic foot for EU 262 individually; and less than or equal to 0.01 grains/dry standard cubic foot and 0.18 lbs/million Btu heat input for EU 634 individually; all of which are more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k), and (j) for EU 634 BACT Limits; Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to each SV in this group except the bypass stacks. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0610, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60% opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more 6-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more 6-minute periods during which the average opacity exceeds 60%. This limit applies individually to each SV in this group except the bypass stacks.	Minn. R. 7011.0610, subp. 1(B)
Sulfur Dioxide: less than or equal to 0.22 lbs/million Btu heat input for EU 100 and EU 110 individually; less than or equal to 0.074 lbs/million Btu heat input for EU 104 and EU 114 individually; and less than or equal to 0.13 lbs/million Btu heat input for EU 262 and EU 634 individually, and less than or equal to 0.072 lbs/million Btu heat input for EU 634 individually when burning natural gas, which are more stringent than the Sulfur Dioxide limit below.	Title I Condition: 40 CFR Section 52.21(k) and (j) for EU 634 BACT Limits; Minn. R. 7007.3000
Sulfur Dioxide: less than or equal to 2.0 lbs/million Btu heat input when the indurating furnace is fired with a liquid fossil fuel. This limit applies individually to each furnace in this group and is less stringent than the Title I Condition, above, for Sulfur Dioxide.	Minn. R. 7011.0610, subp. 2(B)(1)
Nitrogen Oxides: less than or equal to 40 parts per million and less than or equal to 46 lbs/hour for EU 634 individually.	Title I Condition: 40 CFR Section 52.21(j) for EU 634 BACT limits; Minn. R. 7007.3000
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Wet ESP Requirement: The Permittee shall operate all wet electrostatic precipitators associated with each furnace and, for each Wet ESP, with at least one and no fewer than the same number of electric fields on as during the most recent performance test that has shown compliance with the PM and PM10 emission limits for this group.	Minn. R. 7007.0800, subp. 14
Wet ESP Requirement: Monitor and record whether the electric field is on for each CE once every 24 hours when in operation. Monitor and record primary amperage, primary voltage, and inlet gas temperature for each CE once every 24 hours when in operation.	Minn. R. 7007.0800, subps. 4, 5 & 14
Water Flow Rate: Monitor and record the water flow rate to each CE once every 24 hours when in operation. The water flow rate shall be greater than or equal to 145 gallons/minute. Once the operating range is established it becomes an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subps. 4, 5 & 14
Bypass Event Record Keeping: the Permittee shall record and maintain records of the time, date, duration, cause, and corrective action of wet ESP bypass events.	Minn. R. 7007.0800, subp. 5
C. MONITORING REQUIREMENTS	hdr
Emissions Monitoring: The owner or operator shall install and operate a NOx Continuous Emission Monitoring System (CEMS) to measure NOx emissions from EU 634. One NOx monitor shall be installed on each stack (SV 266, SV 267, and SV 268).	Title I Condition: 40 CFR Section 52.21(j): BACT; Minn. R. 7007.3000; Minn. R. 7017.1006

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-25**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Emissions Monitoring: The owner or operator shall install and operate an offgas flow monitoring system to measure offgas flow from EU 634. One flow meter shall be installed on each stack (SV 266, SV 267, and SV 268). (This is needed to determine the mass of emissions from the concentration measurements.)	Title I Condition: 40 CFR Section 52.21(j): BACT; Minn. R. 7007.3000; Minn. R. 7017.1006
Initial Startup of the Monitor: due 180 days after Initial Startup of Furnace 5. As of this date, each of the NOx monitors and flow meters shall be installed and operational.	Title I Condition: 40 CFR Section 52.21(j): BACT; Minn. R. 7007.3000; Minn. R. 7017.1006
D. PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Initial Startup to measure PM, PM10, and SO2 emissions from Furnace 5. Sampling shall be performed for at least one stack and the gas flow rate shall be determined for all stacks except the bypass stacks.	Title I Condition: 40 CFR Section 52.21(k), and (j) for EU 634 BACT Limits; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test: due before 02/18/2008 and every three years thereafter to measure PM and PM10 emissions from two furnaces (on a rotating basis, one from Furnaces 11 and 12 and the other from Furnaces 5 and 6) in this group. PM and PM10 sampling shall be performed for at least two stacks for Furnace 11 or Furnace 12, and for at least one stack for Furnace 5 or Furnace 6. Gas flow rate shall be determined for all stacks of each furnace except the bypass stacks.	Title I Condition: 40 CFR Section 52.21(k), and (j) for EU 634 BACT Limits; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test: due 60 days after Startup with fuel oil followed by 500 hours of use of fuel oil at any furnace, to measure SO2 emissions. Sampling shall be performed for at least two stack for Furnace 11 or Furnace 12, and for at least one stack for Furnace 5 or Furnace 6. Gas flow rate shall be determined for all stacks of each furnace except the bypass stacks.	Title I Condition: 40 CFR Section 52.21(k), and (j) for EU 634 BACT Limits; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-26

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 015 Furnace Discharge of Finished Pellets

Associated Items: CE 120 Rotoclone

CE 121 Rotoclone

CE 265 Rotoclone

CE 274 Wet Scrubber-High Efficiency

EU 120 Furnace 11 Discharge

EU 121 Furnace 12 Discharge

EU 265 Furnace 6 Discharge

EU 635 Furnace 5 Discharge

SV 120 Furnace 11 Discharge

SV 121 Furnace 12 Discharge

SV 265 Furnace 6 Discharge

SV 269 Furnace 5 Discharge

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.011 grains/dry standard cubic foot and also Total Particulate Matter for SV 120 and SV 121 individually; less than or equal to 0.012 grains/dry standard cubic foot for SV 265 individually; and less than or equal to 0.0050 grains/dry standard cubic foot for SV 269 individually, which are more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k)&(j) for SV 269 BACT Limits; Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to each unit in this group. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%. This limit applies individually to each unit in this group.	Minn. R. 7011.0710, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Gas Stream Pressure drop: Upon installation of monitoring equipment, monitor and record individually for each CE at least once every day when in operation. Once the operating range is established it becomes an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan. This requirement of gas stream pressure drop may be replaced with a requirement of monitoring the associated fan motor amperage, if MPCA approves supporting field data submitted by the Permittee for such replacement. Such field data shall be developed during Initial Performance Testing for at least one rotoclone controlled stack each of GP 015 and GP 016. In the interim before the MPCA approval, the Permittee shall perform both gas stream pressure drop monitoring and fan motor amperage monitoring to initiate the supporting field data development.	Minn. R. 7007.0800, subps. 4, 5 & 14
Liquid Flow Rate: Upon installation of monitoring equipment, monitor and record individually the scrubbing liquid flow rate to CE 274 at least once every day when in operation. Once the operating range is established it becomes an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Resuming Operation to measure PM and PM10 from SV 269.	Title I Condition: 40 CFR Section 52.21(k)&(j) for SV 269 BACT Limits; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-27**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Performance Test: due 180 days after Resuming Operation of any emission unit in GP 015, to measure PM and PM10 emissions from one stack in this group other than SV 269. The presently required 3-year testing frequency for this group would require testing again by 6/15/2012 unless a new testing frequency is established.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-28**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 016 Pellet Screening (indoor - product & hearth layer)**Associated Items:** CE 097 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 122 Rotoclone

CE 123 Rotoclone

CE 124 Rotoclone

CE 125 Rotoclone

EU 097 Hearth Layer

EU 122 Furnace 11 Pellet Screen

EU 123 Screen House North

EU 124 Furnace 12 Pellet Screen

EU 125 Screen House South

SV 097 Hearth Layer

SV 122 Furnace 11 Screening

SV 123 East Furnace Screen House

SV 124 Furnace 12 Screening

SV 125 East Furnace Screen House

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.0063 grains/dry standard cubic foot and also Total Particulate Matter for EU 097 individually; less than or equal to 0.011 grains/dry standard cubic foot for EU 122-124 individually; and less than or equal to 0.015 for EU 125 individually, which are more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.05 grams/dry standard cubic meter (0.022 grains/dry standard cubic foot) of exhaust gas on and after the date on which the performance test required is completed. This limit applies individually to each unit in this group and is less stringent than the limit, above, for Total PM.	40 CFR Section 60.382(a)(1); Minn. R. 7011.2700
Opacity: less than or equal to 7 percent opacity for SV 097.	40 CFR Section 60.382(a)(2); Minn. R. 7011.2700
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Gas Stream Pressure Drop: Install, calibrate, maintain, and operate a monitoring device for each CE in this group for the continuous measurement and recording of the change in pressure of the gas stream through the CE. The monitoring device must be certified by the manufacturer to be accurate within 250 Pascals (1 inch water) gauge pressure, plus or minus; and must be calibrated on an annual basis in accordance with manufacturer's instructions.	40 CFR Section 60.384(a); 40 CFR Section 60.385(b); Minn. R. 7011.2700
On SV 097, Hearth Layer, maintain differential pressure across filter as follows: Pressure Drop: greater than or equal to 3.0 inches of water column and less than or equal to 10.0 inches of water column	40 CFR Section 60.384(a); 40 CFR Section 60.385(b); Minn. R. 7011.2700
Fan Motor Amperage: Install, calibrate, maintain, and operate a monitoring device for each CE in this group, except CE 097, for the continuous measurement and recording of the fan motor amperage draw on the CE. This alternative monitoring parameter is approved for this group as per a November 30, 2004, letter from U.S. EPA to Northshore Mining. By no later than September 18, 2006, establish the operating range and submit it in an updated O&M plan. Once submitted, it shall become an enforceable part of this permit. A deviation from the established range shall trigger a corrective action as detailed in the O&M plan.	40 CFR Section 60.384(a); 40 CFR Section 60.385(b); Minn. R. 7011.2700
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emission (opacity) for SV 097 once daily using a Daily Visible Emission Checklist.	Minn. R. 7007.0800, subps. 4, 5 & 14
D. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 120 days after Resuming Operation of EU 097 and every five years thereafter to measure PM and PM10 emissions from SV 097.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-29**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Performance Test: due 120 days after Resuming Operation of any emission unit in GP 016, to measure PM and PM10 emissions from one stack in this group other than SV 097.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-30**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: GP 019 Concentrate Loadout Operations**Associated Items:** CE 205 6% or Greater Moisture Content

CE 275 6% or Greater Moisture Content

CE 276 6% or Greater Moisture Content

CE 277 6% or Greater Moisture Content

CE 278 6% or Greater Moisture Content

CE 279 6% or Greater Moisture Content

EU 637 Concentrate Loadout Conveyor

EU 638 Concentrate Elevating Conveyor

EU 639 Concentrate Transfer Conveyor

EU 640 Concentrate Shuttle Conveyor

EU 641 Concentrate Silo 1 Loadout to Railcar

EU 642 Concentrate Silo 2 Loadout to Railcar

What to do	Why to do it
Opacity: less than or equal to 10 percent opacity for any Process Fugitive Emissions.	40 CFR Section 60.382(b); Minn. R. 7011.2700
Initial Performance Test: due 60 days after achieving maximum capacity, but no later than 180 days after Initial Startup, to measure Process Fugitive Emissions from emission units (beyond EU 637) in GP 019.	40 CFR Section 60.385(a) & (b); Minn. R. 7011.2700
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-31**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: EU 005 Coal Transfer & Coal Bunkers**Associated Items:** SV 005 Coal Transfer & Bunkers

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.0062 grains/dry standard cubic foot and also for Total Particulate Matter, which is more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735, which for Total Particulate Matter is less stringent than the limit above.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60% opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more 6-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more 6-minute periods during which the average opacity exceeds 60%.	Minn. R. 7011.0710, subp. 1(B)
B. OPERATIONAL REQUIREMENTS	hdr
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) once daily using a Daily Visible Emission Checklist.	Minn. R. 7007.0800, subps. 4, 5 & 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due by December 15, 2005 to measure PM and PM10 emissions.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due by December 15, 2005 to measure opacity.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-32**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: EU 043 West Storage Bin #12**Associated Items:** CE 043 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones

SV 043 Conc Bin - Section 12 - Fluxstone

What to do	Why to do it
PM < 10 micron: less than or equal to 0.0063 grains/dry standard cubic foot and also for Total Particulate Matter. This is more stringent than the limit below.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to both EU 030 and EU 031. Note that the Title I Condition, above, on Total Particulate Matter, is a more stringent limit.	Minn. R. 7011.0710, subp. 1(A)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20%, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%. This limit applies individually to both EU 030 and EU 031.	Minn. R. 7011.0710, subp. 1(B)
Process monitoring: the visual emissions observer in the facility staff shall check stack visible emissions (opacity) once daily using one or more Daily Visible Emission Checklists.	Minn. R. 7007.0800, subps. 4, 5 & 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Northshore Mining - Silver Bay
Permit Number: 07500003 - 007

Subject Item: EU 636 60A to 60B transfer and 5x12 screen

What to do	Why to do it
Opacity: less than or equal to 10 percent opacity for any Process Fugitive Emission. Note that, due to lack of a stack/vent associated with any indoor conveyor transfer point in EU 636, PM and Opacity limits specified in 40 CFR 60.382(a) are not given for EU 636.	40 CFR Section 60.382(b); Minn. R. 7011.2700

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-34**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: MR 005 NOx monitor for SV266**Associated Items:** CM 009 Furnace 5, EU634, NOx, ppm and lb/hr

EU 634 Fce 5 HE-WG #501; #502; #503

SV 266 Fce 5 HE-WG #501;#502;#503

What to do	Why to do it
Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system.	Minn. R. 7017.1040, subp. 1
CEM Certification Test: due 120 days after Resuming Operation of Furnace 5. Follow the Performance Specifications listed in 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1050, subp. 1
CEMS Certification Test Plan: due 30 days before CEMS Certification Test	Minn. R. 7017.1060, subps. 1 & 2
CEMS Certification Test Pretest Meeting: due 7 days before CEMS Certification Test.	Minn. R. 7017.1060, subp. 3
CEMS Certification Test Report - Microfiche Copy: due 105 days after CEMS Certification Test	Minn. R. 7017.1080, subp. 3
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 3
Cylinder Gas Audit: due before end of each calendar quarter following CEM Certification Test. Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 4
CEMS Relative Accuracy Test Audit (RATA): due before end of each year following CEM Certification Test. If the relative accuracy is 15% or less the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA).	Minn. R. 7017.1180, subp. 2
Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	Minn. R. 7017.1090, subp. 1
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7007.1130
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-35**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: MR 006 NOx monitor for SV267**Associated Items:** CM 009 Furnace 5, EU634, NOx, ppm and lb/hr

EU 634 Fce 5 HE-WG #501; #502; #503

SV 267 Fce 5 HE-WG #501;#502;#503

What to do	Why to do it
Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system.	Minn. R. 7017.1040, subp. 1
CEM Certification Test: due 120 days after Resuming Operation of Furnace 5. Follow the Performance Specifications listed in 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1050, subp. 1
CEMS Certification Test Plan: due 30 days before CEMS Certification Test	Minn. R. 7017.1060, subps. 1 & 2
CEMS Certification Test Pretest Meeting: due 7 days before CEMS Certification Test.	Minn. R. 7017.1060, subp. 3
CEMS Certification Test Report - Microfiche Copy: due 105 days after CEMS Certification Test	Minn. R. 7017.1080, subp. 3
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 3
Cylinder Gas Audit: due before end of each calendar quarter following CEM Certification Test. Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 4
CEMS Relative Accuracy Test Audit (RATA): due before end of each year following CEM Certification Test. If the relative accuracy is 15% or less the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA).	Minn. R. 7017.1180, subp. 2
Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	Minn. R. 7017.1090, subp. 1
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7007.1130
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-36**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: MR 007 NOx monitor for SV268**Associated Items:** CM 009 Furnace 5, EU634, NOx, ppm and lb/hr

EU 634 Fce 5 HE-WG #501; #502; #503

SV 268 Fce 5 HE-WG #501;#502;#503

What to do	Why to do it
Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system.	Minn. R. 7017.1040, subp. 1
CEM Certification Test: due 120 days after Resuming Operation of Furnace 5. Follow the Performance Specifications listed in 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1050, subp. 1
CEMS Certification Test Plan: due 30 days before CEMS Certification Test	Minn. R. 7017.1060, subps. 1 & 2
CEMS Certification Test Pretest Meeting: due 7 days before CEMS Certification Test.	Minn. R. 7017.1060, subp. 3
CEMS Certification Test Report - Microfiche Copy: due 105 days after CEMS Certification Test	Minn. R. 7017.1080, subp. 3
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 3
Cylinder Gas Audit: due before end of each calendar quarter following CEM Certification Test. Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 4
CEMS Relative Accuracy Test Audit (RATA): due before end of each year following CEM Certification Test. If the relative accuracy is 15% or less the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA).	Minn. R. 7017.1180, subp. 2
Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	Minn. R. 7017.1090, subp. 1
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7007.1130
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-37**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: MR 008 Flow monitor for SV266**Associated Items:** CM 009 Furnace 5, EU634, NOx, ppm and lb/hr

EU 634 Fce 5 HE-WG #501; #502; #503

SV 266 Fce 5 HE-WG #501;#502;#503

What to do	Why to do it
Installation Notification: due 60 days before installing the flow monitoring system. The notification shall include plans and drawings of the system.	Minn. R. 7017.1040, subp. 1
Flow meter certification test: due 120 days after Resuming Operation of Furnace 5. Follow the Performance Specifications listed in 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1050, subp. 1
Flow meter Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at low and high flow rate at least once daily. The flow meter shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 3
Flow meter Relative Accuracy Test (RATA). If the relative accuracy is 15% or less the next flow meter RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before flow meter Relative Accuracy Test Audit (RATA).	Minn. R. 7017.1180, subp. 2
Continuous Operation: The flow meter must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A flow meter must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	Minn. R. 7017.1090, subp. 1
Recordkeeping: The owner or operator must retain records of all flow monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7007.1130
QA Plan: Develop and implement a written quality assurance plan that covers each flow meter. The plan shall be on site and available for inspection within 30 days after initial flow meter RATA. The plan shall contain all of the information required by 40 CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-38**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: MR 009 Flow monitor for SV267**Associated Items:** CM 009 Furnace 5, EU634, NOx, ppm and lb/hr

EU 634 Fce 5 HE-WG #501; #502; #503

SV 267 Fce 5 HE-WG #501;#502;#503

What to do	Why to do it
Installation Notification: due 60 days before installing the flow monitoring system. The notification shall include plans and drawings of the system.	Minn. R. 7017.1040, subp. 1
Flow meter certification test: due 120 days after Resuming Operation of Furnace 5. Follow the Performance Specifications listed in 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1050, subp. 1
Flow meter Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at low and high flow rate at least once daily. The flow meter shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 3
Flow meter Relative Accuracy Test (RATA). If the relative accuracy is 15% or less the next flow meter RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before flow meter Relative Accuracy Test Audit (RATA).	Minn. R. 7017.1180, subp. 2
Continuous Operation: The flow meter must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A flow meter must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	Minn. R. 7017.1090, subp. 1
Recordkeeping: The owner or operator must retain records of all flow monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7007.1130
QA Plan: Develop and implement a written quality assurance plan that covers each flow meter. The plan shall be on site and available for inspection within 30 days after initial flow meter RATA. The plan shall contain all of the information required by 40 CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-39**

01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Subject Item: MR 010 Flow monitor for SV268**Associated Items:** CM 009 Furnace 5, EU634, NOx, ppm and lb/hr

EU 634 Fce 5 HE-WG #501; #502; #503

SV 268 Fce 5 HE-WG #501;#502;#503

What to do	Why to do it
Installation Notification: due 60 days before installing the flow monitoring system. The notification shall include plans and drawings of the system.	Minn. R. 7017.1040, subp. 1
Flow meter certification test: due 120 days after Resuming Operation of Furnace 5. Follow the Performance Specifications listed in 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1050, subp. 1
Flow meter Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at low and high flow rate at least once daily. The flow meter shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 3
Flow meter Relative Accuracy Test (RATA). If the relative accuracy is 15% or less the next flow meter RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before flow meter Relative Accuracy Test Audit (RATA).	Minn. R. 7017.1180, subp. 2
Continuous Operation: The flow meter must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A flow meter must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	Minn. R. 7017.1090, subp. 1
Recordkeeping: The owner or operator must retain records of all flow monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7007.1130
QA Plan: Develop and implement a written quality assurance plan that covers each flow meter. The plan shall be on site and available for inspection within 30 days after initial flow meter RATA. The plan shall contain all of the information required by 40 CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

TABLE B: SUBMITTALS

B-1 01/20/10

Facility Name: Northshore Mining - Silver Bay
Permit Number: 07500003 - 007

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.

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

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.

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.

Send any application for a permit or permit amendment to:

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

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

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

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

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**B-2** 01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
CEM Certification Test Report	due 45 days after CEM Certification Test	MR005, MR006, MR007
Notification of compliance status	due 30 days after Discovery of Deviation of Applicability status for any Emission Unit of GP 001. This one-time notification is required in the event that the unit has become an affected unit subject to the requirements of the federal Acid Rain Program.	GP001
Notification of compliance status	due before 11/12/2007 or the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations required by 40 CFR 63 Subpart DDDDD, whichever is earlier.	Total Facility
Notification of compliance status	due before 12/29/2006 or the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations required by 40 CFR 63 Subpart RRRRR, whichever is earlier.	Total Facility
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup for emission units (beyond EU 637) in GP 019 (Concentrate Loadout Operations).	GP019
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup of each reactivated unit (EU 011, EU 020 and EU 634), Initial Startup of fabric filters replacing multicloners on operating concentrator lines (from the group of EU 042 and EU 044-052), and Initial Startup (reactivation) of a concentrator line from the group of EU 033-041.	Total Facility
Notification of the date of Equipment Removal/Dismantlement	due 15 days after Equipment Removal and/or Dismantlement of the iron nugget pilot plant (PDRDP) equipment required to be rendered inoperable (emission units that were numbered EU 630-633 in the Title V permit issued 2/24/2004).	Total Facility
Notification	due 14 days after Fuel Supplier Certification or Fuel Sulfur Analysis indicated fuel sulfur in a shipment exceeded 0.50% by weight.	GP001
Notification	due 15 days after Startup with fuel oil followed by 500 hours of use of fuel oil at any furnace.	GP014
Notification	due 30 days after Resuming Operation of Process Boilers 1 and 2. The Permittee shall do an applicability determination before resuming operation. If a permit action is required, the Permittee shall apply for and receive the appropriate authorization before resuming operation.	GP002
Operation and Maintenance Plan	due 30 days after 03/16/2008 of newly installed, upgraded or reactivated control equipment to update the previous O&M plan.	Total Facility

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**B-3** 01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Operation and Maintenance Plan	due before 10/30/2006. The Permittee shall provide an O&M plan for review and approval by the Commissioner. The O&M plan shall identify all air pollution control equipment, a preventative maintenance program for that equipment, description of corrective actions to be taken in the event of a malfunction or breakdown, description of the employee training program, daily visible emission checklists, and the records kept to demonstrate plan implementation. The Commissioner may require additions or changes to the O&M plan when granting approval. The Permittee will be given an opportunity to comment on any required additions or changes to the plan before the Commissioner grants approval of the plan.	Total Facility
Performance Test Notification (written)	due 30 days before Performance Test.	EU005, GP001, GP002, GP003, GP004, GP005, GP006, GP007, GP008, GP009, GP010, GP012, GP013, GP014, GP015, GP016, GP019
Performance Test Plan	due 30 days before Performance Test.	EU005, GP001, GP002, GP003, GP004, GP005, GP006, GP007, GP008, GP009, GP010, GP012, GP013, GP014, GP015, GP016, GP019
Performance Test Report - Microfiche Copy	due 105 days after Performance Test. A CD-ROM copy of the test report shall be accepted as an alternative to the microfiche copy, provided that the test report in the CD-ROM is in PDF or TIF format to address compatibility issues.	EU005, GP001, GP002, GP003, GP004, GP005, GP006, GP007, GP008, GP009, GP010, GP012, GP013, GP014, GP015, GP016, GP019
Performance Test Report	due 45 days after Performance Test.	EU005, GP001, GP002, GP003, GP004, GP005, GP006, GP007, GP008, GP009, GP010, GP012, GP013, GP014, GP015, GP016, GP019
Submittal of Permit Application	due 90 days after Initial Performance Test. The Permittee shall submit parameter ranges, along with rationale for their development, in a permit amendment application, to incorporate the air pollution control equipment parameter ranges (scrubbing water flow rate and/or gas stream pressure drop) into this permit. The rationale for choosing these ranges shall include the control equipment manufacturer's recommended ranges and any reasons for deviating from the recommended ranges.	Total Facility
Testing Frequency Plan	due 60 days after Initial Performance Test for SO ₂ emissions from Furnace 5. The plan shall specify a testing frequency for this group on a rotating basis, based on the test data and MPCA guidance. Future performance tests based on one-year (12 months), 36 months, and 60 months intervals, or as applicable, shall be required upon written approval of the MPCA.	GP014
Testing Frequency Plan	due 60 days after Initial Performance Test for SO ₂ emissions while burning fuel oil for any furnace (EU100, EU110, EU262, or EU634). The plan shall specify a testing frequency for this group on a rotating basis, based on the test data and MPCA guidance. Future performance tests based on one-year (12 months), 36 months, and 60 months intervals, or as applicable, shall be required upon written approval of the MPCA.	GP014
Testing Frequency Plan	due 60 days after Initial Performance Test. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 months), 36 months, and 60 months intervals, or as applicable, shall be required upon written approval of the MPCA.	EU005

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**B-4** 01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

Testing Frequency Plan	due 60 days after Initial Performance Test. The plan shall specify a testing frequency for this group on a rotating basis, based on the test data and MPCA guidance. Future performance tests based on one-year (12 months), 36 months, and 60 months intervals, or as applicable, shall be required upon written approval of the MPCA.	GP002, GP004, GP006, GP008, GP009, GP010, GP019
Testing Frequency Plan	due 60 days after Initial Performance Test. The plan shall specify a testing frequency for this group on a rotating basis, based on the test data from the initial sets of tests and MPCA guidance. Future performance tests based on one-year (12 months), 36 months, and 60 months intervals, or as applicable, shall be required upon written approval of the MPCA.	GP007
Testing Frequency Plan	due 60 days after Performance Test. The plan shall specify a testing frequency for this group on a rotating basis, based on the test data and MPCA guidance. Future performance tests based on one-year (12 months), 36 months, and 60 months intervals, or as applicable, shall be required upon written approval of the MPCA.	GP015

TABLE B: RECURRENT SUBMITTALS**B-5** 01/20/10

Facility Name: Northshore Mining - Silver Bay

Permit Number: 07500003 - 007

What to send	When to send	Portion of Facility Affected
Ambient Air Monitoring Report	due 45 days after end of each calendar quarter starting 07/14/2006 to provide ambient air quality data on TSP and PM10 to compare with ambient air quality standards. If ambient PM10 measurements are greater than 145 micrograms/cubic meter, the Permittee shall submit, along with the quarterly ambient air monitoring report, an analysis of such instances and a description of any corrective action(s) taken.	Total Facility
Cylinder Gas Audit (CGA) Results Summary	due 30 days after end of each calendar quarter following end of the calendar quarter in which the Audit was performed	MR005, MR006, MR007
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following CEM Certification Test (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of flow meter bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	MR008, MR009, MR010
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following CEM Certification Test (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	MR005, MR006, MR007
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter starting 07/14/2006. (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	GP001
Flow Meter Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	MR008, MR009, MR010
Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	MR005, MR006, MR007
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 07/14/2006. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 30 days after end of each calendar year starting 07/14/2006 (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner, and to the U.S. EPA regional office in Chicago. This report covers all deviations experienced during the calendar year. The EPA copy shall be sent to: Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604	Total Facility

APPENDIX B

Fugitive Dust Control Actions Required for Mile Post 7 Area

Facility Name: Northshore Mining Co – Silver Bay

Permit Number: 07500003-007

The following requirements apply to the Milepost 7 Tailings Basin area.

(1) Air Control Technology

Pursuant to this Permit, best available air emission control technology shall include specifically, but not exclusively, the use of tailings submersion to the maximum extent practicable but consistent with the Milepost 7 Five Year Operations Plan, as conditionally approved by the MPCA on August 21, 1997 (and any revisions thereto as approved by the MPCA and in compliance with the terms of NPDES/SDS Permit MN 0055301 and this Permit), vegetation, spray water, effective and nonpolluting chemical binders, or other dust retardants on all exposed tailings surfaces.

(2) Tailings Disposal and Stabilization

All tailings except coarse tailings hauled to the Peter Mitchell Mine Pit, tailings used for road, dam and dike construction within the basin, backfill in the plant area, or tailings temporarily stored within the basin for future construction purposes, shall be placed within the tailings basin at all times and may be surface spigotted and stabilized consistent with the Milepost 7 Five Year Operations Plan, as conditionally approved by the MPCA on August 21, 1997, and any revisions thereto as approved by the MPCA and in compliance with the terms of NPDES/SDS Permit MN 0055301 and this Permit.

(3) Exposed Coarse Tailings - Wetting

Coarse tailings shall approximate the particle size distribution outlined by Attachment 1. The coarse tailings shall contain a silt (size fraction smaller than 74 microns) content that shall comply with Attachment 2. Representative sampling, and testing of the gradation of this material at the loading facilities by the plant shall be conducted at least once a month; the results shall be reported monthly to the MPCA. Portions of these representative samples shall be provided to the MPCA for purposes of a quality assurance audit, as requested by the MPCA.

Coarse tailings shall be sufficiently moist before and after railroad car or truck load-out at the facility to minimize dust emissions during loading, transportation and unloading operations.

The coarse tailings material shall be wetted in such a manner as to maintain zero visible emissions until it is treated with dust suppressants, vegetated, or placed under water. There shall be no stockpiling of coarse tailings at the plant. The water content of the coarse tailings shall be verified and reported monthly to the MPCA.

Excessive wetting shall be controlled to avoid free draining of water from the railroad cars during the transportation of coarse tailings. Appropriate measures have been implemented to control and collect drainage from the railroad cars prior to transport, and shall continue to be maintained.

(4) Exposed Coarse Tailings - Splitter Dikes, Railroad Roadbeds, Dams

There shall be no more than a 400-foot wide exposed coarse tailings surface on the basin splitter dikes (including safety berms), and no more than a 200-foot wide exposed coarse tailings surface on railroad roadbeds not located on basin splitter dikes. The total exposed area of coarse tailings shall at no time exceed 300 acres. Estimates of the total exposed coarse tailings area shall be performed monthly, and reported to the MPCA upon request.

(5) Exposed Coarse Tailings - Vegetation and Treatment

The balance of the exposed coarse tailings area shall be vegetated or treated with dust suppressants of such concentration and applied with such frequency that, except for emissions caused by extreme meteorological conditions, the visible emissions from these areas shall be essentially zero. Field tests for selected dust suppressant chemicals to be used for various application situations have been conducted, and a Fugitive Emissions Control Plan provided to the MPCA for approval and the MPCA hereby approves the continued use of the chemicals and methods described in the Fugitive Emissions Control Plan. This plan must be resubmitted within 90 days of the issuance of this Permit, for MPCA review and approval.

Should future studies or information prove that Cohex, or any other dust suppressants approved by the MPCA, are environmentally unsound, the MPCA may require a change in the use of dust suppressants.

The Regulated Party shall continue implementation of the approved vegetation plan to provide sufficient vegetative cover which will become self-sustaining, will minimize the emission of dust and fibers and will minimize the erosion of basin structures. The vegetation plan shall continue to be included as part of the Milepost 7 Five Year Operations Plan, as conditionally approved by the MPCA on August 21, 1997, and any revisions thereto as approved by the MPCA and in compliance with the terms of NPDES/SDS Permit MN 0055301 and this Permit. In addition, the vegetation activities shall be recorded monthly, and reported to the MPCA upon request.

(6) Treatment Technology

The Regulated Party shall be required to apply the Best Available Technology (BAT) to maintain air quality and to comply with all applicable laws, rules, court orders, and decisions, specifically including Minn. R. 7009.0010 to 7009.0080 and other duly adopted rules and standards which now or in the future may be applied to the facility.

(7) Air Quality Limits

The air quality standards at or beyond the property line of the disposal system to which the Regulated Party shall adhere, consistent with the determination of the Minnesota Supreme Court, are, among others, as follows:

- a. Compliance with Minn. R. 7009.0010 to 7009.0080, 7011.0700 to 7011.0735 and 7011.0150;
- b. Fibers in the ambient air shall be below a medically significant level;
- c. The ambient air shall contain no more fibers than that level ordinarily found in the ambient air of a control city such as St. Paul;
- d. The fibers in the ambient air shall be maintained below a level which is injurious to human health or welfare in violation of Minn. Stat. § 116.06 (3); and
- e. Such other standards which now or in the future may be applied to the Regulated Party's fiber emission.

The MPCA recognizes that the above fiber level standards or measurements applicable to fiber emissions emanating from the Regulated Party's operations are to be determined in the future to a degree which approaches reliable scientific and medical precision. The control city standard set forth in paragraph (c) was found by the federal courts to be based on a reasonable medical theory. Any future fiber level standards applied pursuant to paragraphs (b), (d), and (e) must likewise be based on a reasonable medical theory.

(8) Definitions

"Fibers", for the purpose of this Permit, are defined as chrysotile and amphibole mineral particles with 3-to-1 or greater aspect ratios.

"Fugitive dust" means particulate emissions from open sources exposed to the air environment which enter the atmosphere due to the forces of wind, man's activity, or both.

"Coarse tailings" means a mixture of 65-75 percent dry cobs and 25-35 percent filtered tailings.

"Exposed coarse tailings" means coarse tailings surfaces that have not been treated by artificial means including but not limited to watering, chemical stabilization, mulching or vegetation, or natural methods (rainfall or snow cover).

APPENDIX C

Daily Visible Emission Checklists – Explanation & An Example

Facility Name: Northshore Mining Co – Silver Bay

Permit Number: 07500003-007

The Permittee shall develop Daily Visible Emission Checklists for the stack equipped with dry control equipment as part of the O & M Plan. An example is provided on the next page. Note that fabric filters (baghouses) that are equipped with MPCA-approved broken bag detectors are not subject to daily visible emission inspection.

The Permittee shall also develop Daily Visible Emission Checklists for fugitive emission sources at the Silver Bay facility as part of the Fugitive Control Plan for the Silver Bay facility. Note that FS 018 denotes the untreated beaches at Mile Post 7 Tailings Basin Area, for which special control actions are required for fugitive dust in general. See Appendix B of this permit.

A checklist may cover only a few stacks, a few fugitive emission sources, or a number of stacks and nearby fugitive emission sources. Weather condition codes (ambient air temperature; and “clear,” “foggy,” or “raining/snowing”.) are included in the checklists to help assessing whether ambient air conditions were conducive to making the visible emission check.

Daily Visible Emission Checklist (Part of the O & M Plan): An example*

Visual inspection of each stack is to be recorded on day shift Sunday through Saturday.

Record "OK" if equipment does not require attention.

Record "RA" if equipment requires attention to reduce visible emission from the stack.

Record actions taken to remedy problems that require attention ("RA" items).

Record "Moist" if moisture plume limits visible emission observations.

If the unit is down for more than one hour and the service area is active, notify the Environmental Engineer with the following information: Unit number, time it went down, why it went down, and when it is expected to be operating again.

At the end of each week, send completed inspection form to Environmental Engineer to file.

SV	EU	CE	Operator ID	Description	SUN	MON	TUE	WED	THU	FRI	SAT
----	----	----	-------------	-------------	-----	-----	-----	-----	-----	-----	-----

Year _____ Date →
Time _____
Initials _____

Record corrective actions or comments for each "RA." Also record pressure drop and/or water pressure/flow for each unit that moisture plume interferes with the observation.

Date ____/____/____ Employee _____ # _____

** This is an example for the Permittee to develop their own checklists. This example may not have included all the requirements specified in the text of this Appendix or relevant information required through other regulatory actions in effect. This example is not for fugitive emission sources.*

Fugitive Emission Sources for this permit.

FS	Description	FS	Description
001	Coal yard: transfer from ship to pile	011	Pellet cooling: Pile discharge
002	Coal yard: scraper traffic on pile	012	Pellet cooling: wind erosion from pile
003	Coal yard: wind erosion from pile	013	Pellet bridge discharge to yard
004	Fluxstone: transfer from ship to pile	014	Pellet boat loading
005	Fluxstone: hauling on unpaved road	015	Pellet yard wind erosion
006	Fluxstone: moving in Section 12 area	016	Pellet reclaiming activities
007	Fluxstone: wind erosion from pile	017	Pellet screening in pellet yard
009	Coarse tails handling at loadout bin	018	Mile Post 7 untreated basin beaches
010	Pellet cooling: transfer tower	019	Secondary traffic on unpaved roads

APPENDIX D

Current Status and Plan for TSP Compliance

Facility Name: Northshore Mining Co – Silver Bay

Permit Number: 07500003-007

1. Environmental Standard Operating Procedures (ESOPs) have been formally written and implemented for Fugitive Dust control in each relevant department; department employees receive annual training on those ESOPs. ESOPs specify the goal of “no visible dust emissions” and specify equipment or methods available to control emissions. The training stresses that extra vigilance is needed during dry, windy conditions, and when dust-generating potential is higher than normal due to multiple activities (e.g. reclaiming and boat loading).
2. General Fugitive Dust Awareness and Prevention training is given to all employees at plant.
3. Screenhouse rotoclone reliability is optimized by scheduling cleanout at least every 8 weeks.
4. Screenhouse rotoclone operation plan: at first sight of excessive emissions, shut down feed to the screenhouse until problem is solved. If problem cannot be solved promptly, shut down rotoclone fan to prevent excessive stack emissions until problem is solved.
5. Cooling pile operating procedure has been revised as follows: during furnace startup, add maximum water at available transfer points between the furnace discharges and the cooling pile yard. (Note: during winter operations, water application can only be made at the furnace discharges.)
6. Road watering and sweeping are performed as needed; any employee may call for a watering truck.
7. Road watering and/or Coherex application includes parking areas, road shoulders, driving lanes in Pellet Yard, and areas of Pellet Yard newly exposed by removal of the storage pile.
8. Fines dredged from overflow channel shall be reclaimed and sent to Milepost 7; if reclaiming is not possible before they dry out, they shall be treated with Coherex.
9. Fines chute from end of D conveyor is being re-engineered in an attempt to avoid the plugging and icing problems that caused a safety concern before. If an effective design can be implemented in a cost-effective manner, such a chute will be installed at the end of D conveyor and possibly at the center (halfway point, lengthwise) of the D conveyor.
10. Fines chute from end of boat loading conveyors is being re-engineered to avoid plugging. If tests indicate that an effective and affordable design can be implemented, it will be installed on both boat loaders.
11. Water sprays, watering trucks and other equipment installed or purchased for dust control shall be maintained in good working order.
12. Exhaustive tests of many chemical dust suppressants have so far failed to find a suppressant compatible with pellets as they leave Northshore Mining’s furnaces. However, Northshore continues to be open to the possibility that such a suppressant will be developed and become available at some time in the future. In the event that a future chemical is developed that is compatible with Northshore’s chemical and operating requirements, Northshore will continue to explore the possibility of cost-effective application of such chemicals.

Table 1. Actions Taken or Began, Equipment Installed During Previous Plans & Revisions

Implemented	Description of Action/Project/Equipment Installation
1998	Implemented annual employee fugitive dust training plantwide.
1999	Paved the limestone haul road.
1999 onward	Published memos relating to problems, increased vigilance at Pellet Plant and Material Handling.
1999	Installed vacuum cleaner system in “D” conveyor gallery to remove loose dust which might otherwise fall to ground from highest conveyor belt on property. Also added 4” water header to “D” conveyor gallery to allow wet cleanup when appropriate.
1999	Installed wipers on head end of boat loaders to sweep fines into boat instead of allowing them to be carried back to the dock.
1999	Automated and improved water sprays on 160 head end and along 62/162 conveyors. (Water had been present but not as well controlled.)
1999	Installed adjustable water controls on “F” conveyors to allow boat loader operators to control spray in response to visual cues.
1999	Installed automatic water spray on Truck Dump pocket.
1999	Purchased sweeper to sweep paved roads and dock area during non-freezing months. (Sweeper requires a damp road to work, so is not usable during winter months.)
1999	Installed water header in pellet storage yard to support water cannons during non-freezing months.
1999	Committed to more aggressive use of Coherex or chloride compounds as dust suppressant on unpaved roads.
1999	Installed large double-walled storage tank for Coherex on-site to improve the supply and eliminate the need to rely on contractor availability.
1999	Began treating parking lots and unpaved road shoulders in dust suppressant treatment program.
1999	Increased road watering frequency during non-freezing months.
1999	Began washing boat loaders instead of sweeping. Initial effort was during the non-freezing months only; subsequent improvements in water supply have extended the period when this activity is feasible.
1999	Added motor amperage monitoring and alarming to screenhouse rotoclone display in control room; improved water level control.
1999	Changed screenhouse rotoclone operation policy: At first sign of excessive emissions, shut down feed to screenhouse until problem solved. If immediate repair not possible, leave rotoclone off to contain feed inside screenhouse, and restrict feed to 100 LTPH.
1999	Trained Yards & Docks personnel to run watering truck in order to allow quicker response to unexpected dust.
2000 - 2001	Installed water sprays on dump pockets in pellet yard: completed truck dump spray system; added sprays to 2 reclaim pockets.
1999 onward	Replaced 2 Concentrator multiclones with more efficient, newer-technology cartridge filters.
1999 onward	Research and investigation into dust suppressant for cooling pile pellets.
2000	Paved haul road: Power House to DMO via Pumphouse 1.
2000	Reactivated 12S rotoclone in Pellet Plant to reduce load on Screenhouse rotoclone and improve its performance.
2000	Installed water cannon in pellet yard to be used as necessary during non-freezing conditions.
2000	Overhauled watering truck to improve reliability.
2000	Purchased additional water cannon and built another, for a total of 3 water cannons in pellet yard.
2000 onward (recurrent)	Cleaned out culvert system to allow better drainage on docks, reduce fines deposited on dock area that can dry out and blow around.
2000	Added more water sprays and control valves at each conveyor.
2001	Installed cleanouts for F conveyor galleries to allow wet cleanout instead of dry sweeping of fines.
2001	Installed dump snout/chute from end of “D” conveyor to control falling dust. Experienced plugging problems; snout had to be removed in 2002 for safety reasons.
2001	Automated water sprays for F conveyors to allow operation from boatloader cabs; improves response to and control of dust during boat loading operations.
2002	Continued paving around plant where appropriate.
2002	Replaced black and white camera on cooling pile with color camera to improve Control Room’s ability to discriminate between dust and steam.
2002	Improved lighting in pellet yard to allow better dust detection at night.
Began 2002 (recurrent)	Removed fines dredged from mill water overflow channel (final channel of stormwater collection system) and deposited in tailings basin.

APPENDIX E

Modeling Information

Facility Name: Northshore Mining Co – Silver Bay
Permit Number: 07500003-007

Modeling Parameters Used for Northshore Mining Company Furnace 5 Reactivation Project

Hardcopy Report Submittals

Air Emissions Permit Application for the Furnace 5 Reactivation Project, prepared for Northshore Mining Company, Silver Bay, Minnesota, (Volumes I, II, and III), May 2, 2005.

Addendum 1 (May 16, 2005) and PSD Air Quality Modeling for Northshore Mining Company, prepared by W. Gale Biggs Associates, May 2005.

Electronic (CD-ROM) Submittals

Northshore Mining Company – Silver Bay, MN, PSD Air Permit Application, Air Emission Risk Analysis (AERA), Air Dispersion Modeling Input Output Files for the Furnace 5 Reactivation Project, prepared by Barr Engineering Company, May 2, 2005.

Addendum 1 CD-ROM with hand-written title: “Northshore WGBA Air Modeling, May 2005” (Received May 16, 2005).

Appendix A – Summary: Computer-Generated “REPORT” Format with Simple Headers, Simple Sources, and Selected Parameters

The summary report is for simple (constant) emission rates and corresponding stack/source parameters. It does not fully document details regarding

model control options, emission rates with varying emission scalars, corresponding stack/source parameters, wind speed categories for wind erosion, building profile input program (BPIP) outputs, various output selections (e.g., EVENTFIL, MULTYEAR, PLOTFILE, POSTFILE, MAXIFILE), applicable “INCLUDED” file information, receptor grids, or other special features noted in the following EPA modeling user guides:

ISCST3: <http://www.epa.gov/scram001/userg/regmod/isc3v1.pdf>

AERMOD: <http://www.epa.gov/scram001/7thconf/aermod/aermodugb.pdf>

Appendix A – Full Details

See CD-ROM for full data details.

Addendum 1 Emission Changes (May 16, 2005)

Increased PM10 point sources SV261-SV263;
Increased PM10 point sources SV266-SV268;
Decreased PM10 point source SV269;
Deleted PM10 fugitive sources FS008a and FS008b.

A separate table is shown for each applicable combination of model (Northshore on-site model vs. EPA reference model), regulatory requirement (NAAQS vs. Increment), pollutant (CO, NOX, PM10, and SO2), and operating scenario (PM10 only):

- Scenario A: Raising five (5) dry cobbing stacks by five (5) meters (while leaving all concentrator emissions as proposed)
 - o Concentrator Emission Rates (Approximate)
 - o SV032-SV032 at 0.0 grams/second
 - o SV033-SV042 at 0.1 grams/second
 - o SV043-SV043 at 0.2 grams/second
 - o SV044-SV053 at 0.1 grams/second (including SV276 [formerly SV052])
 - o Dry Cobbing Stack Heights (SV021-SV025): 141.4 feet
- Scenario B: Leaving all dry cobbing stacks at their current height (while reducing the number of concentrator stacks by five)
 - o Concentrator Emission Rates (Approximate)
 - o SV032-SV037 at 0.0 grams/second
 - o SV038-SV042 at 0.1 grams/second
 - o SV043-SV043 at 0.2 grams/second
 - o SV044-SV053 at 0.1 grams/second (including SV276 [formerly SV052])
 - o Dry Cobbing Stack Heights (SV021-SV025): 125.0 feet
- Scenario C: Interim Modification Phase (during the initial phase of construction and restart of the additional production capacity)
 - o Concentrator Emission Rates (Approximate)
 - o SV032-SV039 at 0.0 grams/second
 - o SV040-SV041 at 0.1 grams/second
 - o SV042-SV044 at 0.2 grams/second
 - o SV045-SV047 at 0.0 grams/second
 - o SV048-SV050 at 0.2 grams/second
 - o SV051-SV051 at 0.0 grams/second
 - o SV052-SV053 at 0.2 grams/second (including SV276 [formerly SV052])
 - o Dry Cobbing Stack Heights (SV021-SV025): 125.0 feet

Note: if any difference exists between summary values in this appendix vs. the hardcopy report vs. the electronic CD-ROM modeled values, the electronic CD-ROM modeled values prevail.

*** 02/19/05

*** 07:59:29

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**This Run Includes:      20 Source(s);
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1 Source Group(s); and

683 Receptor(s)

AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)
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VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)
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AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.
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AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)
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POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)
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[illegible]

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***      12/02/04
***      18:59:05
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*** 01/07/05

*** 10:56:18

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**This Run Includes:																	
22 Source(s);					1 Source Group(s); and			677 Receptor(s)									
AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)						
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)						
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.						
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)						
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)	ACFM
POINT	SV001C	631531	5238473	192	33.38	264.92	1160.29	65.84	216.01	2.290	7.513	422.	149.	300.	26.46	5208.66	230917
POINT	SV002C	631552	5238492	192	16.97	134.68	589.88	65.84	216.01	3.110	10.203	422.	149.	300.	18.65	3671.26	300190
POINT	SV003	631472	5238483	193	0.00	0.00	0.00	39.93	131.00	1.980	6.496	505.	232.	450.	9.17	1805.12	59827
POINT	SV101C	631339	5238341	197	1.07	8.49	37.19	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT	SV102C	631344	5238339	197	1.07	8.49	37.19	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT	SV103C	631348	5238336	197	1.07	8.49	37.19	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT	SV104C	631334	5238299	197	3.90	30.95	135.56	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV105C	631343	5238292	197	3.90	30.95	135.56	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV111C	631362	5238373	197	0.96	7.62	33.37	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT	SV112C	631366	5238370	197	0.96	7.62	33.37	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT	SV113C	631371	5238367	197	0.96	7.62	33.37	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT	SV114C	631355	5238332	197	3.52	27.94	122.36	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV115C	631363	5238326	197	3.52	27.94	122.36	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV261C	631241	5238189	197	1.92	15.24	66.74	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV262C	631238	5238185	197	1.92	15.24	66.74	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV263C	631235	5238178	197	1.92	15.24	66.74	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV266E	631253	5238206	197	-0.76	-6.03	-26.42	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV267E	631250	5238201	197	-0.76	-6.03	-26.42	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV268E	631245	5238194	197	-0.76	-6.03	-26.42	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV266C	631253	5238206	197	1.92	15.24	66.74	49.38	162.01	1.830	6.004	33					

*** ISCST3 - VERSION 02035 ***

*** NMC - NOX PSD REGULATORY VERSION - 1992

*** 01/07/05

*** FURNACE 5 - CLASS II INCREMENT - 2004

*** 10:56:39

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**This Run Includes: 64 Source(s);

2 Source Group(s); and

677 Receptor(s)

AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)						
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)						
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.						
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)						
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)	ACFM
POINT	SV001C	631531	5238473	192	33.38	264.92	1160.29	65.84	216.01	2.290	7.513	422.	149.	300.	26.46	5208.66	230917
POINT	SV002C	631552	5238492	192	16.97	134.68	589.88	65.84	216.01	3.110	10.203	422.	149.	300.	18.65	3671.26	300190
POINT	SV003	631472	5238483	193	0.00	0.00	0.00	39.93	131.00	1.980	6.496	505.	232.	450.	9.17	1805.12	59827
POINT	SV101C	631339	5238341	197	1.07	8.49	37.19	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT	SV102C	631344	5238339	197	1.07	8.49	37.19	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT	SV103C	631348	5238336	197	1.07	8.49	37.19	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT	SV104C	631334	5238299	197	3.90	30.95	135.56	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV105C	631343	5238292	197	3.90	30.95	135.56	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV111C	631362	5238373	197	0.96	7.62	33.37	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT	SV112C	631366	5238370	197	0.96	7.62	33.37	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT	SV113C	631371	5238367	197	0.96	7.62	33.37	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT	SV114C	631355	5238332	197	3.52	27.94	122.36	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV115C	631363	5238326	197	3.52	27.94	122.36	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV201	631973	5239055	203	0.00	0.00	0.00	27.16	89.11	1.070	3.510	340.	67.	152.	16.46	3240.16	31361
POINT	SV261C	631241	5238189	197	1.92	15.24	66.74	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV262C	631238	5238185	197	1.92	15.24	66.74	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV263C	631235	5238178	197	1.92	15.24	66.74	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV266E	631253	5238206	197	-0.76	-6.03	-26.42	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV267E	631250	5238201	197	-0.76	-6.03	-26.42	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV268E	631245	5238194	197	-0.76	-6.03	-26.42	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV266C	631253	5238206	197	1.92	15.24	66.74	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV267C	631250	5238201	197	1.92	15.24	66.74	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV268C	631245	5238194	197	1.92	15.24	66.74	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	F101E	631303	5238276	197	-0.78	-6.19	-27.11	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	F102E	631300	5238272	197	-0.78	-6.19	-27.11	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	F103E	631297	5238268	197	-0.78	-6.19	-27.11	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	F1DSE	631342	5238253	196	0.00	0.00	0.00	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT	F201E	631293	5238261	197	-0.74	-5.87	-25.72	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	F202E	631290	5238256	197	-0.74	-5.87	-25.72	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	F203E	631286	5238251	197	-0.74	-5.87	-25.72	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	F2DSE	631330	5238236	196	0.00	0.00	0.00	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT	F301E	631282	5238245	197	-0.75	-5.95	-26.07	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	F302E	631297	5238242	197	-0.75	-5.95	-26.07	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	F303E	631275	5238236	197	-0.75	-5.95	-26.07	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	F3DSE	631319	5238221	196	0.00	0.00	0.00	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT	F401E	631271	5238229	197	-0.74	-5.87	-25.72	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	F402E	631268	5238225	197	-0.74	-5.87	-25.72	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	F403E	631265	5238220	197	-0.74	-5.87	-25.72	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	F4DSE	631309	5238204	196	0.00	0.00	0.00	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
AREA	HWY1	631687	5239246	754	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY2	631629	5239166	736	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY3	631568	5239086	735	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY4	631508	5239006	732	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY5	631453	5238922	728	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY6	631392	5238843	729	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY7	631331	5238763	743	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY8	631272	5238683	747	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY9	631213	5238602	743	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY10	631155	5238521	744	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY11	631101	5238436	738	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY12	631048	5238351	742	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		
AREA	HWY13	631003	5238260	740	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00	G/S/M2,	0.1000E+03	M2)		

AREA HWY14	630958	5238169	735	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
AREA HWY15	630907	5238083	725	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
AREA HWY16	630861	5237993	721	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
AREA HWY17	630818	5237901	702	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
AREA HWY18	630769	5237813	694	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
AREA HWY19	630721	5237724	688	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
AREA HWY20	630671	5237637	678	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
AREA HWY21	630618	5237552	674	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
AREA HWY22	630570	5237463	675	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
AREA HWY23	630515	5237379	670	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
AREA HWY24	630464	5237293	666	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
AREA HWY25	630416	5237204	684	0.00	0.00	0.00	10.00	32.81	10.00	10.00	(0.0000E+00 G/S/M2, 0.1000E+03 M2)
TOTAL				71.49	567.38	2484.99					

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***      12/02/04
***      19:46:58
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12/12/04

13:29:03

C:\PROJECTS\NMC MAY05\MAY 16TH\SI9204N.OUT

**This Run Includes: 22 Source(s); 1 Source Group(s); and 677 Receptor(s)																		
AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)							
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)							
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.							
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)							
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)	ACFM	
POINT	SV001	631531	5238473	192	0.00	0.00	0.00	65.84	216.01	2.290	7.513	422.	149.	300.	26.46	5208.66	230917	
POINT	SV002	631552	5238492	192	0.00	0.00	0.00	65.84	216.01	3.110	10.203	422.	149.	300.	18.65	3671.26	300190	
POINT	SV003	631472	5238483	193	0.00	0.00	0.00	39.93	131.00	1.980	6.496	505.	232.	450.	9.17	1805.12	59827	
POINT	SV101C	631339	5238341	197	0.04	0.32	1.39	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834	
POINT	SV102C	631344	5238339	197	0.04	0.32	1.39	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401	
POINT	SV103C	631348	5238336	197	0.04	0.32	1.39	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466	
POINT	SV104C	631334	5238299	197	0.02	0.16	0.70	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV105C	631343	5238292	197	0.02	0.16	0.70	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV111C	631362	5238373	197	0.03	0.24	1.04	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834	
POINT	SV112C	631366	5238370	197	0.03	0.24	1.04	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401	
POINT	SV113C	631371	5238367	197	0.03	0.24	1.04	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466	
POINT	SV114C	631355	5238332	197	0.01	0.12	0.52	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV115C	631363	5238326	197	0.01	0.12	0.52	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV261C	631241	5238189	197	0.54	4.26	18.67	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834	
POINT	SV262C	631238	5238185	197	0.54	4.26	18.67	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401	
POINT	SV263C	631235	5238178	197	0.54	4.26	18.67	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466	
POINT	SV266C	631253	5238206	197	0.54	4.26	18.67	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834	
POINT	SV267C	631250	5238201	197	0.54	4.26	18.67	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401	
POINT	SV268C	631245	5238194	197	0.54	4.26	18.67	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466	
POINT	SV266E	631253	5238206	197	-0.40	-3.17	-13.90	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834	
POINT	SV26																	

12/12/04

13:29:50

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**This Run Includes: 39 Source(s); 2 Source Group(s); and 677 Receptor(s)																		
AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)							
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)							
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.							
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)							
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)	ACFM	
POINT	SV001	631531	5238473	192	0.00	0.00	0.00	65.84	216.01	2.290	7.513	422.	149.	300.	26.46	5208.66	230917	
POINT	SV002	631552	5238492	192	0.00	0.00	0.00	65.84	216.01	3.110	10.203	422.	149.	300.	18.65	3671.26	300190	
POINT	SV003	631472	5238483	193	0.00	0.00	0.00	39.93	131.00	1.980	6.496	505.	232.	450.	9.17	1805.12	59827	
POINT	SV101C	631339	5238341	197	0.04	0.32	1.39	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834	
POINT	SV102C	631344	5238339	197	0.04	0.32	1.39	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401	
POINT	SV103C	631348	5238336	197	0.04	0.32	1.39	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466	
POINT	SV104C	631334	5238299	197	0.02	0.16	0.70	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV105C	631343	5238292	197	0.02	0.16	0.70	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV111C	631362	5238373	197	0.03	0.24	1.04	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834	
POINT	SV112C	631366	5238370	197	0.03	0.24	1.04	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401	
POINT	SV113C	631371	5238367	197	0.03	0.24	1.04	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466	
POINT	SV114C	631355	5238332	197	0.01	0.12	0.52	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV115C	631363	5238326	197	0.01	0.12	0.52	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV201	631973	5239055	203	0.00	0.00	0.00	27.16	89.11	1.070	3.510	340.	67.	152.	16.46	3240.16	31361	
POINT	SV261C	631241	5238189	197	0.54	4.26	18.67	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834	
POINT	SV262C	631238	5238185	197	0.54	4.26	18.67	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401	
POINT	SV263C	631235	5238178	197	0.54	4.26	18.67	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466	
POINT	SV266E	631253	5238206	197	-0.40	-3.17	-13.90	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834	
POINT	SV267E	631250	5238201	197	-0.40	-3.17	-13.90	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401	
POINT	SV268E	631245	5238194	197	-0.40	-3.17	-13.90	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466	
POINT	SV266C</																	

*** 05/11/05
*** 17:34:23

*** ISCST3 - VERSION 02035 ***

*** PM10 PSD - MAY 05 REGULATORY MODEL - 1992 - SCENARIO A
 *** FURNACE 5 - DRY COBBER STACKS +5 M - CHANGE FRN 5&6

*** 05/11/05
 *** 17:35:24

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**This Run Includes:				101 Source(s);			2 Source Group(s); and			677 Receptor(s)									
AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)								
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)								
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.								
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)								
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)	ACFM		
POINT	SV001	631531	5238473	192	6.00	47.62	208.56	65.84	216.01	2.290	7.513	422.	149.	300.	26.46	5208.66	230917		
POINT	SV002	631552	5238492	192	10.00	79.37	347.60	65.84	216.01	3.110	10.203	422.	149.	300.	18.65	3671.26	300190		
POINT	SV003	631472	5238483	193	0.48	3.81	16.68	39.93	131.00	1.980	6.496	505.	232.	450.	9.17	1805.12	59827		
POINT	SV005	631537	5238506	193	0.03	0.24	1.04	39.01	127.99	0.460	1.509	298.	25.	77.	12.92	2543.31	4550		
POINT	SV007	631207	5238929	268	0.17	1.33	5.80	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210		
POINT	SV008	631225	5238954	268	0.17	1.33	5.80	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210		
POINT	SV009	631270	5238858	239	0.24	1.90	8.34	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173		
POINT	SV010	631316	5238926	238	0.24	1.90	8.34	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173		
POINT	SV011	631282	5238839	235	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905		
POINT	SV012	631289	5238848	234	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905		
POINT	SV013	631295	5238857	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905		
POINT	SV014	631301	5238867	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905		
POINT	SV015	631306	5238874	233	0.06	0.48	2.09	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612		
POINT	SV016	631314	5238885	233	0.06	0.48	2.09	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612		
POINT	SV017	631323	5238897	232	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905		
POINT	SV018	631329	5238906	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905		
POINT	SV019	631334	5238915	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905		
POINT	SV020	631341	5238924	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905		
POINT	SV021	631405	5238740	218	0.38	3.02	13.21	43.10	141.40	1.590	5.217	298.	25.	77.	16.03	3155.51	67441		
POINT	SV022	631472	5238837	217	0.38	3.02	13.21	43.10	141.40	1.590	5.217	298.	25.	77.	16.03	3155.51	67441		
POINT	SV023	631417	5238757	218	0.33	2.62	11.47	43.10	141.40	1.460	4.790	298.	25.	77.	16.28	3204.72	57751		
POINT	SV024	631439	5238789	217	0.14	1.08	4.73	43.10	141.40	0.980	3.215	298.	25.	77.	15.15	2982.28	24214		
POINT	SV025	631461	5238820	217	0.22	1.71	7.51	43.10	141.40	1.220	4.003	298.	25.	77.	15.36	3023.62	38046		
POINT	SV026	631493	5238765	209	0.02	0.19	0.83	4.88	16.01	0.610	2.001	298.	25.	77.	0.00	0.00	0		
POINT	SV027	631272	5238442	209	0.02	0.19	0.83	5.79	19.00	0.610	2.001	298.	25.	77.	0.00	0.00	0		
POINT	SV028	631069	5238585	241	0.02	0.15	0.66	8.84	29.00	0.520	1.706	298.	25.	77.	0.00	0.00	0		
POINT	SV029	630613	5238326	261	0.01	0.07	0.31	36.88	121.00	0.400	1.312	298.	25.	77.	0.00	0.00	0		
POINT	SV030	631448	5238773	216	0.04	0.31	1.36	24.08	79.00	0.820	2.690	298.	25.	77.	15.97	3143.70	17870		
POINT	SV031	631456	5238785	216	0.04	0.31	1.36	25.30	83.01	0.820	2.690	298.	25.	77.	15.97	3143.70	17870		
POINT	SV032	631411	5238719	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV033	631397	5238698	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV034	631383	5238678	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV035	631368	5238657	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV036	631354	5238636	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV037	631340	5238616	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV038	631326	5238595	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV039	631311	5238574	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV040	631293	5238547	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV041	631278	5238527	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV042	631264	5238506	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV043	631250	5238485	215	0.20	1.59	6.95	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV044	631473	5238809	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV045	631487	5238829	215	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV046	631501	5238849	215	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV047	631515	5238871	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV048	631529	5238891	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV049	631544	5238911	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV050	631558	5238933	215	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV051	631572	5238953	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV276	631591	5238980	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		
POINT	SV053	631605	5239001	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437		

POINT	SV070	631256	5238333	203	0.01	0.05	0.21	2.44	8.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV071	631256	5238337	203	0.01	0.05	0.21	16.46	54.00	0.400	1.312	298.	25.	77.	0.00	0.00	0
POINT	SV072	631288	5238310	199	0.01	0.11	0.49	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV073	631286	5238306	199	0.01	0.11	0.49	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV074	631277	5238287	198	0.05	0.40	1.77	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT	SV075	631255	5238256	198	0.05	0.40	1.77	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT	SV076	631233	5238224	198	0.05	0.40	1.77	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT	SV077	631275	5238342	201	0.02	0.15	0.66	29.57	97.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV078	631316	5238399	201	0.02	0.15	0.66	29.57	97.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV079	631277	5238345	201	0.02	0.15	0.66	29.57	97.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV080	631318	5238402	201	0.02	0.15	0.66	29.57	97.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV081	631311	5238408	202	0.02	0.15	0.66	39.32	129.00	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV082	631318	5238420	202	0.02	0.15	0.66	39.62	129.99	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV083	631321	5238423	202	0.02	0.15	0.66	38.71	127.00	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV084	631332	5238427	202	0.05	0.41	1.81	35.66	116.99	0.520	1.706	298.	25.	77.	0.00	0.00	0
POINT	SV097	631351	5238393	198	0.10	0.79	3.48	8.84	29.00	0.980	3.215	339.	66.	150.	0.00	0.00	0
POINT	SV101	631339	5238341	197	1.36	10.83	47.41	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT	SV102	631344	5238339	197	1.43	11.37	49.78	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT	SV103	631348	5238336	197	1.49	11.84	51.86	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT	SV104	631334	5238299	197	1.34	10.63	46.58	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV105	631343	5238292	197	1.34	10.63	46.58	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV111	631362	5238373	197	1.36	10.83	47.41	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT	SV112	631366	5238370	197	1.43	11.37	49.78	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT	SV113	631371	5238367	197	1.49	11.84	51.86	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT	SV114	631355	5238332	197	1.34	10.63	46.58	40.84									

*** 05/11/05
*** 17:34:23

*** ISCST3 - VERSION 02035 ***

*** PM10 PSD - MAY 05 REGULATORY MODEL - 1992 - SCENARIO B
 *** FURNACE 5 - 5 CONC STACKS INTO BUILDING, CHANGE FRN 5&6

*** 05/11/05
 *** 17:48:36

C:\PROJECTS\NMC MAY05\MAY_16TH\PMTSCENB\PM92RB.OUT

**This Run Includes:				101 Source(s);				2 Source Group(s); and				677 Receptor(s)										
AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOOR	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)											
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOOR	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)											
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOOR	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.											
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOOR	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)											
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOOR	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)	ACFM					
POINT	SV001	631531	5238473	192	6.00	47.62	208.56	65.84	216.01	2.290	7.513	422.	149.	300.	26.46	5208.66	230917					
POINT	SV002	631552	5238492	192	10.00	79.37	347.60	65.84	216.01	3.110	10.203	422.	149.	300.	18.65	3671.26	300190					
POINT	SV003	631472	5238483	193	0.48	3.81	16.68	39.93	131.00	1.980	6.496	505.	232.	450.	9.17	1805.12	59827					
POINT	SV005	631537	5238506	193	0.03	0.24	1.04	39.01	127.99	0.460	1.509	298.	25.	77.	12.92	2543.31	4550					
POINT	SV007	631207	5238929	268	0.17	1.33	5.80	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210					
POINT	SV008	631225	5238954	268	0.17	1.33	5.80	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210					
POINT	SV009	631270	5238858	239	0.24	1.90	8.34	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173					
POINT	SV010	631316	5238926	238	0.24	1.90	8.34	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173					
POINT	SV011	631282	5238839	235	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV012	631289	5238848	234	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV013	631295	5238857	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV014	631301	5238867	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV015	631306	5238874	233	0.06	0.48	2.09	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612					
POINT	SV016	631314	5238885	233	0.06	0.48	2.09	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612					
POINT	SV017	631323	5238897	232	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV018	631329	5238906	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV019	631334	5238915	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV020	631341	5238924	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV021	631405	5238740	218	0.38	3.02	13.21	38.10	125.00	1.590	5.217	298.	25.	77.	16.03	3155.51	67441					
POINT	SV022	631472	5238837	217	0.38	3.02	13.21	38.10	125.00	1.590	5.217	298.	25.	77.	16.03	3155.51	67441					
POINT	SV023	631417	5238757	218	0.33	2.62	11.47	38.10	125.00	1.460	4.790	298.	25.	77.	16.28	3204.72	57751					
POINT	SV024	631439	5238789	217	0.14	1.08	4.73	38.10	125.00	0.980	3.215	298.	25.	77.	15.15	2982.28	24214					
POINT	SV025	631461	5238820	217	0.22	1.71	7.51	38.10	125.00	1.220	4.003	298.	25.	77.	15.36	3023.62	38046					
POINT	SV026	631493	5238765	209	0.02	0.19	0.83	4.88	16.01	0.610	2.001	298.	25.	77.	0.00	0.00	0					
POINT	SV027	631272	5238442	209	0.02	0.19	0.83	5.79	19.00	0.610	2.001	298.	25.	77.	0.00	0.00	0					
POINT	SV028	631069	5238585	241	0.02	0.15	0.66	8.84	29.00	0.520	1.706	298.	25.	77.	0.00	0.00	0					
POINT	SV029	630613	5238326	261	0.01	0.07	0.31	36.88	121.00	0.400	1.312	298.	25.	77.	0.00	0.00	0					
POINT	SV030	631448	5238773	216	0.04	0.31	1.36	24.08	79.00	0.820	2.690	298.	25.	77.	15.97	3143.70	17870					
POINT	SV031	631456	5238785	216	0.04	0.31	1.36	25.30	83.01	0.820	2.690	298.	25.	77.	15.97	3143.70	17870					
POINT	SV032	631411	5238719	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV033	631397	5238698	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV034	631383	5238678	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV035	631368	5238657	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV036	631354	5238636	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV037	631340	5238616	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV038	631326	5238595	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV039	631311	5238574	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV040	631293	5238547	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV041	631278	5238527	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV042	631264	5238506	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV043	631250	5238485	215	0.20	1.59	6.95	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV044	631473	5238809	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV045	631487	5238829	215	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV046	631501	5238849	215	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV047	631515	5238871	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV048	631529	5238891	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV049	631544	5238911	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV050	631558	5238933	215	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV051	631572	5238953	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV276	631591	5238980	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV053	631605	5239001	216	0.09	0.75	3.30	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					

POINT	SV070	631256	5238333	203	0.01	0.05	0.21	2.44	8.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV071	631256	5238337	203	0.01	0.05	0.21	16.46	54.00	0.400	1.312	298.	25.	77.	0.00	0.00	0
POINT	SV072	631288	5238310	199	0.01	0.11	0.49	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV073	631286	5238306	199	0.01	0.11	0.49	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV074	631277	5238287	198	0.05	0.40	1.77	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT	SV075	631255	5238256	198	0.05	0.40	1.77	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT	SV076	631233	5238224	198	0.05	0.40	1.77	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT	SV077	631275	5238342	201	0.02	0.15	0.66	29.57	97.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV078	631316	5238399	201	0.02	0.15	0.66	29.57	97.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV079	631277	5238345	201	0.02	0.15	0.66	29.57	97.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV080	631318	5238402	201	0.02	0.15	0.66	29.57	97.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV081	631311	5238408	202	0.02	0.15	0.66	39.32	129.00	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV082	631318	5238420	202	0.02	0.15	0.66	39.62	129.99	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV083	631321	5238423	202	0.02	0.15	0.66	38.71	127.00	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV084	631332	5238427	202	0.05	0.41	1.81	35.66	116.99	0.520	1.706	298.	25.	77.	0.00	0.00	0
POINT	SV097	631351	5238393	198	0.10	0.79	3.48	8.84	29.00	0.980	3.215	339.	66.	150.	0.00	0.00	0
POINT	SV101	631339	5238341	197	1.36	10.83	47.41	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT	SV102	631344	5238339	197	1.43	11.37	49.78	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT	SV103	631348	5238336	197	1.49	11.84	51.86	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT	SV104	631334	5238299	197	1.34	10.63	46.58	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV105	631343	5238292	197	1.34	10.63	46.58	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV111	631362	5238373	197	1.36	10.83	47.41	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT	SV112	631366	5238370	197	1.43	11.37	49.78	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT	SV113	631371	5238367	197	1.49	11.84	51.86	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT	SV114	631355	5238332	197	1.34	10.63	46.58	40.84									

*** 05/11/05
*** 17:34:23

*** ISCST3 - VERSION 02035 ***

*** PM10 CHANGE FURNACES 5 & 6 - MAY 05 - SCENARIO C - 1992

05/11/05

*** CONCENTRATOR LINES 1-8 NOT OPERATING - VENT 4 INSIDE (SV045,46,47,51) ***

18:01:18

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**This Run Includes: 101 Source(s); 2 Source Group(s); and 677 Receptor(s)

AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)							
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)							
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.							
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)							
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)	ACFM	
POINT	SV001	631531	5238473	192	6.00	47.62	208.56	65.84	216.01	2.290	7.513	422.	149.	300.	26.46	5208.66	230917	
POINT	SV002	631552	5238492	192	10.00	79.37	347.60	65.84	216.01	3.110	10.203	422.	149.	300.	18.65	3671.26	300190	
POINT	SV003	631472	5238483	193	0.48	3.81	16.68	39.93	131.00	1.980	6.496	505.	232.	450.	9.17	1805.12	59827	
POINT	SV005	631537	5238506	193	0.03	0.24	1.04	39.01	127.99	0.460	1.509	298.	25.	77.	12.92	2543.31	4550	
POINT	SV007	631207	5238929	268	0.17	1.33	5.80	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210	
POINT	SV008	631225	5238954	268	0.17	1.33	5.80	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210	
POINT	SV009	631270	5238858	239	0.24	1.90	8.34	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173	
POINT	SV010	631316	5238926	238	0.24	1.90	8.34	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173	
POINT	SV011	631282	5238839	235	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV012	631289	5238848	234	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV013	631295	5238857	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV014	631301	5238867	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV015	631306	5238874	233	0.06	0.48	2.09	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612	
POINT	SV016	631314	5238885	233	0.06	0.48	2.09	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612	
POINT	SV017	631323	5238897	232	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV018	631329	5238906	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV019	631334	5238915	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV020	631341	5238924	233	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV021	631405	5238740	218	0.38	3.02	13.21	38.10	125.00	1.590	5.217	298.	25.	77.	16.03	3155.51	67441	
POINT	SV022	631472	5238837	217	0.38	3.02	13.21	38.10	125.00	1.590	5.217	298.	25.	77.	16.03	3155.51	67441	
POINT	SV023	631417	5238757	218	0.33	2.62	11.47	38.10	125.00	1.460	4.790	298.	25.	77.	16.28	3204.72	57751	
POINT	SV024	631439	5238789	217	0.14	1.08	4.73	38.10	125.00	0.980	3.215	298.	25.	77.	15.15	2982.28	24214	
POINT	SV025	631461	5238820	217	0.22	1.71	7.51	38.10	125.00	1.220	4.003	298.	25.	77.	15.36	3023.62	38046	
POINT	SV026	631493	5238765	209	0.02	0.19	0.83	4.88	16.01	0.610	2.001	298.	25.	77.	0.00	0.00	0	
POINT	SV027	631272	5238442	209	0.02	0.19	0.83	5.79	19.00	0.610	2.001	298.	25.	77.	0.00	0.00	0	
POINT	SV028	631069	5238585	241	0.02	0.15	0.66	8.84	29.00	0.520	1.706	298.	25.	77.	0.00	0.00	0	
POINT	SV029	630613	5238326	261	0.01	0.07	0.31	36.88	121.00	0.400	1.312	298.	25.	77.	0.00	0.00	0	
POINT	SV030	631448	5238773	216	0.04	0.31	1.36	24.08	79.00	0.820	2.690	298.	25.	77.	15.97	3143.70	17870	
POINT	SV031	631456	5238785	216	0.04	0.31	1.36	25.30	83.01	0.820	2.690	298.	25.	77.	15.97	3143.70	17870	
POINT	SV032	631411	5238719	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV033	631397	5238698	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV034	631383	5238678	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV035	631368	5238657	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV036	631354	5238636	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV037	631340	5238616	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV038	631326	5238595	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV039	631311	5238574	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV040	631293	5238547	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV041	631278	5238527	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV042	631264	5238506	215	0.20	1.59	6.95	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV043	631250	5238485	215	0.20	1.59	6.95	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV044	631473	5238809	216	0.20	1.59	6.95	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV045	631487	5238829	215	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV046	631501	5238849	215	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV047	631515	5238871	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV048	631529	5238891	216	0.20	1.59	6.95	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV049	631544	5238911	216	0.20	1.59	6.95	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV050	631558	5238933	215	0.20	1.59	6.95	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV051	631572	5238953	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV276	631591	5238980	216	0.20	1.59	6.95	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV053	631605	5239001	216	0.20	1.59	6.95	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	

POINT	SV070	631256	5238333	203	0.01	0.05	0.21	2.44	8.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV071	631256	5238337	203	0.01	0.05	0.21	16.46	54.00	0.400	1.312	298.	25.	77.	0.00	0.00	0
POINT	SV072	631288	5238310	199	0.01	0.11	0.49	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV073	631286	5238306	199	0.01	0.11	0.49	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV074	631277	5238287	198	0.05	0.40	1.77	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT	SV075	631255	5238256	198	0.05	0.40	1.77	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT	SV076	631233	5238224	198	0.05	0.40	1.77	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT	SV077	631275	5238342	201	0.02	0.15	0.66	29.57	97.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV078	631316	5238399	201	0.02	0.15	0.66	29.57	97.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV079	631277	5238345	201	0.02	0.15	0.66	29.57	97.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV080	631318	5238402	201	0.02	0.15	0.66	29.57	97.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT	SV081	631311	5238408	202	0.02	0.15	0.66	39.32	129.00	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV082	631318	5238420	202	0.02	0.15	0.66	39.62	129.99	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV083	631321	5238423	202	0.02	0.15	0.66	38.71	127.00	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT	SV084	631332	5238427	202	0.05	0.41	1.81	35.66	116.99	0.520	1.706	298.	25.	77.	0.00	0.00	0
POINT	SV097	631351	5238393	198	0.10	0.79	3.48	8.84	29.00	0.980	3.215	339.	66.	150.	0.00	0.00	0
POINT	SV101	631339	5238341	197	1.36	10.83	47.41	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT	SV102	631344	5238339	197	1.43	11.37	49.78	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT	SV103	631348	5238336	197	1.49	11.84	51.86	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT	SV104	631334	5238299	197	1.34	10.63	46.58	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV105	631343	5238292	197	1.34	10.63	46.58	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV111	631362	5238373	197	1.36	10.83	47.41	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT	SV112	631366	5238370	197	1.43	11.37	49.78	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT	SV113	631371	5238367	197	1.49	11.84	51.86	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT	SV114	631355	5238332	197	1.34	10.63	46.58	40.84									

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***      01/07/05
***      15:25:36
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*** ISCST3 - VERSION 02035 ***

*** NMC - PM10 PSD - REGULATORY MODEL - 1992 - SCENARIO A
 *** FURNACE 5 - CLASS II INCREMENT - 2004

*** 01/07/05
 *** 15:25:43

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**This Run Includes: 136 Source(s);				2 Source Group(s); and				677 Receptor(s)										
AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)							
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)							
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.							
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)							
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)	ACFM	
POINT	SV001	631531	5238473	192	0.00	0.00	0.00	65.84	216.01	2.290	7.513	422.	149.	300.	26.46	5208.66	230917	
POINT	SV002	631552	5238492	192	0.00	0.00	0.00	65.84	216.01	3.110	10.203	422.	149.	300.	18.65	3671.26	300190	
POINT	SV003	631472	5238483	193	0.00	0.00	0.00	39.93	131.00	1.980	6.496	505.	232.	450.	9.17	1805.12	59827	
POINT	SV005	631537	5238506	193	0.00	0.00	0.00	39.01	127.99	0.460	1.509	298.	25.	77.	12.92	2543.31	4550	
POINT	SV007C	631207	5238929	268	0.11	0.87	3.82	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210	
POINT	SV008C	631225	5238954	268	0.10	0.80	3.51	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210	
POINT	SV009C	631270	5238858	239	0.06	0.48	2.09	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173	
POINT	SV010C	631316	5238926	238	0.06	0.48	2.09	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173	
POINT	SV011E	631282	5238839	235	-0.04	-0.29	-1.29	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV011C	631282	5238839	235	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	CRSH5E	631282	5238839	235	-0.04	-0.29	-1.29	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV012C	631289	5238848	234	0.01	0.10	0.42	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV013C	631295	5238857	233	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV014C	631301	5238867	233	0.01	0.10	0.42	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV015C	631306	5238874	233	0.01	0.12	0.52	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612	
POINT	SV016C	631314	5238885	233	0.01	0.12	0.52	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612	
POINT	SV017C	631323	5238897	232	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV018C	631329	5238906	233	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV019C	631334	5238915	233	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV020E	631341	5238924	233	-0.04	-0.30	-1.32	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV020C	631341	5238924	233	0.04	0.29	1.29	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	CR105E	631341	5238924	233	-0.04	-0.30	-1.32	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV021C	631405	5238740	218	0.09	0.75	3.30	43.10	141.40	1.590	5.217	298.	25.	77.	16.03	3155.51	67441	
POINT	SV022C	631472	5238837	217	0.09	0.75	3.30	43.10	141.40	1.590	5.217	298.	25.	77.	16.03	3155.51	67441	
POINT	SV023C	631417	5238757	218	0.08	0.65	2.85	43.10	141.40	1.460	4.790	298.	25.	77.	16.31	3210.63	57857	
POINT	SV024C	631439	5238789	217	0.04	0.28	1.22	43.10	141.40	0.980	3.215	298.	25.	77.	15.15	2982.28	24214	
POINT	SV025C	631461	5238820	217	0.05	0.44	1.91	43.10	141.40	1.220	4.003	298.	25.	77.	15.36	3023.62	38046	
POINT	SV026	631493	5238765	209	0.00	0.00	0.00	4.88	16.01	0.610	2.001	298.	25.	77.	0.00	0.00	0	
POINT	SV027	631272	5238442	209	0.00	0.00	0.00	5.79	19.00	0.610	2.001	298.	25.	77.	0.00	0.00	0	
POINT	SV028	631069	5238585	241	0.00	0.00	0.00	8.84	29.00	0.520	1.706	298.	25.	77.	0.00	0.00	0	
POINT	SV029	630613	5238326	261	0.00	0.00	0.00	36.88	121.00	0.400	1.312	298.	25.	77.	0.00	0.00	0	
POINT	SV030E	631448	5238773	216	-0.20	-1.60	-6.99	24.08	79.00	0.820	2.690	298.	25.	77.	15.97	3143.70	17870	
POINT	SV030C	631448	5238773	216	0.00	0.00	0.00	24.08	79.00	0.820	2.690	298.	25.	77.	15.97	3143.70	17870	
POINT	SV031E	631456	5238785	216	-0.20	-1.60	-6.99	25.30	83.01	0.820	2.690	298.	25.	77.	15.97	3143.70	17870	
POINT	SV031C	631456	5238785	216	0.00	0.00	0.00	25.30	83.01	0.820	2.690	298.	25.	77.	15.97	3143.70	17870	
POINT	SV032E	631411	5238719	216	-0.09	-0.75	-3.27	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV033E	631397	5238698	216	-0.09	-0.75	-3.27	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV034E	631383	5238678	216	-0.09	-0.75	-3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV035E	631368	5238657	216	-0.09	-0.75	-3.27	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV036E	631354	5238636	216	-0.09	-0.73	-3.20	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV037E	631340	5238616	216	-0.10	-0.77	-3.37	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV033C	631397	5238698	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV034C	631383	5238678	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV035C	631368	5238657	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV036C	631354	5238636	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV037C	631340	5238616	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV038E	631326	5238595	216	-0.09	-0.72	-3.16	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV038C	631326	5238595	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV039E	631311	5238574	216	-0.09	-0.72	-3.16	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV039C	631311	5238574	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV040E	631293	5238547	215	-0.09	-0.71	-3.09	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	

POINT SV040C	631293	5238547	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV041E	631278	5238527	215	-0.09	-0.71	-3.09	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV041C	631278	5238527	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV042E	631264	5238506	215	-0.14	-1.15	-5.04	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV043	631250	5238485	215	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV044E	631473	5238809	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV045E	631487	5238829	215	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV046E	631501	5238849	215	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV047E	631515	5238871	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV048E	631529	5238891	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV049E	631544	5238911	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV050E	631558	5238933	215	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV051E	631572	5238953	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV276E	631591	5238980	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV053E	631605	5239001	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV070	631256	5238333	203	0.00	0.00	0.00	2.44	8.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV071	631256	5238337	203	0.00	0.00	0.00	16.46	54.00	0.400	1.312	298.	25.	77.	0.00	0.00	0
POINT SV072	631288	5238310	199	0.00	0.00	0.00	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV073	631286	5238306	199	0.00	0.00	0.00	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV074	631277	5238287	198	0.00	0.00	0.00	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT SV075	631255	5238256	198	0.00	0.00	0.00	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT SV076	631233	5238224	198	0.00	0.00	0.00	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT SV077	631275	5238342	201	0.00	0.00	0.00	14.02	46.00	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV078	631316	5238399	201	0.00	0.00	0.00	29.57	97.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV079	631277	5238345	201	0.00	0.00	0.00	14.02	46.00	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV080	631318	5238402	201	0.00	0.00	0.00	29.57	97.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV081	631311	5238408	202	0.00	0.00	0.00	34.75	114.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV082	631318	5238420	202	0.00	0.00	0.00	34.75	114.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV083	631321	5238423	202	0.00	0.00	0.00	39.01	127.99	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV084	631332	5238427	202	0.00	0.00	0.00	35.66	116.99	0.520	1.706	298.	25.	77.	0.00	0.00	0
POINT SV097	631351	5238393	198	0.00	0.00	0.00	8.84	29.00	0.980	3.215	339.	66.	150.	0.00	0.00	0
POINT SV101	631339	5238341	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT SV102	631344	5238339	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT SV103	631348	5238336	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT SV104	631334	5238299	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV105	631343	5238292	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV111	631362	5238373	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT SV112	631366	5238370	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT SV113	631371	5238367	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT SV114	631355	5238332	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV115	631363	5238326	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV120	631384	5238301	196	0.00	0.00	0.00	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV121	631406	5238332	195	0.00	0.00	0.00	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV122	631388	5238298	195	0.00	0.00	0.00	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV123	631409	5238329	195	0.00	0.00	0.00	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV124	631381	5238283	195	0.00	0.00	0.00	28.65	94.00	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV125	631402	5238314	195	0.00	0.00	0.00	17.98	58.99	1.220	4.003	328.	54.	130.	14.57	2868.11	36089
POINT SV201	631973	5239055	203	0.00	0.00	0.00	27.16	89.11	1.070	3.510	340.	67.	152.	16.46	3240.16	31361
POINT SV202	631924	5239090	203	0.00	0.00	0.00	13.72	45.01	0.300	0.984	336.	63.	146.	0.00	0.00	0
POINT SV203	632061	5239154	212	0.00	0.00	0.00	1.22	4.00	0.530	1.739	384.	111.	231.	0.00	0.00	0
POINT F101E	631303	5238276	197	-0.56	-4.44	-19.43	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT F102E	631300	5238272	197	-0.56	-4.44	-19.43	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT F103E	631297	5238268	197	-0.56	-4.44	-19.43	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT F1DSE	631342	5238253	196	-0.27	-2.17	-9.52	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT F201E	631293	5238261	197	-0.52	-4.15	-18.18	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT F202E	631290	5238256	197	-0.52	-4.15	-18.18	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT F203E	631286	5238251	197	-0.52	-4.15	-18.18	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT F2DSE	631330	5238236	196	-0.26	-2.04	-8.93	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT F301E	631282	5238245	197	-0.74	-5.84	-25.58	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT F302E	631297	5238242	197	-0.74	-5.84	-25.58	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT F303E	631275	5238236	197	-0.74	-5.84	-25.58	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT F3DSE	631319	5238221	196	-0.36	-2.87	-12.58	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844

[illegible]

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***      01/07/05
***      15:25:36
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*** ISCST3 - VERSION 02035 ***

*** NMC - PM10 PSD - REGULATORY MODEL - 1992 - SCENARIO B
 *** FURNACE 5 - CLASS II INCREMENT - 2004

*** 02/10/05
 *** 11:12:43

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**This Run Includes:				136 Source(s);				2 Source Group(s); and				677 Receptor(s)										
AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)											
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)											
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.											
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)											
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)	ACFM					
POINT	SV001	631531	5238473	192	0.00	0.00	0.00	65.84	216.01	2.290	7.513	422.	149.	300.	26.46	5208.66	230917					
POINT	SV002	631552	5238492	192	0.00	0.00	0.00	65.84	216.01	3.110	10.203	422.	149.	300.	18.65	3671.26	300190					
POINT	SV003	631472	5238483	193	0.00	0.00	0.00	39.93	131.00	1.980	6.496	505.	232.	450.	9.17	1805.12	59827					
POINT	SV005	631537	5238506	193	0.00	0.00	0.00	39.01	127.99	0.460	1.509	298.	25.	77.	12.92	2543.31	4550					
POINT	SV007C	631207	5238929	268	0.11	0.87	3.82	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210					
POINT	SV008C	631225	5238954	268	0.10	0.80	3.51	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210					
POINT	SV009C	631270	5238858	239	0.06	0.48	2.09	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173					
POINT	SV010C	631316	5238926	238	0.06	0.48	2.09	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173					
POINT	SV011E	631282	5238839	235	-0.04	-0.29	-1.29	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV011C	631282	5238839	235	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	CRSH5E	631282	5238839	235	-0.04	-0.29	-1.29	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV012C	631289	5238848	234	0.01	0.10	0.42	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV013C	631295	5238857	233	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV014C	631301	5238867	233	0.01	0.10	0.42	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV015C	631306	5238874	233	0.01	0.12	0.52	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612					
POINT	SV016C	631314	5238885	233	0.01	0.12	0.52	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612					
POINT	SV017C	631323	5238897	232	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV018C	631329	5238906	233	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV019C	631334	5238915	233	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV020E	631341	5238924	233	-0.04	-0.30	-1.32	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV020C	631341	5238924	233	0.04	0.29	1.29	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	CR105E	631341	5238924	233	-0.04	-0.30	-1.32	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905					
POINT	SV021C	631405	5238740	218	0.09	0.75	3.30	38.10	125.00	1.590	5.217	298.	25.	77.	16.03	3155.51	67441					
POINT	SV022C	631472	5238837	217	0.09	0.75	3.30	38.10	125.00	1.590	5.217	298.	25.	77.	16.03	3155.51	67441					
POINT	SV023C	631417	5238757	218	0.08	0.65	2.85	38.10	125.00	1.460	4.790	298.	25.	77.	16.31	3210.63	57857					
POINT	SV024C	631439	5238789	217	0.04	0.28	1.22	38.10	125.00	0.980	3.215	298.	25.	77.	15.15	2982.28	24214					
POINT	SV025C	631461	5238820	217	0.05	0.44	1.91	38.10	125.00	1.220	4.003	298.	25.	77.	15.36	3023.62	38046					
POINT	SV026	631493	5238765	209	0.00	0.00	0.00	4.88	16.01	0.610	2.001	298.	25.	77.	0.00	0.00	0					
POINT	SV027	631272	5238442	209	0.00	0.00	0.00	5.79	19.00	0.610	2.001	298.	25.	77.	0.00	0.00	0					
POINT	SV028	631069	5238585	241	0.00	0.00	0.00	8.84	29.00	0.520	1.706	298.	25.	77.	0.00	0.00	0					
POINT	SV029	630613	5238326	261	0.00	0.00	0.00	36.88	121.00	0.400	1.312	298.	25.	77.	0.00	0.00	0					
POINT	SV030E	631448	5238773	216	-0.20	-1.60	-6.99	24.08	79.00	0.820	2.690	298.	25.	77.	15.97	3143.70	17870					
POINT	SV030C	631448	5238773	216	0.00	0.00	0.00	24.08	79.00	0.820	2.690	298.	25.	77.	15.97	3143.70	17870					
POINT	SV031E	631456	5238785	216	-0.20	-1.60	-6.99	25.30	83.01	0.820	2.690	298.	25.	77.	15.97	3143.70	17870					
POINT	SV031C	631456	5238785	216	0.00	0.00	0.00	25.30	83.01	0.820	2.690	298.	25.	77.	15.97	3143.70	17870					
POINT	SV032E	631411	5238719	216	-0.09	-0.75	-3.27	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV033E	631397	5238698	216	-0.09	-0.75	-3.27	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV034E	631383	5238678	216	-0.09	-0.75	-3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV035E	631368	5238657	216	-0.09	-0.75	-3.27	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV036E	631354	5238636	216	-0.09	-0.73	-3.20	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV037E	631340	5238616	216	-0.10	-0.77	-3.37	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV033C	631397	5238698	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV034C	631383	5238678	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV035C	631368	5238657	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV036C	631354	5238636	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV037C	631340	5238616	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV038E	631326	5238595	216	-0.09	-0.72	-3.16	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV038C	631326	5238595	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV039E	631311	5238574	216	-0.09	-0.72	-3.16	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV039C	631311	5238574	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					
POINT	SV040E	631293	5238547	215	-0.09	-0.71	-3.09	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437					

POINT SV040C	631293	5238547	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV041E	631278	5238527	215	-0.09	-0.71	-3.09	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV041C	631278	5238527	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV042E	631264	5238506	215	-0.14	-1.15	-5.04	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV043	631250	5238485	215	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV044E	631473	5238809	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV045E	631487	5238829	215	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV046E	631501	5238849	215	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV047E	631515	5238871	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV048E	631529	5238891	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV049E	631544	5238911	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV050E	631558	5238933	215	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV051E	631572	5238953	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV276E	631591	5238980	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV053E	631605	5239001	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV070	631256	5238333	203	0.00	0.00	0.00	2.44	8.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV071	631256	5238337	203	0.00	0.00	0.00	16.46	54.00	0.400	1.312	298.	25.	77.	0.00	0.00	0
POINT SV072	631288	5238310	199	0.00	0.00	0.00	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV073	631286	5238306	199	0.00	0.00	0.00	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV074	631277	5238287	198	0.00	0.00	0.00	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT SV075	631255	5238256	198	0.00	0.00	0.00	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT SV076	631233	5238224	198	0.00	0.00	0.00	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT SV077	631275	5238342	201	0.00	0.00	0.00	14.02	46.00	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV078	631316	5238399	201	0.00	0.00	0.00	29.57	97.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV079	631277	5238345	201	0.00	0.00	0.00	14.02	46.00	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV080	631318	5238402	201	0.00	0.00	0.00	29.57	97.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV081	631311	5238408	202	0.00	0.00	0.00	34.75	114.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV082	631318	5238420	202	0.00	0.00	0.00	34.75	114.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV083	631321	5238423	202	0.00	0.00	0.00	39.01	127.99	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV084	631332	5238427	202	0.00	0.00	0.00	35.66	116.99	0.520	1.706	298.	25.	77.	0.00	0.00	0
POINT SV097	631351	5238393	198	0.00	0.00	0.00	8.84	29.00	0.980	3.215	339.	66.	150.	0.00	0.00	0
POINT SV101	631339	5238341	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT SV102	631344	5238339	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT SV103	631348	5238336	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT SV104	631334	5238299	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV105	631343	5238292	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV111	631362	5238373	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT SV112	631366	5238370	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT SV113	631371	5238367	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT SV114	631355	5238332	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV115	631363	5238326	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV120	631384	5238301	196	0.00	0.00	0.00	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV121	631406	5238332	195	0.00	0.00	0.00	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV122	631388	5238298	195	0.00	0.00	0.00	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV123	631409	5238329	195	0.00	0.00	0.00	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV124	631381	5238283	195	0.00	0.00	0.00	28.65	94.00	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV125	631402	5238314	195	0.00	0.00	0.00	17.98	58.99	1.220	4.003	328.	54.	130.	14.57	2868.11	36089
POINT SV201	631973	5239055	203	0.00	0.00	0.00	27.16	89.11	1.070	3.510	340.	67.	152.	16.46	3240.16	31361
POINT SV202	631924	5239090	203	0.00	0.00	0.00	13.72	45.01	0.300	0.984	336.	63.	146.	0.00	0.00	0
POINT SV203	632061	5239154	212	0.00	0.00	0.00	1.22	4.00	0.530	1.739	384.	111.	231.	0.00	0.00	0
POINT F101E	631303	5238276	197	-0.56	-4.44	-19.43	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT F102E	631300	5238272	197	-0.56	-4.44	-19.43	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT F103E	631297	5238268	197	-0.56	-4.44	-19.43	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT F1DSE	631342	5238253	196	-0.27	-2.17	-9.52	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT F201E	631293	5238261	197	-0.52	-4.15	-18.18	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT F202E	631290	5238256	197	-0.52	-4.15	-18.18	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT F203E	631286	5238251	197	-0.52	-4.15	-18.18	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT F2DSE	631330	5238236	196	-0.26	-2.04	-8.93	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT F301E	631282	5238245	197	-0.74	-5.84	-25.58	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT F302E	631297	5238242	197	-0.74	-5.84	-25.58	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT F303E	631275	5238236	197	-0.74	-5.84	-25.58	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT F3DSE	631319	5238221	196	-0.36	-2.87	-12.58	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844

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*** ISCST3 - VERSION 02035 ***

*** NMC - PM10 PSD - REGULATORY MODEL - 1992

02/18/05

*** FURNACE 5 - CLASS II INCREMENT - INTERIM

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**This Run Includes: 143 Source(s); 2 Source Group(s); and 529 Receptor(s)

AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)							
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)							
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.							
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)							
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOURL	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)	ACFM	
POINT	SV001	631531	5238473	192	0.00	0.00	0.00	65.84	216.01	2.290	7.513	422.	149.	300.	26.46	5208.66	230917	
POINT	SV002	631552	5238492	192	0.00	0.00	0.00	65.84	216.01	3.110	10.203	422.	149.	300.	18.65	3671.26	300190	
POINT	SV003	631472	5238483	193	0.00	0.00	0.00	39.93	131.00	1.980	6.496	505.	232.	450.	9.17	1805.12	59827	
POINT	SV005	631537	5238506	193	0.00	0.00	0.00	39.01	127.99	0.460	1.509	298.	25.	77.	12.92	2543.31	4550	
POINT	SV007C	631207	5238929	268	0.11	0.87	3.82	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210	
POINT	SV008C	631225	5238954	268	0.10	0.80	3.51	25.30	83.01	1.520	4.987	298.	25.	77.	16.18	3185.04	62210	
POINT	SV009C	631270	5238858	239	0.06	0.48	2.09	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173	
POINT	SV010C	631316	5238926	238	0.06	0.48	2.09	30.78	100.98	1.830	6.004	298.	25.	77.	16.18	3185.04	90173	
POINT	SV011E	631282	5238839	235	-0.04	-0.29	-1.29	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV011C	631282	5238839	235	0.04	0.32	1.39	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	CRSH5E	631282	5238839	235	-0.04	-0.29	-1.29	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV012C	631289	5238848	234	0.01	0.10	0.42	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV013C	631295	5238857	233	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV014C	631301	5238867	233	0.01	0.10	0.42	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV015C	631306	5238874	233	0.01	0.12	0.52	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612	
POINT	SV016C	631314	5238885	233	0.01	0.12	0.52	21.03	69.00	1.010	3.314	298.	25.	77.	13.32	2622.05	22612	
POINT	SV017C	631323	5238897	232	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV018C	631329	5238906	233	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV019C	631334	5238915	233	0.01	0.08	0.35	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV020E	631341	5238924	233	-0.04	-0.30	-1.32	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV020C	631341	5238924	233	0.04	0.29	1.29	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	CR105E	631341	5238924	233	-0.04	-0.30	-1.32	21.03	69.00	0.820	2.690	298.	25.	77.	13.32	2622.05	14905	
POINT	SV021C	631405	5238740	218	0.09	0.75	3.30	38.10	125.00	1.590	5.217	298.	25.	77.	16.03	3155.51	67441	
POINT	SV022C	631472	5238837	217	0.09	0.75	3.30	38.10	125.00	1.590	5.217	298.	25.	77.	16.03	3155.51	67441	
POINT	SV023C	631417	5238757	218	0.08	0.65	2.85	38.10	125.00	1.460	4.790	298.	25.	77.	16.31	3210.63	57857	
POINT	SV024C	631439	5238789	217	0.04	0.28	1.22	38.10	125.00	0.980	3.215	298.	25.	77.	15.15	2982.28	24214	
POINT	SV025C	631461	5238820	217	0.05	0.44	1.91	38.10	125.00	1.220	4.003	298.	25.	77.	15.36	3023.62	38046	
POINT	SV026	631493	5238765	209	0.00	0.00	0.00	4.88	16.01	0.610	2.001	298.	25.	77.	0.00	0.00	0	
POINT	SV027	631272	5238442	209	0.00	0.00	0.00	5.79	19.00	0.610	2.001	298.	25.	77.	0.00	0.00	0	
POINT	SV028	631069	5238585	241	0.00	0.00	0.00	8.84	29.00	0.520	1.706	298.	25.	77.	0.00	0.00	0	
POINT	SV029	630613	5238326	261	0.00	0.00	0.00	36.88	121.00	0.400	1.312	298.	25.	77.	0.00	0.00	0	
POINT	SV030E	631448	5238773	216	-0.20	-1.60	-6.99	24.08	79.00	0.820	2.690	298.	25.	77.	15.97	3143.70	17870	
POINT	SV030C	631448	5238773	216	0.00	0.00	0.00	24.08	79.00	0.820	2.690	298.	25.	77.	15.97	3143.70	17870	
POINT	SV031E	631456	5238785	216	-0.20	-1.60	-6.99	25.30	83.01	0.820	2.690	298.	25.	77.	15.97	3143.70	17870	
POINT	SV031C	631456	5238785	216	0.00	0.00	0.00	25.30	83.01	0.820	2.690	298.	25.	77.	15.97	3143.70	17870	
POINT	SV032E	631411	5238719	216	-0.09	-0.75	-3.27	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV033E	631397	5238698	216	-0.09	-0.75	-3.27	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV034E	631383	5238678	216	-0.09	-0.75	-3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV035E	631368	5238657	216	-0.09	-0.75	-3.27	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV036E	631354	5238636	216	-0.09	-0.73	-3.20	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV037E	631340	5238616	216	-0.10	-0.77	-3.37	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV033C	631397	5238698	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV034C	631383	5238678	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV035C	631368	5238657	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV036C	631354	5238636	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV037C	631340	5238616	216	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV038E	631326	5238595	216	-0.09	-0.72	-3.16	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV038C	631326	5238595	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV039E	631311	5238574	216	-0.09	-0.72	-3.16	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV039C	631311	5238574	216	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	
POINT	SV040E	631293	5238547	215	-0.09	-0.71	-3.09	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437	

POINT SV040C	631293	5238547	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV041E	631278	5238527	215	-0.09	-0.71	-3.09	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV041C	631278	5238527	215	0.09	0.75	3.30	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV042E	631264	5238506	215	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV042C	631264	5238506	215	0.00	0.00	0.00	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV043C	631250	5238485	215	0.20	1.59	6.95	34.75	114.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV044E	631473	5238809	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV044C	631473	5238809	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV045E	631487	5238829	215	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV046E	631501	5238849	215	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV047E	631515	5238871	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV048E	631529	5238891	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV048C	631529	5238891	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV049E	631544	5238911	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV049C	631544	5238911	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV050E	631558	5238933	215	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV050C	631558	5238933	215	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV051E	631572	5238953	216	-0.14	-1.15	-5.04	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV276E	631591	5238980	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV276C	631591	5238980	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV053E	631605	5239001	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV053C	631605	5239001	216	0.00	0.00	0.00	28.35	93.01	1.010	3.314	298.	25.	77.	17.34	3413.39	29437
POINT SV070	631256	5238333	203	0.00	0.00	0.00	2.44	8.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV071	631256	5238337	203	0.00	0.00	0.00	16.46	54.00	0.400	1.312	298.	25.	77.	0.00	0.00	0
POINT SV072	631288	5238310	199	0.00	0.00	0.00	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV073	631286	5238306	199	0.00	0.00	0.00	25.91	85.01	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV074	631277	5238287	198	0.00	0.00	0.00	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT SV075	631255	5238256	198	0.00	0.00	0.00	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT SV076	631233	5238224	198	0.00	0.00	0.00	26.82	87.99	0.490	1.608	298.	25.	77.	0.00	0.00	0
POINT SV077	631275	5238342	201	0.00	0.00	0.00	14.02	46.00	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV078	631316	5238399	201	0.00	0.00	0.00	29.57	97.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV079	631277	5238345	201	0.00	0.00	0.00	14.02	46.00	0.240	0.787	298.	25.	77.	0.00	0.00	0
POINT SV080	631318	5238402	201	0.00	0.00	0.00	29.57	97.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV081	631311	5238408	202	0.00	0.00	0.00	34.75	114.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV082	631318	5238420	202	0.00	0.00	0.00	34.75	114.01	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV083	631321	5238423	202	0.00	0.00	0.00	39.01	127.99	0.210	0.689	298.	25.	77.	0.00	0.00	0
POINT SV084	631332	5238427	202	0.00	0.00	0.00	35.66	116.99	0.520	1.706	298.	25.	77.	0.00	0.00	0
POINT SV097	631351	5238393	198	0.00	0.00	0.00	8.84	29.00	0.980	3.215	339.	66.	150.	0.00	0.00	0
POINT SV101	631339	5238341	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT SV102	631344	5238339	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT SV103	631348	5238336	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT SV104	631334	5238299	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV105	631343	5238292	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV111	631362	5238373	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834
POINT SV112	631366	5238370	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401
POINT SV113	631371	5238367	197	0.00	0.00	0.00	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466
POINT SV114	631355	5238332	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV115	631363	5238326	197	0.00	0.00	0.00	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT SV120	631384	5238301	196	0.00	0.00	0.00	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV121	631406	5238332	195	0.00	0.00	0.00	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV122	631388	5238298	195	0.00	0.00	0.00	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV123	631409	5238329	195	0.00	0.00	0.00	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV124	631381	5238283	195	0.00	0.00	0.00	28.65	94.00	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT SV125	631402	5238314	195	0.00	0.00	0.00	17.98	58.99	1.220	4.003	328.	54.	130.	14.57	2868.11	36089
POINT SV201	631973	5239055	203	0.00	0.00	0.00	27.16	89.11	1.070	3.510	340.	67.	152.	16.46	3240.16	31361
POINT SV202	631924	5239090	203	0.00	0.00	0.00	13.72	45.01	0.300	0.984	336.	63.	146.	0.00	0.00	0
POINT SV203	632061	5239154	212	0.00	0.00	0.00	1.22	4.00	0.530	1.739	384.	111.	231.	0.00	0.00	0
POINT F101E	631303	5238276	197	-0.56	-4.44	-19.43	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT F102E	631300	5238272	197	-0.56	-4.44	-19.43	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT F103E	631297	5238268	197	-0.56	-4.44	-19.43	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT F1DSE	631342	5238253	196	-0.27	-2.17	-9.52	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT F201E	631293	5238261	197	-0.52	-4.15	-18.18	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834

POINT	F202E	631290	5238256	197	-0.52	-4.15	-18.18	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	F203E	631286	5238251	197	-0.52	-4.15	-18.18	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	F2DSE	631330	5238236	196	-0.26	-2.04	-8.93	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT	F301E	631282	5238245	197	-0.74	-5.84	-25.58	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	F302E	631297	5238242	197	-0.74	-5.84	-25.58	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	F303E	631275	5238236	197	-0.74	-5.84	-25.58	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	F3DSE	631319	5238221	196	-0.36	-2.87	-12.58	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT	F401E	631271	5238229	197	-0.55	-4.36	-19.08	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	F402E	631268	5238225	197	-0.55	-4.36	-19.08	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	F403E	631265	5238220	197	-0.55	-4.36	-19.08	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	F4DSE	631309	5238204	196	-0.27	-2.14	-9.39	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT	SV261	631241	5238189	197	0.00	0.00	0.00	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV262	631238	5238185	197	0.00	0.00	0.00	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV263	631235	5238178	197	0.00	0.00	0.00	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV265	631288	5238171	196	0.00	0.00	0.00	27.43	89.99	1.220	4.003	339.	66.	150.	13.26	2610.24	32844
POINT	SV266E	631253	5238206	197	-0.57	-4.52	-19.81	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV266C	631253	5238206	197	0.77	6.14	26.88	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV267E	631250	5238201	197	-0.57	-4.52	-19.81	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV267C	631250	5238201	197	0.77	6.14	26.88	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV268E	631245	5238194	197	-0.57	-4.52	-19.81	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV268C	631245	5238194	197	0.77	6.14	26.88	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV269E	631299	5238187	196	-0.28	-2.22	-9.73	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
POINT	SV269C	631299	5238187	196	0.38	3.02	13.21	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
AREA	COALYARD	631388	5238258	185	0.00	0.00	0.00	20.00	65.62	100							

APPENDIX F**Insignificant Activities Required to be Listed**

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003-007

The following sources at the Permittee's facility qualify as insignificant activities under Minn. R. 7007.1300, subs. 3 and 4:

Activity	Remarks	General Applicable Requirement
Crusher Zincing Furnace (melts zinc for crusher relining)	Propane, 1MMBTU, usage < 500 hrs/yr	Minn. R. 7011.0610 (PM and opacity)
Solvent based parts washers		Minn. R. 7011.0700-0735 (PM and opacity)
Welding Machines		Minn. R. 7011.0700-0735 (PM and opacity)
Quality Control Laboratory		Minn. R. 7011.0700-0735 (PM and opacity)
METCO 5P thermospray gun for powder-coating small parts	Powder usage < 30 lb in 5 years	Minn. R. 7011.0700-0735 (PM and opacity)
Emergency Diesel Generator #1	Emergency use only; tested 30 min/mo	Minn. R. 7011.2300 (SO ₂ and opacity)
Emergency Diesel Generator #2	Emergency use only; tested 30 min/mo	Minn. R. 7011.2300 (SO ₂ and opacity)
Emergency Lighting Generator	Emergency use only; tested 15 min/mo	Minn. R. 7011.2300 (SO ₂ and opacity)
Cummings Diesel Fire Pump	Emergency use only; tested 15 min/mo	Minn. R. 7011.2300 (SO ₂ and opacity)
Radiac hose cutoff saw	Used for cutting hose to make repairs	Minn. R. 7011.0700-0735 (PM and opacity)
Acetic Acid storage tank, 7000 gal, aboveground	PTE << 1 ton/year	Minn. R. 7011.0700-0735 (PM and opacity)
Frother storage tank, 15,000 gal, underground	PTE << 1 ton/year	Minn. R. 7011.0700-0735 (PM and opacity)
MP7 Truck Shop space heater (3.4 MMBtu, Propane)		Minn. R. 7011.0100-0115 (PM and opacity)
Soda Ash Mix Tank	Low-usage batch process	Minn. R. 7011.0700-0735 (PM and opacity)
Soda Ash Unloading	Low-usage batch process; vented indoors	Minn. R. 7011.0700-0735 (PM and opacity)
Filter Cake Loadout Conveyors (2 belts)	High-moisture content	Minn. R. 7011.0700-0735 (PM and opacity)
Additive Silo (over filter cake belts)	Low-usage batch process	Minn. R. 7011.0700-0735 (PM and opacity)

EXHIBIT M

AMBIENT AIR MONITORING PROCEDURES
for the
DETERMINATION OF COMPLIANCE

1. General

This exhibit shall apply to all emission facilities that are required to perform ambient air monitoring in order to demonstrate compliance of State and Federal ambient air quality standards or permit conditions, unless otherwise stated by special conditions of the permit.

2. Network design for criteria and non criteria pollutants

All air monitoring networks intending to demonstrate attainment with State and Federal ambient air quality standards must comply with the requirements in the Code of Federal Regulations Title 40 Part 58.14.

Location, number of monitors, parameters and duration of the study shall be determined through the permit process.

3. Probe and Siting Criteria

Probe siting and placement for criteria pollutants must comply with specifications described in the Code of Federal Regulations Title 40 Part 58 Appendix E. Each monitoring site must have a site and monitor information form completed prior to submission of data. (see attached appendix) Probe siting for non criteria pollutants must meet requirements prescribed in the approved method for the target parameter (see par. 4. Monitoring Methods).

4. Monitoring Methods

All criteria pollutants must be measured by U.S. EPA reference or equivalent methods, approved in accordance to Title 40 Part 58 Appendix C of the Federal Code of Regulations.

A list of "Designated Reference and Equivalent Methods" and "Acceptable Methods for Non criteria Pollutants" may be obtained by writing to:

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF RESEARCH AND DEVELOPMENT
ATMOSPHERIC RESEARCH AND EXPOSURE ASSESSMENT
LABORATORY QUALITY ASSURANCE DIVISION (MD-77)
RESEARCH TRIANGLE PARK, NC 27711

The MPCA must be informed of any method change performed during the monitoring project. The method change must be reported within 45 working days from the end the reporting quarter in which the change took place.

Non criteria pollutants must be measured by methods approved by the U.S. EPA. If no method exists, MPCA will suggest candidate methods recommended by the U.S. EPA or other methodology.

5. Monitoring Plan / Quality Assurance Project Plan

Permittee or operator must submit a monitoring plan that incorporates a quality assurance plan to the MPCA; Environmental Outcomes Division, Air Monitoring Unit, Supervisor at least 30 days prior the start date of the air monitoring project. The Agency shall review the monitoring and quality assurance plans to ensure compliance with EPA requirements of monitoring networks and determine whether adequate quality control measures are utilized to ensure acceptable levels of quality data.

A) Elements of Monitoring plan / Quality Assurance Project Plan

The primary guidance for developing a quality assurance plan is specified in the Code of Federal Regulations 40 Part 58 Appendix A.

In general, the following elements must be addressed in a monitoring plan.

1. General description of monitors and monitor location.
2. Description of calibration methods and reference standards.
3. Sampling schedule for manual methods.
4. Summary of standard operating procedures.
5. Description of routine quality control checks, including frequency.
6. Control limits for zero, span and other control checks including audits.
7. Performance audit procedures and reference standard traceability.
8. Plan of action when monitors fail to meet control/audit limits.
9. Recording and validating data.
10. Format of data submission.

B) Audits

In addition to the quality assurance program developed by the Permittee, the MPCA will conduct performance and systems audits on all criteria pollutant monitors. A similar audit format will be designed for non criteria pollutants dependent upon pollutant parameters. The permit process may determine frequency of scheduled MPCA audits.

6. Data Submittal

All Permittees required to submit data to the agency must do so no later than 45 working days past the end of each calendar quarter. Monitoring site information, monitoring data and quality control results must be compliant with submission requirements of the MPCA "Ambient Air Quality Data Submission Standard." (Appendix A to Exhibit M) All data shall be submitted to the following address:

Minnesota Pollution Control Agency
Environmental Outcomes Division
Air Monitoring Unit – Supervisor
520 Lafayette Road
St. Paul, MN 55155-4194

A) Criteria Pollutants

The Permittee shall include the following data assessment information (as per CFR Title 40 Part. 58 App. A.) for each sampling quarter.

1. For automated analyzers -- precision probability limits from section 4.1 and percentage differences from section 4.2 of CFR 40 Part 58 App. A, section 5.1.2
2. For manual methods - precision probability limits from section 5.1 and percentage differences from section 5.2 and 5.3 of CFR 40 Part 58 App. A, section 5.3.2
3. All data used to calculate the reported estimates of precision and accuracy including span checks, reference standard certifications, collocated sampler and audit results must be made available to the MPCA upon request.

B) Non criteria Pollutants

Data collected for non criteria pollutants must be accompanied by any pertinent quality control information obtained during the reporting quarter. This would include the following information, where applicable:

1. Sampling train flow rate checks.
2. Field blank data.
3. Analytical blank data.
4. Spiked sample percent recoveries.
5. Calibration check standard results.
6. Internal audit results.
7. Sample Duplicate results

Any documentation deemed necessary to assess reported data including, laboratory and field logbooks, mass spectra data, strip charts and calibration data must be made available to the MPCA upon request.

C) Data Validation

The requirement for data recovery is 75 percent of all data possible from each sampling quarter for automated and manual methods. Minimum recovery for the meteorological parameters of wind speed and wind direction is 80 percent from each sampling quarter.

Data that is determined to be invalid must be deleted from the reported data base. The reasons for invalidation of data must be reported to the MPCA. There should not be any correlation between missing data periods and expected highest concentrations.

Appendix A to Exhibit M

Ambient Air Quality Data Submission Standard

The Environmental Outcomes Division (EOD) of the Minnesota Pollution Control Agency collects ambient air quality data in order to assess the quality of the air in the state, and to determine compliance with both the National Ambient Air Quality Standards (NAAQS) and Minnesota Ambient Air Quality Standards (MNAAQs). The ambient air quality data is collected from a network of air monitoring stations maintained by the EOD and from networks required of some regulated industries.

Section I. The Minnesota Air Quality Data Handling System

The Minnesota Air Quality Laboratory Information Management System (LIMS) is a computerized data handling system that accepts, stores, and reports information relating to ambient air quality data. The purpose of the LIMS is to compile and organize air monitoring data from all air monitoring networks within the state, into a useful format acceptable to the U.S. EPA. To facilitate this, all information submitted to LIMS must be in a standardized format. Special input formats and a system of codes has been adopted to ensure standardization and ease of data submission on the part of any contributing organization. In addition, a number of edit checks have been instituted to screen data being submitted to the system.

This document specifies the media, file types, data coding formats, and procedures for submitting information related to ambient air quality data to the MPCA. Section II addresses sampling site information, section III addresses air quality data, section IV addresses precision and accuracy data, and section V gives some general information.

There are three distinct classes of information that are accommodated in LIMS: sampling site information, ambient air quality data, and precision and accuracy information. These are described below.

Site information: Site information includes detailed descriptive information about the location and environment of the sampling site and the parameters monitored. This includes the State, county, and city wherein the site is located, the latitude and longitude, or UTM coordinates, of the site and its elevation above local terrain and mean sea level. It also includes a description of the site location (center city, suburban, rural, or remote), the dominating influence on the sampler within approximately a 1-mile radius of the sampling site (industrial, residential, commercial, or mobile), and much more.

Ambient air quality data: That information which must be supplied to LIMS in order to completely characterize the air quality at a site over a specified time interval. This includes the location of the sampling site, the pollutants that are monitored at that site, the methods of collection and analysis of each pollutant monitored, the magnitude of each pollutant concentration, and the time interval over which the measurements are made.

Precision and Accuracy data: That information which must be supplied to LIMS in order to determine the precision and accuracy of collection and analysis methods employed in obtaining ambient air quality data. This includes raw data from bi-monthly precision checks and from quarterly audits.

Site information is submitted only once for each location, although it must be updated whenever the site environment changes. Air quality data are supplied continuously to the EOD by its own network of monitors and periodically by the air quality networks of some regulated industries. Precision and accuracy data are submitted each calendar quarter.

Section II.

Sampling Site Information

Before any *air quality* data from a monitor can be submitted to LIMS, site and monitor information for the monitor must be supplied to the EOD ambient air quality database manager. After the database manager has received the necessary site and monitor information, an *identity* will be assigned to the monitor. This monitor identity must be used to submit the air quality data from the monitor.

Whenever the site or monitor information changes, the database manager must be notified of the changes.

A. Site Information

The information required to establish a new site is listed in Table 1. This information must be sent to the database manager whenever a new site is established.

The information listed in Table 2 is optional. This information is requested to help prevent the misinterpretation of any ambient air quality data that is obtained by a monitor.

The date of the last air quality sample collected by a monitor must be provided when a monitor is removed from a site. This date must be sent to the EOD ambient air quality database manager whenever a site is terminated. All monitors which ever existed at the site must have a date sampling ended before or on the date the site is terminated.

B. Monitor Information

The information required to add a monitor to a site is listed in Table 3. This information must be sent to the EOD ambient air quality database manager whenever a monitor is added to a site. In addition, the information listed in Table 4 is required when a particulate matter (PM10 or TSP) sampler is added to the site.

The information listed in Table 5 is optional. This information is requested to help prevent the misinterpretation of any ambient air quality data that is obtained by a monitor.

The date of the last air quality sample collected by a monitor must be provided when a monitor is removed from a site. This date must be sent to the database manager whenever a monitor is removed.

C. Data submission

Forms are provided on page 9-12 for submitting site and monitor information. Optionally, *changes to site* or monitor information may be submitted as AIRS formatted transactions along with *air quality data* or *precision and accuracy data*. Please follow the gridlines in section III or IV when submitting site or monitor information as AIRS formatted transactions.

Section III.

Air Quality Data

The technical specifications for acceptable submission of air quality data are as follows:

1. Medium: 3.5" IBM DOS formatted double-sided (DS); double-sided, double-density (DS, DD); or double-sided, high-density (DS,HD) diskette, or e-mail files to David.Kelso@pca.state.mn.us
2. Dataset file type: Card Image Formatted file. A Card Image Formatted file is an ASCII text file in which records are 80 characters in length and end with a carriage return and a line feed. Fields are not delimited.
3. Data coding format: Aerometric Information Retrieval System (AIRS) formatted transactions. A transaction is a card Image Format record.

Section IV. General

All submitted data must adhere to this standard unless; the Environmental Outcomes Division of the MPCA approves an alternative. Failure to comply with this standard will result in the rejection of the submitted data and possible violation of any agreements requiring the submission of ambient monitoring data.

The structure of AIRS formatted transactions can be found in the AIRS User's Guide. Information necessary of creating AIRS formatted transactions can be found in volumes AQ2 & AQ3. The AIRS User's Guide can be downloaded via the internet from TTNWeb/AIRS site at www.epa.gov/ttn/airs/airsmans.html#aqs.

All data should be submitted to:

Minnesota Pollution Control Agency
Environmental Outcomes Division
Air Monitoring Unit – Supervisor
520 Lafayette Road
St. Paul, MN 55155-4194

And

Cover letter only to:

Minnesota Pollution Control Agency
Metro District-Major Facilities
Compliance Tracking Coordinator
520 Lafayette Road
St. Paul, MN 55155-4194

Any Questions concerning this standard should be directed to:

Minnesota Pollution Control Agency
Environmental Outcomes Division
Ambient Air Quality Database Manager
520 Lafayette Road
St. Paul, MN 55155-4194

Currently the database manager is Dave Kelso and can be reached at 651-296-7802 or david.kelso@state.mn.us.

Information Requirements

The following tables define the required fields of the attached forms.

Table 1. Required site information	
Date site established	Date on which a monitoring site began collecting air quality data.
Supporting agency	Name of agency, company or organization that is responsible for the operation of the monitoring site.
Site name and/or site identification number	Name and/or identification number used by the supporting agency.
Site address	Street number, street name, city and zip code of the monitoring site.
State	Name of state where the site is located.
County	Name of county where the site is located.
City	Name of city where the site is located, or none.
Location data	Either longitude and latitude, or Universal Transverse Mercator (UTM) System coordinates. Include method used to determine coordinates and an estimate of the accuracy of the location data.
Land use	Identifies the prevalent land use within 1.4 mile of the site. (residential, commercial, industrial, agricultural, forest, desert, mobile, or blighted area)
Street information	Street/highway name of any streets/highways close enough to have a significant impact on the site, up to 3 streets may be listed
	Type: Arterial, Expressway, Freeway, Major Street or Highway, Through Street or Highway, Local Street or Highway
	Distance from monitor to street in meters
	Direction from site to street
	The annual average daily traffic (ADT)
Location setting	Type of environment in which the site is located. (urban, suburban or rural)
Meteorological data	Is met data collected for this site?
	If so, is it collected at this location or at a different location?
	If it is collected at a different location, what is the location: how far is it from this site and in what direction?

Table 2. Optional site information:	
Compass sector	True (as opposed to magnetic) direction of the site from the central business district or monitored source.
Elevation MSL	Elevation in meters above Mean Sea Level of the site
Distance to city	Distance in kilometers of the site from the center of the downtown central business district in which the site is located, or the monitored source.
Description	Textual description of the location of the site.
Comments	Any other useful information.

Table 3. Required monitor information:	
Parameter	Name of parameter monitored by this monitor (e.g. carbon monoxide, lead, pm-10, hydrogen sulfide, etc.)
Poc	Parameter occurrence code: 1 for regular monitor, 2 or greater for co-located monitors.
Analyzer manufacturer and model and/or AIRS method code	The 3 digit code assigned to a particular analysis and collection method by the EPA usually associated with an analyzer make and model type.
Analyzing lab	Name of laboratory responsible for analysis of air quality measurement samples.
Collection lab	Name of laboratory responsible for collection of air quality measurement samples.
Date sampling began	Date on which air quality samples were first collected by the monitor.
Probe height	Height of sampling probe from ground in meters
Project class	Designates the type of sampling (population-oriented, source-oriented, background, special studies, duplicate sampling, complaint investigation etc.).
Dominant source	Indicates the primary source of the pollutant being monitored (point, area, mobile)
Measurement scale	Denotes the geographic scope of the measurements of air quality data made by this monitor. (see CFR 40 pt. 58, App. D for a discussion of measurement scales for each criteria pollutant)
Monitoring objective	Primary reason for measuring air quality data at this monitor (maximum concentration, population-exposure, background, source-oriented; see CFR 40 pt. 58, App. D for more discussion of monitoring objective in relation to measurement scale).

Table 4. Required particulate monitor information (for PM-10 or TSP only):	
Sampling frequency	Frequency of 24-hour samples (daily, every other day, every sixth day, etc.)

Table 5. Optional monitor information:	
Probe air flow	Is the probe air flow restricted?
Obstructions	Direction and distance of any obstructions from probe.
Obstruction type	Type of each obstruction listed: buildings, trees/brush, ridges, cliffs, structure other than building, etc.
Comments	Any other useful information.

Ambient Air Monitoring **Site Information Form**

New

Change_____

Site ID #: _____

Date established:

Date terminated:

Supporting agency: _____

Street address: _____

City: St Paul State: MN. Zip code: 55055

Site name: _____

Site address: _____

City: _____ State: _____. Zip code: _____. County _____.

County: _____

Fill in either UTM coordinates **OR** Latitude / Longitude

UTM Coordinates:

Zone: _____

North: _____

East:

Longitude and Latitude:

Measurement Information:

Method of determination: _____

Estimate of accuracy: _____ Datum: _____

Land Use

Check one

Residential _____

Commercial _____

Industrial _____

Agricultural _____

Forest _____

Desert _____

Mobile _____

Blighted areas _____

Location Setting

Check one

Rural

Suburban

Urban & City center ____

Compass Sector: _____

Distance from City: _____ km

Elevation MSL: _____ km

Ambient Air Monitoring **Site Information Form**

Street Information

Name

Type

Direction to Site Annual Daily AVG Year of Traffic Count
Traffic Count

1. _____.
2. _____.
3. _____.

Type: 1) Arterial 2) Expressway 3) Freeway 4) Major Street 5) Thru Street 6) Local Street

Meteorological Data

Is meteorological data collected for this site?

Yes ____

No ____

If yes, is it collected at this site or at another site?

This site ____

Another site ____

If met data is collected at a different site, fill in the following:

Meteorological site ID or name: _____

Distance from site to meteorological site: _____ km

Direction from site to meteorological site: _____

Site Description:

Comments

Ambient Air Monitoring **Monitor Information Form**

New____ Change____

For office use: AIRS monitor Id:

Site ID #: _____ Sampling began __/__/__
Parameter: _____ Sampling ended __/__/__

Collection laboratory: _____

Street address: _____

City: _____ State: __ Zip code: _____

Analysis laboratory: _____

Site address: _____

City: _____ State: _____ Zip code: _____

Analyzer manufacturer: _____

Analyzer model: _____

Collection and Analysis method Code: _____

Project Classification:

Check one:

☐ Population-oriented ☐ Source Oriented ☐ Background Surveillance
☐ Complain Invest. ☐ Special Studies ☐ Episode Monitoring
☐ Exposure Studies ☐ Duplicate Sampling
☐ Continuous Monitoring

Dominant Source

Check one:

☐ Point ☐ Area ☐ Mobile

Measurement Scale:

Check one:

☐ micro scale ☐ middle scale ☐ neighborhood ☒ urban scale ☐ regional

Monitoring Objective:

Check one:

☐ Highest Concentration ☒ Population Exposure ☐ General Background ☐ Source Impact

Ambient Air Monitoring Information Form

Monitor Type:

Check one:

☐ Unknown ☒ NAMS ☐ SLAMS ☐ Other ☐ Industrial ☐ Index**Probe Location:**

Check one:

☒ Roof Top ☐ Side of Building ☐ Support at Ground Level ☐ Pole ☐ Other
☐ Top of Tower (met equipment)**Probe**

Probe height above ground:

_____ meters

Probe distance from support:

Horizontal _____ meters

Vertical _____ meters

Unrestricted airflow? Yes ☐ No ☐**Obstructions:**

#	Type	Direction	Distance	Height
1	_____	_____	_____	_____
2	_____	_____	_____	_____
3	_____	_____	_____	_____

Types: 1.building, 2.trees/brush, 3.ridges, 4.cliffs, 5..structure other than building.
Distance and height in meters. Direction in 8-point compass.

For Particulate (PM10, TSP, or PM2.5) Samplers only:

Req. Sampling Frequency

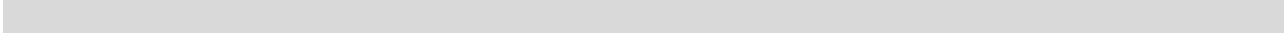
Date effective

_____	____/____/____
_____	____/____/____
_____	____/____/____

For "stratified random", "random", or "seasonal" sampling frequency
fill in the number of samples per month:

Jan.____ Feb.____ Mar.____ Apr.____ May.____ Jun.____

Jul.____ Aug.____ Sep.____ Oct.____ Nov.____ Dec.____



COMMENTS:

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 07500003-007

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

1. General Information

1.1 Applicant and Stationary Source Location

Table 1. Applicant and Source Address

Applicant/Address	Stationary Source/Address (SIC Code: 1011)
Northshore Mining Company – Silver Bay Silver Bay Power Company Cleveland-Cliffs, Inc. 10 Outer Drive Silver Bay, MN 55614	10 Outer Dr Silver Bay Lake County
Contact: Scott Gischia	Phone: 218-226-6076

1.2 Facility Description

Cleveland-Cliffs, Inc. is the parent company of both Northshore Mining Company and Silver Bay Power Company. Northshore Mining Company operates a taconite processing plant at the Silver Bay facility. Silver Bay Power Company operates a power plant at the Silver Bay facility to provide electricity for the taconite processing operations and the grid. The three companies are the Permittee of this Title V permit for the Silver Bay facility (AQ File No. 27A).

The Silver Bay facility was originally built in the mid-1950s by Reserve Mining Company and was briefly owned by Cyprus Minerals from 1989 to 1994 (Northshore was purchased in 1994 by Cleveland Cliffs, Inc.). Northshore (Reserve Mining at the time) was the first taconite operator in Minnesota. The Silver Bay facility is located on the north shore of Lake Superior.

Through a company owned, 47-mile railroad, the Northshore plant receives crushed ore that has been processed in the primary and secondary crushers at the Peter Mitchell Mine, near Babbitt, Minnesota. The taconite plant further crushes the ore in tertiary crushers, dry cobs the ore (removes the larger non-metallic chunks of ore with magnetic separation of the un-concentrated ore), and then concentrates the iron content from roughly 25 percent to 65 percent in a series of ball mills, rod mills, magnetic concentrators and froth flotation cells. The iron concentrate is then mixed with a variety of binders and fluxing agents (i.e., limestone/dolomite mixture) and formed into small balls referred to as green balls. The green balls are then fired in traveling grate furnaces and indurated into taconite pellets. The pellets are shipped through the Great Lakes system to blast furnaces in the lower Great Lakes and made into a variety of steel products.

Air emission units at the Silver Bay facility (taconite plant and power plant) consist of electric generating boilers, steam heating boilers, rail car unloading, crushed ore storage bins, tertiary crushers, dry cobbers, coarse tailings handling operations, additive storage and handling operations, indurating furnaces, and fired pellet handling and screening. In addition, there are fugitive emission sources at the plant that consist of haul roads, concentrate storage piles, taconite pellet cooling piles, taconite pellet storage piles, pellet transfer operations, pellet ship loadout operations, coal piles, fluxstone piles, coal/fluxstone handling operations, coal ash handling operations, and tailings basin operations.

Fabric filters are used to control particulate matter emissions from the two large power boilers. Fabric filter dust collectors are used to collect particulate matter emissions from the rail car unloading operations, tertiary crushers, dry cobbers, coarse tailings handling operations, pellet screening for the hearth layer, and the additive storage and handling operations. The various crushed ore storage bins are controlled with either fabric filters (cartridge filters, CE 030 and CE 031) or multiclones (all 22 of these are located at the concentrator building, CE 032 through CE 053). The indurating furnaces are controlled with wet-walled electrostatic precipitators to collect particulate matter as well as sulfur dioxide, acid gases, and various other air pollutants. Furnace discharges and indoor pellet screening are controlled with type N rotoclones. Pellet screening, estimated at 600,000 long tons per year, at the pellet yard is allowed (FS 017). This will be performed either by Northshore personnel or a contractor.

1.3 Description of the Activities Allowed by this Permit Action

This permit action is a major amendment to replace the rail car unloading equipment, adjust the required pressure drop range in the Pellet Plant's Hearth Layer baghouse, and to adjust the due dates for CEMS and Performance Tests for units which are currently shut down.

This permit action also incorporates an administrative amendment to extend the deadline for submittal of the O&M plan to align with the MACT requirements. A second administrative amendment to restore permit terms related to the iron nugget Pilot Demonstration Research and Development Plant ("PDRDP") is no longer applicable because Furnace 5 was reactivated on July 25, 2008. The permit contains a requirement for the Permittee to render inoperable all units associated with the PDRDP. The units associated with the PDRDP (EUs 630-633) have been removed from the permit.

1.4 Facility Emissions

This amendment does not allow for an increase or decrease in previously permitted emission limits.

Table 1. Facility Classification

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

2. Regulatory and/or Statutory Basis

New Source Review

The facility is an existing major source under New Source Review regulations.

Part 70 Permit Program

The facility is a major source under the Part 70 permit program.

New Source Performance Standards (NSPS)

NSPS LL applies to the replacement of the rail car unloading facilities (GP 003). There are no other NSPSs applicable to the changes authorized by this amendment.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is a major source of HAPs and is subject to NESHAP RRRRR. None of the changes authorized by this amendment are applicable to the NESHAP.

Compliance Assurance Monitoring (CAM)

CAM does not apply to the modifications allowed in this permit amendment.

Minnesota State Rules

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

- Minn. R. 7011.0150 Preventing Particulate Matter From Becoming Airborne
- Minn. R. 7011.0510 Standards of Performance for Existing Indirect Heating Equipment
- Minn. R. 7011.0610 Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment
- Minn. R. 7011.0710 Standards of Performance for Pre-1969 Industrial Process Equipment
- Minn. R. 7011.2700 Standards of Performance for New Metallic Mineral Processing Plants (incorporates NSPS LL by reference).

Table 2. Regulatory Overview of Units Affected by the Modification/Permit Amendment

Level*	Applicable Regulations	Comments
GP 003	40 CFR pt. 60, subp. LL	The PM limit is less stringent than the current limit in the permit. The new opacity limits of 7%, 10% for process fugitives, are more stringent than limits in the current permit.
GP 015	40 CFR 52.21(k)	Performance Test extension to 120 days after resuming operation of any of the emission units in GP 015.
GP 016	40 CFR 52.21(k)	Performance Test extension to 120 days after resuming operation of any of the emission units in GP 016. The testing requirements in GP 016 were aligned with testing requirements throughout the permit by requiring the testing of a representative stack from the group rather than all stacks.
	40 CFR pt. 60, subp. LL	Minimum pressure drop limit reduced to allow for better performance after introduction of new filter media in the baghouse.
MR 005-010	Minn. R. 7017.1050	Changed so that certification tests are due 120 days after resuming operation of Furnace 5.

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3. Technical Information

3.1 Periodic Monitoring

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

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

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

The table below summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Table 3. Periodic Monitoring

Level*	Requirement (rule basis)	Additional Monitoring	Discussion
GP 015 & GP 016	40 CFR 52.21(k)	Performance Testing	Testing deadlines updated to require testing once these units resume operation.
GP 016	40 CFR pt. 60, subp. LL		The Permittee changed their method of operation of the baghouse by making a wholesale bag change-out rather than changing individual bags. Data from the filter leak detector and a dust probe located in the clean air side showed the dust levels decreased dramatically after the changeout. However, with the introduction of all new filter media, the differential pressure upon restart of the baghouse was much lower. The permit limit is lowered to account for the operation this all new filter media.
MR 005-010	Minn. R. 7017.1050	Performance Testing	Testing deadlines updated to require testing once these units resume operation.

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3.2 Insignificant Activities

Northshore Mining Company has several operations which are classified as insignificant activities. These are listed in Appendix F to the permit.

3.3 Permit Organization

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

3.4 Comments Received

Public Notice Period: December 5, 2009 – January 4, 2010

EPA 45-day Review Period: December 5, 2009 – January 19, 2010

4. Conclusion

Based on the information provided by Northshore Mining Company, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 07500003-007 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Trevor Shearen (permit writer/engineer)
Bob Beresford (enforcement)
Andy Place (stack testing)
Chris Buntjer (peer reviewer)

AQ File No. 27A; DQ 2754, 2792, 1209, 1367, 2431, 2486, 2636

Attachments: 1. Facility Description (in Delta)
2. CD-01 Forms (in Delta)