AIR EMISSION PERMIT NO. 07500003-003

IS ISSUED TO

NORTHSHORE MINING CO - SILVER BAY
Silver Bay Power Company
Cleveland-Cliffs, Inc.
10 Outer Drive
Silver Bay, Lake County, MN 55614-1499

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

Permit Type	Application Date
Total Facility Operating Permit	January 17, 1995 (Updated November 26, 2002)
Administrative Amendment	April 8, 2004
Major Amendment	May 17, 2004
Major Amendment	October 25, 2004 (as subsequently revised)

This permit 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.

Permit Type: Federal; Pt 70/NSR Authorization

Authorization to Construct and Operate (40 CFR § 52.21) Issuance Date: December 2, 2005

Authorization to Construct and Operate (40 CFR § 52.21) Effective Date: January 5, 2006

Final Permit Issuance Date: March 22, 2006

Expiration: February 24, 2009
All Title I Conditions do not expire.

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

for Sheryl A. Corrigan
Commissioner

Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

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

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

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

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

PERMIT SHIELD:

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

FACILITY DESCRIPTION:

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 four indurating furnaces (Nos. 5, 6, 11, and 12) 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 contractor.

DESCRIPTION OF PERMIT ACTION 003:

The Permittee intends to reactivate process equipment that was contained in its Part 70 operating permit (Permit Action 001), but has been idle for more than 20 years. This project is subject to Prevention of Significant Deterioration (PSD) permitting and implementation of Best Available Control Technology (BACT) on reactivated equipment. The specific changes include:

- Authorize reactivation of two fine crushers along with their corresponding existing fabric filters;
- Authorize reactivation of nine concentrator sections and upgrading multiclones on all nine to fabric filters as the sections are reactivated;
- Replace multiclones on all currently operating concentrator sections with new fabric filters, by no later than December 31, 2006;
- Authorize construction of a concentrate handling system consisting of conveyor belts and two concentrate storage silos**;**
- Authorization reactivation of pelletizing Furnace 5 along with existing wet-walled electrostatic precipitators for emission control, and upgrading the rotoclone on the Furnace 5 discharge stack to a wet scrubber; and
- Render the iron nugget pilot plant inoperable.

APPENDIX MATERIALS

Appendix A: { Not applicable to this permit }

Appendix B: Fugitive Dust Control Actions Required for Mile Post 7 Area

Appendix C: Daily Visible Emission Checklists – Explanation & An Example

Appendix D: Current Status and Plan for TSP Compliance

Appendix E: Modeling Information

Appendix F: Insignificant Activities Required to be Listed

Appendix B: Fugitive Dust Control Actions Required for Mile Post 7 Area

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 Coherex, 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

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 conductive 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.

S V	EU	CE	Operator ID	Description	SU N	MO N	TUE	WE D	TH U	FRI	SA T
				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
--	--	018	Mile Post 7 untreated basin beaches
009	Coarse tails handling at loadout bin	019	Secondary traffic on unpaved roads
010	Pellet cooling: transfer tower		

Appendix D: Current Status and Plan for TSP Compliance

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

Year implemented	*Description of Action/Project/Equipment Installation*
1998	Implemented annual employee fugitive dust training plantwide.
1999	Paved the limestone haul road.
1999 (and recurring)	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.

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

Year implemented	*Description of Action/Project/Equipment Installation*
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.

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

Year implemented	*Description of Action/Project/Equipment Installation*
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

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)
  - Concentrator Emission Rates (Approximate)
  - SV032-SV032 at 0.0 grams/second
  - SV033-SV042 at 0.1 grams/second
  - SV043-SV043 at 0.2 grams/second
  - SV044-SV053 at 0.1 grams/second (including SV276 [formerly SV052])
  - 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)
  - Concentrator Emission Rates (Approximate)
  - SV032-SV037 at 0.0 grams/second
  - SV038-SV042 at 0.1 grams/second
  - SV043-SV043 at 0.2 grams/second
  - SV044-SV053 at 0.1 grams/second (including SV276 [formerly SV052])
  - 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)
  - Concentrator Emission Rates (Approximate)
  - SV032-SV039 at 0.0 grams/second
  - SV040-SV041 at 0.1 grams/second
  - SV042-SV044 at 0.2 grams/second
  - SV045-SV047 at 0.0 grams/second
  - SV048-SV050 at 0.2 grams/second
  - SV051-SV051 at 0.0 grams/second
  - SV052-SV053 at 0.2 grams/second (including SV276 [formerly SV052])
  - 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.

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*** ISCST2 - VERSION 93109 ***    *** NMC - CO PSD NORTHSHORE - 1992                                    ***        02/19/05
                                  *** FURNACE 5 RESTART - 2004                                         ***        07:59:29
C:\PROJECTS\NMCMAY05\MAY_16TH\CO9204N.OUT
**This Run Includes:   20 Source(s);      1 Source Group(s); and    683 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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    5.22   41.40  181.31   65.84  216.01   2.290   7.513    422.    149.    300.   26.46 5208.66  230917
  POINT SV002     631552 5238492     192    7.72   61.25  268.28   65.84  216.01   3.110  10.203    422.    149.    300.   18.65 3671.26  300190
  POINT SV003     631472 5238483     193    1.59   12.65   55.41   39.93  131.00   1.980   6.496    505.    232.    450.    9.17 1805.12   59827
  POINT SV101     631339 5238341     197    0.15    1.18    5.18   36.88  121.00   1.830   6.004    334.     61.    142.   12.71 2501.97   70834
  POINT SV102     631344 5238339     197    0.16    1.25    5.46   36.88  121.00   1.830   6.004    334.     61.    142.   13.35 2627.95   74401
  POINT SV103     631348 5238336     197    0.16    1.29    5.67   36.88  121.00   1.830   6.004    334.     61.    142.   13.90 2736.22   77466
  POINT SV104     631334 5238299     197    0.57    4.54   19.88   40.84  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV105     631343 5238292     197    0.57    4.54   19.88   40.84  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV111     631362 5238373     197    0.15    1.18    5.18   36.88  121.00   1.830   6.004    334.     61.    142.   12.71 2501.97   70834
  POINT SV112     631366 5238370     197    0.16    1.25    5.46   36.88  121.00   1.830   6.004    334.     61.    142.   13.35 2627.95   74401
  POINT SV113     631371 5238367     197    0.16    1.29    5.67   36.88  121.00   1.830   6.004    334.     61.    142.   13.90 2736.22   77466
  POINT SV114     631355 5238332     197    0.57    4.54   19.88   40.84  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV115     631363 5238326     197    0.57    4.54   19.88   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 SV261     631241 5238189     197    0.51    4.07   17.83   49.38  162.01   1.830   6.004    333.     60.    140.   12.71 2501.97   70834
  POINT SV262     631238 5238185     197    0.54    4.28   18.74   49.38  162.01   1.830   6.004    333.     60.    140.   13.35 2627.95   74401
  POINT SV263     631235 5238178     197    0.56    4.46   19.54   49.38  162.01   1.830   6.004    333.     60.    140.   13.90 2736.22   77466
  POINT SV266     631253 5238206     197    0.51    4.07   17.83   49.38  162.01   1.830   6.004    333.     60.    140.   12.71 2501.97   70834
  POINT SV267     631250 5238201     197    0.54    4.28   18.74   49.38  162.01   1.830   6.004    333.     60.    140.   13.35 2627.95   74401
  POINT SV268     631245 5238194     197    0.56    4.46   19.54   49.38  162.01   1.830   6.004    333.     60.    140.   13.90 2736.22   77466
  TOTAL                              20.98  166.52  729.33
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*** ISCST2 - VERSION 93109 ***    *** NMC - NOX PSD SITE-SPECIFIC VERSION - 1992                          ***        12/02/04
                                  *** FURNACE 5 - 2004                                                   ***        18:59:05
C:\PROJECTS\NMCMAY05\MAY_16TH\NOX9204N.OUT
**This Run Includes:   19 Source(s);      1 Source Group(s); and    677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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   58.68  465.71 2039.72   65.84  216.01   2.290   7.513    422.    149.    300.   26.46 5208.66  230917
  POINT SV002     631552 5238492     192   86.83  689.11 3018.14   65.84  216.01   3.110  10.203    422.    149.    300.   18.65 3671.26  300190
  POINT SV003     631472 5238483     193    2.93   23.25  101.85   39.93  131.00   1.980   6.496    505.    232.    450.    9.17 1805.12   59827
  POINT SV101     631339 5238341     197    2.05   16.30   71.40   36.88  121.00   1.830   6.004    334.     61.    142.   12.71 2501.97   70834
  POINT SV102     631344 5238339     197    2.16   17.12   74.98   36.88  121.00   1.830   6.004    334.     61.    142.   13.35 2627.95   74401
  POINT SV103     631348 5238336     197    2.25   17.84   78.14   36.88  121.00   1.830   6.004    334.     61.    142.   13.90 2736.22   77466
  POINT SV104     631334 5238299     197    7.87   62.44  273.49   40.84  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV105     631343 5238292     197    7.87   62.44  273.49   40.84  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV111     631362 5238373     197    2.05   16.30   71.40   36.88  121.00   1.830   6.004    334.     61.    142.   12.71 2501.97   70834
  POINT SV112     631366 5238370     197    2.16   17.12   74.98   36.88  121.00   1.830   6.004    334.     61.    142.   13.35 2627.95   74401
  POINT SV113     631371 5238367     197    2.25   17.84   78.14   36.88  121.00   1.830   6.004    334.     61.    142.   13.90 2736.22   77466
  POINT SV114     631355 5238332     197    7.87   62.44  273.49   40.84  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV115     631363 5238326     197    7.87   62.44  273.49   40.84  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV261     631241 5238189     197    1.83   14.53   63.65   49.38  162.01   1.830   6.004    333.     60.    140.   12.71 2501.97   70834
  POINT SV262     631238 5238185     197    1.92   15.26   66.84   49.38  162.01   1.830   6.004    333.     60.    140.   13.35 2627.95   74401
  POINT SV263     631235 5238178     197    2.00   15.90   69.66   49.38  162.01   1.830   6.004    333.     60.    140.   13.90 2736.22   77466
  POINT SV266     631253 5238206     197    1.83   14.53   63.65   49.38  162.01   1.830   6.004    333.     60.    140.   12.71 2501.97   70834
  POINT SV267     631250 5238201     197    1.92   15.26   66.84   49.38  162.01   1.830   6.004    333.     60.    140.   13.35 2627.95   74401
  POINT SV268     631245 5238194     197    2.00   15.90   69.66   49.38  162.01   1.830   6.004    333.     60.    140.   13.90 2736.22   77466
  TOTAL                              204.34 1621.78 7103.00
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*** ISCST2 - VERSION 93109 *** *** NMC - NOX PSD SITE-SPECIFIC VERSION - 1992 *** 01/07/05
*** FURNACE 5 - CLASS II INCREMENT - 2004 *** 10:56:18
C:\PROJECTS\NMCMAY05\MAY_16TH\NI9204N.OUT
**This Run Includes: 22 Source(s); 1 Source Group(s); and 677 Receptor(s)

AREA	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	XDIM(M)	YDIM(M)							
VOLUME	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	SYI(M)	SZI(M)							
AREACIRC	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	RADIUS	#VERTS.							
AREAPOLY	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	#VERTS.	SZI(M)							
POINT	SRCIDNT	EASTINGNORTHING	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	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	
TOTAL				80.52	639.05	2798.87											

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*** ISCST3 - VERSION 02035 ***    *** NMC - NOX PSD REGULATORY VERSION - 1992                          ***        01/07/05
                                  *** FURNACE 5 - CLASS II INCREMENT - 2004                            ***        10:56:39
C:\PROJECTS\NMCMAY05\MAY_16TH\NI9204R.OUT
**This Run Includes:    64 Source(s);      2 Source Group(s); and     677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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)
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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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*** ISCST2 - VERSION 93109 ***    *** NMC - SO2 PSD NORTHSHORE SITE-SPECIFIC VERSION - 1992               ***        12/02/04
                                  *** FURNACE 5 RESTART - 2004                                           ***        19:46:58
C:\PROJECTS\NMCMAY05\MAY_16TH\SO29204N.OUT
**This Run Includes:   19 Source(s);      1 Source Group(s); and    677 Receptor(s)
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AREA	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	XDIM(M)	YDIM(M)							
VOLUME	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	SYI(M)	SZI(M)							
AREACIRC	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	RADIUS	#VERTS.							
AREAPOLY	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	#VERTS.	SZI(M)							
POINT	SRCIDNT	EASTINGNORTHING	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	97.80	776.18	3399.49	65.84	216.01	2.290	7.513	422.	149.	300.	26.46	5208.66	230917	
POINT	SV002	631552 5238492	192	144.71	1148.49	5030.12	65.84	216.01	3.110	10.203	422.	149.	300.	18.65	3671.26	300190	
POINT	SV003	631472 5238483	193	4.23	33.54	146.90	39.93	131.00	1.980	6.496	505.	232.	450.	9.17	1805.12	59827	
POINT	SV101	631339 5238341	197	1.42	11.28	49.39	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834	
POINT	SV102	631344 5238339	197	1.49	11.85	51.90	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401	
POINT	SV103	631348 5238336	197	1.56	12.35	54.09	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466	
POINT	SV104	631334 5238299	197	0.75	5.91	25.90	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV105	631343 5238292	197	0.75	5.91	25.90	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV111	631362 5238373	197	1.42	11.28	49.39	36.88	121.00	1.830	6.004	334.	61.	142.	12.71	2501.97	70834	
POINT	SV112	631366 5238370	197	1.49	11.85	51.90	36.88	121.00	1.830	6.004	334.	61.	142.	13.35	2627.95	74401	
POINT	SV113	631371 5238367	197	1.56	12.35	54.09	36.88	121.00	1.830	6.004	334.	61.	142.	13.90	2736.22	77466	
POINT	SV114	631355 5238332	197	0.75	5.91	25.90	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV115	631363 5238326	197	0.75	5.91	25.90	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071	
POINT	SV261	631241 5238189	197	0.51	4.06	17.76	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834	
POINT	SV262	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	SV263	631235 5238178	197	0.56	4.44	19.43	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466	
POINT	SV266	631253 5238206	197	0.51	4.06	17.76	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834	
POINT	SV267	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	SV268	631245 5238194	197	0.56	4.44	19.43	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466	
TOTAL				261.87	2078.32	9102.56											

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*** ISCST2 - VERSION 93109 ***    *** NMC - SO2 PSD NORTHSHORE SITE-SPECIFIC VERSION - 1992               ***        12/12/04
                                  *** FURNACE 5 RESTART - CLASS II INCREMENT - 2004                       ***        13:29:03
C:\PROJECTS\NMCMAY05\MAY_16TH\SI9204N.OUT
**This Run Includes:   22 Source(s);      1 Source Group(s); and    677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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 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
  TOTAL                                    2.30   18.27   80.02
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*** ISCST3 - VERSION 02035 *** *** NMC - SO2 PSD REGULATORY VERSION - 1992 *** 12/12/04
*** FURNACE 5 - CLASS II INCREMENT - 2004 *** 13:29:50
C:\PROJECTS\NMCMAY05\MAY_16TH\SI9204R.OUT
**This Run Includes: 39 Source(s); 2 Source Group(s); and 677 Receptor(s)

AREA	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	XDIM(M)	YDIM(M)							
VOLUME	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	SYI(M)	SZI(M)							
AREACIRC	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	RADIUS	#VERTS.							
AREAPOLY	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	#VERTS.	SZI(M)							
POINT	SRCIDNT	EASTINGNORTHING	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	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	F101E	631303	5238276	197	-0.39	-3.10	-13.56	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	F102E	631300	5238272	197	-0.39	-3.10	-13.56	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	F103E	631297	5238268	197	-0.39	-3.10	-13.56	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	-0.36	-2.86	-12.51	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	F202E	631290	5238256	197	-0.36	-2.86	-12.51	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	F203E	631286	5238251	197	-0.36	-2.86	-12.51	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	-0.51	-4.05	-17.73	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	F302E	631297	5238242	197	-0.51	-4.05	-17.73	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	F303E	631275	5238236	197	-0.51	-4.05	-17.73	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	-0.38	-3.02	-13.21	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	F402E	631268	5238225	197	-0.38	-3.02	-13.21	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	F403E	631265	5238220	197	-0.38	-3.02	-13.21	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
TOTAL					-2.62	-20.78	-91.00										

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*** ISCST2 - VERSION 93109 ***    *** NMC - PM10 - INCREASE FURNACES 5 & 6, MAY 05 - 1992                ***        05/11/05
                                  *** MAY 05 - SITE SPECIFIC MODEL                                      ***        17:34:23
C:\PROJECTS\NMCMAY05\MAY_16TH\PMTSCENA\PM92N.OUT
**This Run Includes:   19 Source(s);      1 Source Group(s); and    677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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 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  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV115     631363 5238326     197    1.34   10.63   46.58   40.84  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV261     631241 5238189     197    1.02    8.09   35.42   49.38  162.01   1.830   6.004    333.     60.    140.   12.71 2501.97   70834
  POINT SV262     631238 5238185     197    1.07    8.50   37.23   49.38  162.01   1.830   6.004    333.     60.    140.   13.35 2627.95   74401
  POINT SV263     631235 5238178     197    1.12    8.86   38.79   49.38  162.01   1.830   6.004    333.     60.    140.   13.90 2736.22   77466
  POINT SV266     631253 5238206     197    1.02    8.09   35.42   49.38  162.01   1.830   6.004    333.     60.    140.   12.71 2501.97   70834
  POINT SV267     631250 5238201     197    1.07    8.50   37.23   49.38  162.01   1.830   6.004    333.     60.    140.   13.35 2627.95   74401
  POINT SV268     631245 5238194     197    1.12    8.86   38.79   49.38  162.01   1.830   6.004    333.     60.    140.   13.90 2736.22   77466
  TOTAL                                    36.83  292.29 1280.14
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*** ISCST3 - VERSION 02035 ***    *** PM10 PSD - MAY 05 REGULATORY MODEL - 1992 - SCENARIO A              ***        05/11/05
                                  *** FURNACE 5 - DRY COBBER STACKS +5 M - CHANGE FRN 5&6                 ***        17:35:24
C:\PROJECTS\NMCMAY05\MAY_16TH\PMTSCENA\PM92RA.OUT
**This Run Includes:   101 Source(s);      2 Source Group(s); and     677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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
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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	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV115	631363	5238326	197	1.34	10.63	46.58	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV120	631384	5238301	196	0.50	3.97	17.38	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV121	631406	5238332	195	0.50	3.97	17.38	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV122	631388	5238298	195	0.50	3.97	17.38	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV123	631409	5238329	195	0.50	3.97	17.38	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV124	631381	5238283	195	0.50	3.97	17.38	28.65	94.00	1.160	3.806	328.	54.	130.	21.49	4230.31	48123
POINT	SV125	631402	5238314	195	0.50	3.97	17.38	17.98	58.99	1.160	3.806	328.	54.	130.	14.97	2946.85	33522
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	SV261	631241	5238189	197	1.02	8.09	35.42	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV262	631238	5238185	197	1.07	8.50	37.23	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV263	631235	5238178	197	1.12	8.86	38.79	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV265	631288	5238171	196	0.38	3.02	13.21	27.43	89.99	1.220	4.003	339.	66.	150.	13.26	2610.24	32844
POINT	SV266	631253	5238206	197	1.02	8.09	35.42	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV267	631250	5238201	197	1.07	8.50	37.23	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV268	631245	5238194	197	1.12	8.86	38.79	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV269	631299	5238187	196	0.16	1.24	5.42	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
AREA	COALYARD	631388	5238258	185	0.50	3.98	17.45	20.00	65.62	100.00	200.00	(0.2510E-04 G/S/M2, 0.2000E+05 M2)					
AREA	COREPLNT	631362	5238461	194	0.81	6.41	28.07	15.00	49.21	110.03	110.03	(0.6670E-04 G/S/M2, 0.1211E+05 M2)					
AREA	PELLSTOR	630749	5237663	194	1.99	15.80	69.19	30.48	100.00	267.31	620.57	(0.1200E-04 G/S/M2, 0.1659E+06 M2)					
AREA	FS003	631388	5238258	19120000.00**********				20.00	65.62	100.00	200.00	(0.1000E+01 G/S/M2, 0.2000E+05 M2)	**STAR**				
AREA	FS007	630749	5237663	195**********				30.48	100.00	267.31	620.57	(0.1000E+01 G/S/M2, 0.1659E+06 M2)	**STAR**				
AREA	FS012	631362	5238461	19312106.6096084.13********				15.00	49.21	110.03	110.03	(0.1000E+01 G/S/M2, 0.1211E+05 M2)	**STAR**				
AREA	FS015	630749	5237663	195**********				30.48	100.00	267.31	620.57	(0.1000E+01 G/S/M2, 0.1659E+06 M2)	**STAR**				
TOTAL					49.12	389.86	1707.48										
SUMP=					45.82	363.67	1592.77										
SUMA=					3.30	26.19	114.71										
WNDA=				**********													

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*** ISCST2 - VERSION 93109 ***    *** NMC - PM10 - INCREASE FURNACES 5 & 6, MAY 05 - 1992                 ***        05/11/05
                                  *** MAY 05 - SITE SPECIFIC MODEL                                       ***        17:34:23
C:\PROJECTS\NMCMAY05\MAY_16TH\PMTSCENB\PM92N.OUT
**This Run Includes:   19 Source(s);      1 Source Group(s); and    677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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 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  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV115     631363 5238326     197    1.34   10.63   46.58   40.84  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV261     631241 5238189     197    1.02    8.09   35.42   49.38  162.01   1.830   6.004    333.     60.    140.   12.71 2501.97   70834
  POINT SV262     631238 5238185     197    1.07    8.50   37.23   49.38  162.01   1.830   6.004    333.     60.    140.   13.35 2627.95   74401
  POINT SV263     631235 5238178     197    1.12    8.86   38.79   49.38  162.01   1.830   6.004    333.     60.    140.   13.90 2736.22   77466
  POINT SV266     631253 5238206     197    1.02    8.09   35.42   49.38  162.01   1.830   6.004    333.     60.    140.   12.71 2501.97   70834
  POINT SV267     631250 5238201     197    1.07    8.50   37.23   49.38  162.01   1.830   6.004    333.     60.    140.   13.35 2627.95   74401
  POINT SV268     631245 5238194     197    1.12    8.86   38.79   49.38  162.01   1.830   6.004    333.     60.    140.   13.90 2736.22   77466
  TOTAL                                    36.83  292.29 1280.14
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*** ISCST3 - VERSION 02035 ***    *** PM10 PSD - MAY 05 REGULATORY MODEL - 1992 - SCENARIO B              ***        05/11/05
                                  *** FURNACE 5 - 5 CONC STACKS INTO BUILDING, CHANGE FRN 5&6             ***        17:48:36
C:\PROJECTS\NMCMAY05\MAY_16TH\PMTSCENB\PM92RB.OUT
**This Run Includes:   101 Source(s);      2 Source Group(s); and     677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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   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
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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	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV115	631363	5238326	197	1.34	10.63	46.58	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV120	631384	5238301	196	0.50	3.97	17.38	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV121	631406	5238332	195	0.50	3.97	17.38	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV122	631388	5238298	195	0.50	3.97	17.38	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV123	631409	5238329	195	0.50	3.97	17.38	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV124	631381	5238283	195	0.50	3.97	17.38	28.65	94.00	1.160	3.806	328.	54.	130.	21.49	4230.31	48123
POINT	SV125	631402	5238314	195	0.50	3.97	17.38	17.98	58.99	1.160	3.806	328.	54.	130.	14.97	2946.85	33522
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	SV261	631241	5238189	197	1.02	8.09	35.42	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV262	631238	5238185	197	1.07	8.50	37.23	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV263	631235	5238178	197	1.12	8.86	38.79	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV265	631288	5238171	196	0.38	3.02	13.21	27.43	89.99	1.220	4.003	339.	66.	150.	13.26	2610.24	32844
POINT	SV266	631253	5238206	197	1.02	8.09	35.42	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV267	631250	5238201	197	1.07	8.50	37.23	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV268	631245	5238194	197	1.12	8.86	38.79	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV269	631299	5238187	196	0.16	1.24	5.42	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
AREA	COALYARD	631388	5238258	185	0.50	3.98	17.45	20.00	65.62	100.00	200.00	(0.2510E-04 G/S/M2, 0.2000E+05 M2)					
AREA	COREPLNT	631362	5238461	194	0.81	6.41	28.07	15.00	49.21	110.03	110.03	(0.6670E-04 G/S/M2, 0.1211E+05 M2)					
AREA	PELLSTOR	630749	5237663	194	1.99	15.80	69.19	30.48	100.00	267.31	620.57	(0.1200E-04 G/S/M2, 0.1659E+06 M2)					
AREA	FS003	631388	5238258	19120000.00**********				20.00	65.62	100.00	200.00	(0.1000E+01 G/S/M2, 0.2000E+05 M2)					**STAR**
AREA	FS007	630749	5237663	195**********				30.48	100.00	267.31	620.57	(0.1000E+01 G/S/M2, 0.1659E+06 M2)					**STAR**
AREA	FS012	631362	5238461	19312106.6096084.13********				15.00	49.21	110.03	110.03	(0.1000E+01 G/S/M2, 0.1211E+05 M2)					**STAR**
AREA	FS015	630749	5237663	195**********				30.48	100.00	267.31	620.57	(0.1000E+01 G/S/M2, 0.1659E+06 M2)					**STAR**
TOTAL					48.65	386.09	1690.97										
SUMP=					45.35	359.90	1576.26										
SUMA=					3.30	26.19	114.71										
WNDA=				**********													

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*** ISCST2 - VERSION 93109 ***    *** NMC - PM10 - INCREASE FURNACES 5 & 6, MAY 05 - 1992                 ***        05/11/05
                                  *** MAY 05 - SITE SPECIFIC MODEL                                       ***        17:34:23
C:\PROJECTS\NMCMAY05\MAY_16TH\PMTSCENC\PM92N.OUT
**This Run Includes:   19 Source(s);      1 Source Group(s); and    677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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 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  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV115     631363 5238326     197    1.34   10.63   46.58   40.84  133.99   1.830   6.004    333.     60.    140.   16.70 3287.40   93071
  POINT SV261     631241 5238189     197    1.02    8.09   35.42   49.38  162.01   1.830   6.004    333.     60.    140.   12.71 2501.97   70834
  POINT SV262     631238 5238185     197    1.07    8.50   37.23   49.38  162.01   1.830   6.004    333.     60.    140.   13.35 2627.95   74401
  POINT SV263     631235 5238178     197    1.12    8.86   38.79   49.38  162.01   1.830   6.004    333.     60.    140.   13.90 2736.22   77466
  POINT SV266     631253 5238206     197    1.02    8.09   35.42   49.38  162.01   1.830   6.004    333.     60.    140.   12.71 2501.97   70834
  POINT SV267     631250 5238201     197    1.07    8.50   37.23   49.38  162.01   1.830   6.004    333.     60.    140.   13.35 2627.95   74401
  POINT SV268     631245 5238194     197    1.12    8.86   38.79   49.38  162.01   1.830   6.004    333.     60.    140.   13.90 2736.22   77466
  TOTAL                                    36.83  292.29 1280.14
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*** 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
C:\PROJECTS\NMCMAY05\MAY_16TH\PMTSCENC\PM92RC.OUT
**This Run Includes: 101 Source(s); 2 Source Group(s); and 677 Receptor(s)

AREA	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	XDIM(M)	YDIM(M)						
VOLUME	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	SYI(M)	SZI(M)						
AREACIRC	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	RADIUS	#VERTS.						
AREAPOLY	SRCIDNT	EASTINGNORTHING	ELEV(M)	G/SEC	#/HOUR	T/YEAR	HGT(M)	HGT(FT)	#VERTS.	SZI(M)						
POINT	SRCIDNT	EASTINGNORTHING	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	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	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV115	631363	5238326	197	1.34	10.63	46.58	40.84	133.99	1.830	6.004	333.	60.	140.	16.70	3287.40	93071
POINT	SV120	631384	5238301	196	0.50	3.97	17.38	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV121	631406	5238332	195	0.50	3.97	17.38	27.74	91.01	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV122	631388	5238298	195	0.50	3.97	17.38	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV123	631409	5238329	195	0.50	3.97	17.38	27.43	89.99	1.160	3.806	339.	66.	150.	21.49	4230.31	48123
POINT	SV124	631381	5238283	195	0.50	3.97	17.38	28.65	94.00	1.160	3.806	328.	54.	130.	21.49	4230.31	48123
POINT	SV125	631402	5238314	195	0.50	3.97	17.38	17.98	58.99	1.160	3.806	328.	54.	130.	14.97	2946.85	33522
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	SV261	631241	5238189	197	1.02	8.09	35.42	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV262	631238	5238185	197	1.07	8.50	37.23	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV263	631235	5238178	197	1.12	8.86	38.79	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV265	631288	5238171	196	0.38	3.02	13.21	27.43	89.99	1.220	4.003	339.	66.	150.	13.26	2610.24	32844
POINT	SV266	631253	5238206	197	1.02	8.09	35.42	49.38	162.01	1.830	6.004	333.	60.	140.	12.71	2501.97	70834
POINT	SV267	631250	5238201	197	1.07	8.50	37.23	49.38	162.01	1.830	6.004	333.	60.	140.	13.35	2627.95	74401
POINT	SV268	631245	5238194	197	1.12	8.86	38.79	49.38	162.01	1.830	6.004	333.	60.	140.	13.90	2736.22	77466
POINT	SV269	631299	5238187	196	0.16	1.24	5.42	27.43	89.99	1.220	4.003	334.	61.	141.	13.26	2610.24	32844
AREA	COALYARD	631388	5238258	185	0.50	3.98	17.45	20.00	65.62	100.00	200.00	(0.2510E-04 G/S/M2, 0.2000E+05 M2)					
AREA	COREPLNT	631362	5238461	194	0.81	6.41	28.07	15.00	49.21	110.03	110.03	(0.6670E-04 G/S/M2, 0.1211E+05 M2)					
AREA	PELLSTOR	630749	5237663	194	1.99	15.80	69.19	30.48	100.00	267.31	620.57	(0.1200E-04 G/S/M2, 0.1659E+06 M2)					
AREA	FS003	631388	5238258	19120000.00**********				20.00	65.62	100.00	200.00	(0.1000E+01 G/S/M2, 0.2000E+05 M2)	**STAR**				
AREA	FS007	630749	5237663	195**********				30.48	100.00	267.31	620.57	(0.1000E+01 G/S/M2, 0.1659E+06 M2)	**STAR**				
AREA	FS012	631362	5238461	19312106.6096084.13********				15.00	49.21	110.03	110.03	(0.1000E+01 G/S/M2, 0.1211E+05 M2)	**STAR**				
AREA	FS015	630749	5237663	195**********				30.48	100.00	267.31	620.57	(0.1000E+01 G/S/M2, 0.1659E+06 M2)	**STAR**				
TOTAL					48.81	387.40	1696.71										
SUMP=					45.51	361.21	1582.00										
SUMA=					3.30	26.19	114.71										
WNDA=				**********													

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*** ISCST2 - VERSION 93109 ***    *** NMC - PM10 PSD - SITE SPECIFIC MODEL - 1992                          ***        01/07/05
                                  *** FURNACE 5 - CLASS II INCREMENT - 2004                                ***        15:25:36
C:\PROJECTS\NMCMAY05\MAY_16TH\PMISCENA\PMI9204N.OUT
**This Run Includes:   22 Source(s);      1 Source Group(s); and    677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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
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  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 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 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 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 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 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 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 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 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
  TOTAL                                     0.61    4.84   21.20
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*** ISCST3 - VERSION 02035 ***    *** NMC - PM10 PSD - REGULATORY MODEL - 1992 - SCENARIO A               ***        01/07/05
                                  *** FURNACE 5 - CLASS II INCREMENT - 2004                               ***        15:25:43
C:\PROJECTS\NMCMAY05\MAY_16TH\PMISCENA\PMI924RA.OUT
**This Run Includes:   136 Source(s);      2 Source Group(s); and     677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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 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
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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
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	100.00	200.00 (0.0000E+00 G/S/M2, 0.2000E+05 M2)						
AREA	COREPLNT	631362	5238461	194	0.00	0.00	0.00	15.00	49.21	110.03	110.03 (0.0000E+00 G/S/M2, 0.1211E+05 M2)						
AREA	PELLSTOR	630749	5237663	194	0.00	0.00	0.00	30.48	100.00	267.31	620.57 (0.0000E+00 G/S/M2, 0.1659E+06 M2)						
AREA	FS003	631388	5238258	191	0.00	0.00	0.00	20.00	65.62	100.00	200.00 (0.0000E+00 G/S/M2, 0.2000E+05 M2) **STAR**						
AREA	FS007	630749	5237663	195	0.00	0.00	0.00	30.48	100.00	267.31	620.57 (0.0000E+00 G/S/M2, 0.1659E+06 M2) **STAR**						
AREA	FS012	631362	5238461	193	0.00	0.00	0.00	15.00	49.21	110.03	110.03 (0.0000E+00 G/S/M2, 0.1211E+05 M2) **STAR**						
AREA	FS015	630749	5237663	195	0.00	0.00	0.00	30.48	100.00	267.31	620.57 (0.0000E+00 G/S/M2, 0.1659E+06 M2) **STAR**						
TOTAL					-8.91	-70.70	-309.64										

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*** ISCST2 - VERSION 93109 ***    *** NMC - PM10 PSD - SITE SPECIFIC MODEL - 1992                          ***        01/07/05
                                  *** FURNACE 5 - CLASS II INCREMENT - 2004                                ***        15:25:36
C:\PROJECTS\NMCMAY05\MAY_16TH\PMISCENB\PMI9204N.OUT
**This Run Includes:   22 Source(s);      1 Source Group(s); and    677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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
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  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 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 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 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 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 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 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 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 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
  TOTAL                                    0.61    4.84   21.20
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*** ISCST3 - VERSION 02035 ***    *** NMC - PM10 PSD - REGULATORY MODEL - 1992 - SCENARIO B               ***        02/10/05
                                  *** FURNACE 5 - CLASS II INCREMENT - 2004                               ***        11:12:43
C:\PROJECTS\NMCMAY05\MAY_16TH\PMISCENB\PMI924RB.OUT
**This Run Includes:   136 Source(s);      2 Source Group(s); and     677 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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
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  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
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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
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	100.00	200.00 (0.0000E+00 G/S/M2, 0.2000E+05 M2)						
AREA	COREPLNT	631362	5238461	194	0.00	0.00	0.00	15.00	49.21	110.03	110.03 (0.0000E+00 G/S/M2, 0.1211E+05 M2)						
AREA	PELLSTOR	630749	5237663	194	0.00	0.00	0.00	30.48	100.00	267.31	620.57 (0.0000E+00 G/S/M2, 0.1659E+06 M2)						
AREA	FS003	631388	5238258	191	0.00	0.00	0.00	20.00	65.62	100.00	200.00 (0.0000E+00 G/S/M2, 0.2000E+05 M2) **STAR**						
AREA	FS007	630749	5237663	195	0.00	0.00	0.00	30.48	100.00	267.31	620.57 (0.0000E+00 G/S/M2, 0.1659E+06 M2) **STAR**						
AREA	FS012	631362	5238461	193	0.00	0.00	0.00	15.00	49.21	110.03	110.03 (0.0000E+00 G/S/M2, 0.1211E+05 M2) **STAR**						
AREA	FS015	630749	5237663	195	0.00	0.00	0.00	30.48	100.00	267.31	620.57 (0.0000E+00 G/S/M2, 0.1659E+06 M2) **STAR**						
TOTAL					-9.38	-74.47	-326.15										

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*** ISCST2 - VERSION 93109 ***    *** NMC - PM10 PSD - SITE SPECIFIC MODEL - 1992                          ***        02/18/05
                                  *** FURNACE 5 - CLASS II INCREMENT - INTERIM                             ***        19:19:37
C:\PROJECTS\NMCMAY05\MAY_16TH\PMISCENC\PMI92N5.OUT
**This Run Includes:   22 Source(s);      1 Source Group(s); and    529 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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
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  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 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 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 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 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 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 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 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 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
  TOTAL                                    0.61    4.84   21.20
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*** ISCST3 - VERSION 02035 ***    *** NMC - PM10 PSD - REGULATORY MODEL - 1992                          ***        02/18/05
                                  *** FURNACE 5 - CLASS II INCREMENT - INTERIM                          ***        19:19:54
C:\PROJECTS\NMCMAY05\MAY_16TH\PMISCENC\PMI92R5.OUT
**This Run Includes:   143 Source(s);      2 Source Group(s); and     529 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING 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
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  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
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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	100.00	200.00	(0.0000E+00 G/S/M2, 0.2000E+05 M2)					
AREA	COREPLNT	631362	5238461	194	0.00	0.00	0.00	15.00	49.21	110.03	110.03	(0.0000E+00 G/S/M2, 0.1211E+05 M2)					
AREA	PELLSTOR	630749	5237663	194	0.00	0.00	0.00	30.48	100.00	267.31	620.57	(0.0000E+00 G/S/M2, 0.1659E+06 M2)					
AREA	FS003	631388	5238258	191	0.00	0.00	0.00	20.00	65.62	100.00	200.00	(0.0000E+00 G/S/M2, 0.2000E+05 M2)	**STAR**				
AREA	FS007	630749	5237663	195	0.00	0.00	0.00	30.48	100.00	267.31	620.57	(0.0000E+00 G/S/M2, 0.1659E+06 M2)	**STAR**				
AREA	FS012	631362	5238461	193	0.00	0.00	0.00	15.00	49.21	110.03	110.03	(0.0000E+00 G/S/M2, 0.1211E+05 M2)	**STAR**				
AREA	FS015	630749	5237663	195	0.00	0.00	0.00	30.48	100.00	267.31	620.57	(0.0000E+00 G/S/M2, 0.1659E+06 M2)	**STAR**				
TOTAL					-8.17	-64.83	-283.92										

Appendix F: Insignificant Activities Required to be Listed

The following sources at the Permittee's facility qualify as insignificant activities under Minn. R. 7007.1300, subps. 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 (opacity and SO2)
Emergency Diesel Generator #2	Emergency use only; tested 30 min/mo	Minn. R. 7011.2300 (opacity and SO2)
Emergency Lighting Generator	Emergency use only; tested 15 min/mo	Minn. R. 7011.2300 (opacity and SO2)
Cummings Diesel Fire Pump	Emergency use only; tested 15 min/mo	Minn. R. 7011.2300 (opacity and SO2)
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)

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 18 months after permit issuance. 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. In any event, all multiclones on operating concentrator lines shall be replaced by fabric filters by December 31, 2006. (Continued in next row)	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
(Continued from previous row) 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.	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. (Continued in next row)	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. Stat. Section 116.07, subds. 4a and 9; Minn. R. 7009.0020; Minn. R. 7011.0150; Minn. R. 7007.0100; Minn. R. 7007.0800, subps. 2 and 4
(Continued from previous row) 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. (Continued in next row)	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. Stat. Section 116.07, subds. 4a and 9; Minn. R. 7009.0020; Minn. R. 7011.0150; Minn. R. 7007.0100; Minn. R. 7007.0800, subps. 2 and 4
(Continued from previous row) For changes not involving increases in emission rates or that do not require a permit amendment, this proposal must be submitted as soon as practicable, but no less than 60 days before beginning actual construction on the stack or associated emssion unit. For changes involving increases in emission rates that 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 involving increases in emission rates and that require a permit amendment other than a minor amendment, the proposal must be submitted with the permit application.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. Stat. Section 116.07, subds. 4a and 9; Minn. R. 7009.0020; Minn. R. 7011.0150; Minn. R. 7007.0100; Minn. R. 7007.0800, subps. 2 and 4

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 Ambeint 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 and 9; Minn. R. 7009.0020; Minn. R. 7011.0150; Minn. R. 7007.0100; Minn. R. 7007.0800, subps. 2 and 4
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
Comply with Subpart RRRRR - National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing: (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; (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 operation and maintenance requirement that applies to the source by October 30, 2003; (c) for a new affected source with an initial startup date after October 30, 2003, comply with each emission limitation, work practice standard, and operation and maintenance requirement that applies to the source upon initial startup. Also comply with applicable requirements of 40 CFR 63, General Provisions.	40 CFR 63.9580 to 63.9652; Tables to Subpart RRRRR of 40 CFR 63; 40 CFR 63, subp. A and Minn. R. 7011.7000
Comply with Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants: Industrial, Commercial, and Institutional Boilers and Process Heaters: (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. (b) for an existing affected source, comply with applicable requirements no later than, September 13, 2007; (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; (d) for a new affected source with an initial startup date after January 13, 2003, comply with requirements upon initial startup. Also comply with applicable requirements of 40 CFR 63, General Provisions.	40 CFR 63.7480 to 63.7585; Tables to Subpart DDDDD of 40 CFR 63; 40 CFR 63, subp. A and Minn. R. 7011.7000
Comply with the O & M Plan: Follow the actions and recordkeeping specified in the O & M plan. The plan may be amended by the Commissioners written approval.	Minn. R. 7007.0800 subp. 14 and Minn. R. 7007.0800 subp. 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.	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
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, subp. 4(D); subp. 14; subp. 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, subp. 2; Minn. R. 7007.0800, subp. 16(J)

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: a. fibers in the ambient air shall be below a medically significant level; 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; 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 d. such other standards which now or in the future may be applied to the Permittee's fiber emissions. 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. (Continued in next row)	Minn. R. 7007.0800, subp. 2
(Continued from previous row) 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. "Fibers," for the purpose of this permit, are defined as chrysotile and amphibole mineral particles with 3-to-1 or greater aspect ratios.	Minn. R. 7007.0800, subp. 2
The Permittee shall comply with the TSP Compliance Plan attached to this permit as Appendix D.	Minn. R. 7007.0800, subp. 4(D); subp. 14; subp. 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 intial 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, subp. 4(D); subp. 14; subp. 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, subp. 4(D); subp. 14; subp. 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, subp. 4(D); subp. 14; subp. 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, subp. 4(D); subp. 14; subp. 16(J)

Facility Name: Northshore Mining Co - Silver Bay

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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, subp. 4(D); subp. 14; subp. 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, subp. 4(D); subp. 16(J)
D. RECORD KEEPING REQUIREMENTS	hdr
Record keeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007. 0800, subp. 5(B)
Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
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 contractors 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

Facility Name: Northshore Mining Co - Silver Bay

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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 Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
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 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 end of each half-year following Permit Issuance. 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
Record Keeping: 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
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: E = U * S * 2 where: 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 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%.	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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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, supb. 2

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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 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 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 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. This limit applies individually to both EU 007 and EU 008.	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 SV007 and SV 008 once daily using a Daily Visible Emission Checklist.	Minn. R. 7007.0800, subp. 4; subp. 5; and subp. 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, subp. 4; subp. 5; and subp. 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. 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, subp. 4; subp. 5; and subp. 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, subp. 4; subp. 5; and subp. 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Intial 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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), and (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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. 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, subp. 4; subp. 5; and subp. 14

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 20 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, subp. 4; subp. 5; and subp. 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due before end of each calendar year following Permit Issuance 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: a) The Permittee has demonstrated three (3) consecutive years that the PM or PM10 emission limit has not been exceeded; and b) The performance test result shall not be greater than or equal to 90% of the limit. 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.	Title I Condition: 40 CFR Section 52.21(k), and (j) for EU 011 and EU 020 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. 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, subp. 4; subp. 5; and subp. 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. 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, subp. 4; subp. 5; and subp. 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. 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, subp. 4; subp. 5; and subp. 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. 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, subp. 4; subp. 5; and subp. 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. 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, subp. 4; subp. 5; and subp. 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. 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, subp. 4; subp. 5; and subp. 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. 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, subp. 4; subp. 5; and subp. 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. 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, subp. 4; subp. 5; and subp. 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. 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, subp. 4; subp. 5; and subp. 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, subp. 4; subp. 5; and subp. 14

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

C. PERFORMANCE TESTING REQUIREMENTS	hdr
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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 10 micron: less than or equal to 0.010 grains/dry standard cubic foot and also for Total Particulate Matter. Tthis 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. 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, subp. 4; subp. 5; and subp. 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, subp. 4; subp. 5; and subp. 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. 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, subp. 4; subp. 5; and subp. 14

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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, subp. 4; subp. 5; and subp. 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. This limit applies individually to each SV in this group except the bypass stacks.	Minn. R. 7011.0610, subp. 1.A
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, subp. 4; subp. 5; and subp. 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, subp. 4; subp. 5; and subp. 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 EU634. One NOx monitor shall be installed on each stack (SV266, SV267, and SV268).	Title I Condition: 40 CFR Section 52.21(j): BACT and Minn. R. 7007.3000; Minn. R. 7017.1006

Facility Name: Northshore Mining Co - Silver Bay

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Emissions Monitoring: The owner or operator shall install and operate an offgas flow monitoring system to measure offgas flow from EU634. One flow meter shall be installed on each stack (SV266, SV267, and SV268). (This is needed to determine the mass of emissions from the concentration measurements.)	Title I Condition: 40 CFR Section 52.21(j): BACT and 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 and 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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), and (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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. 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, subp. 4; subp. 5; and subp. 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, subp. 4; subp. 5; and subp. 14
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Initial Startup to measure PM and PM10 from SV 269.	Title I Condition: 40 CFR Section 52.21(k), and (j) for SV 269 BACT Limits; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test: due before 06/15/2006 to measure PM and PM10 emissions from one stack in this group other than SV 269.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1

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Permit Number: 07500003 - 003

Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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, EU 123 and EU 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 Particulate Matter.	40 CFR 60.382(a)(1); Minn. R. 7011.2700
Opacity: less than or equal to 7 percent opacity for SV 097.	40 CFR 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 60.384(a); 40 CFR 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 5.0 inches of water column and less than or equal to 10.0 inches of water column	40 CFR 60.384(a); 40 CFR 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. Within 180 days of issuance of PER-003, 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 60.384(a); 40 CFR 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, subp. 4; subp. 5; and subp. 14
D. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 1,800 days after 07/22/2004 and every five years thereafter to measure PM and PM10 emissions from all stacks in this group.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1

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Performance Test Pre-test Meeting: due 7 days before Initial Performance Test.	Minn. R. 7017.2030, subp. 4

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 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 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent.	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, subp. 4; subp. 5; and subp. 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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
Particulate Matter < 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 percent, or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent. 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, subp. 4; subp. 5; and subp. 14

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 60.382(b); Minn. R. 7011.2700

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 180 days after Initial Startup of the Monitor but no more than 90 days after the due date of the first excess emissions report required for the CEMS. 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, subp.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 40CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 180 days after Initial Startup of the Monitor but no more than 90 days after the due date of the first excess emissions report required for the CEMS. 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, subp.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 40CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 180 days after Initial Startup of the Monitor but no more than 90 days after the due date of the first excess emissions report required for the CEMS. 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, subp.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 40CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 180 days after the Initial Startup of the flow meter but no more than 90 days after the due date of the first excess emissions report required for the associated CEMS. 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 40CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 180 days after the Initial Startup of the flow meter but no more than 90 days after the due date of the first excess emissions report required for the associated CEMS. 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 40CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 180 days after the Initial Startup of the flow meter but no more than 90 days after the due date of the first excess emissions report required for the associated CEMS. 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 40CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2

TABLE B: SUBMITTALS

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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

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

Send any application for a permit or permit amendment to:

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

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

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

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

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

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

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

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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 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 multiclones 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 180 days after Permit Issuance (PER-003). 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
Operation and Maintenance Plan	due 30 days after Initial Startup of newly installed, upgraded or reactivated control equipment to update the previous O & M 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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

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 SO2 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 SO2 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
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

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

What to send	When to send	Portion of Facility Affected
Ambient Air Monitoring Report	due 45 days after end of each calendar quarter following Permit Issuance 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 following Permit Issuance. (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
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)	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
Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	MR006
Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	MR007
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31.	Total Facility

Facility Name: Northshore Mining Co - Silver Bay

Permit Number: 07500003 - 003

Compliance Certification	due 30 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner, 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
Emissions Inventory Report	due 91 days after end of each calendar year following Permit Issuance (April 1). To be submitted on a form approved by the Commissioner.	Total Facility

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 07500003-003

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:

Applicant/Address	Stationary Source/Address (SIC Code: 1011)
Northshore Mining Company 10 Outer Drive Silver Bay, MN 55614	10 Outer Drive Silver Bay (Lake County), MN 55614
Contact: Dennis Wagner Phone: (218) 226-6056	

1.2 Description of the Facility

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

The Permittee intends to reactivate process equipment that was contained in its Part 70 operating permit (Permit Action 001), but has been idle for more than twenty years. This project is subject to Prevention of Significant Deterioration (PSD) permitting and implementation of Best Available Control Technology (BACT) on reactivated equipment. The specific changes include:

- Authorize reactivation of two fine crushers along with their corresponding existing fabric filters;
- Authorize reactivation of nine concentrator sections and upgrading PM controls on all nine from multiclones to fabric filters as the sections are reactivated;
- Replace multiclones on all currently operating concentrator sections with new fabric filters, by no later than December 31, 2006;
- Authorize construction of a concentrate handling system consisting of conveyor belts and two concentrate storage silos**;**
- Authorize reactivation of pelletizing Furnace 5 along with existing wet electrostatic precipitators for pollution control, and upgrading the pollution control equipment on the Furnace 5 discharge from the rotoclone to a wet scrubber; and
- Render the iron nugget pilot plant inoperable.

1.4 Facility Emissions:

Table 1. Title I Emissions Increase Summary*

Pollutant	Potential Emissions Increase from the Modification (tpy)	PSD Significant Thresholds for Major Sources	PSD Review Required? (Yes or No)
PM	149	25	Yes
PM_{10}	149	15	Yes
NO_x	200	40	Yes
SO_2	56	40	Yes
CO	56	100	No
VOC	10	40	No
Lead	0.03	0.6	No

* These are the potential emissions associated with the modification of the stationary source that consists of reactivating Furnace 5 and associated emission units. Since emissions of a single pollutant are over the 100 tpy threshold, an Environmental Assessment Worksheet (EAW) is also required under Minnesota Rules. The Permittee is also modifying its NPDES/SDS water discharge permit. The EAW, and the air and water permits are being processed concurrently.

Table 2. Total Facility Potential to Emit Summary *(see also section 3.9)*

	PM tpy	PM_{10} tpy	SO_2 tpy	NO_x tpy	CO tpy	VOC tpy	Lead** tpy	All HAPs tpy
Total Facility Limited Potential Emissions*	1719	1644	9095	7097	729	72	0.20	134
Total Facility Actual Emissions (2004)	1084	982	2797	4091	381	24	0.19	HAPs not reported in emission inventory
Anticipated Post-Project Total Facility Actual Emissions	1142	1037	2818	4280	434	34	0.06	HAPs not reported in emission inventory

* This reflects the entire facility (stationary source), including the Furnace 5 project, as permitted in Permit Action 003. The potentials to emit (PTEs) listed in the TSD for the Title V permit were not the true PTEs reflective of control equipment and permit limits. They were a conservative estimation sufficient for regulatory applicability purposes.

** The actual emissions for lead are adjusted from those in the annual emissions inventory, which were based on a very conservative estimate. The emissions calculations contain further details. Most of the anticipated decrease in actual lead emissions is associated with rendering inoperable the iron nugget pilot plant.

Table 3. 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

Northshore Mining Company's (NSM's) proposed Furnace 5 Reactivation project is subject to federal (EPA) and state (MPCA) air quality requirements. The federal air quality regulations include the National Ambient Air Quality Standards (NAAQS), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and New Source Review (NSR). The state air quality regulations include the Minnesota Ambient Air Quality Standards (MAAQS) and the state standards of performance. The MPCA has been delegated the authority by the EPA to administer the federal NSPS, NESHAP and NSR regulations.

2.1 Emission Standards

Emission standards originate from three sources: the federal New Source Performance Standards (NSPS), the National Emission Standards for Hazardous Air Pollutants (NESHAP) and the State Standards of Performance for Minnesota. These are described in more detail in the following sections.

Federal New Source Performance Standards (NSPS)

The NSPS are established for specific industrial source categories and are updated periodically. There are currently 73 NSPS codified at 40 CFR pt. 60. One (40 CFR pt. 60, subpart LL "Standards of Performance for Metallic Mineral Processing plants") is relevant to NSM's Silver Bay facility.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

Section 112 of the Clean Air Act (CAA) of 1970 authorized the EPA to establish health-based NESHAP for an initial list of eight Hazardous Air Pollutants (HAPs). There are currently 22 NESHAPs codified at 40 CFR pt. 61 for these eight HAPs (asbestos, benzene, beryllium, coke oven emissions, inorganic arsenic, mercury, radionuclides and vinyl chloride). None of these NESHAP is relevant to the proposed Furnace 5 Reactivation project.

Section 112 of the Clean Air Act Amendments (CAAA) of 1990 authorized the EPA to establish NESHAPs for an additional 188 HAPs. The NESHAPs in 40 CFR pt. 63 were established to regulate specific categories of stationary sources that are major sources of one or more of these HAPs. A major source is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit (considering controls) 10 tons per year or more of any HAP or 25 tons per year or more of any combination of

HAPs. These NESHAPs impose Maximum Achievable Control Technology (MACT) on major sources of HAPs and are often referred to as MACT standards. There are currently 101 NESHAPs codified at 40 CFR pt. 63. Subpart RRRRR ("National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing") was promulgated in the Federal Register on 10/30/03. The existing Silver Bay facility will have to comply with this rule by October 30, 2006.

State Standards of Performance

Minnesota's air quality rules specify standards for various industrial source categories. These standards are, in essence, the state's versions of the federal NSPS and NESHAP and, in many cases, simply incorporate the federal rules by reference. However, the state rules also specify standards for control equipment efficiencies and visible emissions (for sources not covered by another standard of performance).

The facility is subject to the following state standards of performance:

• Minn. R. 7011.2700: Standards of Performance for New Metallic Mineral Processing Plants (which incorporates the federal NSPS by reference).

• Minn. R. 7011.0150: Preventing avoidable amounts of fugitive particulate matter emissions from becoming airborne.

• Minn. R. 7011.0510, subp. 2: Indirect heating standards of performance opacity limit (other emission limits less stringent than the Title I Condition emission limits).

• Minn. R. 7011.0710, subp. 1.B: Industrial process equipment rule opacity limit (other emission limits less stringent than the Title I Condition emission limits).

• Minn. R. 7011.0610, subp. 1.A: Direct heating standards of performance opacity limit (other emission limits less stringent than the Title I Condition emission limits).

2.2 New Source Review (NSR)

New Source Review (NSR) is required prior to construction of major new sources or major modifications to existing sources. If a source is located in an area that does not meet NAAQS for one or more of the criteria pollutants emitted (i.e., is in a non-attainment area) then non-attainment NSR applies. Otherwise, Prevention of Significant Deterioration (PSD) NSR applies. In the case of NSM's proposed Furnace 5 Reactivation project, the PSD regulations apply because the facility is located in an area that is in attainment status for all criteria pollutants emitted.

NSM's existing Silver Bay facility qualifies as a major source since it is a stationary source which emits, or has the potential to emit, 100 tons per year or more (for this source category) of any air pollutant subject to regulation under the Act. Generally, facilities that have been shutdown for more than two years should be treated as though they are permanently shutdown and that they should be treated as new PSD sources if reactivated (unless an adequately compelling demonstration is made otherwise). The proposed Furnace 5 Reactivation project is assumed to qualify as a major modification because it constitutes a physical change in a major stationary source that will result in a "significant net emissions increase" of one or more pollutants subject to regulation under the Act.

As shown in Table 1, above, the proposed Furnace 5 Reactivation project exceeds the significant thresholds for NO_X, SO_2, and PM and PM_{10} and is, therefore, subject to PSD review for these pollutants. PSD review involves the following analyses:

- Best Available Control Technology (BACT) analysis;
- Air Quality Analysis;
- Additional Impacts Analysis; and
- Class I Area Impact Analysis.

Best Available Control Technology (BACT) Analysis

A major modification subject to PSD review is required to ensure that BACT is used for each pollutant for which there is a significant net emissions increase. BACT is the maximum degree of emission reduction that can be achieved when determined on a case-by-case basis taking into account energy, environmental and economic impacts. BACT is selected using the five-step "Top-Down Process." Step 1 identifies all potential control technologies. In Step 2, any technically infeasible options are eliminated. Step 3 ranks the remaining technologies in order of decreasing control effectiveness. In Step 4, the remaining technologies are subject to (i) an energy impacts analysis, (ii) an economic impacts analysis and (iii) an environmental impacts analysis. Step 5 selects the top ranked technology remaining from Steps 3 and 4 as BACT.

The permit reflects the following as BACT for the reactivated equipment:

Table 4. BACT Summary

Emission Unit	**BACT**	**Pollutant(s) Controlled**
Furnace 5	Wet Electrostatic Precipitator	SO_2 and Particulate Matter
Furnace 5	No Controls	NO_x
Furnace 5 Discharge	Wet Scrubber	Particulate Matter
Concentrator Silos	Fabric Filter	Particulate Matter
Ore Fine Crushers	Fabric Filter	Particulate Matter

Key summaries and tables from the BACT analysis for NSM's proposed Furnace 5 Reactivation project (included in Volume I, Section 5 of its May 2, 2005, permit application submittal) are contained in Attachment 1 to this Technical Support Document.

Other Analyses

In addition to the BACT limits and related permit conditions, the permit contains modeling-based emission limits that were needed to show modeled compliance with ambient air quality standards and PSD increments. Summaries of major modeling results are in Attachment 2. The appendix of the permit contains detailed modeling information that is incorporated into the permit, and Table A of the permit has conditions related to future changes to these parameters. No additional requirements, stemming from the other PSD analyses, were needed. The major results of the other analyses (contained in Volume III of the May 2, 2005, air permit application package) are summarized in Section 3 of this TSD and in Attachment 3.

Table 5. Regulatory Overview of Units Affected by the Modification/Permit Amendment

FC, GP, EU, SV	Applicable Regulations	Comments:
FC	Title I Condition: 40 CFR § 52.21(r)(2)	Construction authorization for reactivated units subject to BACT expires after 18 months.
FC	Title I Condition: 40 CFR § 52.21(k)	Several items with conditions regarding the timing of start up and shut down of units and related scenarios to reflect how facility was modeled, and related notifications.
FC	Title I Condition: 40 CFR § 52.21(k)	Several items concerning modeling, and notifications and demonstrations needed if changes to modeling parameters (included in Appendix E of permit).
FC	40 CFR pt. 63 subp. RRRRR	Taconite NESHAP. Summarized generically at FC level since compliance date is in future. Any needed detailed conditions will be included in the facility's Part 70 operating permit at a later date, which is usual practice. Although undergoing PSD review, the reactivated units are not subject to "new source MACT" in the Taconite NESHAP. (In response to litigation, EPA is re-evaluating the standard and may revise the rule.)
FC	40 CFR pt. 63 subp. DDDDD	Industrial boiler NESHAP. Similarly listed at FC level. Permittee has the submitted initial notification for the process boilers.
FC	Minn. R. 7007.0800	Several items related to pollution control equipment Operation and Maintenance (O&M) plan and updates, largely carried forward from Part 70 permit.
FC	Minn. R. 7007.0800 and Minn. R. 7011.0150	Several items related to fugitive emissions, largely carried forward from Part 70 permit. Concurrent with permit drafting, Fugitive Control Plan has been revised to reflect improved work practices for unpaved roads and to remove items related to iron nugget pilot plant (rendered inoperable), as well as to make miscellaneous edits.
FC	Various	Remainder of FC level items carried forward from Part 70 permit. The condition requiring the quarterly ambient monitoring report was revised to require the Permittee to analyze instances when ambient PM_{10} measurements are greater than 145 micrograms/cubic meter (5 ug/m3 below PM_{10} 24-hr standard) and describe any corrective action(s) taken. Removed requirement for Permittee to submit to MPCA the MDH ambient fiber analysis results since MDH routinely also submits these to MPCA.
GP 001	Title I Condition: 40 CFR § 52.21(k) and others	**Power Boilers:** Modeling based limits; stack testing frequency based on recent testing required in Part 70 permit; other items carried forward from Part 70 permit.
GP 002	Title I Condition: 40 CFR § 52.21(k) and others	**Process Boilers:** Currently idle. Modeling based limits. Notification upon re-start after any appropriate permit actions, if needed. Other items carried forward from Part 70 permit.

GP 003	Title I Condition: 40 CFR § 52.21(k) and others	**Crude Ore Rail Car Unloading:** Modeling based limits; stack testing frequency and monitoring parameter range based on recent testing required in Part 70 permit; other items carried forward from Part 70 permit.
GP 004	Title I Condition: 40 CFR § 52.21(k) and others	**Crushed Ore Storage:** Modeling based limits; other items carried forward from Part 70 permit.
GP 005	Title I Condition: 40 CFR § 52.21(k), and (j) for EU 011 and EU 020 BACT limits; and others	**Tertiary Crushing:** Modeling based limits (and also BACT in the case of the reactivated EU 011 and EU 020); stack testing frequency and monitoring parameter range based on recent testing required in Part 70 permit; other items carried forward from Part 70 permit.
GP 006	Title I Condition: 40 CFR § 52.21(k) and others	**Crushed Ore Conveying:** Modeling based limits; other items carried forward from Part 70 permit.
GP 007	Title I Condition: 40 CFR § 52.21(k) and others	**Dry Cobbing & Conveying:** Modeling based limits; other items carried forward from Part 70 permit.
GP 008	Title I Condition: 40 CFR § 52.21(k) and others	**Coarse Tails Handling:** Modeling based limits; other items carried forward from Part 70 permit.
GP 009	Title I Condition: 40 CFR § 52.21(k) and others	**Concentrator Bins – W or E; with Cartridge Collectors:** Modeling based limits; other items carried forward from Part 70 permit.
GP 010	Title I Condition: 40 CFR § 52.21(k), and (j) for EU 033-041 BACT limits; and others	**Concentrator Bins:** Modeling based limits (with additional "suffix" text describing limits relevant to the phase-in period for upgrade from multiclones to fabric filters); other items carried forward from Part 70 permit.
GP 012	Title I Condition: 40 CFR § 52.21(k) and others	**Additive Handling & Storage – West (by SV locations):** Modeling based limits; stack testing frequency and monitoring parameter range based on recent testing required in Part 70 permit; other items carried forward from Part 70 permit. (Numbering skip due to consolidating GP 010 and GP 011 used for concentrator bins in Part 70 permit.)
GP 013	Title I Condition: 40 CFR § 52.21(k) and others	**Additive Handling & Storage – East (by SV locations):** Modeling based limits; stack testing frequency and monitoring parameter range based on recent testing required in Part 70 permit; other items carried forward from Part 70 permit.
GP 014	Title I Condition: 40 CFR § 52.21(k), and (j) for EU 634 BACT limits; and others	**Pellet Indurating Furnaces:** Modeling based limits for particulates and SO_2 (and also BACT for these pollutants, as well as NO_X, in the case of the reactivated Furnace 5, EU 634); initial performance test required for Furnace 5; particulate stack testing frequency and monitoring parameter range based on recent testing required in Part 70 permit; other items carried forward from Part 70 permit; wet ESP language revised to require at least one electric field to be on.

GP 015	Title I Condition: 40 CFR § 52.21(k), and (j) for SV 269 BACT limits; and others	**Furnace Discharge of Finished Pellets:** Modeling based limits (and also BACT, in the case of the reactivated Furnace 5, SV 269); initial performance test required for Furnace 5; liquid flow rate monitoring required for Furnace 5 wet scrubber (CE 274); other items carried forward from Part 70 permit; the scheduled date for the first stack test under the Part 70 permit was changed from late 2005 to mid-2006 to better match company logistics.
GP 016	Title I Condition: 40 CFR § 52.21(k) and others	**Pellet Screening (indoor – product & hearth layer):** Modeling based limits; stack testing frequency and monitoring parameter range based on recent testing required in Part 70 permit; the alternative fan motor amperage draw monitoring was approved for this group per a November 30, 2004, letter from EPA to Northshore Mining, and establishment of the range and an updated O&M plan are required within 180 days of PER-003 issuance; other items carried forward from Part 70 permit.
GP 019	40 CFR pt. 60, subp. LL	**Concentrate Loadout Operations:** New group created containing these wet transfer operations subject to NSPS Subp. LL. (Numbering skip due to removal of GP 017 and GP 018 associated with iron nugget pilot plant.)
EU 005	Title I Condition: 40 CFR § 52.21(k) and others	**Coal Transfer & Coal Bunkers:** Modeling based limits; other items carried forward from Part 70 permit.
EU 043	Title I Condition: 40 CFR § 52.21(k) and others	**West Storage Bin #12 (fluxstone):** Modeling based limits; other items carried forward from Part 70 permit.
EU 636	40 CFR pt. 60, subp. LL	**60A to 60B transfer and 5x12 screen:** NSPS Subp. LL opacity requirement carried forward from Part 70 permit.

Note, where found, the language, "This is a state-only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act" refers to permit requirements that are mandated by state law rather than by the federal Clean Air Act. The language is to clarify the distinction between permit conditions that are required by federal law and those that are required by state law. State law requirements are not enforceable by EPA or by citizens under the federal Clean Air Act, but are fully enforceable by the MPCA and citizens under provisions of state law.

3. Technical Information

3.1 Additional Explanation of Some Permit Conditions

In the several instances where various initial tests, actions, and submittals, required by the Part 70 permit issued 2/22/2004, have occurred, those conditions have been removed from the permit. Where certain actions, such as performance tests, with deadlines pegged to Part 70 permit issuance date, have yet to occur, the dates have been specified in this permit action PER-003, to avoid confusion. Initial performance tests required by this action (PER-003) are pegged to the issuance date of this major permit amendment. In addition, a number of miscellaneous edits have been made to correct such things as typographical errors, inconsistencies in syntax, within the permit or compared to standard conventions, etc.

Various monitoring parameter ranges established as a result of performance tests required by the Part 70 permit (often handled through parameter reopening amendments) have been folded into this major amendment (PER-003).

For GP 002, clarifying language was added to the notification for resuming process boiler operation reminding the Permittee to determine if a permit action is needed and, if so, to obtain any necessary prior authorization.

GP 010 and GP 011 in the Part 70 permit were lumped together, since there no longer is a practical or other reason to separate them. The corrective actions and reporting required in GP 016, pellet screening, and EU 636 uncontrolled conveyor transfers in furnace building (as labeled in the Part 70 permit) have been completed and, therefore, removed from the permit. Appendix C, thus, has also been removed.

In GP 016, pellet screening, the 10 percent opacity limit for any process fugitive emissions (found in the Part 70 permit) was removed, since no such process fugitive emissions exist at the facility that would correspond to this group. The 7 percent opacity limit, however, for SV 097 remains.

The concentrate loadout group, GP 019, which includes existing conveyor EU 637, was added. The initial NSPS requirements for EU 637 have been completed. The Furnace 5 project involves installation of approximately three additional conveyors, and two concentrate storage silos for railcar loading. These new units are NSPS affected facilities (40 CFR pt. 60, subp. LL), and will require the initial notifications and opacity tests. Since the concentrate has a moisture content of approximately 10 percent, minimal emissions are anticipated. Experience with EU 637 indicates that daily visible emissions checks are not necessary. (Note that, due to lack of a stack/vent associated with the emission units in this group, the PM limit specified in 40 CFR § 60.382(a)(1) is not given.)

The applicability of Compliance Assurance Monitoring (CAM), under 40 CFR pt. 73, was evaluated. Since no units involved with this major amendment (PER-003) meet the definition of "large," a CAM plan was not required at this time. CAM plans will be required for relevant units at the time of reissuance of the Part 70 permit.

Regarding the three modeled scenarios, the facility description in the MPCA's air quality Delta computer system reflects the facility after any phase-in period for upgrading concentrator multiclones to fabric filters is complete, as do the PTEs. (Note that "section" is synonymous with "line" in the case of describing the concentrators.) Text is included at the FC level and GP 010 to address the phase-in until December 31, 2006, and thereafter. Fiber emissions have also been calculated based on stack tests (see Attachment 4), and are lower under each scenario compared to the present facility.

It bears mentioning that there was some discussion on the appropriate number of significant figures to use for the emission limits in the permit. Where a limit is based on a general standard of performance for an industry (NSPS, NESHAP, state rule), the limit is expressed to one significant figure to match the rule, as appropriate. Where a limit is based on modeling or the result of a BACT analysis, it is shown with two significant figures, with one exception. The difference can potentially be important in the context of performance tests and modeling, due to rounding. The one exception is the 0.01 grains per dry standard cubic foot PM/PM_{10} limit applicable to some furnace stacks in GP 014. This was the way the limit appeared in the Part 70 permit, which stemmed from an earlier permit action. The 0.01 gr/dscf limit was determined to be BACT for Furnace 5 as well. The Permittee explained the rationale to MPCA staff's satisfaction in a memo e-mailed on 5/13/2005. Though the 0.01 limit is to one significant figure in the permit, which theoretically could allow for an emission rate of up 0.0149 to pass a performance test, the modeling (and corresponding PTE calculations) was done reflecting this higher number.

3.2 Calculations of Potential to Emit, Emissions Increase Analysis, and Increment Analysis

Attachment 5 contains a summary of the emission calculations for the facility and of the increases involved with the modification. Attachment 6 contains key pages from the MS Excel workbook that contains several tabs with spreadsheets detailing the emission calculations. The calculations are further explained in Volume II of the revised and re-certified application package submitted on May 2, 2005, which also contains the spreadsheet printouts.

The emissions decrease/increase basis underlying the modeling done for the PSD increment analysis is detailed in, "PSD Increment Source Inventory for the Northshore Mining Company's Silver Bay, Minnesota Facility," dated 12/20/2004 (revised 2/18/2005). This is included as Appendix B of Section 1 in "Volume III – Air Quality Impacts Analyses" of the May 2, 2005, application package submittal. Key summary pages are included in Attachment 7.

3.3 Summary of Major Analyses

The EAW for the Furnace 5 reactivation project, co-noticed with this permit amendment, contains thorough summaries of the major PSD-related analyses, outlined above, as well as the air toxics risk evaluation that was conducted. Major results tables (such as dispersion modeling) from the supporting documents are attached to this TSD also. Also attached is the Risk Summary Form that documents the rationale for the risk management decision (Attachment 8).

3.4 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.

As discussed above, where clarifying information was added when helpful, the periodic monitoring regimen established with the Part 70 permit (issued in February 2004) was largely carried forward with this permit action (PER-003). The TSD for the Part 70 permit contains further details. Where appropriate, certain updates, adjustments or changes have been made, and are explained above.

3.5 Insignificant Activities

The Silver Bay plant has several operations which are classified as insignificant activities. These are listed in Appendix F to the permit. These should have been included in the Part 70 total facility operating permit issued February 24, 2004. No periodic monitoring is indicated for any of the items, as they are all quite small, and it is considered unlikely that any relevant state performance standard would be violated.

3.6 Permit Organization

The overall structure of the Part 70 total facility operating permit was retained in this permit action (PER-003). In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements in the computerized permitting database system. Some of the groups may have been done differently had this permit started from scratch. For instance, a number of the groups, for example GP 014 (indurating furnaces), have different emission limits listed for different stacks or units within the group. This does not strictly adhere to the guidance, but on balance it was thought to be most clear this way. A major restructuring of the permit likely

would have resulted in more confusion. The permit appendix had been placed in the cover pages MS Word document for the Part 70 permit and it was left there. The addition of Appendix E, in particular, has substantially increased the length of the appended material. Including such an appendix is standard practice when there are modeling based limits. Typically the modeling information is summarized in a text table. With this permit action, however, because of the relatively more complicated situation including more than one scenario, two models spliced together, etc., it was determined that copying-and-pasting the modeling parameters from the modeling itself was the best way to handle this.

3.7 Comments Received

The public comment period for all three draft documents (EAW, NPDES/SDS water permit, and air emissions permit) began on May 23, 2005, and ended on June 22, 2005. A public information meeting was held on June 7, 2005, in Silver Bay, Minnesota. Approximately 55 citizens attended this meeting, in addition to MPCA and NSM staff. During the 30-day comment period, the MPCA received 75 comment letters. An additional eight comment letters were received after the end of the comment period. Five commenters requested an Environmental Impact Statement (EIS).

Significant comments were received in the following areas: (1) whether the Project would result in additional mercury impacts on fish in the region; (2) whether there should be additional evaluations of the potential for cumulative impacts to water and air from the Project and other mining projects proposed for northeastern Minnesota; (3) whether the Project would increase the likelihood of nuisance dust problems; (4) whether the Project would create significant additional acid deposition; (5) whether the Project would create significant visibility and haze impacts to high quality natural resource areas located in northeastern Minnesota; (6) whether the BACT emission limits were determined correctly; and (7) whether there is a potential for health impacts from the emissions of fibers to the air and water related to the Project. These comments, along with MPCA's responses, are detailed in the Responses to Comments document and summarized in the Findings of Fact.

3.8 Revisions Made to Draft Permit

Two small changes were made to the draft permit amendment after the public comment period.

(1) In response to a comment from the Permittee, the requirement for opacity testing for GP 015 was removed. This opacity testing was not included in the Part 70 operating permit issued in February 2004 because opacity measurements are not possible where stacks have a visible steam plume due to inherently high moisture levels. However, the opacity testing was inadvertently included in the draft permit amendment.

(2) MPCA staff also discovered that a permit condition at the Total Facility level of the February 2004 Part 70 permit was inadvertently left out of the draft permit amendment. The condition indicates that an EIS is required if the Permittee intends to construct a commercial-scale iron nugget production facility. This condition is located at the bottom of page A-4 of the February 2004 Part 70 permit and can now be found on page A-2 of the revised permit amendment.

One commenter suggested additional lower-temperature SCR NO_x control technologies be evaluated for BACT on Furnace 5. These analyses have been done and are included among the attachments to this technical support document. The determination that no additional control is BACT for NO_x from Furnace 5 remained unchanged. Unlike U.S. Steel-Minntac, a NO_x Continuous Emission Monitoring System (CEMS) was not required for this permit as BACT because the age of the furnace and different design. This does not preclude, however, a different CEMS decision being made for this furnace or others under other regulations, such as Best Available Retrofit Technology (BART) under the federal regional haze program.

(The following section also discusses the implementation of a CEMS for NO_X at Furnace 5.)

3.9 Revision to Include Emissions from Mile Post 7

While this permit action (Permit Action 003) does not change the potential-to-emit (PTE) values of PM and PM_{10} for the tailings basin beach (FS 018) that originated in Permit Action 001, 64.8 ton/yr and 32.4 ton/yr, respectively, should have been added to 1719 ton/yr and 1644 ton/yr in Table 2 shown above.

In "Facility Description" part of the DELTA database, the PTE values of FS 018 have been entered for this permit in columns of "Unrestricted Potential (tons/yr)" and "Permit Allowable (tons/yr)." Except for two emission units (EU 070 and EU 071), both columns have the same value for PM and PM_{10}, because only "maximum controlled emissions" were calculated by Permittee. The resultant PTE values, as totaled in DELTA that gives three significant digits for a total value, are as follows:

PTE	PM	PM_{10}	SO_2	NO_x	CO	VOC	Lead	All HAPs
Ton/yr	1780	1670	9090	7100	729	71.7	0.202	134

These values represent the PTEs from the entire stationary source.

3.10 PSD Appeal Period and EPA 45-Day Review

On December 2, 2005, commenters were notified that the MPCA had decided to issue this PSD permit and that they could appeal the permit to the Environmental Appeals Board of the EPA. No appeal was made during the appeal period.

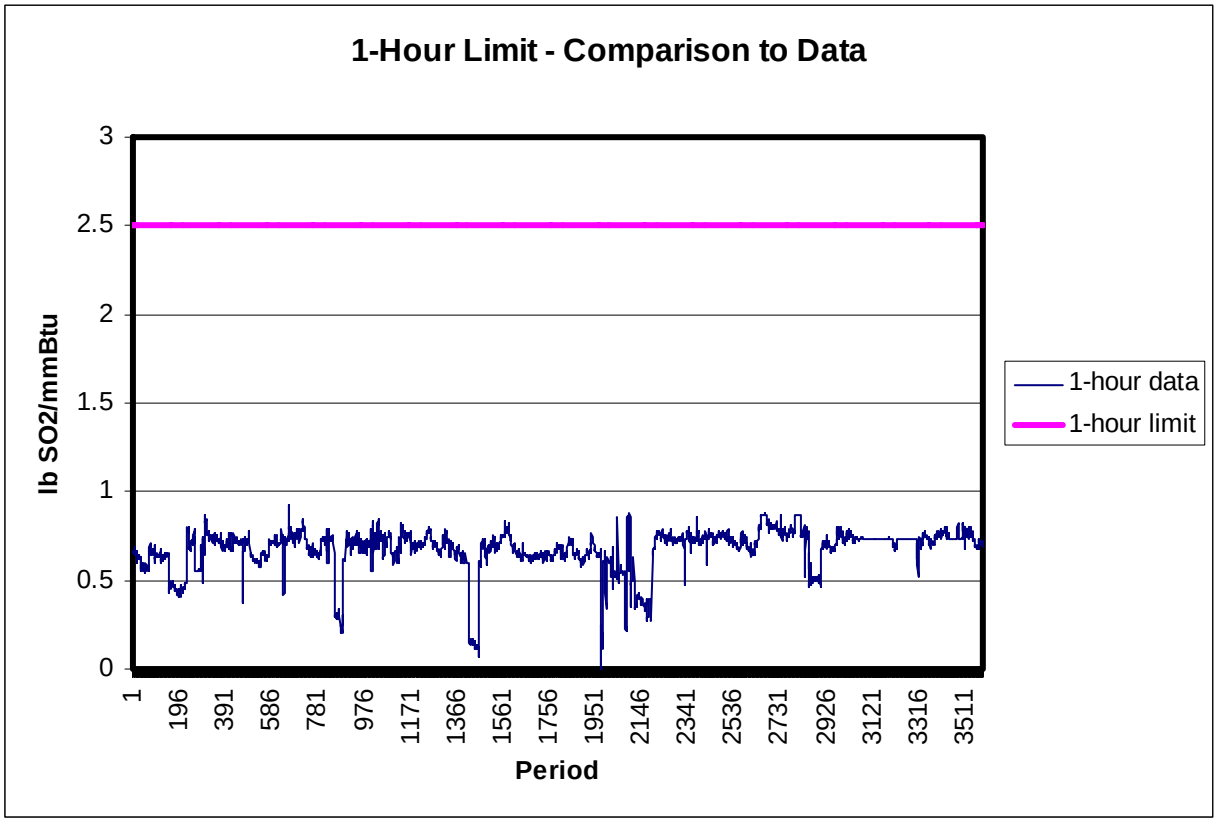
EPA's opportunity to review the operating permit provisions began on December 8, 2005, the day that EPA received the permit. EPA made three official comments:

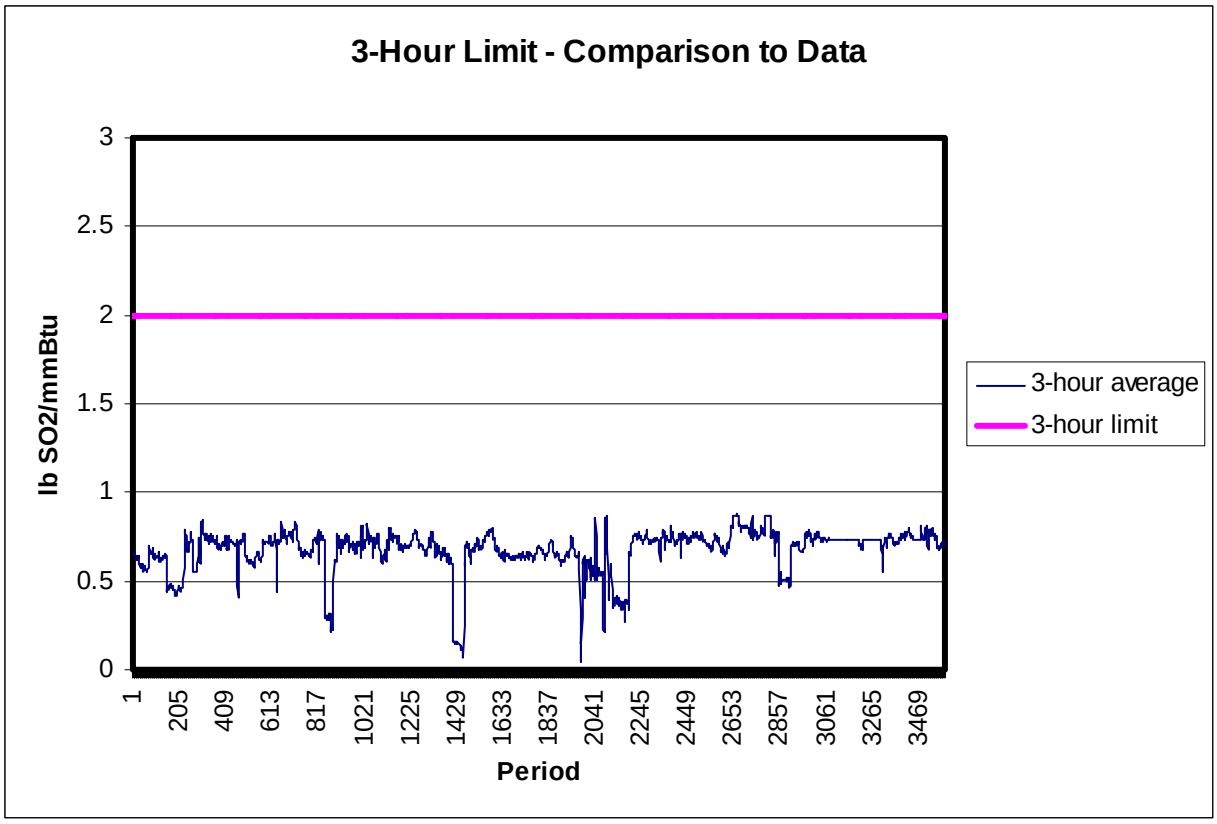
1) p. A-6, Power Boilers - "The Permitte shall restrict the sulfur content of coal so that SO_2 emission from each power boiler does not exceed 2.5 lb SO_2/million BTU on 1-hour average, 2.0 lb SO_2/million BTU on 3-hour average, 1.8 lb SO_2/million BTU on 24-hour average...." - this requirement needs associated continuous or parametric monitoring to demonstrate compliance on a short-term basis. It is our view that this condition is practically unenforceable.

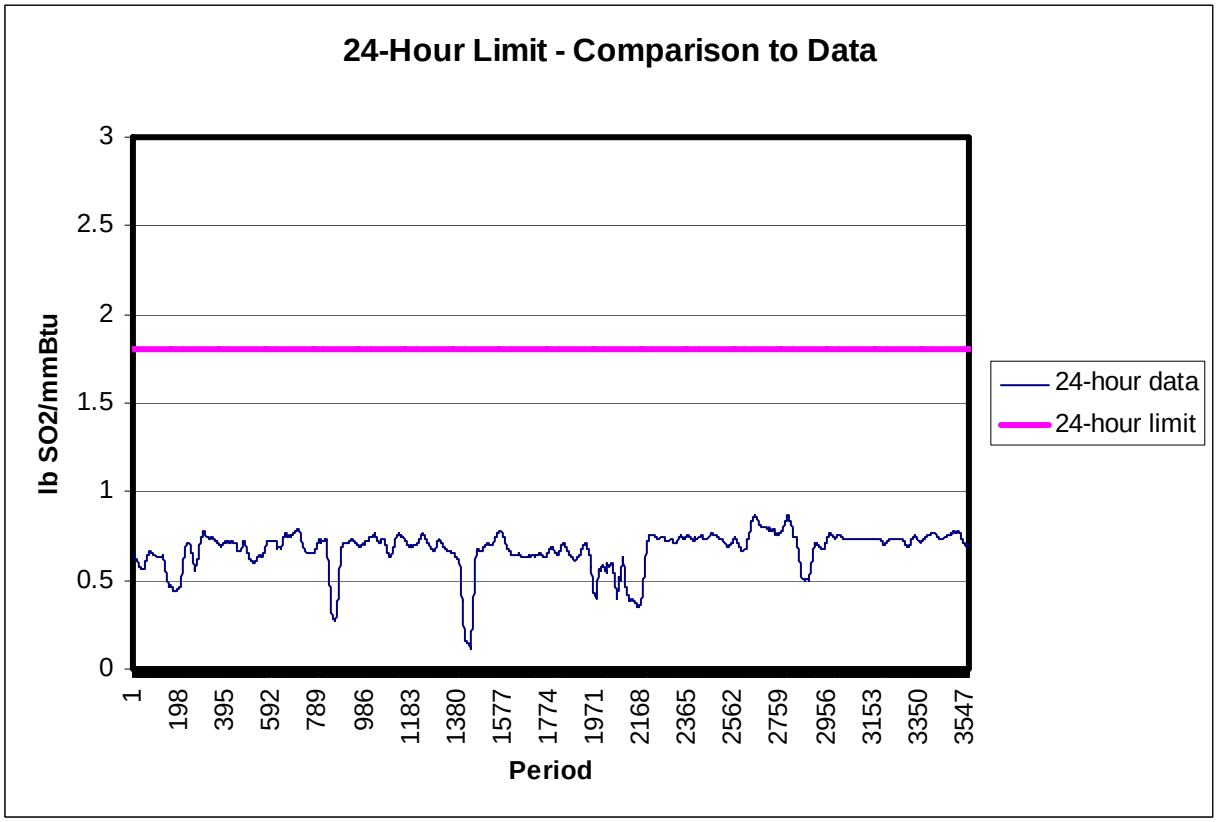
2) p. A-23, Pellet Indurating Furnaces - "Sulfur Dioxide: less than or equal to 0.22lbs/million Btu heat input for EU 100 and EU 110 individually; less than or equal to 0.074 lbs/million Btu heat input for EU 104 and EU 114 individually; ...." - the permit contains no associated monitoring or testing (after the initial performance test) to determine compliance with this condition. It is our opinion that periodic monitoring/testing is appropriate for this requirement.

3.) p. A-23, Nitrogen Oxides - "less than or equal to 40 parts per million and less than or equal to 46 lbs/hour for EU individually " - the permit contains no associated monitoring or testing (after the initial performance test) to determine compliance with this condition. It is our opinion that periodic monitoring/testing is appropriate for this requirement.

In response to EPA's first comment, the MPCA provided data to EPA illustrating the MPCA's opinion that the current monitoring provisions are sufficient to ensure compliance with the 1-hour, 3-hour, and 24-hour SO_2 emissions limits. These data are summarized in the following tables.


1-Hour Limit - Comparison to Data
lb SO2/mmBtu
3
2.5
2
1.5
1
0.5
0
1
196
391
586
781
976
1171
1366
1561
1756
1951
2146
2341
2536
2731
2926
3121
3316
3511
Period
1-hour data
1-hour limit


3-Hour Limit - Comparison to Data
lb SO2/mmBtu
3
2.5
2
1.5
1
0.5
0
1
205
409
613
817
1021
1225
1429
1633
1837
2041
2245
2449
2653
2857
3061
3265
3469
Period
3-hour average
3-hour limit


24-Hour Limit - Comparison to Data
lb SO2/mmBtu
3
2.5
2
1.5
1
0.5
0
1
198
395
592
789
986
1183
1380
1577
1774
1971
2168
2365
2562
2759
2956
3153
3350
3547
Period
24-hour data
24-hour limit

As these charts illustrate, the use of the current coal in the power boilers is protective of the short-term SO_2 limits in the permit.

(The data for the charts above were collected in 1992 and 1993 at Power Boiler No. 2 for use in developing a site-specific model for predicting ambient air quality around Northshore. Gaps in the data are not identified in the charts; the sequences have been tied together.)

[Also, note that the power boilers are likely to be subject to the Clean Air Interstate Rule. Under this rule, Northshore will be required to install CEMS for SO_2 by January 1, 2009. (The rule also requires the installation of continuous emission monitoring systems for NO_X at affected sources by January 1, 2008.)]

The sulfur dioxide limits referred to in EPA's second comment are threatened only when the furnaces burn fuel oil. Historically, Northshore has burned fuel oil only infrequently. This is due, in part, to a lack of tanks to store the fuel oil. When fuel oil has been burned, Northshore brought in tanker trucks with the fuel oil to supply the furnaces. In light of this, the MPCA has addressed EPA's concern by adding a condition to the permit that requires SO_2 stack testing within 60 days after Northshore has operated one or more furnaces on fuel oil for 500 hours.

Finally, in response to EPA's third comment, the MPCA will require the installation and operation of a CEMS for NO_X within 90 days of starting operation of this unit. This level of monitoring has been determined to be appropriate since the unit has a BACT limit for NO_X. Other facilities with similar levels of NO_X emissions are typically required to use CEMS to monitor compliance with BACT limits.

To assess the feasibility of installing and operating a CEMS at an indurating furnace, the MPCA contacted a sales representative for monitoring systems as well as a contact from a taconite company. Based on these conversations, the MPCA is comfortable with requiring NO_X and flow monitors for Northshore's Furnace 5.

In addition to the condition requiring the monitors, the MPCA included requirements for the monitors (to measure NO_X concentration and flow rate).

At the time it submitted the comments noted above, EPA also added the following comment:

> "In regard to the BACT analysis for Indurating Furnace #5, we recognize that the public comment period for the NSR portion of this permit has ended. However, due to staff availability during that time, comments on the BACT analysis were not submitted. Nevertheless, for the record, we encourage the installation of progressive control technology in all industries, including the taconite industry. Based on the information provided to us, it is our opinion that the technological infeasibility of NO_X controls has not been proven for this emissions unit."

The MPCA agrees with EPA that the comment on the BACT analysis was not timely. However, the MPCA stands by its determination of "no control" as BACT for NO_X at Furnace 5.

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. 07500003-003, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Jeff Peltola (permit writer/engineer), Bob Beresford (enforcement), Dennis Becker (modeling), Mary Dymond (risk analysis), and Dick Cordes (PSD increment analysis); Hongming Jiang and Mike Mondloch (peer reviewers)

Attachments:

1. BACT Analysis Summaries
2. Modeling Summaries
3. Summaries of PSD Additional Impacts Analyses
4. Fiber Emissions Calculations
5. Total Facility Potential Emissions and Modification Emissions Increase Summaries
6. Main Emission Calculation Spreadsheets
7. PSD Increment Source Inventory Summaries
8. Risk Summary Form
9. Table 5-2 from May 2, 2005 Air Permit Application Package Showing Chemical-by-Chemical Risk Calculation Results
10. Cost Analyses for Lower Temperature SCR NO_x Controls

(NOTE: The May 2, 2005, air permit application volumes and risk analysis report have addenda with errata and change pages.)