

AIR EMISSION PERMIT NO. 13700061- 004
Major Amendment

IS ISSUED TO

Hibbing Taconite Co

HIBBING TACONITE CO
4950 County Highway 5 North
Hibbing, St. Louis County, MN 55746

The emission units, control equipment and emission stacks at the stationary source authorized in this permit amendment are as described in the Permit Applications Table.

This permit amendment supersedes Air Emission Permit No. 13700061-003 and authorizes the Permittee to operate and construct the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

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

Permit Type: Federal; Pt 70/Major for NSR

Operating Permit Issue Date: January 14, 2010

Authorization to Construct and Operate (40 CFR § 52.21) Issuance Date: June 2, 2010

Major Amendment Issue Date: June 25, 2010

Expiration Date: January 14, 2015
Title I Conditions do not expire.

Christopher J. Nelson, P.E.
Strategic Projects Sector Manager
Industrial Division

for Paul Eger
Commissioner
Minnesota Pollution Control Agency

Permit Applications Table

Permit Type	Application Date	Permit Action
Total Facility Operating Permit -Reissuance	August 31, 2006	003
Major Amendment	March 10, 2010	004

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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:

Hibbing Taconite Company (HTC) is the owner and operator of a taconite ore mine and beneficiation facility located in Hibbing, Minnesota. The facility is located in St. Louis County, which is designated as attainment or unclassified for federal criteria pollutants. The existing facility is classified as a major emission source with respect to the federal Prevention of Significant Deterioration program. The facility is also a major source of hazardous air pollutants (HAPs) because potential emissions of HAPs exceed the major source thresholds of 10 tons per year (tpy) of any individual HAP and 25 tpy of total HAPs.

The facility was constructed in two phases. Phase I construction began in 1974, with operation beginning in 1976. Phase I consists of one crusher, six autogenous mill lines, two stages of magnetic separation – rougher and finisher, two Dravo-Lurgi straight grate pellet indurating furnaces, and associated processing and material handling equipment.

Phase II construction began in 1976, with operations beginning in 1979. Phase II consists of one crusher, three autogenous grinding mill lines, two stages of magnetic separation, one Dravo-Lurgi straight grate indurating furnace, and associated processing and material handling equipment.

The three pellet indurating furnaces are functionally equivalent, each one producing, on average, the same production. Hibbing Taconite has the capability to produce up to 9 million dry long tons of pellets, which equates to approximately 10.1 million dry short tons (1 long ton = 2,240 lbs).

To produce 8.0 million dry long tons of pellets, approximately 32 million wet long tons of taconite ore must be processed. Stripping (including the overburden, the rock and the low-grade taconite that cannot be economically processed) must be removed prior to hauling the taconite ore. During 1994-1998, Hibbing Taconite averaged nearly 50 million long tons (56 million short tons) of all material (taconite and stripping) annually.

All three furnaces at the facility use natural gas as the primary fuel. Also, all grades of fuel oil and used oil may be used. Replacement/modification of the lower burners on the three indurating furnaces was authorized under the most recent reissuance dated January 14, 2010 as well as the installation of a large diesel generator and several portable heaters.

AMENDMENT DESCRIPTION:

This permit action authorizes the construction and operation of an in-pit crushing and clobbering operation comprising of an additional 44 fugitive emission sources. This modification will upgrade the low-grade pit material by increasing its overall weight recovery in the mine before it is delivered to the existing crusher. Limits on throughput and operating months will be taken to reduce emissions to below PSD significance thresholds. The facility will be employing water sprayers and the Fugitive Dust Plan to control emissions resulting from this modification.

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-1

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

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

Subject Item:**Total Facility**

What to do	Why to do it
A. OPERATIONAL REQUIREMENTS	hdr
The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.	40 CFR pt. 50; Minn. Stat. Section 116.07, subps. 4a & 9; Minn. R. 7007.0100, subps. 7A, 7L & 7M; Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080
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.	40 CFR 63.9591; Minn. R. 7011.0150
Comply with Fugitive Emissions Control Plan: The Permittee shall follow the actions and record keeping specified in the Fugitive Emissions control plan. The plan may be amended by the Permittee with the Commissioner's approval. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors as requested by the Commissioner.	Minn. Stat. Section 116.07, subp. 4a; Minn. R. 7007.0100; Minn. R. 7007.0800, subp. 2; Minn. R. 7011.0150; Minn. R. 7009.0020; 40 CFR 63.9591
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance (O & M) plan for all air pollution control equipment. At a minimum, the O&M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subps. 14 and 16(J)
Operation and Maintenance Plan (continued): Update the O & M Plan as necessary to include: 1) a description of the monitoring device; 2) test results which demonstrate compliance; 3) appropriate operating parameters demonstrating compliance (these are specified under "Pollution Control Equipment Limits" in this permit at Group Level); 4) procedures for demonstrating initial and continuous compliance with the corresponding limits.	Minn. R. 7007.0800, subps. 14 and 16(J) (continued)
Comply with the Operation and Maintenance Plan: Follow the actions and recordkeeping specified in the O & M Plan.	40 CFR 63.9600; Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, 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 enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A. (This requirement is also repeated in this permit for GP 001 through GP 005.)	Minn. R. 7007.0800, subps. 2 and 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
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

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Changing operating parameters: Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3, or a representative unit within the same test group as specified by the applicable requirement. The limit is final upon issuance of a permit amendment incorporating the change.	40 CFR Section 63.9622(f); Minn. R. 7011.8030; Minn. R. 7017.2025, subp. 3
Operating Conditions for Performance Testing: A) Performance Testing for the Primary Crusher and Concentrator Units (EU001 - EU013 and the associated control equipment and stacks) shall be conducted at a production rate to be determined from the projected Annual Production Rate for the year that the test is performed. Performance tests shall be conducted at a minimum of 90% of the estimated capacity of each unit based on the variables used in the Annual Production Rate projection. The test plan shall quantify the variables and show the calculation method used to determine the proposed operating rate for each test. B) Performance Testing for the Straight Grate Furnaces and associated emission units (EU018 - EU025 and the associated control equipment and stacks) shall be conducted at a minimum of 90% of 430 short tons per hour for each furnace. C) all other required performance tests shall be conducted at a minimum of 90% of the rated capacity of the emission unit.	Minn. R. 7017.2025
Operating Conditions for Performance Testing (continued): D) If a performance test is conducted at less than the applicable minimum as defined in (A) - (C) the Permittee shall be given the opportunity to retest within 90 days of the subject test before process limits can be applied as specified in Minn. R. 7017.2025, subp. 3.	Minn. R. 7017.2025
Performance Test Notification (written): due 30 days before Performance Test.	Minn. R. 7017.2020, subp. 1
Performance Test Plan: due 30 days before Performance Test.	Minn. R. 7017.2020, subps. 2 and 3
Performance Test Pre-test Meeting: due 7 days before Performance Test.	Minn. R. 7017.2020, subp. 4
Performance Test Report: due 45 days after Performance Test.	Minn. R. 7017.2020, subps. 1 and 2
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.	Minn. R. 7017.2020, subp. 2
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)
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)
Visible Emissions Training: The Permittee shall 1) maintain a plant employee on site that has been certified in EPA Method 9 within the past three years. or 2) employ a similarly certified contractor. This person will train other plant employees to perform daily visible emissions observations as detailed in the O&M Plan and Fugitive Control Plan. If the Permittee installs Agency approved broken bag detectors on the control equipment required to have visible emissions observations done, the Permittee may use the broken bag detectors in place of the visible emissions observations and the Permittee is not required to implement 1) and 2) above.	Minn. R. 7007.0800, subps. 4(D), 14, and 16(J)
D. RECORDKEEPING REQUIREMENTS	hdr

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007. 1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007. 0800, subp. 5(B)
Recordkeeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. These records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the office of the stationary source for all other years. The records may be maintained in either electronic or paper format.	Minn. R. 7007.1200, subp. 4
Contractors: The Permittee shall retain records on site of all contractors that are allowed on site and have equipment that include crushers, screens, and/or conveyors. The Permittee shall also retain records on site of all contractors whose operations require an Air Emissions Permit from the MPCA. The records shall include the contractor's company name, the MPCA Air Emissions Permit number, a short description of activities undertaken by the contractor, an estimate of the air emissions from the activity or the amount of material handled, and the dates the contractor was on site. These records shall be updated at least monthly.	Minn. R. 7007.0800, subp. 2
Contractors: The Permittee shall evaluate if the activities of any contractor require NSR permitting prior to the contractor performing such activities. If a contractor has their own permit, but it is determined that the contractor is under the common control of the Permittee then the contractor's permit does not shield the Permittee or the contractor from the permit regulations or enforcement of NSR and/or Part 70.	Minn. R. 7007.0800, subp. 2
E. REPORTING REQUIREMENTS	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
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. The Permittee shall submit this on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
Deviations. An excursion from an established daily average operating parameter will be reported as a daily deviation. If the daily average operating parameter value for an emission unit or group of similar emission units does not meet the corresponding established operating limit, the Permittee shall report this as a deviation and follow corrective actions to restore the equipment and practices to proper operation to meet applicable permit conditions. This does not apply to compliance with the Taconite MACT. Taconite MACT compliance shall be determined according to the applicable requirements and regulations in this permit and in 40 CFR Pt. 63, Subp. RRRRR.	40 CFR Section 64.9: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7011.0610; Minn. R. 7007.0800, subp. 6
F. DETERMINING IF A PROJECT/MODIFICATION IS SUBJECT TO NEW SOURCE REVIEW	hdr
These requirements apply where there is a reasonable possibility (as defined in 40 CFR Section 52.21(r)(6)(vi)) that a proposed project, analyzed using the actual-to-projected-actual (ATPA) test (either by itself or as part of the hybrid test described in Section 52.21(a)(2)(iv)(f)) and found to not be part of a major modification, may result in a significant emissions increase. If the ATPA test is not used for a particular project, or if there is not a reasonable possibility that the proposed project could result in a significant emissions increase, then these requirements do not apply to that project. Even though a particular modification is not subject to New Source Review, or where there isn't a reasonable possibility that a proposed project could result in a significant emissions increase, a permit amendment, recordkeeping, or notification may still be required under Minn. R. 7007.1150 - 7007.1500.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
Preconstruction Documentation -- Before beginning actual construction on a project, the Permittee shall document the following: 1. Project description 2. Identification of any emission unit (EU) whose emissions of an NSR pollutant could be affected 3. Pre-change potential emissions of any affected existing EU, and the projected post-change potential emissions of any affected existing or new EU. 4. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded due to increases not associated with the modification and that the EU could have accommodated during the baseline period, an explanation of why the amounts were excluded, and any creditable contemporaneous increases and decreases that were considered in the determination. The Permittee shall maintain records of this documentation.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.1200, subp. 4; Minn. R. 7007.0800, subps. 4 & 5
The Permittee shall monitor the actual emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using the ATPA test, and the potential emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using potential emissions in the hybrid test. The Permittee shall calculate and maintain a record of the sum of the actual and potential (if the hybrid test was used in the analysis) emissions of the regulated pollutant, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit of any unit associated with the project.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5
The Permittee must submit a report to the Agency if the annual summed (actual, plus potential if used in hybrid test) emissions differ from the preconstruction projection and exceed the baseline actual emissions by a significant amount as listed at 40 CFR Section 52.21(b)(23). Such report shall be submitted to the Agency within 60 days after the end of the year in which the exceedances occur. The report shall contain: a. The name and ID number of the facility, and the name and telephone number of the facility contact person b. The annual emissions (actual, plus potential if any part of the project was analyzed using the hybrid test) for each pollutant for which the preconstruction projection and significant emissions increase are exceeded. c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5
G. PERMIT APPENDICES	hdr

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Permit Appendices: This permit contains Appendices B (Visible Emissions Checklist) as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the appendices.	Minn. R. 7007.0800, subp. 2
H. MISCELLANEOUS	hdr
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 - 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 - 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 001 Crushing**Associated Items:** CE 001 Venturi Scrubber

CE 002 Venturi Scrubber

CE 003 Venturi Scrubber

CE 004 Venturi Scrubber

EU 001 Phase I Apron Feeder

EU 002 Phase II Apron Feeder

EU 003 Phase I Primary Ore Conveyor - Tail

EU 004 Phase II Primary Ore Conveyor - Tail

SV 001

SV 002

SV 003

What to do	Why to do it
POLLUTANT LIMITS	hdr
Front-half Particulate Matter: less than or equal to 0.008 grains/dry standard cubic foot using 6-hour Average and on the basis of a flow-weighted mean concentration. For each ore crushing and handling source, the Permittee shall determine the flow-weighted mean concentration of particulate matter emissions from all emission units in each affected source following the procedures in 40 CFR Section 63.9621(b).	40 CFR Section 63.9590(a); 40 CFR Section 63.9621(b); 40 CFR Section 63.9623(a)(1); Minn. R. 7011.8030
The pollutant limits apply to each individual emission unit, stack/vent, and piece of control equipment listed under the Associated Items.	Minn. R. 7007.0800, subp. 2
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.	Minn. R. 7011.0715, subp. 1(A)
Total Particulate Matter: greater than or equal to 85 percent control efficiency for equipment which is located not less than one-fourth mile from any residence or public roadway, and the operation of the entire emission facility does not cause a violation of the ambient air quality standards, shall be considered in compliance with the requirements of Minn. R. 7011.0715, subp. 1(A). This is an alternative demonstration of compliance to the Total Particulate Limit above.	Minn. R. 7011.0715, subp. 3
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Wet Scrubber Monitoring: 1) maintain the daily average pressure drop and daily average scrubber water flow rate at or above the minimum levels established during the initial or subsequent performance tests; 2) operate and maintain each Continuous Parameter Monitoring System (CPMS) according to the O & M plan and record all information needed to document conformance with these requirements; 3) collect and reduce monitoring data for pressure drop and scrubber water flow rate according to the O & M plan and record all information needed to document conformance with these requirements.	40 CFR 63.9580 to 63.9652; 40 CFR Section 64.7(e) and 40 CFR Section 64.9(a); CAM and Minn. R. 7017.0200; Minn. R. 7007.0800, subp. 4(D), subp. 14, and subp. 16(J)
Inspect quarterly, or as required by the O&M plan and manufacturer specifications, all components that are not subject to wear or plugging, including structural components, housings, ducts, and hoods. Maintain a written record of each inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Inspect monthly, or as required by the O&M plan and manufacturer specifications, all components that are subject to wear or plugging. Maintain a written record of each inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

<p>Alternate Operating Scenario: The Permittee is allowed to change the location of the pickup points of CE003 and CE004 in an effort to improve the collection of particulate from EU003 and EU004.</p> <p>If an effective location for the pickup points can not be found, CE003 and CE004 may be removed from service without a permit as long as the unrestricted net emission change due to this action is not over the significant emission rates for PSD. Otherwise the removal of CE003 and CE004 from operation would require a major amendment.</p>	Minn. R. 7007.0800, subp. 11
PERFORMANCE TESTING REQUIREMENTS	hdr
<p>Performance testing frequency requirements for each emission unit are listed below and at the control equipment (CE) level for the associated scrubber.</p> <p>Additional performance testing requirements are found in GP008 and GP009.</p>	Minn. R. 7017.2020, subp. 1
<p>Performance Test: due before end of each 60 months starting 06/22/2004 on one stack in this group in rotation to measure Total Particulate Matter and Opacity emissions to demonstrate compliance with the IPER emission limitations and to revise the parametric operating limits associated with IPER compliance. The performance test due 6/22/09 was granted a 365 day extension or shall be conducted within 120 days after Resuming Operation, whichever occurs first. Future performance tests are due based on the initial performance test date.</p> <p>Parametric operating limits are found at the CE level.</p>	40 CFR Section 64.3: CAM and Minn. R. 7017.0200; Minn. R. 7017.2020, subp. 1; Minn. R. 7017.2025, subp. 3

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 002 Concentrating

Associated Items:

- CE 005 Wet Scrubber-High Efficiency
- CE 006 Wet Scrubber-High Efficiency
- CE 007 Wet Scrubber-High Efficiency
- CE 008 Wet Scrubber-High Efficiency
- CE 009 Wet Scrubber-High Efficiency
- CE 010 Wet Scrubber-High Efficiency
- CE 011 Wet Scrubber-High Efficiency
- CE 012 Wet Scrubber-High Efficiency
- CE 013 Wet Scrubber-High Efficiency
- EU 005 Line No 1 Mill Feed Conveyor
- EU 006 Line No 2 Mill Feed Conveyor
- EU 007 Line No 3 Mill Feed Conveyor
- EU 008 Line No 4 Mill Feed Conveyor
- EU 009 Line No 5 Mill Feed Conveyor
- EU 010 Line No 6 Mill Feed Conveyor
- EU 011 Line No 7 Mill Feed Conveyor
- EU 012 Line No 8 Mill Feed Conveyor
- EU 013 Line No 9 Mill Feed Conveyor
- SV 004
- SV 005
- SV 006
- SV 007
- SV 008
- SV 009
- SV 010
- SV 011
- SV 012

What to do	Why to do it
POLLUTANT LIMITS	hdr
Front-half Particulate Matter: less than or equal to 0.008 grains/dry standard cubic foot using 6-hour Average and on the basis of a flow-weighted mean concentration. For each ore crushing and handling source, the Permittee shall determine the flow-weighted mean concentration of particulate matter emissions from all emission units in each affected source following the procedures in 40 CFR Section 63.9621(b).	40 CFR Section 63.9590(a);40 CFR Section 63.9621(b);40 CFR Section 63.9623(a)(1); Minn. R. 7011.8030
The pollutant limits apply to each individual emission unit, stack/vent, and piece of control equipment listed under the Associated Items.	Minn. R. 7007.0800, subp. 2
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.	Minn. R. 7011.0715, subp. 1(A)
Total Particulate Matter: greater than or equal to 85 percent control efficiency for equipment which is located not less than one-fourth mile from any residence or public roadway, and the operation of the entire emission facility does not cause a violation of the ambient air quality standards, shall be considered in compliance with the requirements of Minn. R. 7011.0715, subp. 1(A). This is an alternative demonstration of compliance to the Total Particulate Limit above.	Minn. R. 7011.0715, subp. 3

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Wet Scrubber Monitoring: 1) maintain the daily average pressure drop and daily average scrubber water flow rate at or above the minimum levels established during the initial or subsequent performance tests; 2) operate and maintain each CPMS according to the O & M plan and record all information needed to document conformance with these requirements; 3) collect and reduce monitoring data for pressure drop and scrubber water flow rate according to the O & M plan and record all information needed to document conformance with these requirements.	40 CFR 63.9580 to 63.9652; 40 CFR Section 64.7(e) and 40 CFR Section 64.9(a): CAM and Minn. R. 7017.0200; Minn. R. 7007.0800, subp. 4(D), subp. 14, and subp. 16(J)
Inspect quarterly, or as required by the O&M plan and manufacturer specifications, all components that are not subject to wear or plugging, including structural components, housings, ducts, and hoods. Maintain a written record of each inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Inspect monthly, or as required by the O&M plan and manufacturer specifications, all components that are subject to wear or plugging. Maintain a written record of each inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
PERFORMANCE TESTING REQUIREMENTS	hdr
Performance testing frequency requirements for each emission unit are listed below and at the control equipment (CE) level for the associated scrubber.	Minn. R. 7017.2020, subp. 1
Additional performance testing requirements are found in GP008 and GP009.	
Performance Test: due before end of each 60 months starting 06/23/2004 on two stacks from this group in rotation to measure Total Particulate Matter and Opacity emissions to demonstrate compliance with the IPER emission limitations and to revise the parametric operating limits associated with IPER compliance. The performance test due 6/23/09 was granted a 365 day extension or shall be conducted within 120 days after Resuming Operation, whichever occurs first. Future performance tests are due based on the initial performance test date.	40 CFR Section 64.3: CAM and Minn. R. 7017.0200; Minn. R. 7017.2020, subp. 1; Minn. R. 7017.2025, subp. 3
Parametric operating limits are found at the CE level.	

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 003 Furnaces Nos. 1-3

Associated Items:

- CE 022 Venturi Scrubber
- CE 023 Venturi Scrubber
- CE 024 Venturi Scrubber
- CE 025 Venturi Scrubber
- CE 026 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- CE 027 Venturi Scrubber
- CE 028 Venturi Scrubber
- CE 029 Venturi Scrubber
- CE 030 Venturi Scrubber
- CE 031 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- CE 032 Venturi Scrubber
- CE 033 Venturi Scrubber
- CE 034 Venturi Scrubber
- CE 035 Venturi Scrubber
- CE 036 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- EU 020 Pellet Indurating Furnace Line No 1
- EU 021 Pellet Indurating Furnace Line No 2
- EU 022 Pellet Indurating Furnace Line No 3
- SV 021
- SV 022
- SV 023
- SV 024
- SV 025
- SV 026
- SV 027
- SV 028
- SV 029
- SV 030
- SV 031
- SV 032

What to do	Why to do it
FUEL CONSUMPTION	hdr
<p>Fuel Usage: less than or equal to 3810000 million Btu/year using 12-month Rolling Sum to be calculated by the 15th day of each month for the previous 12-month period for the three indurating furnaces together unless the 12-month rolling sum for fuel consumption exceeds 3,600,000 million Btu.</p> <p>In that case, the 365-day rolling sum fuel usage will be determined daily until the 365-day rolling sum falls below 3,400,000 million Btu.</p>	Title I Condition: To avoid a major modification under 40 CFR 52.21 & Minn. R. 7007.3000
POLLUTANT LIMITS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS
A-11

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Front-half Particulate Matter: less than or equal to 0.01 grains/dry standard cubic foot using 6-hour Average and on the basis of a flow-weighted mean concentration. For each indurating furnace source, the Permittee shall determine the flow-weighted mean concentration of particulate matter emissions from all emission units in each affected source following the procedures in 40 CFR Section 63.9621(c).	40 CFR Section 63.9590(a); 40 CFR Section 63.9621(c); 40 CFR Section 63.9623(a)(2); Minn. R. 7011.8030
The following requirements apply to each individual emission unit, stack/vent, and piece of control equipment listed under the Associated Items.	Minn. R. 7007.0800, subp. 2
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.	Minn. R. 7011.0610, subp. 1(A)(1)
Total Particulate Matter: greater than or equal to 85 percent control efficiency for equipment which is located not less than one-fourth mile from any residence or public roadway, and the operation of the entire emission facility does not cause a violation of the ambient air quality standards, shall be considered in compliance with the requirements of Minn. R. 7011.0715, subp. 1(A). This is an alternative demonstration of compliance to the Total Particulate Limit above.	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity	Minn. R. 7011.0610, subp. 1(A)(2)
Sulfur Dioxide: less than or equal to 4 lbs/million Btu heat input if a solid fossil fuel is burned or 2 pounds per million Btu heat input if a liquid fossil fuel is burned	Minn. R. 7011.0610, subp. 2
Sulfur Content of Fuel: less than or equal to 0.10 percent by weight when burning any grade of fuel oil	Title I Condition: To avoid a major modification under 40 CFR 52.21 & Minn. R. 7007.3000
Sulfur Content of Fuel: less than or equal to the applicable limit above, based on fuel type, minus 0.75 lb SO ₂ /MMBtu which accounts for the contribution of SO ₂ from the pellets.	Minn. R. 7007.0800, subp. 4 & 5
Fuel Limits: The Permittee shall combust only natural gas, all grades of fuel oil, and used oil in these emission units. Other materials may be combusted in these emission units for a short period of time during a trial burn as approved by an amendment to this permit.	Minn. R. 7007.0800, subp. 2
Fuel Recordkeeping: the Permittee shall record the amount of liquid fuels burned each day in each furnace. The amount of natural gas consumed in each furnace shall be recorded by the 15th day of the month for the previous month. The Permittee shall obtain a fuel supplier certification of the sulfur content and heat value of the liquid fuels. Alternatively the Permittee may sample the liquid fuels from the tanks with each new shipment, but not more than once per calendar week if multiple deliveries are made. The Permittee shall analyze the sample according to the current ASTM methods. While burning used oil the Permittee shall follow all hazardous waste rules including, but not limited to, Minn. R. 7045.0885.	Minn. R. 7007.0800, subp. 4(B)
RECORDKEEPING	hdr
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of fuel oil, certifying that the sulfur content does not exceed 0.10% by weight.	Minn. R. 7007.0800, subp. 4 & 5
The Permittee shall retain these certifications for five years.	
Fuel Oil Consumption: On a daily basis, the Permittee shall record the gallons of fuel oil consumed by the indurating furnaces in GP003 (EU020, EU021, and EU022). (This also applies on days when no fuel oil is consumed.)	Minn. R. 7007.0800, subp. 4 & 5
The Permittee shall retain these records for five years.	
Natural Gas Consumption: On a daily basis, the Permittee shall record the cubic feet of natural gas consumed by the indurating furnaces in GP003 (EU020, EU021, and EU022). (This also applies on days when no natural gas is consumed.)	Minn. R. 7007.0800, subp. 4 & 5
The Permittee shall retain these records for five years.	
Energy (Btu) Consumption: On a daily basis, the Permittee shall record the energy content of the fuels consumed in the indurating furnaces in GP003 (EU020, EU021, EU022). (This also applies on days when no fuel is consumed.)	Minn. R. 7007.0800, subp. 4 & 5
The Permittee shall assume the energy content of Natural Gas is 1020 Btu/standard cubic foot. The Permittee shall assume the energy content of Fuel Oil is 150000 Btu/gallon.	
The Permittee shall retain these records for five years.	
POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Inspect quarterly, or as required by the O&M plan and manufacturer specifications, all components that are not subject to wear or plugging, including structural components, housings, ducts, and hoods. Maintain a written record of each inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Inspect monthly, or as required by the O&M plan and manufacturer specifications, all components that are subject to wear or plugging. Maintain a written record of each inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Scrubbers	hdr
Wet Scrubber Monitoring: 1) maintain the daily average pressure drop and daily average scrubber water flow rate at or above the minimum levels established during the initial or subsequent performance tests; 2) operate and maintain each CPMS according to the O & M plan and record all information needed to document conformance with these requirements; 3) collect and reduce monitoring data for pressure drop and scrubber water flow rate according to the O & M plan and record all information needed to document conformance with these requirements.	40 CFR 63.9580 to 63.9652; 40 CFR Section 64.7(e) and 40 CFR Section 64.9(a); CAM and Minn. R. 7017.0200; Minn. R. 7007.0800, subp. 4(D), subp. 14, and subp. 16(J)
Multiclones	hdr
Multiclone Pressure Drop Monitoring: 1) maintain the daily average pressure drop at or above the minimum levels established during the initial or subsequent performance tests; 2) operate and maintain each CPMS according to the O & M plan and record all information needed to document conformance with these requirements; 3) collect and reduce monitoring data for pressure drop according to the O & M plan and record all information needed to document conformance with these requirements.	40 CFR 63.9580 to 63.9652; 40 CFR 64; Minn. R. 7007.0800, subp. 4(D), subp. 14, and subp. 16(J)
PERFORMANCE TESTING REQUIREMENTS	hdr
Performance testing frequency requirements for each emission unit are listed below and at the control equipment (CE) level for the associated scrubber.	Minn. R. 7017.2020, subp. 1
Additional performance testing requirements are found in GP008 and GP009.	
Performance Test: due before end of each 60 months starting 06/23/2004 on all stacks associated with one EU in this group in rotation to measure Total Particulate Matter and Opacity emissions to demonstrate compliance with the Direct Heating Fossil-Fuel-Burning Equipment emission limitations and to revise the parametric operating limits associated with Direct Heating Rule compliance. The performance test due 6/23/09 on EU021 was granted a 365 day extension or shall be conducted within 120 days after Resuming Operation, whichever occurs first. Future performance tests are due based on the initial performance test date.	40 CFR Section 64.3; CAM and Minn. R. 7017.0200; Minn. R. 7017.2020, subp. 1; Minn. R. 7017.2025, subp. 3
Parametric operating limits are found at the CE level.	
Performance Test: due 120 days after Startup of EU020 (Pellet Indurating Furnace Line No. 1) following replacement or modification of the lower burners. The Permittee shall conduct a performance test for NOx simultaneously on all four stacks associated with EU020. During the NOx performance test, the Permittee shall monitor and record the input parameters associated with the Predictive Emission Monitoring System for Nitrogen Oxides and include the data in the performance test report. This testing requirement is to confirm the NOx emission factor used in the netting analysis.	Title I Condition: To avoid a major modification under 40 CFR 52.21 & Minn. R. 7007.3000
Performance Test: due 120 days after Startup of EU021 (Pellet Indurating Furnace Line No. 2) following replacement or modification of the lower burners. The Permittee shall conduct a performance test for NOx simultaneously on all four stacks associated with EU021. During the NOx performance test, the Permittee shall monitor and record the input parameters associated with the Predictive Emission Monitoring System for Nitrogen Oxides and include the data in the performance test report. This testing requirement is to confirm the NOx emission factor used in the netting analysis.	Title I Condition: To avoid a major modification under 40 CFR 52.21 & Minn. R. 7007.3000
Performance Test: due 120 days after Startup of EU022 (Pellet Indurating Furnace Line No. 3) following replacement or modification of the lower burners. The Permittee shall conduct a performance test for NOx simultaneously on all four stacks associated with EU022. During the NOx performance test, the Permittee shall monitor and record the input parameters associated with the Predictive Emission Monitoring System for Nitrogen Oxides and include the data in the performance test report. This testing requirement is to confirm the NOx emission factor used in the netting analysis.	Title I Condition: To avoid a major modification under 40 CFR 52.21 & Minn. R. 7007.3000

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 004 Pelletizing - Scrubbers

Associated Items:

- CE 018 Wet Scrubber-High Efficiency
- CE 019 Wet Scrubber-High Efficiency
- CE 020 Wet Scrubber-High Efficiency
- CE 021 Wet Scrubber-High Efficiency
- CE 037 Wet Scrubber-High Efficiency
- CE 038 Wet Scrubber-High Efficiency
- CE 039 Wet Scrubber-High Efficiency
- CE 040 Wet Scrubber-High Efficiency
- CE 041 Wet Scrubber-High Efficiency
- EU 018 Phase I Hearth Layer Bin/Layer Feed
- EU 019 Phase II Hearth Layer Bin/Layer Feed
- EU 023 Pellet Machine Discharge Line No 1
- EU 024 Pellet Machine Discharge Line No 2
- EU 025 Pellet Machine Discharge Line No 3
- EU 026 Pellet Hearth Layer Screening
- EU 027 Pellet Transfer House
- SV 017
- SV 018
- SV 019
- SV 020
- SV 033
- SV 034
- SV 035
- SV 036
- SV 037

What to do	Why to do it
The following requirements apply to each individual emission unit, stack/vent, and piece of control equipment listed under the Associated Items.	Minn. R. 7007.0800, subp. 2
POLLUTANT LIMITS	hdr
Front-half Particulate Matter: less than or equal to 0.008 grains/dry standard cubic foot using 6-hour Average and on the basis of a flow-weighted mean concentration. For each finished pellet handling source, the Permittee shall determine the flow-weighted mean concentration of particulate matter emissions from all emission units in each affected source following the procedures in 40 CFR Section 63.9621(b).	40 CFR Section 63.9590(a); 40 CFR Section 63.9621(b); 40 CFR Section 63.9623(a)(3); Minn. R. 7011.8030
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.	Minn. R. 7011.0715, subp. 1(A)
Total Particulate Matter: greater than or equal to 85 percent control efficiency for equipment which is located not less than one-fourth mile from any residence or public roadway, and the operation of the entire emission facility does not cause a violation of the ambient air quality standards, shall be considered in compliance with the requirements of Minn. R. 7011.0715, subp. 1(A). This is an alternative demonstration of compliance to the Total Particulate Limit above.	Minn. R. 7011.0715, subp. 3
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS
A-14

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Wet Scrubber Monitoring: 1) maintain the daily average pressure drop and daily average scrubber water flow rate at or above the minimum levels established during the initial and subsequent performance tests; 2) operate and maintain each CPMS according to the O & M plan and record all information needed to document conformance with these requirements; 3) collect and reduce monitoring data for pressure drop and scrubber water flow rate according to the O & M plan and record all information needed to document conformance with these requirements.	40 CFR 63.9580 to 63.9652; 40 CFR Section 64.7(e) and 40 CFR Section 64.9(a); CAM and Minn. R. 7017.0200; Minn. R. 7007.0800, subp. 4(D), subp. 14, and subp. 16(J)
Inspect quarterly, or as required by the O&M plan and manufacturer specifications, all components that are not subject to wear or plugging, including structural components, housings, ducts, and hoods. Maintain a written record of each inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Inspect monthly, or as required by the O&M plan and manufacturer specifications, all components that are subject to wear or plugging. Maintain a written record of each inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Alternate Operating Scenario: The Permittee is allowed to change the location of the pickup points of CE 020 in an effort to improve the collection of particulate from EU 018. If an effective location for the pickup points can not be found, CE020 may be removed from service without a permit as long as the unrestricted net emission change due to this action is not over the significant emission rates for PSD. Otherwise the removal of CE020 from operation would require a major amendment.	Minn. R. 7007.0800, subp. 11
PERFORMANCE TESTING REQUIREMENTS	hdr
Performance testing frequency requirements for each emission unit are listed below and at the control equipment (CE) level for the associated scrubber. Additional performance testing requirements are found in GP008 and GP009.	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 06/24/2004 in rotation (SV017, SV019) to measure Total Particulate Matter and Opacity emissions to demonstrate compliance with the IPER emission limitations and to revise the parametric operating limits associated with IPER compliance. The performance test due 6/24/09 was granted a 365 day extension or shall be conducted within 120 days after Resuming Operation, whichever occurs first. Future performance tests are due based on the initial performance test date. Parametric operating limits are found at the CE level.	40 CFR Section 64.3: CAM and Minn. R. 7017.0200; Minn. R. 7017.2020, subp. 1; Minn. R. 7017.2025, subp. 3
Performance Test: due before end of each 60 months starting 06/24/2004 in rotation (SV018, SV020) to measure Total Particulate Matter and Opacity emissions to demonstrate compliance with the IPER emission limitations and to revise the parametric operating limits associated with IPER compliance. The performance test due 6/24/09 was granted a 365 day extension or shall be conducted within 120 days after Resuming Operation, whichever occurs first. Future performance tests are due based on the initial performance test date. Parametric operating limits are found at the CE level.	40 CFR Section 64.3: CAM and Minn. R. 7017.0200; Minn. R. 7017.2020, subp. 1; Minn. R. 7017.2025, subp. 3
Performance Test: due before end of each 60 months starting 06/24/2004 in rotation (SV033, SV034, SV035) to measure Total Particulate Matter and Opacity emissions to demonstrate compliance with the IPER emission limitations and to revise the parametric operating limits associated with IPER compliance. The performance test due 6/24/09 was granted a 365 day extension or shall be conducted within 120 days after Resuming Operation, whichever occurs first. Future performance tests are due based on the initial performance test date. Parametric operating limits are found at the CE level.	40 CFR Section 64.3: CAM and Minn. R. 7017.0200; Minn. R. 7017.2020, subp. 1; Minn. R. 7017.2025, subp. 3
Performance Test: due before end of each 60 months starting 06/24/2004 on SV036 to measure Total Particulate Matter and Opacity emissions to demonstrate compliance with the IPER emission limitations and to revise the parametric operating limits associated with IPER compliance. The performance test due 6/24/09 was granted a 365 day extension or shall be conducted within 120 days after Resuming Operation, whichever occurs first. Future performance tests are due based on the initial performance test date. Parametric operating limits are found at the CE level.	40 CFR Section 64.3: CAM and Minn. R. 7017.0200; Minn. R. 7017.2020, subp. 1; Minn. R. 7017.2025, subp. 3

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Performance Test: due before end of each 60 months starting 06/24/2004 on SV037 to measure Total Particulate Matter and Opacity emissions to demonstrate compliance with the IPER emission limitations and to revise the parametric operating limits associated with IPER compliance. The performance test due 6/24/09 was granted a 365 day extension or shall be conducted within 120 days after Resuming Operation, whichever occurs first. Future performance tests are due based on the initial performance test date.

Parametric operating limits are found at the CE level.

40 CFR Section 64.3: CAM and Minn. R. 7017.0200; Minn. R. 7017.2020, subp. 1; Minn. R. 7017.2025, subp. 3

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 005 Pelletizing - Baghouses**Associated Items:** CE 016 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

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

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

CE 043 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

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

EU 016 Phase I Bentonite Day Bins

EU 017 Phase II Bentonite Day Bins

EU 028 Bentonite Storage Silo - East

EU 029 Bentonite Storage Silo - West

EU 033 Limestone Storage Silo

SV 015

SV 016

SV 038

SV 039

SV 043

What to do	Why to do it
POLLUTANT LIMITS	hdr
The following requirements apply to each individual emission unit, stack/vent, and piece of control equipment listed under the Associated Items.	Minn. R. 7007.0800, subp. 2
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.	Minn. R. 7011.0715, subp. 1(A)
Total Particulate Matter: greater than or equal to 85 percent control efficiency for equipment which is located not less than one-fourth mile from any residence or public roadway, and the operation of the entire emission facility does not cause a violation of the ambient air quality standards, shall be considered in compliance with the requirements of Minn. R. 7011.0715, subp. 1(A). This is an alternative demonstration of compliance to the Total Particulate Limit above.	Minn. R. 7011.0715, subp. 3
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Parametric Monitoring: For each baghouse the Permittee shall either, 1) make daily visible emission checks or pressure drop readings when visible emission checks can not be performed, or 2) operate a broken bag detector.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Option 1 - Process Monitoring: a person who has been trained according to the requirement "Visible Emission Training" in the Total Facility section of this permit shall check the visible emissions from the stack once each operating day using a checklist that contains at a minimum the information in Appendix B. Evidence of visible emissions shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Option 1 - Gas Stream Pressure Drop: Upon installation of the pressure drop gauge, monitor and record the gas stream pressure drop at least once each operating day. Once the the pressure drop range has been established it becomes an enforceable part of this permit. A deviation from this range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Option 2 - Broken Bag Detectors: If the Permittee uses a broken bag detector, an alarm of the detector shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Inspect quarterly, or as required by the O&M plan and manufacturer specifications, all components that are not subject to wear or plugging, including structural components, housings, ducts, and hoods. Maintain a written record of each inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Inspect monthly, or as required by the O&M plan and manufacturer specifications, all components that are subject to wear or plugging. Maintain a written record of each inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 06/22/2004 on one stack -- alternated between SV015 and SV016 -- to measure Total Particulate and opacity emissions. The performance test due 6/22/09 was granted a 365 day extension or shall be conducted within 120 days after Resuming Operation, whichever occurs first. Future performance tests are due based on the initial performance test date.	Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance on one stack -- rotating among SV038, SV039, and SV043 -- to measure Total Particulate and opacity emissions.	Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Hibbing Taconite Co
Permit Number: 13700061 - 004

Subject Item: GP 006 Emergency Generators
Associated Items: EU 031 Phase I Emergency Generator
EU 032 Phase II Emergency Generator
SV 041

What to do	Why to do it
OPERATING LIMITS	hdr
The Permittee may not operate EU031 (Phase I Emergency Generator) or EU032 (Phase II Emergency Generator).	Title I Condition: To avoid a major modification under 40 CFR 52.21 & Minn. R. 7007.3000

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 008 Point Sources and Fugitive Sources Subject to MACT

Associated Items:

- CE 001 Venturi Scrubber
- CE 002 Venturi Scrubber
- CE 003 Venturi Scrubber
- CE 004 Venturi Scrubber
- CE 005 Wet Scrubber-High Efficiency
- CE 006 Wet Scrubber-High Efficiency
- CE 007 Wet Scrubber-High Efficiency
- CE 008 Wet Scrubber-High Efficiency
- CE 009 Wet Scrubber-High Efficiency
- CE 010 Wet Scrubber-High Efficiency
- CE 011 Wet Scrubber-High Efficiency
- CE 012 Wet Scrubber-High Efficiency
- CE 013 Wet Scrubber-High Efficiency
- CE 018 Wet Scrubber-High Efficiency
- CE 019 Wet Scrubber-High Efficiency
- CE 020 Wet Scrubber-High Efficiency
- CE 021 Wet Scrubber-High Efficiency
- CE 022 Venturi Scrubber
- CE 023 Venturi Scrubber
- CE 024 Venturi Scrubber
- CE 025 Venturi Scrubber
- CE 026 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- CE 027 Venturi Scrubber
- CE 028 Venturi Scrubber
- CE 029 Venturi Scrubber
- CE 030 Venturi Scrubber
- CE 031 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- CE 032 Venturi Scrubber
- CE 033 Venturi Scrubber
- CE 034 Venturi Scrubber
- CE 035 Venturi Scrubber
- CE 036 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- CE 037 Wet Scrubber-High Efficiency
- CE 038 Wet Scrubber-High Efficiency
- CE 039 Wet Scrubber-High Efficiency
- CE 040 Wet Scrubber-High Efficiency
- CE 041 Wet Scrubber-High Efficiency
- EU 001 Phase I Apron Feeder
- EU 002 Phase II Apron Feeder

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Associated Items:

- EU 003 Phase I Primary Ore Conveyor - Tail
- EU 004 Phase II Primary Ore Conveyor - Tail
- EU 005 Line No 1 Mill Feed Conveyor
- EU 006 Line No 2 Mill Feed Conveyor
- EU 007 Line No 3 Mill Feed Conveyor
- EU 008 Line No 4 Mill Feed Conveyor
- EU 009 Line No 5 Mill Feed Conveyor
- EU 010 Line No 6 Mill Feed Conveyor
- EU 011 Line No 7 Mill Feed Conveyor
- EU 012 Line No 8 Mill Feed Conveyor
- EU 013 Line No 9 Mill Feed Conveyor
- EU 018 Phase I Hearth Layer Bin/Layer Feed
- EU 019 Phase II Hearth Layer Bin/Layer Feed
- EU 020 Pellet Indurating Furnace Line No 1
- EU 021 Pellet Indurating Furnace Line No 2
- EU 022 Pellet Indurating Furnace Line No 3
- EU 023 Pellet Machine Discharge Line No 1
- EU 024 Pellet Machine Discharge Line No 2
- EU 025 Pellet Machine Discharge Line No 3
- EU 026 Pellet Hearth Layer Screening
- EU 027 Pellet Transfer House
- FS 001 Truck Dump/Crusher Building
- FS 002 Primary Ore Conveyor to Shuttle Belt
- FS 003 Shuttle Belt to Crude Ore Stockpile
- FS 004 Wind Erosion - Crude Ore Stockpile
- FS 005 Non-Metallic Rock Transfer (Cobbed Rock)
- FS 006 Wind Erosion - Non-Metallic Rock Stockpile (Cobbed Rock)
- FS 007 Filter Cake Stockpiles Load
- FS 008 Filter Cake Reclaim Load
- FS 009 Filter Cake Wind Erosion
- FS 010 Pellet Bin Loading
- FS 011 Pellet Stockpiles Load
- FS 012 Pellet Reclaim Load
- FS 013 Pellet Wind Erosion
- FS 014 Cleaning - Steam Cleaning Vehicles/Parts/Buildings
- FS 016 Loading Overburden
- FS 017 Unloading Overburden
- FS 018 Wind Erosion Overburden
- FS 019 Drilling Rock
- FS 020 Loading Rock

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Associated Items:	FS 021 Unloading Rock
	FS 022 Wind Erosion Rock
	FS 023 Drilling Taconite Ore
	FS 024 Loading Taconite Ore
	FS 025 Hauling on Unpaved Haul Road, Overburden, Rock, Taconite, Misc.
	FS 026 Non-Productive Material Transfers - Tailing, Rock, Crude Ore Emergency, Filter Cake, Pellets
	FS 027 Blasting - Rock & Taconite
	FS 028 Small Fleet Vehicle Travel on Unpaved Road
	FS 029 Tailing Basin Wind Erosion - Dry
	FS 030 Tailing Basin Wind Erosion - Damp
	FS 031 Material Handling: Loader A into Jaw Crusher A
	FS 032 Jaw Crusher A
	FS 033 Material Handling: Jaw Crusher A to Conveyor A1
	FS 034 Material Handling: Conveyor A1 to Conveyor A2
	FS 035 Material Handling: Conveyor A2 to Screen A1
	FS 036 Screen A1
	FS 037 Material Handling: Screen A1 to Conveyor AB1
	FS 038 Material Handling: Loader B into Jaw Crusher B
	FS 039 Jaw Crusher B
	FS 040 Material Handling: Jaw Crusher B to Conveyor B1
	FS 041 Material Handling: Conveyor B1 to Conveyor B2
	FS 042 Material Handling: Conveyor B2 to Screen B1
	FS 043 Screen B1
	FS 044 Material Handling: Screen B1 to Conveyor AB1
	FS 045 Material Handling: Conveyor AB1 to Cone Crusher
	FS 046 Cone Crusher
	FS 047 Material Handling: Cone Crusher to Conveyor AB2
	FS 048 Material Handling: Conveyor AB2 to Conveyor AB3
	FS 049 Material Handling: Conveyor AB3 to Conveyor A3
	FS 050 Material Handling: Conveyor A3 to Conveyor A4
	FS 051 Material Handling: Conveyor A4 to Cobber A
	FS 052 Cobber A
	FS 053 Material Handling: Conveyor AB3 to Conveyor B3
	FS 054 Material Handling: Conveyor B3 to Conveyor B4
	FS 055 Material Handling: Conveyor B4 to Cobber B
	FS 056 Cobber B
	FS 057 Material Handling: Cobber A to Conveyor A5
	FS 058 Material Handling: Conveyor A5 to Conveyor B7
	FS 059 Material Handling: Cobber A to Conveyor A6
	FS 060 Material Handling: Conveyor A6 to Conveyor A7

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Associated Items:

FS 061 Material Handling: Conveyor A7 to Conveyor A8

FS 062 Material Handling: Conveyor A8 to Conveyor A9

FS 063 Material Handling: Conveyor A9 to Magnetic Stockpile

FS 064 Wind Erosion: Magnetic Stockpile

FS 065 Material Handling: Cobber B to Conveyor B5

FS 066 Material Handling: Conveyor B5 to Conveyor A7

FS 067 Material Handling: Cobber B to Conveyor B6

FS 068 Material Handling: Conveyor B6 to Conveyor B7

FS 069 Material Handling: Conveyor B7 to Screen B2

FS 070 Screen B2

FS 071 Material Handling: Screen B2 to Conveyor B8

FS 072 Material Handling: Conveyor B8 to Conveyor B9

FS 073 Material Handling: Conveyor B9 to Non-Magnetic Stockpile

FS 074 Wind Erosion: Non-Magnetic Stockpile

What to do	Why to do it
NESHAP GENERAL PROVISIONS - 40 CFR pt. 63, subp. A	hdr
Proper Operation and Maintenance: At all times, including periods of startup, shutdown and malfunction, the Permittee shall operate and maintain the emission unit(s) subject to the MACT standard and its associated air pollution control and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.	40 CFR Section 63.6(e)(1)(i); Minn. R. 7011.7000
The non-opacity emission standards apply at all times except during periods of startup, shutdown or malfunction.	40 CFR Section 63.6(f); Minn. R. 7011.7000
STARTUP, SHUTDOWNS AND MALFUNCTIONS	hdr
Malfunctions: Malfunctions shall be corrected as soon as practicable after their occurrence.	40 CFR Section 63.6(e)(1)(ii); Minn. R. 7011.7000
The Permittee shall prepare a written Startup, Shutdown, and Malfunction Plan (SSMP) for each of the emission units, including associated control and monitoring equipment, subject to Maximum Control Technology Standards by the applicable MACT standard compliance date. The SSMP shall be prepared in accordance with 40 CFR Section 63.6(e)(3) and include requirements specified therein. The SSMP must be located at the plant site and must be kept updated. When the SSMP is updated, the Permittee must keep all previous versions of the SSMP for a period of 5 years. The Permittee must submit the SSMP when required.	40 CFR Section 63.6(e)(3)(i); 40 CFR Section 63.6(e)(3)(v); Minn. R. 7011.7000
When actions taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the SSMP, the Permittee must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a checklist, or other effective form of record keeping that confirms conformance with the SSMP for that event. In addition, the Permittee must keep records of these events as specified in 40 CFR Section 63.10(b). Furthermore, the Permittee shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the SSMP in the Semi-Annual startup, shutdown, and malfunction report required in 40 CFR Section 63.10(d)(5).	40 CFR Section 63.6(e)(3)(iii); Minn. R. 7011.7000
Recordkeeping: The Permittee shall maintain files of all information required by 40 CFR part 63 in a form suitable and readily available for expeditious inspection and review. The files should be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Only the most recent two years of information must be kept on site.	40 CFR Section 63.10(b)(1); Minn. R. 7019.0100, subp. 2

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

<p>The Permittee shall maintain, at a minimum, the following information in the files:</p> <ol style="list-style-type: none"> 1) the occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards; 2) the occurrence and duration of each malfunction of the emission unit or air pollution control or monitoring equipment; 3) all maintenance performed on the pollution control and monitoring equipment; 4) actions taken during periods of startup or shutdown when the source exceeded applicable emission limits in a relevant standard and when such actions are different from the procedures specified in the affected source's SSMP; or actions taken during period of malfunction when the actions taken are different from the procedures specified in the SSMP; 	40 CFR Section 63.10(b)(2); Minn. R. 7019.0100, subp. 2
<p>(continued)</p> <ol style="list-style-type: none"> 5) all information necessary to demonstrate conformance with the affected source's SSMP when all actions taken during SSM are consistent with procedures specified in the SSMP; 6) each period during which a continuous monitoring system (CMS) is malfunctioning or inoperative; 7) all required measurements needed to demonstrate compliance with a relevant standard; 8) all results of performance test, CMS performance evaluations, and opacity and visible emission observations; 9) all measurements as may be necessary to determine the conditions of performance tests and performance evaluations; 10) all CMS calibration checks; 11) all adjustments and maintenance performed on CMS; 12) any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements under this part; 13) all documents supporting initial notifications and notifications of compliance status. 	40 CFR Section 63.10(b)(2); Minn. R. 7019.0100, subp. 2 (continued)
Prior to construction or reconstruction of an "affected source" under the promulgated MACT standards, the Permittee must apply for and obtain an air emission permit.	40 CFR Section 63.5(b)(3); Minn. R. 7011.7000
PERFORMANCE TESTING	hdr
Conduct of performance tests. Performance tests shall be conducted under such conditions as the Commissioner specifies based on representative performance of the affected source.	40 CFR Section 63.7(e); Minn. R. 7017.2015, subp. 3
Performance test methods and other procedures: The Permittee shall conduct each performance test according to the requirements in 40 CFR Section 63.7(e)(1) and the applicable requirements in 40 CFR Section 63.9621(b) and (c) for purposes of Taconite NESHAP.	40 CFR Section 63.9621(a); Minn. R. 7011.8030
MONITORING	hdr
<p>Operation and maintenance of continuous monitoring systems. The Permittee shall maintain and operate each CMS in a manner consistent with good air pollution control practices. The owner or operator must:</p> <ul style="list-style-type: none"> - Maintain and operate each CMS as specified in section 63.6(e)(1). - Keep the necessary parts for routine repairs readily available. - Develop a written SSMP for each CMS as specified in section 63.6(e)(3). 	40 CFR Section 63.8(c)(1); Minn. R. 7017.1010, subp. 2
All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s). The read out, or other indication of operation, from any CMS required for compliance with the emission standard must be readily accessible on site for operational control or inspection by the operator of the equipment.	40 CFR Section 63.8(c)(2); Minn.R. 7017.1010, subp. 2
<p>All CMS shall be installed, operational, and the data verified prior to or in conjunction with conducting performance tests under section 63.7.</p> <p>Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.</p>	40 CFR Section 63.8(c)(3) and (4); 7017.1010, subp. 2

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

<p>The Permittee shall develop and submit to the Commissioner for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in paragraph 40 CFR 63.8(e)(3)(i). The quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:</p> <ul style="list-style-type: none"> (i) Initial and any subsequent calibration of the CMS; (ii) Determination and adjustment of the calibration drift of the CMS; (iii) Preventive maintenance of the CMS, including spare parts inventory; (iv) Data recording, calculations, and reporting; (v) Accuracy audit procedures, including sampling and analysis methods; and (vi) Program of corrective action for a malfunctioning CMS. <p>The Permittee shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part.</p>	40 CFR Section 63.8(d)(2) and (3); 7017.1010, subp. 2
Notification of performance evaluation. The Permittee shall notify the Commissioner in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under 40 CFR Section 63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.	40 CFR Section 63.8(e)(2); Minn.R. 7017.1010, subp. 2
The Permittee shall develop and submit a site-specific performance evaluation test plan to the Commissioner for approval upon request in accordance with 40 CFR Section 63.8(e)(3)(i).	40 CFR Section 63.8(e)(3)(i); Minn.R. 7017.1010, subp. 2
The Permittee shall conduct a performance evaluation of a required CMS during any performance test required under 40 CFR Section 63.7 in accordance with the applicable performance specification as specified in the relevant standard. If a performance test is not required, or the requirement for a performance test has been waived under section 40 CFR Section 63.7(h), the Permittee shall conduct the performance evaluation not later than 180 days after the appropriate compliance date.	40 CFR Section 63.8(e)(4); Minn.R. 7017.1010, subp. 2
The Permittee shall submit to the Commissioner a copy of a written report of the results of the performance evaluation simultaneously with the results of the performance test required under 40 CFR Section 63.7 or within 60 days of completion of the performance evaluation if no test is required.	40 CFR Section 63.8(e)(5); 40 CFR 63.10(e)(2); Minn.R. 7017.1010, subp. 2; Minn. R. 7019.0100, subp. 2
Reduction of monitoring data. The Permittee must reduce the monitoring data as specified in 40 CFR Section 63.8(g).	40 CFR Section 63.8(g); Minn.R. 7017.1010, subp. 2
NOTIFICATIONS	hdr
The Permittee shall submit notifications required under 40 CFR part 63 to the the Commissioner. In addition, the Permittee shall send a copy of each notification to the appropriate Region V contact.	40 CFR Section 63.9(a); Minn.R. 7019.0100, subp. 2
Notification of the Actual Date of Initial Startup: due 15 days after initial startup. Submit the name and number of each unit and the actual date of initial startup each unit.	40 CFR Section 63.9(b)(4)(v); Minn. R. 7019.0100, subp. 2
<p>Performance Test Notifications and Submittals</p> <p>Performance Test Notification (written): due 60 days before each Performance Test</p> <p>Performance Test Plan: due 60 days before each Performance Test</p> <p>Performance Test Pre-Test Meeting: due 7 day before each Performance Test</p> <p>Performance Test Report: due 45 days after each Performance Test</p> <p>Performance Test Report - Microfiche Copy or CD: due 105 days after each Performance Test.</p> <p>The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.</p>	40 CFR Section 63.7(b)(1); 40 CFR Section 63.7(c)(2)(iv); 40 CFR Section 63.7(g)(1); 40 CFR Section 63.9(e); Minn. R. 7019.0100, subp. 2; Minn. R. 7017.2015, subp. 3; Minn. R. 7017.2030, subp. 1-4; Minn. R. 7017.2018 and Minn. R. 7017.2035, subp. 1-2
The Permittee shall submit a written notification of the date the CMS performance evaluation under 40 CFR Section 63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under 40 CFR Section 63.7(b). If no performance test is required, the Permittee shall submit a written notification of the date of the performance evaluation at least 60 calendar days before the evaluation is scheduled to begin.	40 CFR Section 63.9(g)(1); Minn.R. 7019.0100, subp. 2
The Permittee shall submit a notification of compliance status to the Commissioner following completion of the relevant compliance demonstration activity specified in the relevant standard.	40 CFR Section 63.9(h)(3); Minn.R. 7019.0100, subp. 2
The Permittee shall submit actual HAP emissions data and other information to verify that information submitted as part of the permit application is correct as soon as available but no later than with the initial notification of compliance.	40 CFR Section 63.9(h)(5); Minn.R. 7019.0100, subp. 2
Change in information already provided. Any change in the information already provided under this 40 CFR section 63.9 shall be provided to the Commissioner in writing within 15 calendar days after the change.	40 CFR Section 63.9(j); Minn.R. 7019.0100, subp. 2

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Excess Emissions and Continuous Monitoring System Report; The Permittee shall submit an excess emissions and CMS performance report and/or a summary report to the Commissioner by the 30th day following the end of each calendar half. The report(s) shall include all the information required and in accordance with 40 CFR Section 63.10(e)(3).	40 CFR Section 63.10(e)(3)(i) and (v); Minn. R. 7019.0100, subp. 2
Immediate startup, shutdown, and malfunction reports; Any time an action taken by the Permittee during a startup or shutdown or malfunction (that caused the source to exceed any applicable emission limitation in the relevant emission standards), that is not consistent with the procedures specified in the affected source's SSMP, the Permittee shall report the actions taken for that event within 2 working days after commencing the actions followed by a letter within 7 working days after the end of the event. The reports must be in accordance with 40 CFR Section 63.10(d)(5)(ii).	40 CFR Section 63.10(d)(5)(ii); 40 CFR Section 63.6(e)(3)(iv); Minn. R. 7019.0100, subp. 2
RECORDKEEPING	hdr
The Permittee shall maintain, at a minimum, the following information in the files: 1) the occurrence and duration of each startup, shutdown, or malfunction of operation; 2) the occurrence and duration of each malfunction of the air pollution control equipment; 3) all maintenance performed on the pollution control equipment; 4) actions taken during periods of startup, shutdown, and malfunction when such actions are different from the procedures specified in the affected source's (SSMP). In this case, the Permittee shall report this action within 2 days of occurrence and follow by a written notification within 7 days of occurrence. 5) all information necessary to demonstrate conformance with the affected source's SSMP and actions taken in accordance with SSMP;	40 CFR Section 63.10(b)(2); Minn. R. 7019.0100, subp. 2
(continued) 6) each period during which a CMS is malfunctioning or inoperative; 7) all required measurements needed to demonstrate compliance with a relevant standard; 8) all results of performance test, CMS performance evaluations, and opacity and visible emission observations; 9) all measurements as may be necessary to determine the conditions of performance tests and performance evaluations; 10) all CMS calibration checks; 11) all adjustments and maintenance performed on CMS; 12) any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements under this part; 13) all documents supporting initial notifications and notifications of compliance status.	40 CFR Section 63.10(b)(2); Minn. R. 7019.0100, subp. 2 (continued)
The Permittee shall maintain records for each CMS: 1) All required CMS measurements; 2) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks; 3) The date and time identifying each period during which the CMS was out of control; 4) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, that occurs during startups, shutdowns, and malfunctions of the affected source; 5) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;	40 CFR Section 63.10(c); Minn. R. 7019.0100, subp. 2
(continued) 6) The nature and cause of any malfunction; 7) The corrective action taken or preventive measures adopted; 8) The nature of the repairs or adjustments to the CMS that was inoperative or out of control; 9) The total process operating time during the reporting period; and 10) All procedures that are part of a quality control program developed and implemented for CMS under 40 CFR section 63.8(d).	40 CFR Section 63.10(c); Minn. R. 7019.0100, subp. 2 (continued)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-26**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 009 Point Sources Subject to Taconite MACT

Associated Items:

- CE 001 Venturi Scrubber
- CE 002 Venturi Scrubber
- CE 003 Venturi Scrubber
- CE 004 Venturi Scrubber
- CE 005 Wet Scrubber-High Efficiency
- CE 006 Wet Scrubber-High Efficiency
- CE 007 Wet Scrubber-High Efficiency
- CE 008 Wet Scrubber-High Efficiency
- CE 009 Wet Scrubber-High Efficiency
- CE 010 Wet Scrubber-High Efficiency
- CE 011 Wet Scrubber-High Efficiency
- CE 012 Wet Scrubber-High Efficiency
- CE 013 Wet Scrubber-High Efficiency
- CE 018 Wet Scrubber-High Efficiency
- CE 019 Wet Scrubber-High Efficiency
- CE 020 Wet Scrubber-High Efficiency
- CE 021 Wet Scrubber-High Efficiency
- CE 022 Venturi Scrubber
- CE 023 Venturi Scrubber
- CE 024 Venturi Scrubber
- CE 025 Venturi Scrubber
- CE 026 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- CE 027 Venturi Scrubber
- CE 028 Venturi Scrubber
- CE 029 Venturi Scrubber
- CE 030 Venturi Scrubber
- CE 031 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- CE 032 Venturi Scrubber
- CE 033 Venturi Scrubber
- CE 034 Venturi Scrubber
- CE 035 Venturi Scrubber
- CE 036 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- CE 037 Wet Scrubber-High Efficiency
- CE 038 Wet Scrubber-High Efficiency
- CE 039 Wet Scrubber-High Efficiency
- CE 040 Wet Scrubber-High Efficiency
- CE 041 Wet Scrubber-High Efficiency
- EU 001 Phase I Apron Feeder
- EU 002 Phase II Apron Feeder

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Associated Items:

EU 003 Phase I Primary Ore Conveyor - Tail

EU 004 Phase II Primary Ore Conveyor - Tail

EU 005 Line No 1 Mill Feed Conveyor

EU 006 Line No 2 Mill Feed Conveyor

EU 007 Line No 3 Mill Feed Conveyor

EU 008 Line No 4 Mill Feed Conveyor

EU 009 Line No 5 Mill Feed Conveyor

EU 010 Line No 6 Mill Feed Conveyor

EU 011 Line No 7 Mill Feed Conveyor

EU 012 Line No 8 Mill Feed Conveyor

EU 013 Line No 9 Mill Feed Conveyor

EU 018 Phase I Hearth Layer Bin/Layer Feed

EU 019 Phase II Hearth Layer Bin/Layer Feed

EU 020 Pellet Indurating Furnace Line No 1

EU 021 Pellet Indurating Furnace Line No 2

EU 022 Pellet Indurating Furnace Line No 3

EU 023 Pellet Machine Discharge Line No 1

EU 024 Pellet Machine Discharge Line No 2

EU 025 Pellet Machine Discharge Line No 3

EU 026 Pellet Hearth Layer Screening

EU 027 Pellet Transfer House

What to do	Why to do it
OPERATING REQUIREMENTS	hdr
The Permittee shall meet the notification and schedule requirements in 40 CFR Section 63.9640.	40 CFR Section 63.9583; Minn. R. 7011.8030
The Permittee shall submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin.	40 CFR Section 63.9640(a); 40 CFR Section 63.7(b)(1); Minn. R. 7011.8030
The Permittee shall submit the initial notification of compliance status (including the performance test results) for each emission limitation and operating limit by the dates specified below: (1) For each initial compliance demonstration that does not include a performance test, before the close of business on the 30th calendar day following completion of the initial compliance demonstration. (2) For each initial compliance demonstration that does include a performance test, before the close of business on the 60th calendar day following the completion of the performance test.	40 CFR Section 63.9640(e); 40 CFR 63.9623(c); 40 CFR Section 63.9(h)(2)(ii); Minn. R. 7011.8030
The Permittee may change the operating limits for any air pollution control device if the Permittee: 1) submits a written notification to the Commissioner requesting to conduct a new performance test to revise the operating limit. 2) conduct a performance test to demonstrate compliance with the applicable emission limitation. 3) establishes revised operating limits according to the applicable procedures in 40 CFR Section 63.9622(a).	40 CFR Section 63.9622(f); Minn. R. 7011.8030

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3, or a representative unit within the same test group as specified by the applicable requirement. The limit is final upon issuance of a permit amendment incorporating the change.	40 CFR Section 63.9622(f); Minn. R. 7011.8030; Minn. R. 7017.2025, subp. 3
MONITORING	hdr
Monitoring Data. The Permittee shall monitor continuously (or collect data at all required intervals) at all times an affected source is operating except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments). The Permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or to fulfill a minimum data availability requirement. The Permittee shall use all the data collected during all other periods in assessing compliance.	40 CFR Section 63.9633 ; Minn. R. 7011.8030
CORRECTIVE ACTIONS	hdr
In the event that an exceedance of an established operating limit for an air pollution control device except for a baghouse occurs, The Permittee shall initiate corrective action to determine the cause of the operating limit exceedance and complete the corrective action within 10 calendar days.	40 CFR Section 63.9600(b)(3); Minn. R. 7011.8030
If the daily average operating parameter value for an emission unit or group of similar emission units does not meet the corresponding established operating limit, the Permittee must then follow the following procedures: (1) The Permittee must initiate and complete initial corrective action within 10 calendar days and demonstrate that the initial corrective action was successful. During any period of corrective action, the Permittee must continue to monitor and record all required operating parameters for equipment that remains in operation. After 10 calendar days, measure and record the daily average operating parameter value for the emission unit or group of similar emission units on which corrective action was taken.	40 CFR Section 63.9634(j); Minn. R. 7011.8030
(continued) (2) If the initial corrective action required in (1) was not successful, then the Permittee must complete additional corrective action within 10 calendar days and demonstrate that the subsequent corrective action was successful. After the second set of 10 calendar days allowed to implement corrective action, the Permittee must again measure and record the daily average operating parameter value for the emission unit or group of similar emission units. (3) If the second attempt at corrective action required in paragraph (2) was not successful, then the Permittee must repeat the procedures until the corrective action is successful. If the third attempt at corrective action is unsuccessful, the Permittee must conduct another performance test in accordance with the procedures in 40 CFR section 63.9622(f) and report to the Commissioner as a deviation the third unsuccessful attempt at corrective action.	40 CFR Section 63.9634(j); Minn. R. 7011.8030 (continued)
(continued) (4) After the third unsuccessful attempt at corrective action, the Permittee must submit the written report required in (3) within 5 calendar days after the third unsuccessful attempt at corrective action. This report must notify the Commissioner that a deviation has occurred and document the types of corrective measures taken to address the problem that resulted in the deviation of established operating parameters and the resulting operating limits.	40 CFR Section 63.9634(j); Minn. R. 7011.8030 (continued)
REPORTING	hdr
Deviations. The Permittee must report each instance in which an emission limitation was not met. This includes periods of startup, shutdown, and malfunction. The Permittee must report each instance in which a work practice standards in 40 CFR section 63.9591 was not met. The Permittee must report each instance in which an applicable operation and maintenance requirement in 40 CFR section 63.9600 was not met. These deviations must be reported in accordance with the requirements in 40 CFR section 63.9641.	40 CFR Section 63.9637(a) ; Minn. R. 7011.8030
The Permittee shall submit a notification of compliance status to the Commissioner following completion of the relevant compliance demonstration activity specified in the relevant standard.	40 CFR Section 63.9(h)(3); Minn. R. 7011.8030; Minn.R. 7019.0100, subp. 2

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Immediate startup, shutdown, and malfunction reports: Any time an action taken by the Permittee during a startup or shutdown or malfunction (that caused the source to exceed any applicable emission limitation in the relevant emission standards), that is not consistent with the procedures specified in the affected source's SSMP, the Permittee shall report the actions taken for that event within 2 working days after commencing the actions followed by a letter within 7 working days after the end of the event. The reports must be in accordance with 40 CFR Section 63.10(d)(5)(ii).	40 CFR Section 63.10(d)(5)(ii); 40 CFR Section 63.9641(c); Minn. R. 7011.8030; Minn. R. 7019.0100, subp. 2
Immediate corrective action report. The Permittee shall submit an immediate corrective action report if three unsuccessful attempts of applying corrective action as described in 40 CFR section 63.9634(j) were made on an emission unit or group of emission units. Also, within 5 calendar days after the third unsuccessful attempt at corrective action, the Permittee shall submit to the Commissioner a written report in accordance with 40 CFR section 63.9634(j)(3) and (4).	40 CFR Section 63.9641(e); Minn. R. 7011.8030
During periods of startup, shutdown, and malfunction, the Permittee must operate in accordance with your SSMP and the requirements in paragraphs 40 CFR Section 63.9637(b)(1) and (2).	40 CFR Section 63.9637(b); Minn. R. 7011.8030
Compliance Report Content: Each compliance report must include the information in paragraphs (1) through (3) and, as applicable, in paragraphs (4) through (8). (1) Company name and address. (2) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. (3) Date of report and beginning and ending dates of the reporting period. (4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in Section 63.10(d)(5)(i). (5) If there were no deviations from the continuous compliance requirements in Sections 63.9634 through 63.9636 that apply to you, then provide a statement that there were no deviations from the emission limitations, work practice standards, or O & M requirements during the reporting period.	40 CFR Section 63.9641(b); Minn. R. 7011.8030
Compliance Report Content (continued): (6) If there were no periods during which a CMS (including a CPMS) was out-of-control as specified in Section 63.8(c)(7), then provide a statement that there were no periods during which a CMS was out-of-control during the reporting period. (7) For each deviation from an emission limitation in Table 1 to this subpart that occurs at an affected source where you are not using a CMS (including a CPMS) to comply with an emission limitation, the compliance report must contain the information in paragraphs (1) through (4) of this section and the information in paragraphs (7)(i) and (ii). This includes periods of startup, shutdown, and malfunction. (i) The total operating time of each affected source during the reporting period. (ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable, and the corrective action taken.	40 CFR Section 63.9637(b); Minn. R. 7011.8030 (continued)
Compliance Report Content (continued): (8) For each deviation from an emission limitation occurring at an affected source a CMS (including a CPMS) is used to comply with the emission limitation, the Permittee must include the information in paragraphs (1) through (4) and the information in paragraphs (8)(i) through (xi). This includes periods of startup, shutdown, and malfunction. (i) The date and time that each malfunction started and stopped. (ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks. (iii) The date, time, and duration that each CMS was out-of-control, including the information in Section 63.8(c)(8). (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.	40 CFR Section 63.9637(b); Minn. R. 7011.8030 (continued)
Compliance Report Content (continued): (v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period. (vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. (vii) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during the reporting period. (viii) A brief description of the process units. (ix) A brief description of the CMS. (x) The date of the latest CMS certification or audit.	40 CFR Section 63.9637(b); Minn. R. 7011.8030 (continued)

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Compliance Report Content (continued): (xi) A description of any changes in CMS, processes, or controls since the last reporting period.	40 CFR Section 63.9637(b); Minn. R. 7011.8030 (continued)
RECORDKEEPING	hdr
<p>The Permittee shall keep:</p> <ul style="list-style-type: none">- A copy of each notification and report that you submitted to comply with this 40 CFR part 63, subpart RRRRR.- The records in 40 CFR section 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.- Records of performance tests and performance evaluations as required in section 63.10(b)(2)(viii). <p>The Permittee shall also keep the records required in 40 CFR sections 63.9634 through 63.9636 to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that apply. Each record shall be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record shall be kept on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.</p>	40 CFR Section 63.9642(a) and (c); 40 CFR Section 63.9643(b) and (c); Minn. R. 7011.8030

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

Associated Items:

- CE 001 Venturi Scrubber
- CE 002 Venturi Scrubber
- CE 003 Venturi Scrubber
- CE 004 Venturi Scrubber
- CE 005 Wet Scrubber-High Efficiency
- CE 006 Wet Scrubber-High Efficiency
- CE 007 Wet Scrubber-High Efficiency
- CE 008 Wet Scrubber-High Efficiency
- CE 009 Wet Scrubber-High Efficiency
- CE 010 Wet Scrubber-High Efficiency
- CE 011 Wet Scrubber-High Efficiency
- CE 012 Wet Scrubber-High Efficiency
- CE 013 Wet Scrubber-High Efficiency
- EU 001 Phase I Apron Feeder
- EU 002 Phase II Apron Feeder
- EU 003 Phase I Primary Ore Conveyor - Tail
- EU 004 Phase II Primary Ore Conveyor - Tail
- EU 005 Line No 1 Mill Feed Conveyor
- EU 006 Line No 2 Mill Feed Conveyor
- EU 007 Line No 3 Mill Feed Conveyor
- EU 008 Line No 4 Mill Feed Conveyor
- EU 009 Line No 5 Mill Feed Conveyor
- EU 010 Line No 6 Mill Feed Conveyor
- EU 011 Line No 7 Mill Feed Conveyor
- EU 012 Line No 8 Mill Feed Conveyor
- EU 013 Line No 9 Mill Feed Conveyor
- SV 001
- SV 002
- SV 003
- SV 004
- SV 005
- SV 006
- SV 007
- SV 008
- SV 009
- SV 010
- SV 011
- SV 012

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

What to do	Why to do it
EMISSIONS AVERAGING	hdr
<p>For emission units not selected for initial performance testing and defined within a group of similar emission units in accordance with 40 CFR section 63.9620(e), the Permittee shall calculate the daily average value of each operating parameter for the similar air pollution control device applied to each similar emission unit within a defined group using the following equation.</p> <p>$P_k = (\text{sum of all } P_i) / n$</p> <p>$P_k$ = Daily average operating parameter value for all emission units within group k; P_i = Daily average parametric monitoring parameter value corresponding to emission unit i within the group; and n = Total number of emission units within the group, including emission units that have been selected for performance tests and those that have not been selected for performance tests.</p>	40 CFR Section 63.9634(b); Minn. R. 7011.8030
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-33**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 011 Finished Pellet Handling Sources Subject to Taconite MACT

Associated Items:

- CE 018 Wet Scrubber-High Efficiency
- CE 019 Wet Scrubber-High Efficiency
- CE 020 Wet Scrubber-High Efficiency
- CE 021 Wet Scrubber-High Efficiency
- CE 037 Wet Scrubber-High Efficiency
- CE 038 Wet Scrubber-High Efficiency
- CE 039 Wet Scrubber-High Efficiency
- CE 040 Wet Scrubber-High Efficiency
- CE 041 Wet Scrubber-High Efficiency
- EU 018 Phase I Hearth Layer Bin/Layer Feed
- EU 019 Phase II Hearth Layer Bin/Layer Feed
- EU 023 Pellet Machine Discharge Line No 1
- EU 024 Pellet Machine Discharge Line No 2
- EU 025 Pellet Machine Discharge Line No 3
- EU 026 Pellet Hearth Layer Screening
- EU 027 Pellet Transfer House
- SV 017
- SV 018
- SV 019
- SV 020
- SV 033
- SV 034
- SV 035
- SV 036
- SV 037

What to do	Why to do it
EMISSIONS AVERAGING	hdr
<p>For emission units not selected for initial performance testing and defined within a group of similar emission units in accordance with 40 CFR section 63.9620(e), the Permittee shall calculate the daily average value of each operating parameter for the similar air pollution control device applied to each similar emission unit within a defined group using the following equation.</p> $P_k = (\text{sum of all } P_i) / n$ <p>P_k = Daily average operating parameter value for all emission units within group k; P_i = Daily average parametric monitoring parameter value corresponding to emission unit i within the group; and n = Total number of emission units within the group, including emission units that have been selected for performance tests and those that have not been selected for performance tests.</p>	40 CFR Section 63.9634(b); Minn. R. 7011.8030
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 012 Indurating Sources Subject to Taconite MACT

Associated Items:

- CE 022 Venturi Scrubber
- CE 023 Venturi Scrubber
- CE 024 Venturi Scrubber
- CE 025 Venturi Scrubber
- CE 026 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- CE 027 Venturi Scrubber
- CE 028 Venturi Scrubber
- CE 029 Venturi Scrubber
- CE 030 Venturi Scrubber
- CE 031 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- CE 032 Venturi Scrubber
- CE 033 Venturi Scrubber
- CE 034 Venturi Scrubber
- CE 035 Venturi Scrubber
- CE 036 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones
- EU 020 Pellet Indurating Furnace Line No 1
- EU 021 Pellet Indurating Furnace Line No 2
- EU 022 Pellet Indurating Furnace Line No 3
- SV 021
- SV 022
- SV 023
- SV 024
- SV 025
- SV 026
- SV 027
- SV 028
- SV 029
- SV 030
- SV 031
- SV 032

What to do	Why to do it
<p>Good combustion practices (GCP) for indurating furnaces; The Permittee shall identify and implement a set of site-specific GCP for the indurating furnace. These GCP shall correspond to standard operating procedures for maintaining the proper and efficient combustion within each indurating furnace. GPC include, but are not limited to the following elements:</p> <ol style="list-style-type: none"> 1) Proper operating conditions for each indurating furnace (e.g., minimum combustion temperature, maximum carbon monoxide concentration in the furnace exhaust gases, burner alignment, or proper fuel-air distribution/mixing). 2) Routine inspection and preventative maintenance and corresponding schedules. 3) Performance analyses. 4) Keeping applicable operator logs. 5) Keeping applicable records to document compliance with each element. 	<p>40 CFR Section 63.9600(b)(4); 40 CFR Section 63.9636(a)(4); Minn. R. 7011.8030</p>

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

The Permittee shall: - Perform preventative maintenance for each control device in accordance with 40 CFR Section 63.9600(b)(1) and record all information needed to document conformance with these requirements. - Implement and maintain site-specific GPC for each indurating furnace in accordance with 40 CFR Section 63.9600(b)(4) and record all information needed to document conformance with these requirements.	40 CFR Sections 63.9636(a)(1) and (4); Minn. R. 7011.8030
PERFORMANCE TESTING REQUIREMENTS See GP003, GP008 and the CE level.	hdr

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 013 Fugitive Sources Subject to Taconite MACT

Associated Items:

- FS 001 Truck Dump/Crusher Building
- FS 002 Primary Ore Conveyor to Shuttle Belt
- FS 003 Shuttle Belt to Crude Ore Stockpile
- FS 004 Wind Erosion - Crude Ore Stockpile
- FS 005 Non-Metallic Rock Transfer (Cobbed Rock)
- FS 006 Wind Erosion - Non-Metallic Rock Stockpile (Cobbed Rock)
- FS 007 Filter Cake Stockpiles Load
- FS 008 Filter Cake Reclaim Load
- FS 009 Filter Cake Wind Erosion
- FS 010 Pellet Bin Loading
- FS 011 Pellet Stockpiles Load
- FS 012 Pellet Reclaim Load
- FS 013 Pellet Wind Erosion
- FS 014 Cleaning - Steam Cleaning Vehicles/Parts/Buildings
- FS 016 Loading Overburden
- FS 017 Unloading Overburden
- FS 018 Wind Erosion Overburden
- FS 019 Drilling Rock
- FS 020 Loading Rock
- FS 021 Unloading Rock
- FS 022 Wind Erosion Rock
- FS 023 Drilling Taconite Ore
- FS 024 Loading Taconite Ore
- FS 025 Hauling on Unpaved Haul Road, Overburden, Rock, Taconite, Misc.
- FS 026 Non-Productive Material Transfers - Tailing, Rock, Crude Ore Emergency, Filter Cake, Pellets
- FS 027 Blasting - Rock & Taconite
- FS 028 Small Fleet Vehicle Travel on Unpaved Road
- FS 029 Tailing Basin Wind Erosion - Dry
- FS 030 Tailing Basin Wind Erosion - Damp
- FS 031 Material Handling: Loader A into Jaw Crusher A
- FS 032 Jaw Crusher A
- FS 033 Material Handling: Jaw Crusher A to Conveyor A1
- FS 034 Material Handling: Conveyor A1 to Conveyor A2
- FS 035 Material Handling: Conveyor A2 to Screen A1
- FS 036 Screen A1
- FS 037 Material Handling: Screen A1 to Conveyor AB1
- FS 038 Material Handling: Loader B into Jaw Crusher B
- FS 039 Jaw Crusher B
- FS 040 Material Handling: Jaw Crusher B to Conveyor B1

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Associated Items:

FS 041 Material Handling: Conveyor B1 to Conveyor B2

FS 042 Material Handling: Conveyor B2 to Screen B1

FS 043 Screen B1

FS 044 Material Handling: Screen B1 to Conveyor AB1

FS 045 Material Handling: Conveyor AB1 to Cone Crusher

FS 046 Cone Crusher

FS 047 Material Handling: Cone Crusher to Conveyor AB2

FS 048 Material Handling: Conveyor AB2 to Conveyor AB3

FS 049 Material Handling: Conveyor AB3 to Conveyor A3

FS 050 Material Handling: Conveyor A3 to Conveyor A4

FS 051 Material Handling: Conveyor A4 to Cobber A

FS 052 Cobber A

FS 053 Material Handling: Conveyor AB3 to Conveyor B3

FS 054 Material Handling: Conveyor B3 to Conveyor B4

FS 055 Material Handling: Conveyor B4 to Cobber B

FS 056 Cobber B

FS 057 Material Handling: Cobber A to Conveyor A5

FS 058 Material Handling: Conveyor A5 to Conveyor B7

FS 059 Material Handling: Cobber A to Conveyor A6

FS 060 Material Handling: Conveyor A6 to Conveyor A7

FS 061 Material Handling: Conveyor A7 to Conveyor A8

FS 062 Material Handling: Conveyor A8 to Conveyor A9

FS 063 Material Handling: Conveyor A9 to Magnetic Stockpile

FS 064 Wind Erosion: Magnetic Stockpile

FS 065 Material Handling: Cobber B to Conveyor B5

FS 066 Material Handling: Conveyor B5 to Conveyor A7

FS 067 Material Handling: Cobber B to Conveyor B6

FS 068 Material Handling: Conveyor B6 to Conveyor B7

FS 069 Material Handling: Conveyor B7 to Screen B2

FS 070 Screen B2

FS 071 Material Handling: Screen B2 to Conveyor B8

FS 072 Material Handling: Conveyor B8 to Conveyor B9

FS 073 Material Handling: Conveyor B9 to Non-Magnetic Stockpile

FS 074 Wind Erosion: Non-Magnetic Stockpile

What to do	Why to do it
FUGITIVE DUST EMISSIONS CONTROL PLAN	hdr

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

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

<p>The Permittee shall prepare and at all times operate according to, a fugitive dust emissions control plan that describes in detail the measures that will be put in place to control fugitive dust emissions from:</p> <ol style="list-style-type: none">1) Stockpiles (includes, but is not limited to, stockpiles of uncrushed ore, crushed ore, or finished pellets);2) Material transfer points;3) Plant roadways;4) Tailings basin;5) Pellet loading areas; and6) Yard areas. <p>The Permittee shall maintain a current copy of the fugitive dust emissions control plan onsite, and it must be available for inspection upon request. The plan must be kept for the life of the affected source or until the affected source is no longer subject to the requirements of 40 CFR Part 63, subp RRRRR.</p>	<p>40 CFR Section 63.9591(a); 40 CFR Section 63.9591(d);40 CFR Section 63.9635</p>
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TABLE A: LIMITS AND OTHER REQUIREMENTS**A-39**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 014 Wet Scrubbers Subject to Taconite MACT

Associated Items:

- CE 001 Venturi Scrubber
- CE 002 Venturi Scrubber
- CE 003 Venturi Scrubber
- CE 004 Venturi Scrubber
- CE 005 Wet Scrubber-High Efficiency
- CE 006 Wet Scrubber-High Efficiency
- CE 007 Wet Scrubber-High Efficiency
- CE 008 Wet Scrubber-High Efficiency
- CE 009 Wet Scrubber-High Efficiency
- CE 010 Wet Scrubber-High Efficiency
- CE 011 Wet Scrubber-High Efficiency
- CE 012 Wet Scrubber-High Efficiency
- CE 013 Wet Scrubber-High Efficiency
- CE 018 Wet Scrubber-High Efficiency
- CE 019 Wet Scrubber-High Efficiency
- CE 020 Wet Scrubber-High Efficiency
- CE 021 Wet Scrubber-High Efficiency
- CE 022 Venturi Scrubber
- CE 023 Venturi Scrubber
- CE 024 Venturi Scrubber
- CE 025 Venturi Scrubber
- CE 027 Venturi Scrubber
- CE 028 Venturi Scrubber
- CE 029 Venturi Scrubber
- CE 030 Venturi Scrubber
- CE 032 Venturi Scrubber
- CE 033 Venturi Scrubber
- CE 034 Venturi Scrubber
- CE 035 Venturi Scrubber
- CE 037 Wet Scrubber-High Efficiency
- CE 038 Wet Scrubber-High Efficiency
- CE 039 Wet Scrubber-High Efficiency
- CE 040 Wet Scrubber-High Efficiency
- CE 041 Wet Scrubber-High Efficiency
- EU 001 Phase I Apron Feeder
- EU 002 Phase II Apron Feeder
- EU 003 Phase I Primary Ore Conveyor - Tail
- EU 004 Phase II Primary Ore Conveyor - Tail
- EU 005 Line No 1 Mill Feed Conveyor

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-40**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Associated Items:

- EU 006 Line No 2 Mill Feed Conveyor
- EU 007 Line No 3 Mill Feed Conveyor
- EU 008 Line No 4 Mill Feed Conveyor
- EU 009 Line No 5 Mill Feed Conveyor
- EU 010 Line No 6 Mill Feed Conveyor
- EU 011 Line No 7 Mill Feed Conveyor
- EU 012 Line No 8 Mill Feed Conveyor
- EU 013 Line No 9 Mill Feed Conveyor
- EU 018 Phase I Hearth Layer Bin/Layer Feed
- EU 019 Phase II Hearth Layer Bin/Layer Feed
- EU 020 Pellet Indurating Furnace Line No 1
- EU 021 Pellet Indurating Furnace Line No 2
- EU 022 Pellet Indurating Furnace Line No 3
- EU 023 Pellet Machine Discharge Line No 1
- EU 024 Pellet Machine Discharge Line No 2
- EU 025 Pellet Machine Discharge Line No 3
- EU 026 Pellet Hearth Layer Screening
- EU 027 Pellet Transfer House

What to do	Why to do it
Each individual emission unit and piece of control equipment listed under the Associated Items is subject to the requirements of this group (GP014). Members of GP014 are also subject to the provisions of GP004, GP008 and GP009. Individual emission units may be members of GP001, GP002, GP003, GP010, GP011, or GP012. Individual scrubbers may be subject to requirements at the CE level.	40 CFR Section 63, subp. RRRRR; Minn. R. 7011.8030
OPERATION AND MAINTENANCE PLAN	hdr
<p>Operation and Maintenance Plan:</p> <p>The Permittee shall prepare, and at all times operate according to a written O & M plan. The Permittee shall maintain a current copy of the O & M plan onsite, and it must be available for inspection upon request. The plan must be kept for the life of the affected source or until the affected source is no longer subject to 40 CFR part 63, subpart RRRRR.</p> <p>The plan shall address preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.</p>	40 CFR Section 63.9600(b); Minn. R. 7011.8030; 40 CFR Section 64.7(b):CAM and Minn. R. 7017.0200
<p>Operation and Maintenance Plan (continued):</p> <p>In the event that an exceedance of an established operating limit for an air pollution control device occurs, the Permittee shall initiate corrective action to determine the cause of the operating limit exceedance and complete the corrective action within 10 calendar days. The corrective action procedures taken must be consistent with the installation, operation, and maintenance procedures listed in the site-specific CPMS monitoring plan in accordance with 40 CFR Section 63.9632(b).</p>	40 CFR Section 63.9600(b); Minn. R. 7011.8030 (continued)
CORRECTIVE ACTIONS	hdr
If the daily average operating parameter value for an emission unit or group of similar emission units does not meet the corresponding established operating limit, you must then follow the procedures in paragraphs (1) through (4), below.	40 CFR 63.9634(j); Minn. R. 7011.8030

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-41**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

(continued) (1) You must initiate and complete initial corrective action within 10 calendar days and demonstrate that the initial corrective action was successful. During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. After 10 calendar days, measure and record the daily average operating parameter value for the emission unit or group of similar emission units on which corrective action was taken. After the initial corrective action, if the daily average operating parameter value for the emission unit or group of similar emission units meets the operating limit established for the corresponding unit or group, then the corrective action was successful and the emission unit or group of similar emission units is in compliance with the established operating limits.	40 CFR 63.9634(j); Minn. R. 7011.8030 (continued)
(continued) (2) If the initial corrective action required in paragraph (1) was not successful, then you must complete additional corrective action within 10 calendar days and demonstrate that the subsequent corrective action was successful. During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. After the second set of 10 calendar days allowed to implement corrective action, you must again measure and record the daily average operating parameter value for the emission unit or group of similar emission units. If the daily average operating parameter value for the emission unit or group of similar emission units meets the operating limit established for the corresponding unit or group, then the corrective action was successful and the emission unit or group of similar emission units is in compliance with the established operating limits.	40 CFR 63.9634(j); Minn. R. 7011.8030 (continued)
(continued) (3) If the second attempt at corrective action required in paragraph (2) was not successful, then you must repeat the procedures of paragraph (2) until the corrective action is successful. If the third attempt at corrective action is unsuccessful, you must conduct another performance test in accordance with the procedures in 40 CFR 63.9622(f) and report to the Administrator as a deviation the third unsuccessful attempt at corrective action. (4) After the third unsuccessful attempt at corrective action, you must submit to the Administrator the written report required in paragraph (3) within 5 calendar days after the third unsuccessful attempt at corrective action. This report must notify the Administrator that a deviation has occurred and document the types of corrective measures taken to address the problem that resulted in the deviation of established operating parameters and the resulting operating limits.	40 CFR 63.9634(j); Minn. R. 7011.8030 (continued)
PARAMETRIC LIMITS	hdr
The Permittee shall establish site-specific operating limits. The Permittee shall: 1) measure and record the pressure drop and scrubber water flow rate every 15 minutes during each run of the particulate matter performance test. 2) Calculate and record the average pressure drop and scrubber water flow rate for each individual test run.	40 CFR Section 63.9622(a); Minn. R. 7011.8030; 40 CFR Section 64.9(b) and Minn. R. 7017.0200
The Permittee shall maintain the daily average pressure drop and daily average scrubber water flow rate at or above the minimum levels established during the initial performance test. The Permittee may change the daily average pressure drop and daily average scrubber water flow rate if the permittee: 1) submits a written notification to the Commissioner requesting to conduct a new performance test to revise the operating limit. 2) conduct a performance test to demonstrate compliance with the applicable emission limitation. 3) establishes revised operating limits according to the applicable procedures in 40 CFR Section 63.9622(a).	40 CFR Section 63.9590(b)(1); 40 CFR Section 63.9622(f); Minn. R. 7011.8030; 40 CFR Sections 64.7(e) and 64.9(a); CAM and Minn. R. 7017.0200
The Permittee shall install, operate, and maintain a CPMS according to the requirements in 40 CFR 63.9632(b) through (e) and monitor the daily average pressure drop and daily average scrubber water flow rate according to the requirements in 40 CFR 63.9633.	40 CFR Section 63.9631(b); Minn. R. 7011.8030; 40 CFR Section 64.7(b); CAM and Minn. R. 7017.0200
The Permittee shall maintain a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with 40 CFR section 63.9622(a).	40 CFR Section 63.9623(b); Minn. R. 7011.8030; 40 CFR 64.9(b); CAM and Minn. R. 7017.0200

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-42**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

<p>The Permittee shall develop and make available for inspection, a site-specific monitoring plan that addresses the following:</p> <ol style="list-style-type: none"> 1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected emission unit such that the measurement is representative of control of the exhaust emissions. 2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system. 3) Performance evaluation procedures and acceptance criteria. 4) Ongoing operation and maintenance procedures in accordance with 40 CFR section 63.8(c)(1), (3), (4)(ii), (7), and (8). 5) Ongoing data quality assurance procedures in accordance with 40 CFR section 63.8(d). 6) Ongoing recordkeeping and reporting procedures in accordance with 40 CFR section 63.10(c), (e)(1), and (e)(2)(i). 7) Corrective action procedures to be followed in the event an air pollution control device exceeds an operating limit. 	<p>40 CFR Section 63.9632(b); Minn. R. 7011.8030; 40 CFR Section 64.6: CAM and Minn. R. 7017.0200</p>
<p>The Permittee shall install and operate each CPMS such that the CPMS completes a minimum of one cycle of operation for each successive 15-minute period and determines and records valid data for at least 95 percent of every daily averaging period. Each CPMS must also determine and record the daily average of all recorded readings.</p> <p>The Permittee shall operate and maintain each CPMS and conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.</p>	<p>40 CFR Section 63.9632(c), (d) and (e); Minn. R. 7011.8030; 40 CFR 64.6: CAM and Minn. R. 7017.0200</p>
<p>The Permittee shall maintain the daily average pressure drop and daily average scrubber water flow rate at or above the minimum levels established during the initial or subsequent performance test.</p> <p>The Permittee shall operate and maintain each wet scrubber CPMS according to 40 CFR section 63.9632(b) and record all the information needed to document conformance with these requirements.</p> <p>The Permittee shall collect and reduce monitoring data for pressure drop and scrubber water flow rate according to 40 CFR section 63.9632(c) and record all the information needed to document conformance with these requirements.</p> <p>If the daily average pressure drop or daily average scrubber water flow rate is below the operating limits established for a corresponding emission unit or group of similar emission units, the Permittee shall then follow the corrective action procedures in 40 CFR section 63.9634(j) of this section.</p>	<p>40 CFR Section 63.9634(e); Minn. R. 7011.8030; 40 CFR Section 64.7(c): CAM and Minn. R. 7017.0200</p>
<p>The Permittee shall perform preventative maintenance for each control device in accordance with 40 CFR section 63.9600(b)(1) and recording all information needed to document conformance with these requirements.</p> <p>The Permittee shall also initiate and complete corrective action (in accordance with 40 CFR section 63.9600(b)(3)) for a CPMS when an established operating limit for an air pollution control device is exceeded and record all the information needed to document conformance with these requirements.</p>	<p>40 CFR Section 63.9636(a)(1) and (3); Minn. R. 7011.8030; 40 CFR Section 64.7(b) and (d): CAM and Minn. R. 7017.0200</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-43**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 018 Multiclones Subject to Taconite MACT**Associated Items:** CE 026 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones

CE 031 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones

CE 036 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones

What to do	Why to do it
OPERATION AND MAINTENANCE PLAN	hdr
<p>Operation and Maintenance Plan:</p> <p>The Permittee shall prepare, and at all times operate according to a written O & M plan. The Permittee shall maintain a current copy of the O & M plan onsite, and it must be available for inspection upon request. The plan must be kept for the life of the affected source or until the affected source is no longer subject to 40 CFR part 63, subpart RRRRR.</p> <p>The plan shall address preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.</p>	40 CFR Section 63.9600(b); Minn. R. 7011.8030; 40 CFR Section 64.7(b):CAM and Minn. R. 7017.0200
<p>Operation and Maintenance Plan (continued):</p> <p>In the event that an exceedance of an established operating limit for an air pollution control device occurs, the Permittee shall initiate corrective action to determine the cause of the operating limit exceedance and complete the corrective action within 10 calendar days. The corrective action procedures taken must be consistent with the installation, operation, and maintenance procedures listed in the site-specific CPMS monitoring plan in accordance with 40 CFR Section 63.9632(b).</p>	40 CFR Section 63.9600(b); Minn. R. 7011.8030 (continued)
SITE-SPECIFIC MONITORING PLAN	hdr
The site-specific monitoring plan must include the site-specific procedures for demonstrating initial and continuous compliance with the corresponding operating limit.	40 CFR 63.9622(e); 40 CFR 63.9634(i); Minn. R. 7011.8030
CORRECTIVE ACTIONS	hdr
<p>If the daily average operating parameter value for an emission unit or group of similar emission units does not meet the corresponding established operating limit, you must then follow the procedures in paragraphs (1) through (4), below.</p> <p>(continued)</p> <p>(1) You must initiate and complete initial corrective action within 10 calendar days and demonstrate that the initial corrective action was successful. During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. After 10 calendar days, measure and record the daily average operating parameter value for the emission unit or group of similar emission units on which corrective action was taken. After the initial corrective action, if the daily average operating parameter value for the emission unit or group of similar emission units meets the operating limit established for the corresponding unit or group, then the corrective action was successful and the emission unit or group of similar emission units is in compliance with the established operating limits.</p>	40 CFR 63.9634(j); Minn. R. 7011.8030
<p>(continued)</p> <p>(2) If the initial corrective action required in paragraph (1) was not successful, then you must complete additional corrective action within 10 calendar days and demonstrate that the subsequent corrective action was successful. During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. After the second set of 10 calendar days allowed to implement corrective action, you must again measure and record the daily average operating parameter value for the emission unit or group of similar emission units. If the daily average operating parameter value for the emission unit or group of similar emission units meets the operating limit established for the corresponding unit or group, then the corrective action was successful and the emission unit or group of similar emission units is in compliance with the established operating limits.</p>	40 CFR 63.9634(j); Minn. R. 7011.8030 (continued)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-44**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

<p>(continued)</p> <p>(3) If the second attempt at corrective action required in paragraph (2) was not successful, then you must repeat the procedures of paragraph (2) until the corrective action is successful. If the third attempt at corrective action is unsuccessful, you must conduct another performance test in accordance with the procedures in 40 CFR 63.9622(f) and report to the Administrator as a deviation the third unsuccessful attempt at corrective action.</p> <p>(4) After the third unsuccessful attempt at corrective action, you must submit to the Administrator the written report required in paragraph (3) within 5 calendar days after the third unsuccessful attempt at corrective action. This report must notify the Administrator that a deviation has occurred and document the types of corrective measures taken to address the problem that resulted in the deviation of established operating parameters and the resulting operating limits.</p>	40 CFR 63.9634(j); Minn. R. 7011.8030 (continued)
PARAMETRIC LIMITS	hdr
<p>The Permittee shall maintain the daily average operating parameter specified in the site-specific monitoring plan in accordance with 63.9631(f) at or above the minimum levels established during the initial performance test.</p> <p>The Permittee may change the daily average operating parameter value if the permittee:</p> <ol style="list-style-type: none"> 1) submits a written notification to the Commissioner requesting to conduct a new performance test to revise the operating limit. 2) conduct a performance test to demonstrate compliance with the applicable emission limitation. 3) establishes revised operating limits according to the procedures in the site-specific monitoring plan in accordance with 40 CFR Section 63.9622(e). 	40 CFR 63.9590(b)(5); 40 CFR 63.9622(f); Minn. R. 7011.8030
The Permittee shall maintain a record of the site-specific operating limits as measured during the performance test in accordance with 40 CFR 63.9622(e)	40 CFR 63.9623(b)(5); Minn. R. 7011.8030
<p>The Permittee shall install and operate each CPMS such that the CPMS completes a minimum of one cycle of operation for each successive 15-minute period and determines and records valid data for at least 95 percent of every daily averaging period. Each CPMS must also determine and record the daily average of all recorded readings.</p> <p>The Permittee shall operate and maintain each CPMS and conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.</p>	40 CFR Section 63.9632(c), (d) and (e); Minn. R. 7011.8030
<p>The Permittee shall perform preventative maintenance for each control device in accordance with 40 CFR section 63.9600(b)(1) and recording all information needed to document conformance with these requirements.</p> <p>The Permittee shall also initiate and complete corrective action (in accordance with 40 CFR section 63.9600(b)(3)) for a CPMS when an established operating limit for an air pollution control device is exceeded and record all the information needed to document conformance with these requirements.</p>	40 CFR Section 63.9636(a)(1) and (3); Minn. R. 7011.8030

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-45**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: GP 019 Sources Subject to NSPS Subpart LL, Standards of Performance for Metallic Mineral Processing

Associated Items:

- CE 047 Manually Operated Water Spray
- CE 050 Manually Operated Water Spray
- FS 032 Jaw Crusher A
- FS 034 Material Handling: Conveyor A1 to Conveyor A2
- FS 035 Material Handling: Conveyor A2 to Screen A1
- FS 036 Screen A1
- FS 037 Material Handling: Screen A1 to Conveyor AB1
- FS 039 Jaw Crusher B
- FS 041 Material Handling: Conveyor B1 to Conveyor B2
- FS 042 Material Handling: Conveyor B2 to Screen B1
- FS 043 Screen B1
- FS 044 Material Handling: Screen B1 to Conveyor AB1
- FS 045 Material Handling: Conveyor AB1 to Cone Crusher
- FS 046 Cone Crusher
- FS 047 Material Handling: Cone Crusher to Conveyor AB2
- FS 048 Material Handling: Conveyor AB2 to Conveyor AB3
- FS 049 Material Handling: Conveyor AB3 to Conveyor A3
- FS 050 Material Handling: Conveyor A3 to Conveyor A4
- FS 051 Material Handling: Conveyor A4 to Cobber A
- FS 053 Material Handling: Conveyor AB3 to Conveyor B3
- FS 054 Material Handling: Conveyor B3 to Conveyor B4
- FS 055 Material Handling: Conveyor B4 to Cobber B
- FS 057 Material Handling: Cobber A to Conveyor A5
- FS 058 Material Handling: Conveyor A5 to Conveyor B7
- FS 059 Material Handling: Cobber A to Conveyor A6
- FS 060 Material Handling: Conveyor A6 to Conveyor A7
- FS 061 Material Handling: Conveyor A7 to Conveyor A8
- FS 062 Material Handling: Conveyor A8 to Conveyor A9
- FS 063 Material Handling: Conveyor A9 to Magnetic Stockpile
- FS 065 Material Handling: Cobber B to Conveyor B5
- FS 066 Material Handling: Conveyor B5 to Conveyor A7
- FS 067 Material Handling: Cobber B to Conveyor B6
- FS 068 Material Handling: Conveyor B6 to Conveyor B7
- FS 069 Material Handling: Conveyor B7 to Screen B2
- FS 070 Screen B2
- FS 071 Material Handling: Screen B2 to Conveyor B8
- FS 072 Material Handling: Conveyor B8 to Conveyor B9
- FS 073 Material Handling: Conveyor B9 to Non-Magnetic Stockpile

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-46**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

What to do	Why to do it
NSPS GENERAL PROVISIONS 40 CFR pt. 60, subp. A	hdr
No owner or operator shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard.	40 CFR Section 60.12; Minn. R. 7011.0050
LIMITS	hdr
Material Usage: less than or equal to 4592000 tons/year of combined material throughput through FS 032 and FS 039.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21 & Minn. R. 7007.3000
Water flow rate: greater than or equal to 15 gallons/minute using 4-hour Block Average unless a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average water flow rate recorded during the most recent MPCA approved performance test where compliance was demonstrated when FS031-FS074 are in operation.	Title I Condition: To avoid classification as major modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; Minn. R. 7017.2025
Divide total volume by total operating time in each four-hour block. Downtime of 15 or more minutes is not to be included as operating time.	
Opacity: less than or equal to 10 percent using 6-minute Average on or after the 60th day after achieving the maximum production rate, but not later than 180 operating days after initial startup.	40 CFR Section 63.382(b); Minn. R. 7011.2700
The Permittee shall operate and maintain the water spraying system (CE 047 and CE 050) at all times that FS 032 and/or FS 039 is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subps 2 & 14
Opacity Compliance: Demonstrate compliance with opacity standards using Reference Method 9.	40 CFR Section 60.11; Minn. R. 7017.2015
The opacity standards apply at all times except during periods of startup, shutdown, malfunction.	40 CFR Section 60.11(c)
PERFORMANCE TESTING	hdr
Initial Performance Test: due 180 days after Initial Startup to measure opacity when all units in the In-Pit Crushing and Cobbing Operation are operating (FS 031 - 074) at maximum capacity.	40 CFR Section 60.8; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Performance Test.	Minn. R. 7017.2030, subp. 4
For the purpose of demonstrating initial compliance, conduct opacity observations concurrently with the initial performance test required in 40 CFR 60.8 and include the results in the test report, pursuant to the conditions described in 40 CFR 60.11(e)(1)-(3).	40 CFR Section 60.11(e)(1); 40 CFR Section 60.11(e)(2); 40 CFR Section 60.11(e)(3)
RECORDKEEPING	hdr
Recordkeeping: Maintain a file of all measurements, maintenance, reports and records for at least five years. This meets the requirements of 40 CFR Section 60.7(f).	Minn. R. 7997.0800, subp. 5(C); meets requirements of 40 CFR Section 60.7(f); Minn. R. 7019.0100, subp. 1
Recordkeeping: The Permittee shall retain records on site to document the combined throughput of FS032 and FS039. These records shall be updated the 30th day of each month of operation of FS032 and FS039.	Title I Condition: Recordkeeping associated with a limit taken to avoid classification as a major modification under 40 CFR Section 52.21
Recordkeeping: The Permittee shall retain records on site to document water flow rates of CE 047 and CE 050 using a 4-hour block averaging time.	Title I Condition: Recordkeeping associated with a limit taken to avoid classification as a major modification under 40 CFR Section 52.21
Recordkeeping: Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	40 CFR Section 60.7(b), Minn. R. 7019.0100, subp. 1
Fugitive Dust Observations: The Permittee shall observe the fugitive dust sources identified in the Fugitive Control Plan once daily during daylight hours. The Permittee shall use the fugitive sources visible emissions checklist(s) in the Appendix B as a means to indicate when appropriate corrective actions in the Fugitive Control Plan are taken.	Minn. R. 7007.0800, subps. 4(D), 14, and 16(J)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-47**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: EU 036 Paint Booth**Associated Items:** SV 045

What to do	Why to do it
POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A)
Total Particulate Matter: greater than or equal to 85 percent control efficiency for equipment which is located not less than one-fourth mile from any residence or public roadway, and the operation of the entire emission facility does not cause a violation of the ambient air quality standards, shall be considered in compliance with the requirements of Minn. R. 7011.0715, subp. 1(A). This is an alternative demonstration of compliance to the Total Particulate Limit above.	Minn. R. 7011.0715, subp. 3
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
POLLUTION CONTROL EQUIPMENT LIMITS	hdr
Pressure Drop: greater than or equal to 0.5 inches of water column across the mat or panel filter for CE 046, per operation parameters submitted on 12/21/2005 via e-mail.	Minn. R. 7007.0800, subp. 4(D); 14; 16(J)
MONITORING, TESTING AND REPORTING	hdr
Gas Stream Pressure Drop: Monitor and record the gas stream pressure drop at least once each operating day. Once the the pressure drop range has been established it becomes an enforceable part of this permit. A deviation from this range shall trigger a corrective action as detailed in the O&M plan.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Inspect monthly, or as required by the O&M plan and manufacturer specifications, the capture/containment and panel filter control system. Maintain a written record of each inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 4(D); Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-48**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 001 Venturi Scrubber**Associated Items:** EU 001 Phase I Apron Feeder

GP 001 Crushing

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 001 Phase I Apron Feeder: Venturi Scrubber

MR 002 Phase I Apron Feeder: Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 12 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 27 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.0 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 30 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP001.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-49**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 002 Venturi Scrubber**Associated Items:** EU 002 Phase II Apron Feeder

GP 001 Crushing

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 003 Phase II Apron Feeder: Venturi Scrubber

MR 004 Phase II Apron Feeder: Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 16 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 42 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.0 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 30 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 36 months following permit issuance to measure front-catch particulate matter for compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP001.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-50**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 003 Venturi Scrubber**Associated Items:** EU 003 Phase I Primary Ore Conveyor - Tail

GP 001 Crushing

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 005 Phase I POC: Venturi Scrubber

MR 006 Phase I POC: Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.6 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 18 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.0 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 30 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP001.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-51**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 004 Venturi Scrubber**Associated Items:** EU 004 Phase II Primary Ore Conveyor - Tail

GP 001 Crushing

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 007 Phase II POC: Venturi Scrubber

MR 008 Phase II POC: Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.2 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 26 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.0 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 30 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP001.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-52**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 005 Wet Scrubber-High Efficiency**Associated Items:** EU 005 Line No 1 Mill Feed Conveyor

GP 002 Concentrating

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 009 Mill Line 1: HE Wet Scrubber

MR 010 Mill Line 1: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 18 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 43 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 10 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 35 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 36 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP002.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-53**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 006 Wet Scrubber-High Efficiency**Associated Items:** EU 006 Line No 2 Mill Feed Conveyor

GP 002 Concentrating

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 011 Mill Line 2: HE Wet Scrubber

MR 012 Mill Line 2: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 18 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 48 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 10 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 35 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP002.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-54**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 007 Wet Scrubber-High Efficiency**Associated Items:** EU 007 Line No 3 Mill Feed Conveyor

GP 002 Concentrating

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 013 Mill Line 3: HE Wet Scrubber

MR 014 Mill Line 3: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 18 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 42 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 10 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 35 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP002.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-55

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 008 Wet Scrubber-High Efficiency**Associated Items:** EU 008 Line No 4 Mill Feed Conveyor

GP 002 Concentrating

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 015 Mill Line 4: HE Wet Scrubber

MR 016 Mill Line 4: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 20 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 35 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 10 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 35 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP002.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-56**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 009 Wet Scrubber-High Efficiency**Associated Items:** EU 009 Line No 5 Mill Feed Conveyor

GP 002 Concentrating

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 017 Mill Line 5: HE Wet Scrubber

MR 018 Mill Line 5: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 19 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 44 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 10 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 35 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP002.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-57**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 010 Wet Scrubber-High Efficiency**Associated Items:** EU 010 Line No 6 Mill Feed Conveyor

GP 002 Concentrating

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 019 Mill Line 6: HE Wet Scrubber

MR 020 Mill Line 6: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 20 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 34 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 10 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 35 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 36 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-58**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 011 Wet Scrubber-High Efficiency**Associated Items:** EU 011 Line No 7 Mill Feed Conveyor

GP 002 Concentrating

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 021 Mill Line 7: HE Wet Scrubber

MR 022 Mill Line 7: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 19 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 37 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 10 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 35 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP002.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-59**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 012 Wet Scrubber-High Efficiency**Associated Items:** EU 012 Line No 8 Mill Feed Conveyor

GP 002 Concentrating

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 023 Mill Line 8: HE Wet Scrubber

MR 024 Mill Line 8: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 19 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 47 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 10 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 35 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP002.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-60**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 013 Wet Scrubber-High Efficiency**Associated Items:** EU 013 Line No 9 Mill Feed Conveyor

GP 002 Concentrating

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 010 Ore Crushing and Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 025 Mill Line 9: HE Wet Scrubber

MR 026 Mill Line 9: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 19 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 32 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 10 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 35 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP ore crushing limitations. The limit is found in GP002.	40 CFR Part 63.9630(a); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-61**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 016 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 016 Phase I Bentonite Day Bins

GP 005 Pelletizing - Baghouses

MR 027 Phase I Bentonite Day Bin: Fabric Filter

What to do	Why to do it
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column using 24-hour Block Average measured across the fabric filter, per operation parameters submitted on 12/21/2005 via e-mail. This limit applies during all operating periods.	Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-62**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 017 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 017 Phase II Bentonite Day Bins

GP 005 Pelletizing - Baghouses

MR 028 Phase II Bentonite Day Bin: Fabric Filter

What to do	Why to do it
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column using 24-hour Block Average measured across the fabric filter, per operation parameters submitted on 12/21/2005 via e-mail. This limit applies during all operating periods.	Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-63**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 018 Wet Scrubber-High Efficiency**Associated Items:** EU 018 Phase I Hearth Layer Bin/Layer Feed

GP 004 Pelletizing - Scrubbers

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 011 Finished Pellet Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 029 Phase I Hearth Layer Bin: HE Wet Scrubber

MR 030 Phase I Hearth Layer Bin: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 32 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 0.5 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 15 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP finished pellet handling limitations. The limit is found in GP004.	40 CFR Part 63.9630(c); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-64**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 019 Wet Scrubber-High Efficiency**Associated Items:** EU 019 Phase II Hearth Layer Bin/Layer Feed

GP 004 Pelletizing - Scrubbers

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 011 Finished Pellet Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 031 Phase II Hearth Layer Bin: HE Wet Scrubber

MR 032 Phase II Hearth Layer Bin: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.7 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 22 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 0.5 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 15 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP finished pellet handling limitations. The limit is found in GP004.	40 CFR Part 63.9630(c); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-65**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 020 Wet Scrubber-High Efficiency**Associated Items:** EU 018 Phase I Hearth Layer Bin/Layer Feed

GP 004 Pelletizing - Scrubbers

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 011 Finished Pellet Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 033 Phase I Hearth Layer Feed: HE Wet Scrubber

MR 034 Phase I Hearth Layer Feed: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.7 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 28 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 0.2 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 15 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP finished pellet handling limitations. The limit is found in GP004.	40 CFR Part 63.9630(c); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-66**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 021 Wet Scrubber-High Efficiency**Associated Items:** EU 019 Phase II Hearth Layer Bin/Layer Feed

GP 004 Pelletizing - Scrubbers

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 011 Finished Pellet Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 035 Phase II Hearth Layer Feed: HE Wet Scrubber

MR 036 Phase II Hearth Layer Feed: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.8 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 48 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 0.2 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 15 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP finished pellet handling limitations. The limit is found in GP004.	40 CFR Part 63.9630(c); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-67**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 022 Venturi Scrubber**Associated Items:** EU 020 Pellet Indurating Furnace Line No 1

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 037 Furnace Line 1 Venturi Scrubber

MR 038 Furnace Line 1 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.7 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 715 gallons/minute using 24-hour Block Average, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-68**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 023 Venturi Scrubber**Associated Items:** EU 020 Pellet Indurating Furnace Line No 1

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 039 Furnace Line 1 Venturi Scrubber

MR 040 Furnace Line 1 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.6 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 11/8-11/12, 2005 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 629 gallons/minute using 24-hour Block Average, per operating parameters from 11/8-11/12, 2005 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-69**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 024 Venturi Scrubber**Associated Items:** EU 020 Pellet Indurating Furnace Line No 1

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 041 Furnace Line 1 Venturi Scrubber

MR 042 Furnace Line 1 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 3.1 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 723 gallons/minute using 24-hour Block Average, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-70**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 025 Venturi Scrubber**Associated Items:** EU 020 Pellet Indurating Furnace Line No 1

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 043 Furnace Line 1 Venturi ScrubberFurnace Line 1 Venturi Scrubber

MR 044 Furnace Line 1 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 3.4 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 445 gallons/minute using 24-hour Block Average, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-71**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 026 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones**Associated Items:** EU 020 Pellet Indurating Furnace Line No 1

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 018 Multiclones Subject to Taconite MACT

MR 045 Line 1 Multiclone

What to do	Why to do it
Pressure Drop: greater than or equal to 1.0 inches of water column using 24-hour Block Average across the Multiclone for, per operation parameters submitted on 12/21/2005 via e-mail.	Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-72**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 027 Venturi Scrubber**Associated Items:** EU 021 Pellet Indurating Furnace Line No 2

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 046 Furnace Line 2 Venturi Scrubber

MR 047 Furnace Line 2 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 3.3 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 412 gallons/minute using 24-hour Block Average, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-73**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 028 Venturi Scrubber**Associated Items:** EU 021 Pellet Indurating Furnace Line No 2

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 048 Furnace Line 2 Venturi Scrubber

MR 049 Furnace Line 2 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.9 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 5/14-5/20, 2008 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 327 gallons/minute using 24-hour Block Average, per operating parameters from 5/14-5/20, 2008 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-74**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 029 Venturi Scrubber**Associated Items:** EU 021 Pellet Indurating Furnace Line No 2

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 050 Furnace Line 2 Venturi Scrubber

MR 051 Furnace Line 2 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 3.9 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 11/24-12/30, 2008 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 305 gallons/minute using 24-hour Block Average, per operating parameters from 11/24-12/30, 2008 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-75**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 030 Venturi Scrubber**Associated Items:** EU 021 Pellet Indurating Furnace Line No 2

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 052 Furnace Line 2 Venturi Scrubber

MR 053 Furnace Line 2 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 3.1 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 5/14-5/20, 2008 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 351 gallons/minute using 24-hour Block Average, per operating parameters from 5/14-5/20, 2008 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Hibbing Taconite Co
Permit Number: 13700061 - 004

Subject Item: CE 031 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones

Associated Items: EU 021 Pellet Indurating Furnace Line No 2
GP 003 Furnaces Nos. 1-3
GP 008 Point Sources and Fugitive Sources Subject to MACT
GP 009 Point Sources Subject to Taconite MACT
GP 012 Indurating Sources Subject to Taconite MACT
GP 018 Multiclones Subject to Taconite MACT
MR 054 Line 2 Multiclone

What to do	Why to do it
Pressure Drop: greater than or equal to 1.0 inches of water column using 24-hour Block Average across the Multiclone for, per operation parameters submitted on 12/21/2005 via e-mail.	Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-77**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 032 Venturi Scrubber**Associated Items:** EU 022 Pellet Indurating Furnace Line No 3

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 055 Furnace Line 3 Venturi Scrubber

MR 056 Furnace Line 3 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 4.0 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 445 gallons/minute using 24-hour Block Average, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-78**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 033 Venturi Scrubber**Associated Items:** EU 022 Pellet Indurating Furnace Line No 3

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 057 Furnace Line 3 Venturi Scrubber

MR 058 Furnace Line 3 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 3.2 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 419 gallons/minute using 24-hour Block Average, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-79**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 034 Venturi Scrubber**Associated Items:** EU 022 Pellet Indurating Furnace Line No 3

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 059 Furnace Line 3 Venturi Scrubber

MR 060 Furnace Line 3 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.9 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 431 gallons/minute using 24-hour Block Average, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-80**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 035 Venturi Scrubber**Associated Items:** EU 022 Pellet Indurating Furnace Line No 3

GP 003 Furnaces Nos. 1-3

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 012 Indurating Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 061 Furnace Line 3 Venturi Scrubber

MR 062 Furnace Line 3 Venturi Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 3.3 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 436 gallons/minute using 24-hour Block Average, per operating parameters from 4/24-4/27, 2007 performance tests.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
DIRECT HEATING EQUIPMENT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.5 inches of water column using 24-hour Block Average measured across the Venturi of the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 300 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due -900 days before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
Performance Test: due before 60 months following permit issuance to measure front-half particulate matter to demonstrate compliance with the Taconite NESHAP indurating furnace limitations.	40 CFR Section 63.9630(b); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Hibbing Taconite Co
Permit Number: 13700061 - 004

Subject Item: CE 036 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones

- Associated Items:
- EU 022 Pellet Indurating Furnace Line No 3
 - GP 003 Furnaces Nos. 1-3
 - GP 008 Point Sources and Fugitive Sources Subject to MACT
 - GP 009 Point Sources Subject to Taconite MACT
 - GP 012 Indurating Sources Subject to Taconite MACT
 - GP 018 Multiclones Subject to Taconite MACT
 - MR 063 Line 3 Multiclone

What to do	Why to do it
Pressure Drop: greater than or equal to 1.0 inches of water column using 24-hour Block Average across the Multiclone for, per operation parameters submitted on 12/21/2005 via e-mail.	Minn. R. 7011.0610; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-82**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 037 Wet Scrubber-High Efficiency**Associated Items:** EU 023 Pellet Machine Discharge Line No 1

GP 004 Pelletizing - Scrubbers

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 011 Finished Pellet Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 064 Machine Discharge Line 1: HE Wet Scrubber

MR 065 Machine Discharge Line 1: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.9 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 72 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 55 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP finished pellet handling limitations. The limit is found in GP004.	40 CFR Part 63.9630(c); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-83**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 038 Wet Scrubber-High Efficiency**Associated Items:** EU 024 Pellet Machine Discharge Line No 2

GP 004 Pelletizing - Scrubbers

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 011 Finished Pellet Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 066 Machine Discharge Line 2: HE Wet Scrubber

MR 067 Machine Discharge Line 2: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.6 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 62 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 55 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP finished pellet handling limitations. The limit is found in GP004.	40 CFR Part 63.9630(c); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-84**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 039 Wet Scrubber-High Efficiency**Associated Items:** EU 025 Pellet Machine Discharge Line No 3

GP 004 Pelletizing - Scrubbers

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 011 Finished Pellet Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 068 Machine Discharge Line 3: HE Wet Scrubber

MR 069 Machine Discharge Line 3: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.1 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 51 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 55 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP finished pellet handling limitations. The limit is found in GP004.	40 CFR Part 63.9630(c); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-85**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 040 Wet Scrubber-High Efficiency**Associated Items:** EU 026 Pellet Hearth Layer Screening

GP 004 Pelletizing - Scrubbers

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 011 Finished Pellet Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 070 Hearth Layer Screen: HE Wet Scrubber

MR 071 Hearth Layer Screen: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 0.50 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 30 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 3.0 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 15 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP finished pellet handling limitations. The limit is found in GP004.	40 CFR Part 63.9630(c); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-86**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 041 Wet Scrubber-High Efficiency**Associated Items:** EU 027 Pellet Transfer House

GP 004 Pelletizing - Scrubbers

GP 008 Point Sources and Fugitive Sources Subject to MACT

GP 009 Point Sources Subject to Taconite MACT

GP 011 Finished Pellet Handling Sources Subject to Taconite MACT

GP 014 Wet Scrubbers Subject to Taconite MACT

MR 072 Pellet Transfer House: HE Wet Scrubber

MR 073 Pellet Transfer House: HE Wet Scrubber

What to do	Why to do it
MACT PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 3.7 inches of water column using 24-hour Block Average measured across the Wet Scrubber.	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
Water flow rate: greater than or equal to 29 gallons/minute using 24-hour Block Average	40 CFR Part 63.9590(b)(1); Minn. R. 7011.8030; Minn. R. 7007.0800, subps. 2 and 14
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 2.5 inches of water column using 24-hour Block Average measured across the Wet Scrubber, per operation parameters submitted on 12/21/2005 via e-mail.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
Water flow rate: greater than or equal to 40 gallons/minute using 24-hour Block Average, per operation parameters submitted on 12/21/2005 via e-mail. Downtime of 15 or more minutes is not to be included as operating time.	40 CFR Section 64.7: CAM and Minn. R. 7017.0200; Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3
PERFORMANCE TESTING REQUIREMENTS	hdr
Also see GP008.	
Performance Test: due before 60 months following permit issuance to measure front-catch particulate matter to demonstrate compliance with Taconite NESHAP finished pellet handling limitations. The limit is found in GP004.	40 CFR Part 63.9630(c); Minn. R. 7011.8030; Minn. R. 7017.2020, subp. 1
MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS	hdr
See GP008 and GP009.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-87**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 042 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 028 Bentonite Storage Silo - East

GP 005 Pelletizing - Baghouses

MR 074 Bentonite Silo - East: Fabric Filter

What to do	Why to do it
IPER PARAMETRIC LIMITS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column using 24-hour Block Average across the fabric filter, per operation parameters submitted on 12/22/2005 via e-mail. Note that this baghouse is operated when the silo is being loaded or unloaded; therefore, pressure drop monitoring will not be continuous through any given day (batch operation). This limit applies during all operating periods.	Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-88**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 043 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 029 Bentonite Storage Silo - West

GP 005 Pelletizing - Baghouses

MR 075 Bentonite Silo - West: Fabric Filter

What to do	Why to do it
POLLUTION CONTROL EQUIPMENT LIMITS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column using 24-hour Block Average across the fabric filter, per operation parameters submitted on 12/22/2005 via e-mail. Note that this baghouse is operated when the silo is being loaded or unloaded; therefore, pressure drop monitoring will not be continuous through any given day (batch operation). This limit applies during all operating periods.	Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-89**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: CE 044 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 033 Limestone Storage Silo

GP 005 Pelletizing - Baghouses

MR 076 Limestone Silo: Fabric Filter

What to do	Why to do it
POLLUTION CONTROL EQUIPMENT LIMITS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column using 24-hour Block Average across the fabric filter, per operation parameters submitted on 12/22/2005 via e-mail. Note that this baghouse is operated when the silo is being loaded or unloaded; therefore, pressure drop monitoring will not be continuous through any given day (batch operation). This limit applies during all operating periods.	Minn. R. 7011.0715; Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-90**

06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

Subject Item: BG 003 Pelletizing Phase II

What to do	Why to do it
Performance Test: due 120 days after Startup for NOx. The Permittee shall conduct a performance test for NOx on a least one indurating furnace to validate the NOx emission factor used in the netting analysis for the burner replacement/modification. If this performance test determines that the actual NOx emission factor after the burner replacement/modification is higher than what was used in the netting analysis, the Permittee shall reevaluate PSD applicability for the burner replacement/modification.	TBD

TABLE B: SUBMITTALS

B-1 06/25/10

Facility Name: Hibbing Taconite Co
Permit Number: 13700061 - 004

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

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

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

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

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

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

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.

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

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

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**B-2** 06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Fugitive Control Plan	due 30 days after Permit Issuance. Update to include FS 031 - FS 074 to the Visible Emission Checklists.	Total Facility
Monitoring Plan	<p>due 180 days after Resuming Operation. The Permittee shall develop and submit to the Commissioner for approval a site-specific monitoring plan for each multiclone that addresses the following:</p> <p>(1) A description of the device. (2) Test results collected in accordance with 40 CFR section 63.9621 verifying the performance of the device for reducing emissions of particulate matter to the atmosphere to the levels required by 40 CFR pt. 63, subp. RRRRR. (3) A copy of the operation and maintenance plan required in 40 CFR section 63.9600(b). (4) Appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s).</p> <p>The Permittee shall maintain a current copy of the monitoring plan onsite, and it must be available for inspection upon request. The plan must be kept for the life of the affected source or until the affected source is no longer subject to the requirements of 40 CFR pt.63, subp. RRRRR.</p>	GP018
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup	GP019
Notification of the Date Construction Began	due 30 days after Start Of Construction. Submit the name and number of each unit and the date construction of each unit began.	GP019
Notification	due 15 days after Resuming Operation. The Permittee shall submit a notification of the actual date of Resuming Operation.	Total Facility
Notification	due 60 days before Start Of Construction (or as soon as practical) of any physical or operational change which increases emission rate.	GP019
Testing Frequency Plan	due 60 days after Initial Performance Test for opacity. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on 12-month, 36-month, or 60-month intervals, or as applicable, shall be required upon written approval of the MPCA.	GP019

TABLE B: RECURRENT SUBMITTALS**B-3** 06/25/10

Facility Name: Hibbing Taconite Co

Permit Number: 13700061 - 004

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 01/14/2010 . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year starting 01/14/2010 (for the previous calendar year). The Permittee shall submit this on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year. The EPA copy shall be sent to Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604.	Total Facility

APPENDIX MATERIAL

Facility Name:Hibbing Taconite Co

Permit Number: 13700061-004

A – Operator’s Summary *(not used in this permit)*

B – Visible Emissions Checklist

APPENDIX B

VISIBLE EMISSION CHECKS

Daily Stack Emissions Inspection

Emission Units and Stack/Vents:

Visible Emissions Checklist(s): The Permittee shall use one or more checklists until such time as broken bag detectors are installed. The checklist or checklists must contain the following:

Visible Emissions Checklist(s):

- 1) Initials of observer;
- 2) Date and time of observation;
- 3) Indication of process and control equipment performance, either "requires attention", or "does not require attention". This determination is based upon an observed change in visible emission characteristics from that observed when this source and its pollution control equipment are properly operated and maintained. A change in visible emission characteristics will be indicative of "requires attention";
- 4) Facility identification of emission unit.
- 5) Short description of emission unit.

The Permittee shall retain a central facility checklist of the following information to support the Visible emission checklist(s):

- 1) Description of investigation and corrective actions completed for each "requires attention" observation marked on the visible emission checklist(s);
- 2) Weather conditions (temperature, cloud cover, wind, precipitation);
- 3) A key which will enable an inspector to cross reference the identification numbers or names used on the visible emission checklist(s) to the Emission Unit (EU), Stack/Vent (SV) and Control Equipment (CE) numbers used in the Title V permit.

APPENDIX B

EXAMPLE VISIBLE EMISSION CHECKLIST

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

Record "OK" if equipment does not require attention.

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

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

Record "Moist" if a moisture plume limits visible emissions observations.

If the piece of control equipment is down for more than one hour and the service area is active, notify the Environmental Engineer with the following information: EU and CE 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 the completed inspection form to the Environmental Engineer to file.

EU	GP	SV	CE	Service Area	Sat	Sun	Mon	Tue	Wed	Thu	Fri
				Year_____ Date >>							
				Time							
				Initials							

Record corrective actions or comments for each "RA". Also record pressure for each unit that a moisture plume or other difficulty interferes with the observation.

Date ____/____/____ Employee _____ # _____

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 13700061-004

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)
Hibbing Taconite Company P.O. Box 589 Hibbing, MN 55746	4950 County Highway 5 North Hibbing St. Louis County
Contact: Mr. Andrew McDowell, Environmental Manager Phone: 218-262-5970	

1.2 Facility Description

HTC, an unincorporated joint venture, is the owner and operator of a taconite (magnetite) ore mining and beneficiation facility located in Hibbing, Minnesota. Cliffs Mining Company is the managing agent.

HTC's mine and beneficiation facility (all plant buildings) are located in St. Louis County, an area designated attainment for all criteria pollutants. The existing facility is classified as a major emission source with respect to the federal PSD program. The facility is also a major source of hazardous air pollutants (HAPs) because potential emissions of HAPs exceed the major source thresholds of 10 tons per year (tpy) for any individual HAP and 25 tpy of total HAPs.

The beneficiation plant is situated in the approximate center of HTC's property, with the active mine extending from three miles to the southeast to six miles to the southwest, and the tailing basin located to the north. The beneficiation plant was constructed in two phases. Phase I construction began in 1974, with operations beginning in 1976. Phase I consists of one crusher, six autogenous mill lines, two stages of magnetic separation – rougher and finisher, two Dravo-Lurgi straight grate indurating furnaces, and associated processing and material handling equipment. Phase II construction began in 1976, with operations beginning in 1979. Phase II consists of one crusher, three autogenous grinding mill lines, two stages of magnetic separation, one Dravo-Lurgi straight grate indurating furnace, and associated processing and material handling equipment.

The three pellet indurating furnaces are functionally equivalent, each one producing, on average, the same yield. HTC produced in excess of 8.6 million dry long tons (dlt) – in 1988, with capabilities of producing up to 9 million dlt annually. Steel demand drives the level of HTC's annual pellet production. By convention, HTC reports long tons (1 long ton = 2240 pounds) of production. Because the Minnesota Pollution Control Agency (MPCA) uses short tons, the long tons are multiplied by a factor of 1.12 and reported as short tons for air quality permitting purposes.

To produce 8.0 million dlt of pellets, approximately 32 million wet long tons (wlt) of taconite ore must be processed. The current weight recovery (percentage of concentrate recovered to taconite ore) is in the range of 25 percent. Stripping (including the overburden, the rock, and the low-grade taconite that cannot be economically processed) must be performed prior to hauling the taconite ore. "All-material" includes the total taconite ore removed and stripping tons. During the period (1994-1998), HTC averaged nearly 50 million long tons of all material per year.

HTC started operation in 1976 having the flexibility to use natural gas or fuel oil (all grades). All three furnaces started operation with No. 6 fuel oil (Bunker C) as the primary fuel and were then switched over to natural gas as the primary fuel during 1981. In the recent past, the facility evaluated other fuels including wood and oat hulls. To date, these alternative fuels have not proven to be viable options for the current indurating process.

The major steps in taconite pellet production include taconite ore mining, crushing, grinding, concentrating, agglomerating, and indurating. The larger sources of air emissions at HTC are from the mining activities and indurating furnace operations, with lesser amounts from other processing operations and fugitive dust sources, including haul roads and the tailings basin. The mining activities and materials handling operations generate particulate emissions. Wet scrubbers are the primary means of controlling these emissions, although baghouses are used on some smaller emission units.

The indurating furnaces emit particulate matter and combustion pollutants. Particulate emissions are controlled with wet scrubbers, which also reduce emissions of sulfur dioxide. Because the construction of the facility predates the PSD program, the furnaces have no add-on controls in place to limit emissions of nitrogen oxide or carbon monoxide. Replacement/modification of the lower burners on the three indurating furnaces as well as the installation of a large diesel generator and several portable heaters was authorized under the most recent reissuance dated January 14, 2010.

1.3 Description of the Activities Allowed by this Permit Action

This facility is a major source under the Part 70 regulations and also under the Prevention of Significant Deterioration (PSD) regulation. If emissions from this project exceeded the PSD significance levels, Hibbing Taconite Company (HTC) would be required to conduct an analysis for Best Available Control Technology (BACT) and perform other actions required under PSD. However, HTC proposes adding new equipment, and the emissions from this addition will not exceed PSD significance levels. Because of this, the facility is not subject to BACT and other PSD requirements for this permit action.

This permit action authorizes the construction and operation of an in-pit crushing and cobbing operation comprising of an additional 44 fugitive emission sources. This modification will upgrade the low-grade pit material by increasing its overall weight recovery in the mine before it is delivered to the existing crusher. HTC is proposing to limit the material throughput of the in-pit crushing and cobbing sources to ensure that NSR/PSD significant thresholds will not be exceeded. The project will therefore be considered a synthetic minor for NSR/PSD purposes. The facility will be employing water sprayers and the Fugitive Dust Plan to control particulate matter (PM, PM₁₀ and PM_{2.5}) emissions resulting from this modification.

This permit action added GP 019: Sources Subject to NSPS Subpart LL. This group identifies and contains permit conditions related to this NSPS.

1.4. Facility Emissions:

Table 1. Title I Emissions Increase Summary

Pollutant	Emissions Increase from the Modification (tpy)	Limited Emissions Increase from the Modification (tpy)	PSD/112(g) Significant Thresholds for major sources (tpy)	NSR/ 112(g) Review Required?
PM	98.6	22.3	25	No
PM ₁₀	51.3	11.5	15	No
PM _{2.5}	15.6	3.4	10	No
NO _x	0	0	40	No
SO ₂	0	0	40	No
CO	0	0	100	No
Ozone (VOC)	0	0	40	No
Lead	0	0	0.6	No
Total HAPs	0.3	0.07	10/25	No

Table 2. Facility Classification

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

2. Regulatory and/or Statutory Basis

New Source Review

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

Limits on operation hours and throughput for Jaw Crushers A & B (FS032 and FS039) were taken to avoid classification as a major modification for PSD.

Part 70 Permit Program

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

New Source Performance Standards (NSPS)

As a part of this modification, Jaw Crushers A & B (FS032 & FS039), Screens A1, B1 & B2 (FS036, FS043 & FS070), and the Cone Crusher (FS046) trigger 40 CFR pt. 60, subp. LL: Standards of Performance for Metallic Mineral Processing Plants.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is a major source under 40 CFR pt. 63. Much of the facility – the emission units, control equipment, stack/vents, and fugitive sources of GP008 – is subject to the NESHAPs: Taconite Iron Ore Processing (subpart RRRRR).

Compliance Assurance Monitoring (CAM)

CAM does not apply to the modification allowed in this permit amendment, no one emission unit added is a large pollutant specific emission unit (PSEU).

Environmental Review & AERA

The facility has accepted limits on production such that it is not subject to environmental review, i.e. an Environmental Assessment Worksheet (EAW) and is not required to perform an Air Emissions Risk Analysis (AERA).

Minnesota State Rules

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

- Minn. R. 7011.0050 General Provisions of Federal NSPS Incorporated by Reference (incorporation of 40 CFR 60 subpart A by reference)
- Minn. R. 7011.0610 Standards of Performance for Direct Heating Fossil-Fuel-Burning Equipment
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment
- Minn. R. 7011.7000 General Provisions of Federal NESHAPs Source Categories Incorporated by Reference (incorporation of 40 CFR 63 subpart A by reference)
- Minn. R. 7011.8030 Taconite Iron Ore Processing (incorporation of 40 CFR 63 subpart RRRRR by reference)

Table 3. Regulatory Overview of Units Affected by the Modification/Permit Amendment

Level	Applicable Regulations	Comments:
GP 008 and GP 013 EUs subject to Taconite MACT	40 CFR pt 63, subp. RRRRR	NESHAPs from Taconite Operations Fugitive emission sources added to an existing group.
GP 019 EUS subject to 40 CFR Subpart LL	40 CFR pt. 60, subp. LL Title I Condition: Operational throughput to avoid PSD	NSPS for Metallic Mineral Processing Plants. The permit includes all relevant parts of standard.

3. Technical Information

Control Efficiencies for Water Spray System

A 90% control efficiency is assumed for continuous water sprays at 42 of the 44 fugitive sources. At the two material loading points (Loader A into Jaw Crusher A, FS 031 and Loader B into Jaw Crusher B FS 039) a 75% control efficiency is assumed due the nature of unloading the ore into the crushing units. To achieve the increased control efficiencies, several operating and maintenance measures are applied to the proposed in-pit crushing and cobbing system. This includes a continuous water spraying unit which will be installed alongside of the in-pit crushing and cobbing system as well as reduced operating months/hours. The control equipment (CE 047 and CE 050) is required to be operated at all times the process is operating. Material throughput through FS 031 and FS 039 will be recorded.

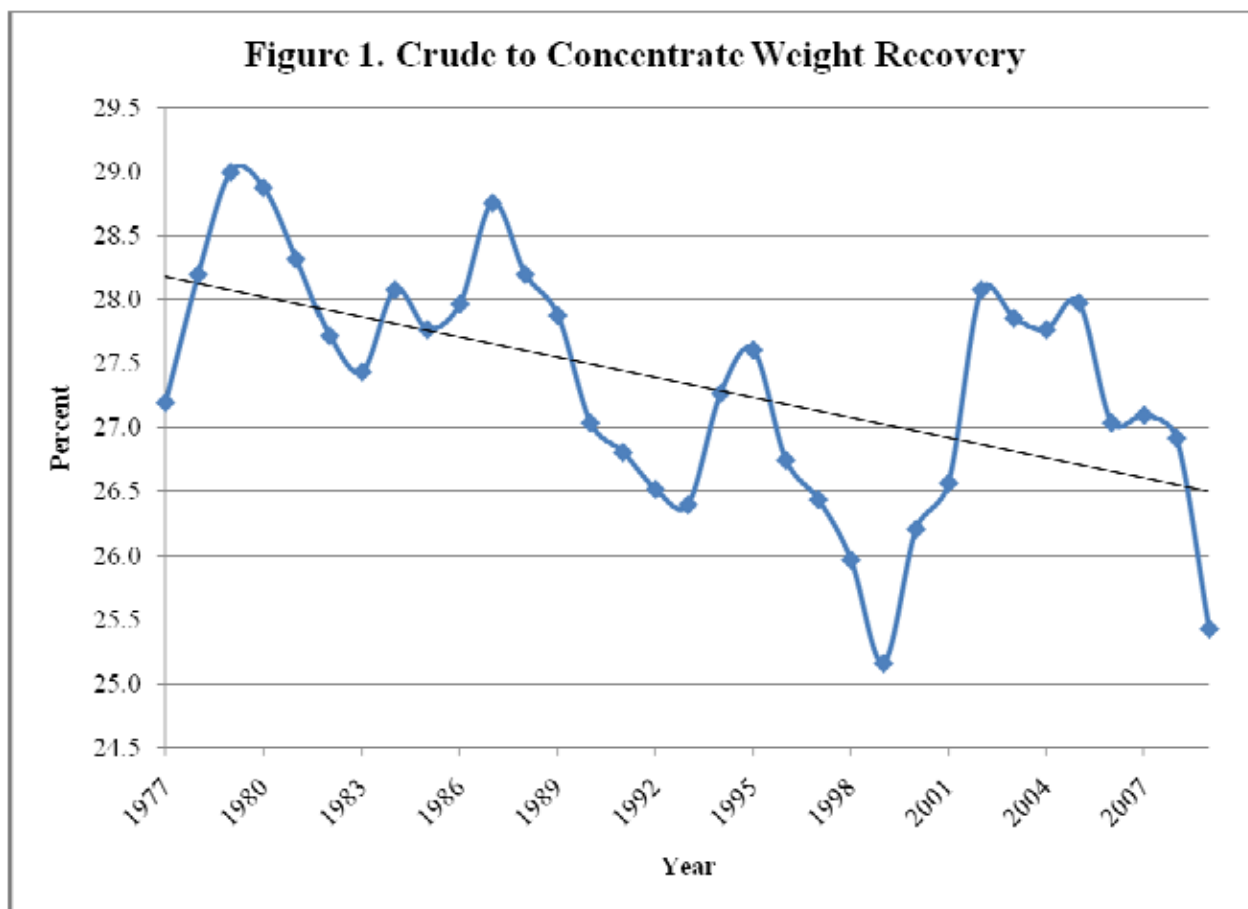
The water spray system for the proposed in-pit crushing and cobbing system is comprised of an electrically-powered submersible pump capable of delivering a maximum combined water flow rate of 20 gallons per minute. Water is pumped from the water source to the in-pit crushing and cobbing system through a three-inch main supply pipe, from which 3/4 inch hoses direct water to each of the 44 fugitive sources. Individual water flow rates through material transfer points will range from 0.5 to 5 gallons per minute, with effective fugitive dust control achieved through the use of a continuous misting / fogging system. The water spray system is manually operated, with system operators present at all times during operation of the proposed in-pit crushing and cobbing system. The water spray system is required to be used anytime material is flowing through the affected processing system (Attachment 4). The overall system water flow rate will be maintained at greater than or equal to 15 gallons per minute, using a 4-hour block average. This flow rate is presumed to adequately sustain fugitive emissions when the In-Pit Crushing and Cobbing Operation is operating. The initial performance test on opacity when all units are operating at maximum capacity will be conducted to confirm this presumption. New water flow limits may result from this performance test.

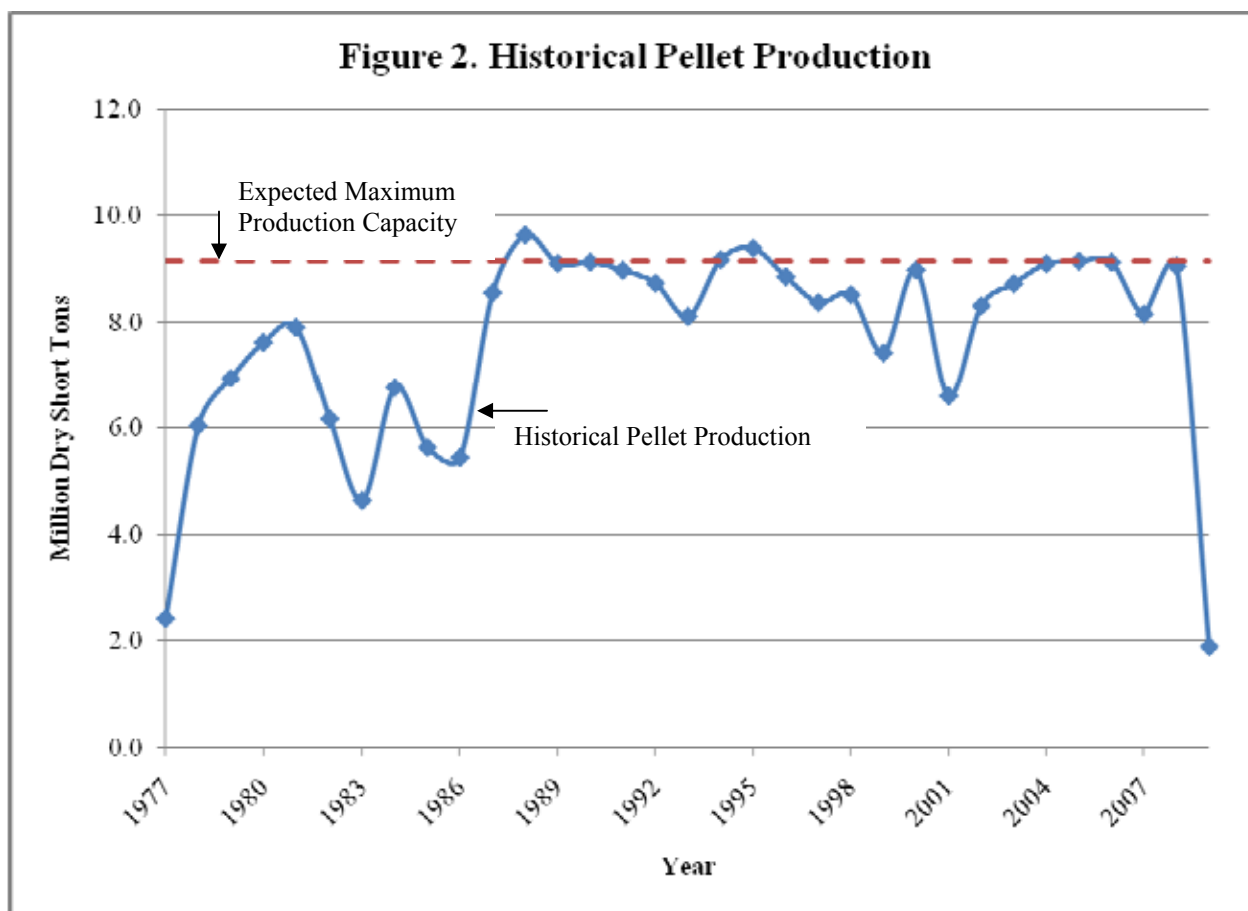
Truck hauling

Truck miles due to the transporting of ore are presumed to be reduced as a result of the In-Pit Crushing and Cobbing Operation. The In-Pit Crushing and Cobbing operation may have to be moved to maintain short relative distances to the blast site. Annual vehicle miles traveled are expected to decrease as a result of concentrating low-grade ore in-pit.

Potential Debottlenecking due to Modification

HTC's annual pellet production has been decreasing in recent years due to the decreasing weight recovery of HTC's remaining ore body. Figures 1 and 2 illustrate HTC's historical crude ore to concentrate weight recovery and pellet production, respectively. Pellet production would still be limited by the existing crusher capacities, the amount of blasted and available high grade ore, and mill throughputs. In addition, a specific blend of ore is still needed to allow the autogenous grinding to take place, and having too much low grade ore, would negatively affect grinding efficiency and result in decreasing mill throughputs in the concentrator. The projected throughput of the plant after the project is less than the highest throughput achieved in the last 10 years. No process or equipment changes at the plant, or anywhere else on site, are proposed to accommodate the proposed in-pit crushing and cobbing operation.





Calculations of Emission Increase for Modification

HTC is a major stationary source under both Part 70 and New Source Review.

NSR Applicability

The area surrounding HTC attains the National Ambient Air Quality Standards for all criteria pollutants, so the PSD program may apply if triggered (instead of Nonattainment Area New Source Review). HTC estimated emissions from the in-pit crushing and clobbering system.

Projected emissions are summarized in Table 1. Detailed calculations associated with the determination of this modification as a synthetic minor can be found in Attachment 1. Operations will be limited to throughput on the amount ore to be crushed (4,592,000 short tons/yr combined through the two jaw crushers) and the system can only operate while the continuous water spraying unit can be in operation. These are Title I Conditions in the permit for GP019.

Emission Factors for PM, PM₁₀, and PM_{2.5} for material handling and transfer points are derived from the formula found in the U.S. Environmental Protection Agency's AP-42 – Compilation of Air Pollutant Emission Factors, 5th Edition, November 2006, Chapter 13.2.4 – Aggregate Handling and Storage Piles. A 90 percent control efficiency is assumed for continuous water

sprays at all 42 of the 44 fugitive sources. At the two material loading points (Loader A into Jaw Crusher A, FS 031 and Loader B into Jaw Crusher B FS 038) a 75 percent control efficiency is assumed due the nature of unloading the ore into the crushing units.

If the emissions increases from a new project exceeded the significance levels in the PSD rule, HTC would need to conduct a PSD analysis on the pollutant that exceeded the threshold. However, the project does not trigger PSD review.

3.2 Periodic Monitoring

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

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

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

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

Table 4. Periodic Monitoring

Level*	Requirement (rule basis)	Additional Monitoring	Discussion
GP019	Opacity \leq 10 % (40 CFR pt. 60 subp. LL)	Monitoring and Recordkeeping	Members of this group are subject to the NSPS for Metallic Mineral Processing Plants. Visible emission checks will be conducted daily. The VE check will occur when the emission unit is operating.
	Material throughput \leq 4592000 tons/yr	Monitoring and Recordkeeping	Members of this group are subject to the NSPS for Metallic Mineral Processing Plants. Monthly recordkeeping of the combined throughput of FS032 and FS039 will ensure emissions remain below thresholds.
	Water Flow \geq 15 gal/min	Monitoring and Recordkeeping	Water sprays are used as control equipment to suppress fugitive dust from members of this group. Records to be kept of water flow using a 4-hour block average. To ensure compliance with all fugitive sources operating simultaneously.
		Performance Test	To verify minimum water flow rate requirement.

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

3.3 Insignificant Activities

HTC has will be installing a 2000-gal fuel tank to serve operations for the in-pit crushing and cobbing units. Table 5 identifies this insignificant activity associated with this modification.

Table 5. Insignificant Activities

Insignificant Activity	General Applicable Emission limit	Discussion
2000-gal fuel tank TK 006	Minn. R. 7011.1505	VOC emissions from this unit are expected to be << 1.0ton/yr. No periodic monitoring is necessary.

3.4 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements.

3.5 Comments Received

Public Notice Period: 5/01/2010 – 6/1/2010

EPA 45-day Review Period: 5/01/2010 – 6/16/2010

One comment was received during the public comment period. Minnesota Power submitted a comment in support of this project. This resulted in no changes to the permit. Comments were not received from EPA during the EPA review period.

4. Permit Fee Assessment

Attachment 3 to this TSD contains the MPCA's assessment of Application and Additional Points used to determine the permit application fee for this permit action as required by Minn. R. 7002.0019. The permit action includes a major amendment application received after the effective date of the rule (July 1, 2009). The permit includes limits to remain below PSD thresholds.

5. Conclusion

Based on the information provided by HTC, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 13700061-004, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Sarah Seelen (permit writer/engineer)
Bob Beresford (enforcement)
Andrew Place (stack testing)
Trevor Shearen (peer reviewer)

AQ File No. 541; DQ 3009

Attachments included in the AQ file copy and available upon request:

1. PTE Summary and Emissions Increase Calculation Spreadsheets

2. Facility Description and CD-01 Forms
3. Points Calculator
4. Process Flow Diagram