



## Minnesota Pollution Control Agency

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October 29, 2012

TO: INTERESTED PARTIES

RE: Northern Metals LLC – Request for Approval of Findings of Fact, Conclusions of Law, and Order to Deny Request for Contested Case Hearing and Authorize Issuance of Air Emission Permit No. 05300480-003

On October 23, 2012, the Minnesota Pollution Control Agency (MPCA) Citizens' Board voted to approve the Findings of Fact, Conclusions of Law, and Order approving the issuance of the Air Emission Permit No. 05300480-003 to Northern Metals LLC, Minneapolis, Minnesota. The Findings of Fact, Conclusions of Law, and Order document concludes that the criteria in Minn. R. 7000.1900 for ordering a contested case hearing has not been met and the decision to issue the Air Emission Permit No. 05300480-003 satisfied the requirements of Minn. Stat. § 116.07, subd. 4a.

We appreciate the time and effort of those who submitted comments on the Air Emission Permit No. 05300480-003 for the Northern Metals LLC.

Sincerely,

A handwritten signature in blue ink, appearing to read "John Linc Stine", is positioned above the printed name.

John Linc Stine  
Commissioner

JLS/KS:rm

**STATE OF MINNESOTA  
MINNESOTA POLLUTION CONTROL AGENCY**

**IN THE MATTER OF A REQUEST FOR  
A CONTESTED CASE HEARING ON THE  
PROPOSAL TO ISSUE AIR EMISSION  
PERMIT AMENDMENT NO. 05300480-003  
FOR NORTHERN METALS, LLC  
MINNEAPOLIS, MINNESOTA**

**FINDINGS OF FACT  
CONCLUSIONS OF LAW  
AND ORDER**

**FINDINGS OF FACT**

The above-entitled matter came before the Minnesota Pollution Control Agency (MPCA) Citizens' Board at a regular meeting held in St. Paul, Minnesota on October 23, 2012. Based on the MPCA staff review, comments and information received during the comment period, and other information in the record of the MPCA, the MPCA hereby makes the following Findings of Fact, Conclusions of Law, and Order:

**Facility History**

1. Northern Metals, LLC (Northern Metals) operates a metal recycling facility at 2800 Pacific Street North Minneapolis, Minnesota (Facility). A predecessor company, American Iron and Supply, Inc., (American Iron) began metal recycling operations on the site in 1951. Northern Metals purchased the facility in 2006.
2. In 1995, American Iron proposed to install and operate a Kondirator-brand metal shredder at the Facility.
3. An Environmental Assessment Worksheet (EAW) and a Human Health and Ecological Risk Assessment were prepared on the Kondirator proposal in 1995 pursuant to Minn. Stat. § 116G.151. The EAW was completed on October 9, 1995. The EAW process led to a negative declaration on the need for an Environmental Impact Statement (EIS).
4. In 1996, American Iron applied for an air emissions permit to install and operate the Kondirator metal shredder at the Facility. Upon completion of subsequent litigation, the MPCA issued a non-expiring air emission permit to American Iron on December 8, 1998; however, the Kondirator shredder was never installed.
5. After Northern Metals purchased the Facility from American Iron, Northern Metals installed and placed into operation a Metso-brand (not Kondirator) metal shredder under the air emissions permit Northern Metals assumed from American Iron when it purchased the metals recycling Facility in 2006. The Metso shredder commenced operation on June 18, 2009.

6. Air emission sources at the Facility include the hammermill shedder operation, fugitive dust sources (paved roads, material handling, and storage piles), and small fuel-burning equipment. Both the fugitive dust sources and the fuel-burning equipment are classified as “insignificant activities” under Minn. R. 7007.1300. The shredder operation is enclosed in a building and is controlled by two cyclones, two wet scrubbers, and two fabric filters (baghouses).
7. The pollutants of greatest concern from the Facility are particulate matter (PM), particulate matter less than 10 microns in diameter (PM<sub>10</sub>), particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) and Hazardous Air Pollutants (HAPs). Compared to other facilities for which the MPCA has issued air emission permits, however, emissions from the Facility are small.
8. The 1998 Facility air emission permit required that, upon placing the shredder into operation, stack emission testing was to be performed to demonstrate compliance with permit limits. This testing was conducted from December 1-4, 2009.
9. The test results Northern Metals reported showed that stack emissions for PM, PM<sub>10</sub> and mercury were out of compliance with the permit by 204 percent, 258 percent, and 32 percent, respectively. Re-testing for PM and PM<sub>10</sub> conducted on December 22, 2009, indicated continued non-compliance for total PM and PM<sub>10</sub> by 102 percent and 207 percent, respectively. The Facility returned to compliance with its mercury emission limit as confirmed by stack testing conducted on June 22, 23, and 29, 2010.
10. The particulate matter (PM and PM<sub>10</sub>) emissions limits that Northern Metals failed to meet during its 2009 testing are 0.43 lb/hr. Those limits were intended to limit both filterable and condensable particulate matter. However, through an error when the Facility was originally permitted in 1998, the numerical value of those limits does not include condensable particulate matter, but only filterable particulate matter.
11. The MPCA and United States Environmental Protection Agency (EPA) address both filterable and condensable particulate matter emissions in permit limits and measure both filterable and condensable particulate matter through stack testing. In order to correct the fact that the current particulate limits do not include condensables, the MPCA staff proposed re-establishing the particulate limits to account for condensables.
12. The MPCA brought an enforcement action for the noncompliant stack emissions testing that was resolved with a Stipulation Agreement that became effective on August 11, 2010. The Stipulation Agreement required Northern Metals to submit a Compliance Plan to the MPCA for approval, which Northern Metals did. Among other things, the Compliance Plan specified that Northern Metals would submit an application to amend its air emissions permit to include particulate matter limits of 1.83 lb/hr for condensable and filterable particulate matter for all regulated forms of PM, including PM<sub>2.5</sub>. A PM<sub>2.5</sub> limit had not been included in the original 1998 Air Emissions Permit.

### Proposed Project Description

13. Northern Metals submitted the required major amendment application (application) to its existing air emission permit on March 29, 2010.
14. Northern Metals superseded the March 29, 2010, application with a major amendment application on August 30, 2010, and supplemented the application on October 6, 2011. Northern Metals submitted air dispersion modeling in support of its March 2010 permit application, and did it again to support the revised application submitted in August 2010. Northern Metals' application included changes the company believed were warranted based on the stack test results and its operational experience. The Stipulation Agreement required the application to include a change to the particulate matter emission limits to include both filterable and condensable particulate matter. Other changes requested in the application include:
  - New emission limit for mercury.
  - Removal of restrictions related to the processing of stainless steel, aluminum, brass and copper, and removal of the prohibition on the processing of auto hulks.
  - Modification of metal emissions limits based on new information obtained through stack testing, and to be consistent with the values used in the Air Emissions Risk Analysis (AERA).
  - Incorporation of performance test frequencies.
  - Updates to pollution control equipment.
  - Removal of requirements that have been completed or are obsolete.
  - Removal of the requirement to sweep the roads on-site daily.

The proposed changes relate to permit limits, other permit conditions, and operational changes only, and do not include new construction, increases in production/throughput, or expansion of hours of operation.

15. After a full assessment of the potential emission changes, and an evaluation of those changes through the AERA and Air Dispersion Modeling, the MPCA incorporated the required and requested changes into the draft permit with the exception of two of the requested changes. The MPCA did not increase the mercury limit as requested in the application and the MPCA did not remove the requirement to sweep the roads on-site daily.
16. In addition to the changes requested by Northern Metals, the MPCA included further changes to the permit to ensure continued compliance with all applicable requirements and to update the permit based on current MPCA practices. These changes include:
  - Reorientation of the mercury limit from an hourly limit to an annual limit and incorporation of the requirement to calculate the 12-month rolling sum of mercury emissions on a monthly basis.
  - Incorporation of the updated feedstock control plan as an enforceable part of the permit.
  - Incorporation of modeling requirements delineating under what circumstances Northern Metals should perform remodeling.
  - Addition of pollution control equipment requirements.
  - Addition of the requirement for Northern Metals to submit and implement a comprehensive Fugitive Dust Control Plan.

- Revision of permit language based on updated standard requirements, citations, and formatting.
  - Addition of a limit on the amount of material allowed to be shredded per day.
17. An EAW was prepared on the proposed major air emissions permit amendment. The MPCA was the responsible governmental unit (RGU) for the environmental review of the Project.
  18. Air Dispersion Modeling was performed for PM<sub>10</sub> and PM<sub>2.5</sub> to support the draft permit and EAW. There are National Ambient Air Quality Standards (NAAQS) for PM<sub>10</sub> and PM<sub>2.5</sub> and modeling was required to demonstrate compliance with the NAAQS.
  19. The MPCA staff completed an AERA to support the draft permit and EAW.
  20. The draft permit is a non-expiring federally enforceable State Operating Permit. This is the same type of permit as the existing permit held by Northern Metals.

#### **Procedural History**

21. Minn. R. 7007.0050 to 7007.3010 apply to the issuance of air emissions permits and describe the process the MPCA must follow in reviewing an application for a permit. Minn. R. 7007.0850 and Minn. R. 7007.0950 contain procedural requirements for public notice and comment and review and objection by EPA, which apply to this proposed permit. Minn. R. 7007.0850, subp. 2 requires the MPCA to give public notice of the preliminary determination to issue a permit, including information on how copies of relevant documents can be obtained, the activities involved in the permit action, the emission changes, the comment procedures, any scheduled meetings or hearings, and hearing request procedures. Minn. R. 7007.0950 specifies the procedures for EPA review.
22. On November 16, 2012, pursuant to Minn. R. 7007.0850, subp. 2, the MPCA Commissioner issued a public notice of the preliminary decision to issue the permit. The notice was published in the St. Paul Pioneer Press on that date. The notice was also posted on the MPCA public notices webpage at <http://www.pca.state.mn.us/index.php/public-notices.html> and mailed to interested parties. The notice included the information required by rule.
23. The comment period for the draft permit period began November 17, 2011, and ended at 4:30 p.m. on December 16, 2011.
24. The public comment for the EAW began on November 14, 2011, and ended on December 14, 2011.
25. During the comment period for the EAW and draft permit, the MPCA received several comments including a number of requests for a public informational meeting, extension of the public notice periods, and denial of the permit. The MPCA also received two requests for a contested case hearing on the draft Air Permit. One request was received on December 14, 2012, before the close of the public comment period on the permit. The other request was received on December 17, 2012, after the close of public comment period on the permit.

26. The MPCA staff determined that a public informational meeting would be useful to help clarify and resolve issues concerning the EAW and proposed permit.
27. Minn. R. 7007.0850, subp. 2.A.(3) requires at least 30 days advance notice for a meeting on an air emissions permit.
28. On January 6, 2012, the MPCA issued a public notice announcing a public informational meeting for the draft permit and EAW on February 14, 2012, and an extension of the comment period for both the draft permit and EAW beginning on January 13, 2012, and ending on February 28, 2012. The notice was published in the Minneapolis Star Tribune on January 12, 2012. This notice was also posted on the MPCA's website and mailed to interested parties. Upon due consideration, the MPCA decided to change the date of the public meeting to February 28, 2012, to accommodate community needs.
29. On January 26, 2012, the MPCA published a notice in the Minneapolis Star Tribune stating that the comment period for the EAW and the draft permit amendment had been re-opened, that a public meeting would be held on February 28, 2012, and that the comment period would end on March 14, 2012, two weeks after the public meeting. The meeting was also intended to provide an additional opportunity for the public to submit written comments. This notice was also posted on the MPCA's website and sent to interested parties. The notice specified that comments received during the previous public comment periods on the EAW and permit did not need to be resubmitted. The notice further stated that comments submitted after the close of the previous public comment periods on the EAW and permit should be resubmitted.
30. In early February, 2012, the MPCA staff determined that the 4.2 lb/hr PM limits specified in the draft permit amendment had the unintended effect of relaxing the emission limit from the 1.83 lb/hr limit that had been included in settlement of the enforcement action described in the Project Description section above.
31. The MPCA staff also re-ran the air dispersion modeling that Northern Metals had done for the Facility to show modeled compliance with NAAQS. The air dispersion modeling was based on monitored ambient air background concentration data that by February, 2012, was outdated. Updated ambient air monitored background concentration data had become available in January, 2012.
32. The MPCA finds that in light of the fact that the MPCA staff was considering a change to the PM limits from 4.2 lb/hr to 1.83 lb/hr and the availability of updated ambient air background concentration data, it was appropriate for MPCA staff to re-model the facility emissions for particulate matter.
33. The MPCA staff updated the background concentration input data before rerunning the NAAQS modeling. MPCA staff modeling with the updated background data at 4.2 lb/hr showed that the facility would exceed the 24-hour NAAQS for PM<sub>2.5</sub> by a wide margin.

34. The MPCA staff then ran an air dispersion model at 1.83 lb/hr. This modeling exercise showed compliance with the 24-hour PM<sub>2.5</sub> NAAQS at 34.3 µg/m<sup>3</sup> (micrograms per cubic meter), which is 0.7 µg/m<sup>3</sup> below the NAAQS.
35. The MPCA staff concluded that tightening the particulate matter emission limits in the proposed permit to 1.83 lb/hr would be the most appropriate thing to do under the circumstances.
36. Under guidance pertaining to the Environmental Quality Board (EQB) Rules, if an RGU determines that important information in an EAW is either so incomplete or so inaccurate that the Project commenters have not been given a fair chance to review the true Project, the RGU may withdraw the EAW, revise it and republish it. *EAW Guidelines: Preparing Environmental Assessment Worksheets*, Environmental Quality Board, page 4, (May 12, 2010). Given the significant change in the particulate matter limits from 4.2 lb/hr to 1.83 lb/hr, MPCA staff decided to revise the EAW and republish it in this case.
37. On February 20, 2012, the MPCA published a notice in the *EQB Monitor* of the Commissioner's decision to revise the draft permit and issue a revised EAW on the Project. This notice also announced the decision to close the comment period that was to end on March 14, 2012.
38. On February 23, 2012, the MPCA staff published a public notice in the Minneapolis Star Tribune to end the public comment period and postpone the public informational meeting in order to revise the EAW and permit amendment and put them back on public notice with revised particulate matter emission limits.
39. The MPCA staff and Northern Metals were unable to agree on revisions to the EAW and permit amendment to include 1.83 lb/hr particulate matter limits and on a schedule to put the revised EAW and permit on public notice.
40. On February 24, 2012, Northern Metals filed a Petition for a Peremptory Writ of Mandamus in Ramsey County District Court. Northern Metals based its petition on Minn. Stat. § 116D.04, subd. 2a(b) and Minn. R. 4410.1700, subp. 2.A., which call for an RGU, in this case the MPCA, to make its final decision on the need for an EIS between three and thirty days after the close of the public comment period on the EAW. No consequence is specified for failure to meet the timing in the rule.
41. In its Petition, Northern Metals argued that it was entitled to a decision on the need for an EIS at the January 2012, the MPCA Board meeting because the EAW and permit amendment came off public notice on December 14, 2011, and the EQB rules make no provision for extended comment periods. Northern Metals also argued that it was entitled to automatic damages and claimed that it was losing as much as \$2 million dollars a month in revenues as a result of MPCA's failure to make a timely EIS-need decision.
42. The Court held a hearing on the Petition for the Peremptory Writ of Mandamus on February 24, 2012. Neither the MPCA nor the Commissioner was served with the Petition for the Peremptory Writ of Mandamus and neither was given notice of the February 24, 2012, hearing. The hearing proceeded without the MPCA's knowledge or participation.

43. The Court issued the Writ on February 24, 2012. The Writ ordered the MPCA to make its final decision on the need for an EIS at its March 27, 2012, MPCA Board meeting and to make its final decision on the Air Emissions Permit no later than 90 days following the March 27, 2012, decision. Due to the Peremptory Writ of Mandamus, MPCA staff was unable to revise the EAW and draft permit amendment and to re-publish the EAW for further public comment on the changed permit conditions.
44. As directed by the Court, MPCA staff brought the EAW to the Board for discussion on March 26, 2012, and for a final decision on the need for an EIS, with the 4.2 lb/hr PM<sub>2.5</sub> emission limit. MPCA staff recommended that the MPCA Board issue a positive declaration on the need for an EIS on the basis that the Facility could not model attainment with the PM<sub>2.5</sub> NAAQS at the proposed 4.2 lb/hr PM emission limit. The MPCA Board agenda provided that the final decision would be made on March 27, 2012, in accordance with the Peremptory Writ of Mandamus.
45. During the course of the Board Meeting of March 26, 2012, Ramsey County District Court issued an order that stayed all administrative action on the Northern Metals matter and stayed enforcement of the Peremptory Writ. The MPCA finds that as a result of the March 26, 2012, District Court order, the MPCA staff was prohibited from conducting further work on the Northern Metals EAW and permit and the MPCA Board was prohibited from considering the EAW and making its final decision on the need for an EIS on March 27, 2012.
46. The MPCA finds that it was prepared to make its final decision on the need for an EIS at its March 27, 2012, meeting except for issuance of the District Court's Stay Order.
47. On June 19, 2012, pursuant to a motion by the MPCA, the District Court vacated its March 26, 2012, stay order. The June 19, 2012, order required the MPCA to make its final EIS decision as soon as administratively possible.
48. After the June 19, 2012, District Court order, MPCA staff and Northern Metals worked to settle the issues regarding the Peremptory Writ of Mandamus litigation and to resolve the issues regarding Northern Metals' air emissions permit.
49. On July 23, 2012, consistent with the Court's order, the MPCA published a notice in the *EQB Monitor* stating that a public meeting on the EAW would be conducted on August 9, 2012. The notice also stated that the EAW comment period was being reopened and extended to September 10, 2012. The purpose of the meeting was to provide an update on the status of the EAW and to provide further opportunity for the public to submit written comments.
50. The public meeting was held as scheduled on August 9, 2012.
51. On September 7, 2012, the MPCA published a notice that there would be an additional community informational meeting on September 25, 2012. The same notice announced that the Northern Metals matter would go before the Board for an EIS-need decision on October 1, 2012.
52. The MPCA staff and Northern Metals entered into a Settlement Agreement on September 14, 2012, that resolved the issues in the litigation and established conditions under which MPCA staff would



bring both the EAW and the Air Emissions Permit to the MPCA Board for final decisions. The MPCA staff and Northern Metals filed a Stipulation for Dismissal with Prejudice in the Ramsey County District Court on September 17, 2012. The settlement agreement is Attachment 4 to the Board item and the Stipulation for Dismissal with Prejudice is Attachment 5 to the Board item.

53. The Stipulation for Dismissal with Prejudice was signed by the Ramsey County District Court on September 24, 2012.
54. The MPCA finds that it was appropriate for the MPCA staff to settle the litigation and the issues concerned with the air emissions permit to reduce the time and expense that would result from a continued dispute.
55. On September 14, 2012, the MPCA posted an updated draft permit on the MPCA's website at <http://www.pca.state.mn.us/index.php/topics/environmental-review/environmental-review-and-draft-air-permit-amendment-for-northern-metals.html> and used an e-mail notification system to inform interested parties that the updated draft was available for review. The MPCA did not formally re-notice the changes to the draft permit because the draft permit contains more stringent limits than the draft permit as proposed on November 17, 2011.
56. The community informational meeting was held as scheduled on September 25, 2012.
57. On October 1, 2012, during a Special Board Meeting, the Board issued a Negative Declaration on the need for an EIS.

#### **Public Comment and MPCA Consideration of Comments**

58. During the announced comment periods for both the EAW and the draft permit, the MPCA received 184 comment letters and e-mails from citizens, units of government, and Northern Metals. A list of the comment letters and e-mails received are Appendix A to these Findings. Copies of the comment letters are Appendix B to these Findings.
59. The MPCA prepared written responses to the comments. The comments and the responses to the comments are Appendix C to these Findings. Due to substantial overlap between the EAW and draft permit comments, the MPCA considered all comments submitted during both the EAW and the draft permit comment periods in both the EAW and permit records. Therefore, Appendices A-C are nearly identical to Appendices A-C contained in the Board Packet for the Northern Metals EAW brought before the Board on October 1, 2012.
60. Comment letters raised the following categories of concerns:
  - Air quality impacts related to particulate emissions.
  - Human health impacts related to emissions of toxic air pollutants from the shredder and the effect of lowering the PM<sub>2.5</sub> limit on the AERA results.
  - Human health and environmental impacts related to emissions of mercury from the shredder.
  - Noise.
  - General air quality concerns including the compatibility of the proposal with various management plans, including the National Park Service ("NPS") Mississippi National River

and Recreation Area Comprehensive Management Plan, and the Above the Falls land use plan and other relevant plans prepared by the city of Minneapolis.

- Policy implications of relaxation of permit limitations as a means of resolving noncompliance issues.
- Company concerns that more stringent permit terms and conditions are required at its Facility than at any other shredder facility in the state.
- Cumulative effects.

#### Air quality impacts related to particulate emissions

61. The initial air emissions permit, issued in 1998, limited PM and PM<sub>10</sub> emissions to a rate of 0.43 pounds lb/hr. This limit was based on the need, as determined by MPCA, to limit particulate emissions to keep human health risks within acceptable risk levels. This determination was based on the Human Health Risk Assessment prepared by MPCA in 1995, and it led the company to seek air emission control equipment that would limit particulate emissions to below 0.49 lb/hr. The company found a vendor that would guarantee sufficient particulate control to keep emissions below that level when combined with other equipment that the company was already committed to install. With all this air emission control equipment deployed and the vendor guarantee, the permit issued in 1998 limited particulate matter emissions to 0.43 lb/hr.
62. At the time of the MPCA's original environmental review and risk assessment in 1995, the impact assessment did not adequately take condensable particulate matter into consideration. However, as described in Finding 10 the 1998 permit identified the particulate matter limits as including both filterable and organic condensable portion of the pollutant.
63. When the company tested the shredder emissions in late 2009, as required by its operating permit, it found that particulates (PM and PM<sub>10</sub>, including condensables, as the permit required) were being emitted at the rate of 1.32 pounds per hour, considerably higher than its permitted emission rate of 0.43 pounds per hour. The ensuing enforcement action is described in Finding 12 above.
64. Many public comments expressed concerns about the proposed particulate emission limit, possible negative health impacts and raising emission limits as the resolution to violations identified by stack testing. Additional similar comments were also received during the reopened comment periods for the draft permit and EAW which ended on February 21, 2012, and the second reopened comment period for the EAW which ended on September 10, 2012.
65. Sources of particulate emissions at the Northern Metals Facility include two exhaust streams, one from the metal shredder and one from the cleaning equipment system, also called the cascade cleaning system. Air emissions from each exhaust stream are controlled by high efficiency cyclones, wet scrubbers, and fabric filtration systems operated in series. The controlled emissions from the two exhaust streams vent through a single stack.
66. Storage piles, paved roads, raw material handling activity, boilers, furnaces and space heaters for building heat, two evaporators to dispose of water from air pollution control equipment, collected metal turnings oil, and welding tools are air emission sources and are considered insignificant activities under Minn. R. 7007.1300. These sources are subject to general applicable requirements

listed in Appendix A to the proposed permit. The storage piles, paved roads, and raw material handling are listed in the permit to ensure that they are managed according to the Facility's fugitive dust control plan.

67. Fugitive dust emissions from raw material handling and roads at the existing Facility are less than the similar emissions from the Kondirator project proposed in 1995 because the 1995 EAW studied and the air emission permit subsequently was issued for a shredder to be built outdoors with paving only around the shredder and on roads within the Facility yard. The existing shredder, which began operating in 2009, is housed inside the shredder building and all but a small fraction of the Facility yard has now been paved.
68. The proposed permit is not expected to increase the quantity or composition of fugitive dust emissions. Northern Metals will be required to submit and implement a fugitive dust control plan within 60 days of permit issuance, which is typical of other permits that require fugitive emissions control plans. The plan must identify all fugitive emission sources including storage piles, paved roads, truck loading and unloading, rail loading and unloading, barge loading and unloading, and other material transfers, primary and contingent control measures, and recordkeeping of control measures and any corrective actions.
69. The MPCA finds that the requirement to submit and comply with fugitive dust control plan is a standard and effective means of regulating fugitive emissions through air emission permits. The fugitive dust control plan and the requirement to sweep roads each operating day is sufficient to ensure that avoidable amounts of fugitive particulate matter do not become airborne.
70. Air quality modeling was conducted under multiple scenarios to determine the appropriate  $PM_{10}$  and  $PM_{2.5}$  emission limits for the Facility. This process is described in detail in "Report on Air Dispersion Modeling Techniques by the MPCA Air Dispersion Modeling Staff, July – August 2012," which is attached to the Technical Support Document for Air Emission Permit No. 05300480-003. The final modeling analysis, conducted by the MPCA staff, was based on a proposed  $PM_{2.5}$  emission rate of 1.83 lb/hr and a background concentration of  $30 \mu\text{g}/\text{m}^3$ . Using these parameters, it was predicted that Northern Metals would individually contribute  $3.9 \mu\text{g}/\text{m}^3$  to the ambient concentration of  $PM_{2.5}$  which, when added to the  $30 \mu\text{g}/\text{m}^3$  background concentration, resulted in a total modeled concentration of  $33.9 \mu\text{g}/\text{m}^3$ . This demonstrates that the draft permit will comply with the 24-hr  $PM_{2.5}$  NAAQS ( $35 \mu\text{g}/\text{m}^3$ ).
71. Recalculating the particulate limits to reflect the inclusion of the condensable portion of the gas stream does not mean that actual emissions of particulate matter are increasing; rather the limits have been recalculated from the limit contained in the existing permit in order to account for condensable particulate matter, which has always been emitted but not accounted for. In other words, the site-specific particulate limits have been corrected while retaining the same technical and regulatory criteria and level of protection that were the underlying basis for the 1998 permit limits.
72. Both the 0.43 lb/hr limit and the 1.83 lb/hr limit are more restrictive than the standards of performance in Minnesota rules for this type of equipment. There is not a comparable Federal standard of performance. The basis for all forms of particulate matter limits for this facility is the value that represents the operation of the facility at permitted capacity, under proper operation of

the pollution control equipment and that models compliance with the NAAQS. The limits for particulate matter are a site-specific determination, and do not represent a lowering of either a State or Federal standard.

73. The limit in the draft permit of 1.83 lb/hr is roughly equivalent to what the existing permit limit would be if it were calculated to include condensables. It is not appropriate to strictly limit a facility to the emission rates measured from the most recent stack test because of the inherent variability in processes and testing methodology. Reasonable margins of compliance are added as a standard practice. Based on the most recent stack test, the MPCA finds that there is a reasonable assurance that the facility will be in compliance with the 1.83 lb/hr limits.
74. The proposed air emission permit includes the option, identified in the permit as Particulate Limit Scenario 2, for Northern Metals to request to increase all three particulate matter limits (PM, PM<sub>10</sub>, and PM<sub>2.5</sub>) to 2.25 lb/hr no less than 36 months after permit issuance. Northern Metals may only exercise this option after it has received written approval from the MPCA to do so, and only after it has demonstrated, through MPCA-approved air dispersion modeling, that an emission rate of 2.25 lb/hr is protective of the NAAQS. MPCA staff must provide notice that the MPCA Board will consider Northern Metals' request pursuant to Minn. R. 7000.0650.
75. An increase from 1.83 lb/hr to 2.25 lb/hr, or a 0.42 lb/hr increase, is a small increase. By way of comparison, the value of the increase is below the 0.855 lb/hr threshold for a PM<sub>10</sub> emissions increase to be considered an insignificant modification under Minn. R. 7007.1250, subp. 1. The MPCA notes that the insignificant modifications rule does not apply in this case.
76. The test results from Northern Metals show that the facility can meet the 1.83 lb/hr particulate matter limits
77. The MPCA finds that it is not the MPCA's usual practice to pre-authorize the relaxation of emission limits. There is significant public interest in this permit and specifically in the particulate matter limit. Therefore, it is in the public interest to provide for public participation in the decision to authorize Particulate Matter Limit Scenario 2.
78. The MPCA finds that a significant increase in PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions is not expected based on the change in particulate limits in draft permit to 1.83 lb/hr, because the limits are modified to reflect inclusion of condensable particulate matter that has always been emitted from the shredder.
79. The MPCA finds that operation of the Facility under the proposed permit conditions and limits, including proper operation, maintenance, and monitoring of the control equipment, and a PM, PM<sub>10</sub>, and PM<sub>2.5</sub> limit of 1.83 lb/hr is protective of the NAAQS, which are in turn protective of human health and the environment.

Human health impacts related to hazardous air pollutants from the shredder and the effect of lowering the particulate limits on the AERA results

80. Among the permit changes proposed by Northern Metals is the elimination of the ban on shredding scrap motor vehicles ("auto hulks"). The company is currently allowed to shred auto

parts, such as fenders, hoods, and bumpers, but the current permit prohibits the shredding of whole auto hulks.

81. The shredding of auto hulks has the potential to result in dioxin, furan, and polychlorinated biphenyls (PCB) emissions. All are known carcinogens (cancer-causing substances). These emissions could result from the shredding of chlorinated materials, such as plastics, and padding materials, in the presence of metals and heat, which is more likely to occur with shredding whole auto hulks than with the separate auto parts currently allowed to be shredded.
82. The potential to emit for dioxins, furans, and PCBs was based on very conservative assumptions. The calculations were based on stack test results and used the instrument detection limit for PCB and dioxin/furan congeners that were not detected during the stack test and used the highest stack test run (rather than the average of the stack test runs) for those congeners that were detected. Additionally, a safety factor of 1.6 was applied the PCB and dioxin/furan emission rates to account for the potential increase in non-metallic input to the shredder.
83. The conservative emission rate of dioxins, furans, and PCBs described above was evaluated in the AERA. Dioxins, furans, and PCBs were not evaluated in the 1995 risk assessment.
84. Among the permit changes also sought by Northern Metals are elevated limits on certain Hazardous Air Pollutants (HAPs) (lead, arsenic, beryllium, cadmium, hexavalent chromium, nickel, and manganese) and the removal of restrictions on the percent of aluminum, brass, copper, and stainless steel scrap that can be shredded.
85. The proposed permit limits on the metal HAPs were based on updated operating data and worst-case annual emissions evaluated assuming there were no restrictions on the percent of aluminum, brass, copper, and stainless steel scrap that can be shredded. These assumptions are a very conservative representation of the proposed change in operation and these proposed permit limits were shown through the AERA results to be well below (less than 10 percent of) the pollutant-specific health benchmarks.
86. As noted above, the MPCA staff prepared an AERA based on these proposed permit changes and using updated data and risk assessment procedures. The MPCA staff determined that human health risks associated with this permit amendment are within human health risk guidelines, except for the chronic, cancer risk for an urban gardener scenario near the Facility fence line.
87. The metal HAP emissions limits and emissions rates used in the AERA increased because: 1) the MPCA had actual emissions data on which to base the current risk assessment; 2) the MPCA needed to evaluate the possible worst-case effect of removing certain feedstock restrictions; and 3) by recalculating emission rates with stack test and other actual operational data, the MPCA could show direct correlation with other parameters that were measured during the stack tests such as feedstock output rates, pressure drop across the baghouses and scrubber water level. The draft air emissions permit requires Northern Metals to measure these other parameters on an ongoing basis to ensure proper operation of the facility and of the control equipment between stack test events. Although the increases in the permit limits for metals may seem large when expressed as percentages of the existing emission limits, actual emissions are very low and are not expected to increase through the issuance of the draft permit.

88. The MPCA staff rigorously reviewed the revised metal limits for compliance with all applicable requirements and for potential health effects. Through the AERA, MPCA staff determined that all emission rates are below both short term and long term human health risk thresholds. The proposed limits continue to be stringent and protective.
89. The urban gardener scenario referred to in Finding 86 assumes that an individual lives at a constant location for 70 years, and during that time inhales pollutants, incidentally ingests soil (0.7 grams per week) from that location and eats home grown produce (1.4 pounds per week) and seven eggs per week produced by chickens living at that location.
90. Urban farming is a growing occupation and avocation in the city of Minneapolis and is encouraged by the city. This includes keeping chickens for egg production.
91. Under the Urban Gardener scenario, the MPCA staff determined that human health risks were above risk guidelines at a location on the easterly Facility fence line. This led to a more refined analysis of the data, which led in turn to a finding that the area of maximum impact is an industrial area, not a residential area where urban farming could occur. The refined analysis showed that the Urban Gardener scenario was not plausible at this location given the industrial zoning along the fence line of the facility.
92. Under the Urban Gardener scenario, the AERA resulted in a determination that the human health risk from all of the carcinogens together equals, but does not exceed, the facility risk guideline at the location nearest to the shredder that could potentially be used for urban gardening, i.e., at a residential area that lies across the river.
93. The MPCA uses the Minnesota Department of Health negligible excess lifetime risk level of 1 in 100,000. All risk estimates were below pollutant-specific health benchmarks and combined facility risk guidelines, including acute risk estimates, except for the chronic urban gardener risks as explained above
94. With the exception of dioxins, furans and PCBs, the HAPs, taken together, contribute a small fraction toward the AERA's estimate of human health risk. The risk estimates were dominated by dioxins, furans, and PCBs.
95. Dioxins, furans and PCBs stack test results showed that emissions of these pollutants were not in themselves high. Nonetheless, they contributed to the overall human health risks from the proposed permit amendment.
96. The proposed permit amendment contains a detailed Feedstock Control Plan that describes the actions and recordkeeping for feedstock processed at the Facility. The Feedstock Control Plan acts as an important element of the overall emissions control system for the Facility because it limits the types and amounts of materials to be processed. The Feedstock Control Plan prohibits the Facility from accepting dioxin, furan, or PCB-containing materials or any material that is classified as hazardous waste under any Federal, State, or local rule or regulation. The MPCA determined that the Feedstock Control Plan should be upgraded within 60 days of permit issuance as described in Finding 109. Northern Metals must also modify the plan whenever the feedstock

control practices change and must submit plan amendments to the MPCA for approval. The Plan is and will continue to be an enforceable part of the permit.

97. Particulate emissions are composed of multiple organic and inorganic chemicals, some of which are defined as HAPs. When this chemical composition is known, sometimes it is used to estimate emission rates of these specific chemicals based on the emission rates of particulate matter. As indicated in the AERA Impact Analysis Summary, the AERA was intended to consider worst case scenarios of potential facility emissions. While the AERA did not specifically quantify risks from particulate matter, some of the emission estimates for pollutants in the AERA are based on a particulate matter limit of 4.2 lb/hr. A description of how the emissions were calculated in the AERA can be found in the AERA Impact Analysis Summary. The AERA also shows that Dioxins/Furans/PCBs, Arsenic, and Nickel contribute the most to overall risk estimates. The other pollutant concentrations are estimated to be less than 10 percent of their respective health benchmarks.
98. Dioxins/Furans/PCBs emission estimates were not based on a particulate matter limit, but rather were based on stack test results and a conservative estimate representing the worst case increase in emissions due to feedstock changes. For the stack test results, the highest detected values or average instrument detection limit, when the pollutant was not detected, were used in the calculations. A safety factor of 1.6 was applied to the calculations to represent the potential 60 percent increase in non-metallic feedstock from processing auto hulks. Since the emission estimates for Dioxins/Furans/PCBs were not based on any assumptions about PM<sub>2.5</sub> (or PM or PM<sub>10</sub>) changing the PM<sub>2.5</sub> limit would not change the risk estimates from Dioxins/Furans/PCBs.
99. Arsenic and Nickel emission estimates are based on proposed and pollutant-specific permit limits. Thus changing the PM<sub>2.5</sub> permit limit would also not change the risk estimates from Arsenic and Nickel.
100. Since the risk drivers are not based on PM<sub>2.5</sub> assumptions, the proposed change in the PM<sub>2.5</sub> limit from 4.2 lb/hr to 1.83 lb/hr would not change the results of the AERA included in the EAW. In any event, the proposed change in the PM<sub>2.5</sub> limit is a downward change from, which would only improve any modeled risks associated with particulate matter emissions.
101. The MPCA finds that the proposed permit limits on metal HAPs and all forms of particulate matter, as informed by the AERA demonstrates that human health effects related to these emissions do not exceed levels of concern and that the permit limits for these pollutants are properly protective of human health.
102. The MPCA finds that the proposed permit conditions including the feedstock control plan, limits on the amount of material that can be shredded, conditions ensuring the proper operation of control equipment, and periodic stack testing are reasonable and sufficient to ensure that the Facility meets the proposed permit limits on metal HAPs as well as remains below all emission rates used in the AERA.
103. The MPCA finds that the metal HAPs, dioxin, furan, and PCB emissions are not expected to increase with the removal of the feedstock restrictions, but that the MPCA still took a conservative

approach and evaluated the worst case potential emission scenarios in the AERA and the draft air emissions permit.

Human health impacts related to mercury emissions from the shredder

104. The proposal by Northern Metals to eliminate the current prohibition on the shredding of auto hulks raises the potential for increased mercury emissions from the shredder stack. This potential arises from the former use of mercury switches in automobiles and appliances.
105. The current permit limits mercury emissions to 0.00079 lb/hr. This is the hourly equivalent of 3 lb/yr. The mercury limit has been converted in the proposed permit from an hourly limit to an annual limit that is calculated as a 12-month rolling sum. Thus, the limit on mercury emissions overall will not change.
106. Based on the results of two separate stack testing events of three stack test runs and six stack test runs, Northern Metals complied with the hourly mercury emission limit in eight out of the nine of those runs.
107. Northern Metals states that it follows a mercury switch removal program on incoming scrap and state law requires mercury switch removal before auto hulk processing. Northern Metals' Feedstock Control Plan describes the procedures it follows to eliminate mercury switches in its scrap.
108. Domestic automobile manufacturers completed the phase out of mercury switches used in vehicles for lighting, anti-lock braking systems, and other automotive systems by model year 2003. Foreign automobile manufacturers completed the phase out by the mid to late 1990's.
109. The MPCA finds that for this type of operation, a Feedstock Control Plan is the best means of ensuring that mercury switches do not enter the shredder, and thus mercury is not released into the air. The existing Feedstock Control Plan is incorporated into the permit as an enforceable condition. The upgraded plan will remain an enforceable condition of the permit and must address at a minimum internal practices and training, restrictions on incoming scrap materials, supplier education and certification, load inspections, and recordkeeping.
110. There is inherent variability in the methods to measure mercury at the stack. Therefore, the MPCA finds that the averaging of test results is the appropriate means to determine compliance with permit limits unless specified otherwise by rule or permit conditions. The averaging of mercury tests shows that the shredder is emitting mercury at 0.00053 lb/hr, well within the 0.00079 lb/hr limit. This comparison serves to support the conclusion that the MPCA has a reasonable assurance that Northern Metals will be in compliance with the mercury limit.
111. The testing demonstrates that while an occasional high value might occur, overall emissions are low, and the proposed facility limit of three pounds per year is consistent with the State's October 2009 Implementation Plan for Minnesota's Statewide Mercury Total Maximum Daily Load (TMDL) and can be met.



112. There are no State or Federal rules that govern performance test frequency for this type of operation. The draft air emissions permit that was put on public notice in November of 2011 contained a more frequent testing schedule than the current draft air emission permit that was posted on the MPCA's website in September of 2012. The testing frequency for mercury in the current draft permit is once per 60 months. Northern Metals requested a frequency of once per 60 months and the MPCA determined that this frequency still provides a reasonable assurance of compliance with the mercury limit because the primary means of ensuring continual compliance with the mercury limit are through other conditions in the permit, including: 1) the feedstock control plan, 2) the limits on shredder output and associated recordkeeping, 3) the proper operation, monitoring, and maintenance of the pollution control equipment, and 4) a 12-month rolling sum mercury calculation.
113. Additionally, the required performance test itself is not used to demonstrate compliance with the mercury limit, it is only used to establish the mercury emission factor to be used in the 12-month rolling sum calculation. So, more frequent performance testing would not determine compliance with a limit at a more frequent rate, it would require Northern Metals to reset its emission factor at a more frequent rate.
114. The MPCA has evaluated both the short-term and long-term mercury emissions from Northern Metals in the AERA, and determined that no significant human health risks occur at the current hourly limit equivalent of 3 lb/yr. The results of the AERA analysis were presented in the AERA Impact Assessment Summary.
115. Converting the mercury limit to an annual limit is appropriate. The concern with mercury is that it is a bio-accumulative pollutant. Human health is negatively impacted when people eat fish in which mercury has bio-accumulated. This means that the primary concern is mercury emissions over time, not short term emissions at the levels of Northern Metals' potential emissions.
116. Taken together, the above considerations lead the MPCA to find that reformatting the current hourly limit to an annual limit 3 lb/yr would prevent an actual increase in the limit while measuring mercury emissions on a basis that most accurately reflects the MPCA's concerns related to mercury emissions over time. These permitting requirements are in keeping with the new and expanding source guidelines in the State's Mercury TMDL Implementation Plan.
117. The MPCA finds that no increase in mercury emissions is being allowed by the proposed permit amendment.
118. The MPCA finds that the proposed permit conditions including the feedstock control plan, limits on the amount of material that can be shredded, conditions ensuring the proper operation of control equipment, and periodic stack testing are reasonable and sufficient to ensure that the Facility meets the 3 lb/yr mercury limit.

#### Noise

119. The current permit requires monitoring of noise levels at the Facility on an annual basis. The noise monitoring events from the past three years, conducted in accordance with the current air emissions permit, found noise levels to be below the Sound Level Limit for Noise Area Class I listed

in Minn. R. ch. 7030. This is the most restrictive noise area classification, and it includes residential areas. There is no evidence to indicate that this would change with the proposed permit amendment. The shredder throughput would remain at about current levels and hours of operation would not change.

120. The proposed air emissions permit retains the requirements for annual noise monitoring, and the monitoring plan and results must be approved by the MPCA.
121. The MPCA finds that when the Facility is operating, it is subject to noise requirements in the permit, including annual testing. These requirements assure that noise will not be produced beyond allowable limits.

Public comments on impacts related to general concerns including the compatibility of the proposal with various management plans, including the National Park Service (NPS) Mississippi National River and Recreation Area (MNRRA) Comprehensive Management Plan, and the Above the Falls Land Use Plan and other relevant plans prepared by the city of Minneapolis.

122. The NPS expressed concerns regarding incompatibility of the proposed permit amendment with the goals of the MNRRA Comprehensive Management Plan. The NPS concerns relate primarily to whether relaxed permit limits on particulate matter and mercury would result in increases in emissions of those pollutants. The issues have been addressed in previous Findings in this document and the MPCA has found that particulate matter and mercury emissions are not expected to increase under the proposed permit amendment. As a result, the MPCA finds that emissions resulting from the draft permit amendment is not incompatible with the MNRRA plan..
123. The city of Minneapolis has prepared three plans that deal with the Mississippi River corridor in this vicinity. They are the Above the Falls Land Use Management Plan (2000), the Industrial Land Use and Employment Policy Plan (November 2006), and the Minneapolis Plan for Sustainable Growth (October 2009).
124. The Minneapolis Plan for Sustainable Growth, Industrial Land Use and Employment Policy Plan, and the Above the Falls plans are guides for future development rather than prescriptive documents for short-term land uses.
125. Some excerpts from that report include:
  - The MNRRA legislation listed the importance of economic resources along with other more traditional national park system resources, and the plan must "recognize existing economic activities in the area and provide for their management."
  - While improvement along the riverfront is desired, this plan should concentrate on new development in the corridor. Existing development is not expected to be substantially changed by this plan.
  - **(1) Encourage compliance with existing air and water quality standards and provide incentives for reducing emissions and loadings beyond required levels.** Potential new sources of pollution will be rigorously reviewed to maximize pollution prevention opportunities and to further reduce the effect of pollutant loadings on the quality of the fishery, the quality of drinking water supplies, or air quality in the corridor. (Emphasis added)

Policies and Actions —

Following are policies and actions for economic resource management, most of which are also found in other parts in the plan and are explained in greater detail in those sections of the document. (Emphasis added)

- **(1) Recognize the importance of economic activities and provide for commercial use in the corridor.**
- **(2) Encourage businesses to invest in the river corridor consistent with the values identified in the MNRRA legislation.**
- **(3) Preserve riverfront land for economic uses that rely on the river.**
- (4) Protect historic buildings for adaptive reuse.
- (5) Encourage economic investment that preserves and rehabilitates historic structures.
- **(6) Continue existing land uses in the corridor.**
- **(7) Allow redevelopment and expansion of corridor businesses.**
- (8) Encourage sustainable economic activities that improve the quality of life.
- (9) Promote tourism in the corridor.
- **(10) Continue barge fleeting areas and allow for some expansion in fleeting activity.**
- (11) Interpret the working river.
- (12) Encourage special events that draw people to the river.
- (13) Increase visitor access and recreational use in the corridor.
- (14) Minimize NPS land acquisition.
- **(15) Preserve riverfront investment and encourage riverfront improvement with a wide variety of land uses.**
- **(16) Encourage local land use control and local, regional, and state economic development activities that promote sustainable development.**
- (17) Promote coordination and consolidation of regulations for new development and redevelopment activities.
- **(18) Recognize the transportation system's important role in the metropolitan economy and how transportation is necessary to preserve economic resources in the corridor.**

126. The Comprehensive Management Plan recognizes that existing industrial development along the river will and should continue. Northern Metals is an existing source and they are not proposing any new construction. The proposed air emissions permit amendment is consistent with the Comprehensive Management Plan for the Mississippi River National River and Recreation Area (MNRRA).

Public comments on impacts related to the policy implications of relaxation of permit limitations as a means of resolving noncompliance issues

127. Several comments expressed concerns and criticism that the granting of the proposed permit amendment would result in significant increases in actual emissions and human health risks. These comments are based, in part, on the assumption that an emission source emits at the established emission limit.
128. As outlined in Findings above, the proposed permit contains stringent emission and operating limits on the shredder. These terms and conditions have been derived using MPCA-approved air quality modeling and health risk assessment methodologies that are based on conservative

assumptions regarding the types and amounts of pollutants to be generated, the manner of pollutant dispersion in the surrounding environment, and their potential impact on human health. The proposed limits will assure that air quality standards will not be violated as a result of these emissions and that human health will be protected.

129. In addition, current actual emission levels are not expected to significantly rise due to the proposed permit amendment as described in these Findings. The revision to the particulate matter limits primarily accounts for condensable particulates already being emitted from the shredder and must be included in the permitted limits.

Northern Metals' concerns that more stringent permit terms and conditions are required at its Facility than at any other shredder facility in the State

130. Northern Metals stated that other shredders in the State are not subject to the limitations placed on its shredder, and have been granted less stringent permit conditions.
131. The proposed Northern Metals air emissions permit has more stringent conditions than other metals shredders, in part, due to the impacts assessed by the environmental review, including a risk assessment, that was required by the Legislature and because such conditions were included in the permit to resolve violations as part of an enforcement action. As a result, the permit was written to contain the current terms and conditions.

### **Requests for a Contested Case Hearing**

132. In order to be valid, contested case hearing petitions on a proposed permit must be received during the public comment period on the permit. Minn. R. 7000.1800, subp. 1.A. The public comment period on Northern Metals proposed permit closed at 4:30 p.m. on December 16, 2011.
133. Representative Joe Mullery and Representative Phyllis Kahn requested a contested case hearing in a letter received on December 14, 2011. Their contested case hearing request was submitted before the end of the comment period and so was timely.
134. Mr. Alan Muller requested a contested case hearing via e-mail, received 12:00 a.m. on December 17, 2011, after the public comment period closed at 4:30 p.m. on December 16, 2011. Mr. Muller's contested case hearing petition was untimely.
135. The MPCA reopened the public comment period on January 6, 2012, and issued a notice that stated that all timely comments from the first public comment period would be considered and that comments submitted after the end of the first public comment period could be considered timely if resubmitted before the close of the new comment period. The new comment period was scheduled to end on March 14, 2012, but actually ended on February 23, 2012, as described in Findings 28 through 38 above.
136. Mr. Muller could have submitted his untimely contested case hearing request during this second notice period, but did not. As a result, the Muller did not cure the timing defect of his petition and it remained untimely. The MPCA finds that the contested case hearing request by Mr. Alan Muller is untimely.
137. Mr. Muller made the same points in his comment letter that Representatives Mullery and Kahn made, including objecting to the change in the mercury, HAPs and particulate matter limits, and the change in performance testing. In addition, he asked questions concerning how control equipment efficiencies were calculated and how the height of the stack at the Facility was determined. He concluded by saying that "material issues of fact are abundant and justify an evidentiary proceeding." While Mr. Muller posed a number of questions, he provided very few facts that he might introduce at a hearing and the MPCA does not dispute those that he did provide such as the percentage increases in certain emission limits.

### **Evaluation of the Request for a Contested Case Hearing**

138. The MPCA must determine if a request for a contested case hearing meets certain criteria specified in Minn. R. ch. 7000. Minn. R. 7000.1800, subp. 2.A. requires that a petition for a contested case hearing must state the issues proposed to be addressed, the specific relief sought or requested resolution of the matter, and the reasons (which may be in the form of proposed Findings) that would support a MPCA decision to hold a contested case hearing.
139. The MPCA notes that while the information specified in Minn. R. 7000.1800, subp. 2.B. is not required in a contested case hearing petition, it is information that is helpful to the agency as it considers whether a hearing will aid the agency in making a final decision. The information specified in subp. 2.B. is (1) a proposed list of prospective witnesses to be called at the hearing,

including experts, with a brief description of the testimony they will provide; (2) a proposed list of publications, references, or studies that the petitioner would introduce at the hearing; and (3) an estimate of the time required for the petitioner to present the case at a hearing.

140. The criteria on which the MPCA evaluates a petition for a contested case hearing are specified in Minn. R. 7000.1900. The criteria are:

***Subpart 1. Board or commissioner decision to hold contested case hearing.***

*The board or commissioner must grant the petition to hold a contested case hearing or order upon its own motion that a contested case hearing be held if it finds that:*

- A. there is a material issue of fact in dispute concerning the matter pending before the board or commissioner;*
- B. the board or commissioner has the jurisdiction to make a determination on the disputed material issue of fact; and*
- C. there is a reasonable basis underlying the disputed material issue of fact or facts such that the holding of a contested case hearing would allow the introduction of information that would aid the board or commissioner in resolving the disputed facts in making a final decision on the matter.*

All three criteria must be satisfied for the MPCA to grant a petition for a contested case hearing.

141. The MPCA notes that the timely contested case hearing request does not include all the information required by Minn. R. 7000.1800, subp. 2.A. The petition does not state the issues that would be addressed at a hearing or the relief sought. On that basis, the petition is deficient and should be denied. Nonetheless, the MPCA has attempted to identify the issues that the Petitioners might raise at a contested case hearing on the proposed permit and will address each.
142. Petition Issue 1 - The petitioners state that “Northern Metals is proposing to significantly increase harmful and dangerous emissions in an extremely vulnerable section of Minneapolis. Further, the people and local businesses have made great strides in cleaning up and revitalizing this community. To allow Northern Metals to expand its operations and increase harmful emissions would be an enormous step in the wrong direction.” The commenter goes on to cite this proposal as a “blatant violation of environmental justice.”
143. There is no dispute that the people and local businesses in the area of north Minneapolis have made important gains in revitalizing their community. This aspect of Petition Issue 1 issue does not meet criterion A. of Minn. R. 7000.1900, subp. 1 because it does not raise a dispute concerning a material issue of fact.
144. The petitioners state that Northern Metals proposes to significantly increase harmful, dangerous emissions. Petitioners allege that lead emissions would increase by more than 300 percent, zinc emissions would increase by 400 percent and other toxins would increase by as much as 2700 percent. The MPCA staff recommend permit issuance in part on the basis that the proposed changes to the Northern Metals permit do not significantly increase emissions. As a result, petitioners have apparently raised a dispute over whether, as a factual matter, the proposed permit will significantly increase emissions. The facts are material because emission limits are an important part of Northern Metals’ proposed permit.

145. The MPCA has jurisdiction to determine whether the changes in emission limits in the proposed permit will result in a significant increase in harmful or dangerous emissions.
146. The MPCA does not dispute that the increases in some allowable emissions appear to be large when expressed as percent increases from existing emission limits. Percent increases are of less importance than potential increases in the mass of pollutants being emitted. The question, therefore, is whether the increase in mass of allowable emissions is significant and whether the increase is significant in light of its effect on risk to human health.
147. The petitioners have not identified any facts or information they would introduce at a hearing to support a conclusion that the proposed permit would result in a significant increase in the mass of pollutants allowed or would significantly increase the risk to human health from harmful or dangerous emissions. Nor have they identified facts that would tend to discredit the facts currently in the record concerning changes in emissions. The existing record evidence shows that there is no increase proposed in particulate matter emissions since the change to the particulate matter limits is the correction of an error in the existing permit and the correction reflects the current state of emissions. Similarly, the record demonstrates that there is no increase in the mercury emission limit because it is only a conversion of the current hourly limit to an annual limit. See Finding 105.
148. The record also shows that although the increases in the metals emission limits appear to be high when expressed as percentages of the existing limits, the proposed limit increases are, in fact, very small and actual emissions are not expected to increase at all. See Findings 87 and 103.
149. In light of the existing record evidence and in the absence of demonstration that the petitioners can support the assertion that emissions or risk to human health will significantly increase, there is no reasonable basis to petitioners' assertion. The MPCA finds that criteria A. and B. of Minn. R. 7000.1900, subp 1 are satisfied with respect to Petition Issue 1, but criterion C. is not. Petitioners have not demonstrated that there is a reasonable basis to their assertion that the proposed permit will significantly increase harmful or dangerous emissions such that holding a contested case hearing on the issue will help the MPCA reach a final decision.
150. Petition Issue 2 – The petitioners allege that Northern Metals' proposed solution to its noncompliance with its existing emissions limits is to relax the existing emission limits. The petitioners believe that this is inconsistent with the purpose of air quality standards and is nothing more than legalizing what is currently illegal. The petitioners also express concern that this practice could set a precedent for other companies and render all pollution standards meaningless.
151. The MPCA interprets this issue to apply to the particulate matter limits as they were originally proposed at 4.2 lb/hr before the MPCA changed the limit in the proposed permit to 1.83 lb/hr because there is no outstanding noncompliance with permit limits other than the PM limits. As described in Findings 10, the particulate matter limits in the existing permit (0.43 lb/hr) were incorrect because they did not reflect the condensable fraction of the particulate matter gas stream that has always been part of the emissions. In re-establishing the limits, the MPCA determined that a 1.83 lb/hr emission limit would reflect the conversion of the existing 0.43 lb/hr

limit to a limit that includes both the condensable and filterable fractions of the emissions. Thus, the 1.83 lb/hr emission limits are not a relaxation of the existing limits, but a conversion of the existing limits from reflecting only filterable particulate matter to reflecting both filterable and condensable particulate matter.

152. In addition to finding that the proposed PM limits convert the existing limit to one that correctly includes both condensable and filterable PM, we have also found that the MPCA and EPA establish PM limits that reflect both the condensable and filterable fractions of the particulate matter gas stream. Finding 11. The MPCA is satisfied that it is appropriate policy to ensure that permit limits are properly calculated.
153. There is no dispute that Northern Metals cannot comply with the existing particulate matter limits (0.43lb/hr) and that this change will make it possible for Northern Metals to demonstrate compliance.
154. Even if there were a dispute, Petitioners' issue is that changing the particulate matter limits is inconsistent with the purpose of air quality standards and could set a bad precedent for other facilities that would render air quality standards meaningless. This does not constitute a factual dispute, but expresses a concern that changing the existing limit, regardless of the necessity for doing so, is not good policy.
155. The MPCA finds that Petition Issue 2 does not satisfy criterion A. of Minn. R. 7000.1900, subp 1 because petitioners are primarily concerned with MPCA policy and have not disputed a material issue of fact related to particulate matter limits.
156. Petition Issue 3 – Petitioners allege that allowing increased emissions is not consistent with the Comprehensive Management Plan for the Mississippi National River Recreation Area (MNRRA). MPCA has found previously in this document that the proposed permit does not represent an increase in emissions and has denied a contested case hearing on that subject. See Findings related to Petition Issue 1 above.
157. The MPCA also believes that whether the proposed permit amendment is consistent with goals and objectives in the regional plan is not a factual dispute, but is a concern over whether the proposed permit is good policy.
158. Even if this were a factual dispute, petitioners have not provided information for the MPCA to conclude that there is a reasonable basis underlying their belief that the permit is inconsistent with the objectives of the MNRRA. The MPCA has found in Findings 122-126 that the Mississippi River plans recognize existing industrial uses in the area in which the Facility is located and do not require such uses to cease operation. Northern Metals is an existing industrial use. Petitioners have not identified any information that they might introduce to the contrary.
159. The MPCA finds that petitioners' Issue 3 does not satisfy criteria A. and C. of Minn. R. 7000.1900, subp. 1.
160. Petition Issue 4 – Petitioners indicate that the closure of the locks on the Mississippi is becoming increasingly likely due to the growing threat of the Asian Carp. They state that it does not make



sense for Northern Metals to be expanding when they may soon have to change locations or find an alternative to barge transportation.

161. While the MPCA is aware that this issue has been discussed in various forums, no action is known to be imminent and the outcome is conjectural. Other transportation modes are available to Northern Metals if this does happen.
162. Petitioners do not identify any information they might introduce at a hearing to support the statement that closure of the locks is increasingly likely. As such the MPCA cannot conclude that a contested case hearing on this issue would be of assistance in reaching a final decision on permit issuance.
163. Further, Petitioners' statement that it does not make sense to allow Northern Metals to expand if the locks will close is a statement of a policy preference, not a dispute concerning a material fact.
164. The MPCA finds that Petition Issue 4 does not satisfy criteria A. and C. of Minn. R. 7000.1900, subp. 1.
165. Petition Issue 5 – The petitioners state that the Facility permit is extremely controversial and directly affects thousands of Minnesotans.
166. The MPCA recognizes that there is substantial public concern over this project. Therefore, as described in Findings 26-29, 49-51, and 55-56, the MPCA conducted additional public outreach beyond what is required by rule and beyond what is done during the MPCA's usual public notice process. As a result, there is no dispute that this is a controversial matter.
167. The MPCA finds that petitioners have not satisfied criterion A. of Minn. R. 7000.1900, subp. 1 as to Issue 5.

#### **Final Determination on issuance of the permit**

168. The MPCA's decision to issue the proposed permit is governed by its permit rule, Minn. R. 7007.1000, which provides:

*Subp. 1. **Preconditions for issuance.** The agency shall issue a permit or permit amendment, or reissue a permit only if it determines that all of the following conditions have been met.*

- A. The agency has received a complete application for a permit, permit amendment, or permit reissuance, except that a complete application need not be received before issuance of a general permit under part 7007.1100, subpart 4.*
- B. The agency has complied with the public participation procedures for permit issuance if required by part 7007.0850.*
- C. The agency has complied with the procedures for notifying and responding to affected states, if required by part 7007.0900.*
- D. If the administrator's review is required by part 7007.0950, the administrator has received a copy of the permit and any notices required and has not objected to issuance of the permit within the time period specified, or the administrator*

*has objected but the objection has been resolved to the administrator's satisfaction.*

- E. The conditions of the permit provide for compliance with all applicable requirements and the requirements of parts 7007.0100 to 7007.1850, or include a schedule to achieve such compliance.*
- F. The permit does not reflect a variance from any federally enforceable applicable requirements or requirements of part 7007.0100 to 7007.1850.*
- G. The agency anticipates that the applicant will, with respect to the stationary source and activity to be permitted, comply with all conditions of the permit.*
- H. All applicable provisions of Minnesota Statutes, chapter 116D, and the rules adopted under Minnesota Statutes, chapter 116D, have been fulfilled*

**Subp. 2 *Grounds for denial.*** *The following constitute grounds for the agency to refuse to issue a new or modified permit, or to refuse permit reissuance:*

- A. The agency is unable to make any of the determinations required under subpart 1.*
- B. There exists at the stationary source to be permitted unresolved noncompliance with applicable state or federal pollution control statutes or rules administered by the agency, or conditions of a previous or existing air emission permit, and the applicant will not undertake a schedule of compliance to resolve the noncompliance.*
- C. An applicant has failed to disclose fully all facts relevant to the stationary source or activity to be permitted, or the applicant has knowingly submitted false or misleading information to the agency.*
- D. The permitted facility or activity would endanger human health or the environment and the danger cannot be removed by an amendment to the permit.*
- E. With respect to the stationary source or activity to be permitted, the applicant has not complied with the requirement to pay fees under chapter 7002.*
- F. With respect to the stationary source of activity to be permitted, the applicant has failed to pay a penalty owed pursuant to court order, consent decree, stipulation agreement, schedule of compliance, or an order issued under Minnesota Statutes, section 116.072*
- G. The applicant has failed to prepare a pollution prevention plan or submit a pollution prevention progress report to the commissioner as required by Minnesota Statutes, sections 115D.07 and 115.08.*


### CONCLUSIONS OF LAW

169. The preconditions for permit issuance have been met and there are no grounds for denial.
170. Any findings that might properly be termed conclusions and any conclusions that might properly be termed findings are hereby adopted as such.
171. The MPCA has jurisdiction over this matter.
172. Due adequate, and timely public notice of the proposed permit was given in accordance with Minn. R. 7007.0850, 7007.0900 and 7007.0950.
173. The conditions under which the MPCA is authorized to issue this permit set forth in Minn. R. 7007.1000 have been met, and no condition for the denial of the permit is present. Proper operation of the Facility in accordance with the conditions of the permit issued by this order will achieve compliance with applicable state and federal air pollution control statutes and rules and the conditions of the permit.

### ORDER

The Minnesota Pollution Control Agency denies the requests for a contested case hearing and authorizes the issuance of the Northern Metals air emission permit No. 05300480-003.

### IT IS SO ORDERED



\_\_\_\_\_  
Commissioner John Linc Stine  
Chair, Citizens' Board  
Minnesota Pollution Control Agency

10/29/12

\_\_\_\_\_  
Date