UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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CHICAGO, IL 60604-3590

AUG 0 5 2015

REPLY TO THE ATTENTION OF:
E-19J

Tamara Cameron
Chief, Regulatory Branch
U.S. Army Corps of Engineers – St. Paul District
180 5th Street East, Suite 700
St. Paul, Minnesota 55101-1678

Barb Naramore
Assistant Commissioner
Minnesota Department of Natural Resources
500 Lafayette Road
St. Paul, Minnesota 55155-4040

Shawn Olson
Acting Deputy Forest Supervisor
U.S. Forest Service – Superior National Forest
8901 Grand Avenue Place
Duluth, Minnesota 55808

Re: Preliminary Final Environmental Impact Statement for the NorthMet Mining Project and Land Exchange, Hoyt Lakes, St. Louis County, Minnesota

Dear Ms. Cameron, Ms. Naramore, and Mr. Olson:

The United States Environmental Protection Agency (EPA) has reviewed the Preliminary Final Environmental Impact Statement (PFEIS) for the NorthMet Mining Project and Land Exchange. This PFEIS was prepared by Environmental Resources Management (ERM), and we understand it is being reviewed in parallel by the co-lead agencies: U.S. Army Corps of Engineers (USACE), U.S. Forest Service (USFS), and the Minnesota Department of Natural Resources (MDNR). EPA appreciates the opportunity to review this preliminary document in our role as a cooperating agency, consistent with our June 27, 2011 cooperating agency agreement for this project.

The PFEIS reflects many improvements to the project, and to the clarity and completeness of the environmental review. Our extensive discussions with the co-lead and cooperating agencies have helped to resolve virtually all of our previous comments, and to

review important questions about project modeling. EPA's remaining comments and recommendations for the Final EIS (FEIS) are attached.

EPA retains oversight authority for permitting of National Pollutant Discharge Elimination System (NPDES) discharges and water quality. We will work with USACE and the Minnesota Pollution Control Agency (MPCA) during project permitting. We will also continue to work with the co-lead and cooperating agencies to reach an FEIS that clearly conveys all relevant information and supports meaningful and effective public comment.

I look forward to discussing these comments as needed to resolve any questions before issuance of the FEIS. Please contact me at 312-353-8894 or Kenneth Westlake of my staff at 312-886-2910 to schedule this discussion.

Sincerely,

Alan Walts
Director, Office of Enforcement and Compliance Assurance

Enclosure: EPA Comments on PFEIS

cc: Doug Bruner, U.S. Army Corps of Engineers – St. Paul District (email copy)
Esteban Chiriboga, Great Lakes Indian Fish and Wildlife Commission (email copy)
John Coleman, Great Lakes Indian Fish and Wildlife Commission (email copy)
Steve Colvin, Minnesota Department of Natural Resources (email copy)
Randall Doneen, Minnesota Department of Natural Resources (email copy)
Lisa Fay, Minnesota Department of Natural Resources (email copy)
Ann Foss, Minnesota Pollution Control Agency (email copy)
Andrew Horton, U.S. Fish and Wildlife Service (email copy)
Michael Jimenez, U.S. Forest Service – Superior National Forest (email copy)
Bill Johnson, Minnesota Department of Natural Resources (email copy)
Tyler Kaspar, 1854 Treaty Authority (email copy)
Bill Latady, Bois Forte Band of Lake Superior Chippewa (email copy)
Nancy Schuldt, Fond du Lac Band of Lake Superior Chippewa (email copy)
Margaret Watkins, Grand Portage Band of Lake Superior Chippewa (email copy)
Darren Vogt, 1854 Treaty Authority (email copy)

EPA COMMENTS ON NORTHMET PROJECT PFEIS

Base flow and cumulative impacts

The NorthMet Mine Site GoldSim model requires an input to represent the flow rate of discharges from the nearby North Shore Mine to the Partridge River in order to assess potential water quality impacts, particularly from sulfate. The initial calculations to determine this flow rate resulted in some negative values that are not possible in nature. The co-leads applied three different approaches to address this result, and averaged the outputs of these approaches to yield a flow rate of 2.6 cubic feet per second (cfs). As we have discussed, this method is not statistically supportable. The co-leads have resolved this concern by conducting a sensitivity analysis. This analysis shows that values in the range of 2.5 to 4.5 cfs are reasonable, and supports the use of 2.6 cfs as an appropriate flow rate that will not underestimate NorthMet's potential water quality impacts to the Partridge River.

Recommendation: Document this sensitivity analysis and briefly summarize it in the FEIS.

Potential impacts of groundwater drawdown

The co-leads have recognized that groundwater drawdown would occur during this project, potentially including within the area of the One Hundred Mile Swamp.

Recommendation: The FEIS should address potential impacts to aquatic habitat as a direct result of groundwater drawdown associated with the project. A monitoring plan for indirect impacts to aquatic resources will be a key element of a Clean Water Act Section 404 permit.

Potential post-closure northward flow path in bedrock groundwater

The co-leads have proposed an adaptive management strategy to monitor for a possible northward flow path from the NorthMet Mine Site's East Pit, and to mitigate or prevent this flow path if necessary. EPA's review and discussion with co-lead and cooperating agencies indicate that a northward flow path is possible and can be addressed through adaptive management. EPA regards the proposed strategy as an appropriate response to this possibility.

Recommendation: The potential for a northward flow path of groundwater in bedrock and the associated adaptive management strategy should be clearly and specifically described in the FEIS, with reference to relevant analysis in a supporting technical memorandum.

Wetland mitigation ratios

Page 5-250 of the PFEIS discusses mitigation of direct and indirect wetland impacts. As we have discussed and documented, EPA expects USACE to apply the following minimum ratios for direct wetland mitigation: a 2:1 ratio for bogs; and a 1.5:1 ratio for lesser quality wetlands.

Recommendation: Recognizing that the final mitigation ratios will be addressed during the Clean Water Act Section 404 permitting process, the FEIS should reflect that the mitigation ratios stated above will be the minimum ratios.

Model calibration

The PFEIS indicates that the primary purpose of the NorthMet Mine Site MODFLOW model is to establish pit inflows during mine operations and closure. However, reference documentation states that MODFLOW contributes to a number of other GoldSim numeric input parameters as well.

Recommendation: The FEIS should specifically identify which GoldSim parameters are based on MODFLOW outputs, whether taken alone or together with other information.

Contradictory information

In our review, we noted that information presented in the PFEIS is at times inconsistent with or contradicts the latest information available in associated technical memoranda and reports. For example, the Water Modeling Data Package describes areas within the project as having no surface water/groundwater hydrologic connection, while the technical memoranda state the opposite.

Recommendation: While completing their parallel review of the PFEIS and preparing the FEIS, the co-leads should cross-check to assure the FEIS is fully consistent with supporting technical memoranda and reports.

Impacts to moose

EPA understands that moose is a culturally important species for Chippewa tribes. The proposed project is within the 1854 Ceded Territory, within which tribes exercise treaty-reserved hunting, fishing, and gathering rights. While the PFEIS adequately describes impacts to moose, it does not discuss avoidance, minimization or mitigation measures to reduce these impacts.

Recommendation: We recommend that the co-lead agencies continue to consult directly with tribal representatives to identify potential avoidance, minimization, or mitigation strategies for anticipated impacts to treaty resources. The FEIS should describe the outcome to date of this ongoing consultation, and resulting strategies.