



Major Differences of Opinion between Co-lead and Cooperating Agencies

1. Impacts to flow in Embarrass and Partridge Rivers

- Co-lead agencies agree with prediction that the project will not result in substantial changes to average stream flow when compared to existing conditions.
- Cooperating agencies believe that projected reductions in average stream flows in Partridge and Embarrass Rivers will result in measurable impacts.

2. Predicted decrease in mercury loading

- Co-lead agencies agree with prediction that the project will result in a net decrease in mercury loading across both the Embarrass and Partridge River systems by 0.6 grams per year.
- Cooperating agencies do not believe the proposed project will result in a decreased mercury load to these river systems.

3. Wild rice standard applicability determinations and areas of production

- Co-lead agencies are relying on MPCA draft staff recommendations for applying the wild rice 10 mg/L sulfate surface water standard in the SDEIS.
- Cooperating agencies disagree with the MPCA's draft staff recommendations on where to apply the wild rice sulfate standard and disagree with the seasonal (April 1-August 31) application of the standard.

4. Impaired waters list regulatory designation should be made for Embarrass River watershed

- Co-lead agencies are relying on current MPCA's final 2012 TMDL list of impaired waters in the SDEIS.
- Cooperating agencies believe sulfate concentrations should be a criteria used for designation of an impaired wild rice water and note that all segments of the Embarrass River identified as wild rice waters by the MPCA are impaired because they exceed the sulfate standard.

5. Underground mining analysis

- Co-lead agencies believe that the Underground Mining Alternative was adequately considered.
- Cooperating agencies believe this alternative was not adequately considered and it would provide significant environmental benefits compared to the proposed project.

6. West pit backfill option analysis

- Co-lead agencies believe that the West Pit Backfill option was adequately considered.
- Cooperating agencies believe this option was not adequately considered. Potential environmental benefits to long term water quality have not been fully assessed and mineral encumbrance issues can be avoided.

7. Partridge River baseline base flow and XP-SWMM model calibration

- Co-lead agencies believe predictions of Partridge River baseline baseflow are adequate and the XP-SWMM model calibration was appropriate.
- Cooperating agencies believe the surface water flow hydrology at the Mine Site is inadequately characterized and the XP-SWMM model predictions may have underestimated baseflow conditions by a factor of three (3).

8. Analog method to assess indirect impacts from mine dewatering

- Co-lead agencies believe SDEIS adequately uses the analog method to assess potential indirect effects from mine dewatering.
- Cooperating agencies believe the analog method proposed by the Co-lead agencies is not rigorous and should not be the sole means of indirect impact assessment for the SDEIS. Resource assessment areas of concern include wetlands, groundwater and surface waters.

9. Mine Site groundwater impact travel times

- Co-lead agencies believe the SDEIS adequately predicts groundwater impact travel times at the Mine Site as a function of bedrock hydraulic conductivity.
- Cooperating agencies believe assumed groundwater pollutant travel times at the Mine Site are underestimated based on relevant literature and data.

10. No Action Alternative analysis

- Co-lead agencies believe the SDEIS adequately analyzes effects on water resources under the No Action Alternative as required by NEPA/MEPA.
- Cooperating agencies believe CEQ guidelines require that water quality modeling of a No Action Alternative should include activities that will occur under the Cliffs Consent Decree.

11. Cumulative Effects to groundwater and surface water quality and quantity

- Co-lead agencies believe the SDEIS appropriately considered the potential for cumulative groundwater effects and accurately predicts cumulative effects to surface water quality and quantity.
- Cooperating agencies disagree with the Final SDD and SDEIS conclusion that no cumulative effects to groundwater and surface water resources are expected.

12. Cumulative Effects Analysis Area for Partridge and Embarrass Rivers

- Co-lead agencies believe the SDEIS uses an appropriate cumulative effects assessment area (CEAA), which includes the Partridge and Embarrass River watersheds.
- Cooperating agencies believe limiting the CEAA for water resources to the Partridge and Embarrass River watersheds is too small and at a minimum should include the St. Louis River. Cooperating agencies have made requests to include the 1854 Ceded Territory in the CEAA.

13. Effects on groundwater and surface water hydrology

- Co-lead agencies believe the SDEIS adequately predicts effects on groundwater and surface water hydrology.
- Cooperating agencies disagree with conclusion that project is not predicted to result in any significant effects on groundwater or surface water hydrology.

14. GoldSim not able to replicate Tailings Basin water/Partridge River Water Quality under the No Action Alternative

- Co-lead agencies believe the GoldSim model adequately replicates NorthMet Project Proposed Action water quality for Tailings Basin water and the Partridge River under the Continuation of Existing Conditions modeling scenario for the SDEIS.
- Cooperating agencies have found by comparing GoldSim model outputs to sample results that the model does not accurately predict existing water quality conditions, such as the existing exceedance of the aluminum standard in the Embarrass River, or existing conditions in the Partridge River and therefore believe the model is even less likely to accurately predict future project conditions.

15. Mineral fibers

- Co-lead agencies believe the SDEIS adequately describes the risks associated with mineral fibers, including chrysotile minerals, and potential ingestion risks.
- Cooperating agencies believe the risks associated with exposure to mineral fibers are greater than portrayed in the SDEIS.

16. Rail car spillage and dust

- Co-lead agencies believe the SDEIS adequately predicts the rail car spillage and potential environmental effects. They also do not expect any substantial reactive airborne fugitive dust emissions from rail transport.
- Cooperating agencies disagree that the amount of ore predicted in the SDEIS that could escape from rail cars would be small because the rail cars proposed for use are not sealed. They also believe that fugitive dust escaping through gaps in the rail cars is a concern.

17. Use of water evaluation criteria vs. water quality standards

- Co-lead agencies believe the SDEIS appropriately considers effects on water, including the evaluation criteria specific to the NorthMet Project Proposed Action and it is appropriate for the reporting of effects to reflect specific evaluation criteria based on the applicable water quality standards.
- Cooperating agencies disagree with statements in the SDEIS that indicate “no impact” when that assertion is based on not exceeding an evaluation criteria and believe the SDEIS should acknowledge where there is a change, regardless if a criteria or standard is exceeded.

18. Loss of “High Biodiversity Significance Values” sites

- Co-lead agencies believe the SDEIS appropriately discloses potential effects (loss) to high biodiversity significant sites as listed in the MN Biological Survey characterization data.
- Cooperating agencies believe that native plant communities identified by the MN Biological Survey will be impacted by the proposed Mine Site and related transportation and utility corridor without appropriate mitigation for their landscape-scale and ecosystem values.