Disclaimer: This document is a working document. This document may change over time as a result of new information, further deliberation or other factors not yet known to the co-lead agencies.

EPA Comment #8: The Tribal Cooperating Agencies Cumulative Effects Analysis (September 2013) included in Appendix C of the SDEIS states: "PSDEIS Table 4.2.2-18 reports Colby Lake as currently having an observed mean for Arsenic of 0.78 to 1.4 ug/L (depending on the data set), whereas Figure 5.2.2-35, the No- Action (continuation of current conditions) "P50 model for Colby Lake Arsenic shows annual maximum values of 0.5 ug/L." In addition, the SDEIS shows Colby Lake's current mean arsenic concentration as 0.78-1.4 ug/L on Table 4.2.2-18, with a range of 0.25- 2.3 ug/L, while the modeled P90 maximum value in Figure 5.2.2-35 lists the maximum concentration of arsenic in Colby Lake as 0.70 ug/L. Comparing the modeled mean for arsenic in Colby Lake to existing site-specific data in the SDEIS, the model outputs underestimate arsenic concentrations by up to 100%. Colby Lake is currently modeled as a continuation of the Partridge River because there is insufficient data to model it as a lake, which may be causing this discrepancy. We understand that monitoring is ongoing, which may provide additional information on observed arsenic concentrations.

> **Recommendation:** The FEIS should document an analysis that addresses this discrepancy between existing conditions in Colby Lake and modeling results, taking into account all necessary data. The FEIS should include any follow-up actions that will be necessary based on this analysis.

Response to EPA Comment #8: The Mine Site GoldSim model used for the SDEIS (v5) was modified for the FEIS (Mine Site GoldSim model v6) to include a new chemical loading source in Colby Lake and was calibrated to the measured chemical concentrations in the lake. This calibration considered new surface water chemistry data collected through the end of 2013. The same chemical loading source was applied to both the Continuation of Existing Conditions model and Proposed Action model in v6. The chemical loading source was constant and did not exhibit seasonal or long-term variations for future conditions. Incorporation of the loading source addressed the issue by providing predicted chemical concentrations in Colby Lake for existing conditions that are similar to currently measured concentrations. The average arsenic concentration based on 33 samples in Colby Lake is 0.95 µg/L. The GoldSim v6 Continuation of Existing Conditions modeling scenario predicts an average concentration of 0.80 µg/L at P50 over the 200 year modeling period.

Additional Information:

- NorthMet Project Mine Site Water Data Package v13; Section 5.2.4.8 Additional Loading to Colby Lake; page 148.
- NorthMet Project Mine Site Water Data Package v13; Attachment C; Table 1-13 Existing Surface Water Concentrations; .pdf-page 743.
- Colby Lake GoldSim Calibration; CDF 201 Version 2; September 11, 2014. [Workplan]