



September 13, 2019

Mr. Gordon Criswell
Talen Montana
PO Box 38
Colstrip, Montana

RE: DEQ Comments on Units 3&4 Cleanup Criteria and Risk Assessment Report

Gordon:

DEQ has reviewed the above-referenced document and is requesting additional action regarding ecological screening level exceedances for boron and sulfate. DEQ recognizes that limited data are available for surface water in the Units 3&4 Area; DEQ requests that data continue to be collected in this area, and may require an updated report in the future based on the data collected.

Additionally, DEQ previously provided the following comment on the Cleanup Criteria and Risk Assessment Report received June 26, 2019:

“Page 41, C-4.2.1, Surface Water, Aquatic Life, second paragraph: For the CCME number [for boron], please clarify which species drove the final 1500 µg/L protective level. If it was fish, fish can be removed, and invertebrates, amphibians and plants should be examined to determine if site concentrations would pose a threat to receptors present at the site.”

Talen has re-calculated the CCME number for boron for invertebrates, amphibians, and plants, which gave a protective level of 2100 µg/L. The surface water in two areas, the West Seep Diversion and the PSW-4 Overflow Pond, still exceeds this screening level on multiple occasions. Although Talen discusses the uncertainties associated with this screening level, the number cannot be dismissed based on these uncertainties. Therefore, DEQ requires that boron be listed as a COC for the West Seep Diversion and the PSW-4 Overflow Pond, and these areas should be addressed in the Remedy Evaluation Report.

Sulfate also exceeds the ecological screening level for livestock in two areas, the PSW-4 Overflow Pond and the NP Cut. Although the 95 UCL for sulfate for all surface water at the 3&4 EHP was below the livestock screening level, the number of exceedances at these two areas is concerning since both of these areas are described as being used by livestock, and having water for half of the year. Therefore, DEQ requires that sulfate be listed as a COC for the POSW-4 Overflow Pond and the NP Cut, and these areas should be addressed in the Remedy Evaluation Report.

Little information is provided on the operations of surface water at the three areas described above. Two of the areas appear to be man-made structures (the West Seep Diversion is essentially a dam that was constructed to contain the West Seep when it appeared in 2004, and the PSW-4 Overflow Pond is described as an “earthen stock pond”), and the NP Cut appears to be related to past mining operations. Based on these descriptions, these features are not classified as state waters, however they appear to pose an ecological risk to plants, invertebrates, and amphibians from boron exceedances, and to livestock from sulfate exceedances, especially in the case of the PSW-4 Overflow Pond, which is described as containing water for half of the year and being used by wildlife and livestock. Additionally, it is unclear what the source of water is in these areas. Please provide additional information that describes the source of water (i.e., is the PSW-4 Overflow Pond sourced from the PSW-4 well nearby?), and how the water source(s) could be influencing the levels of boron and sulfate in these features.

DEQ is running a public comment period on this Report from September 18, 2019 through October 18, 2019. Once public comments are received, DEQ will determine whether the Report may be approved.

If you have any questions, please feel free to contact me at 406-444-6797 or sedinberg@mt.gov.

Sincerely,



Sara Edinberg
Hydrogeologist
Montana DEQ

cc: Gordon Criswell, Talen Montana (electronic copy)
Al Hilty, Hydrometrics (electronic copy)
Marietta Canty, Neptune Inc (electronic copy)
Aimee Reynolds, DEQ (electronic copy)
Ed Hayes, DEQ (electronic copy)