



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
UPPER PENINSULA DISTRICT OFFICE



C. HEIDI GREETHER
DIRECTOR

August 29, 2018

VIA E-MAIL

Mr. Tom Repaal, Sr. Environmental Engineer
Copperwood Resources, Inc.
310 East Highway 2
Wakefield, Michigan 49968

Dear Mr. Repaal:

**SUBJECT: Request for Additional Information - Copperwood Mine - Mining Permit
Application Amendment Request March 2018 - MP 01 2012**

The Michigan Department of Environmental Quality (MDEQ) has conducted an initial review of the Copperwood Mine Mining Permit Application Amendment Request (Application), March 2018, MP 01 2012. To assist in the completion of the review, please respond by addressing the following items of request for additional information to supplement, clarify, and support the proposed amendment:

1. Provide a map that clearly shows the differences in the original site layout and the requested changes to the site layout in an appropriate scale.
2. Explain how tailings will be transported to the Tailings Disposal Facility (TDS) in the proposed site layout, and include a figure showing the location of the tailings transport system.
3. Section 2.3 of the Application indicates changes in surface and mineral rights in the project area since MP 01 2012 was issued. Rule 425.203 (d) of Part 632 Nonferrous Metallic Mineral Mining regulations of the Natural Resources and Environmental Protection Act of P.A. 1994, as amended (Part 632) requires a map and description of ownership of all tracts of land in the mining area and within 1320 feet of the boundary of the mining area, including surface rights and mineral rights. Provide an updated map showing current ownership that meets this requirement.
4. Provide additional detail of the plans and design of the ore stockpile, including construction and thickness of the compacted clay till base and liner.
5. Specify the area and thickness of topsoil that will be stripped, and area and volumes of overburden and waste rock to be excavated for the proposed site layout. Demonstrate that this material will be adequate in characterization and volumes required for construction and reclamation plans or provide plans for hauling material in from off site.
6. MP 01 2012 Special Permit Condition G1 requires that all vehicles and equipment leaving the contact area of the main facilities site will be required to be washed before leaving, and wash water shall be used as facility process water, routed to the tailings

- discharge line, or treated in the water treatment plant. How has this condition been considered in the new facility design and layout?
7. What plans are in place for subsidence monitoring during operations and post closure?
 8. Provide an updated deposition analysis reflecting the revised dispersion modeling that was submitted to the MDEQ Air Quality Division.
 9. Section 3.16 of Volume II of the Application, Environmental Impact Assessment (EIA) Amendment, states that the follow-up field surveys will be completed in the spring of this year, and an updated assessment on potential cultural, historical, and archaeological resources will be provided to the MDEQ. If these surveys have been completed, please provide the results. If they have not been completed, provide a revised schedule.
 10. Section 3.17 of Volume II of the Application, EIA Amendment, mentions a mitigation measure/engineering control for emission sources to include "partial cover systems on the ore stockpiles." Explain this reference, including how this is accounted for in the mine plan.
 11. Has additional baseline information been collected since issuance of the permit for surface water and/or biological resources?
 12. Clarify the total area of the TDF in acres. Explain the total area to be reclaimed in Table 9-1, Tailings Disposal Facility, Closure.
 13. Have alternatives been evaluated for tailings disposal since the permit was issued?
 14. What are the plans for the intake structure at closure?
 15. Does the financial assurance take into account contractor profit?

Thank you for your attention in this regard. If you have any questions, please feel free to contact me at the telephone number listed below or by e-mail at humphreym@michigan.gov.

Sincerely,



Melanie Humphrey
Oil, Gas, and Minerals Division
Upper Peninsula District Office
906-250-7564

MH

cc: Mr. Harold Fitch, DEQ
Mr. Rick Henderson, DEQ
File: Copperwood, CM9