

**Michigan Department of Environmental Quality  
Oil, Gas, and Minerals Division  
Copperwood Mining Permit Amendment Request – MP 01 2012  
Proposed Decision  
September 25, 2018**

**Basis for Proposed Decision**

The Michigan Department of Environmental Quality (MDEQ) has made a proposed decision to grant a request submitted by Copperwood Resources, Inc. to amend Mining Permit MP 01 2012, issued under the provisions of Section 63205 (MCL 324 63205) of Part 632, Nonferrous Metallic Mineral Mining, of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended (Part 632). The Copperwood Mine is located in Ironwood and Wakefield Townships, Gogebic County, within Sections 1, 2, 11, and 12 of T49N, R46W; Sections 6, 7, and 8 of T49N, R45W; and Sections 35 and 36, T50N, R46W. The amendment includes the following changes to the project since permit issuance: mining area boundary extended approximately 225 acres to the west to accommodate surface facilities relocation, addition of an outdoor stockpile, and water supply infrastructure (increase in footprint from original design approximately 25 acres); modification of mine ventilation including one intake and two exhaust ventilation raises; mine plan design modifications to minimize subsidence; and modifications to TDF design.

In making this determination, the MDEQ has reviewed and/or considered the following:

- Mining Permit Application Amendment, Copperwood, Volume I, Copperwood Resources, Inc., submitted March 22, 2018.
- Mining Permit Application Amendment, Copperwood, Volume II, Environmental Impact Assessment Amendment, Copperwood Resources, Inc., submitted March 22, 2018.
- Addendum to Amendment Request, Copperwood Resources Inc., submitted June 26, 2018.
- Copperwood Mine Mining Permit MP 01 2012, including terms and conditions set forth in the Permit Application submitted by Orvana Resources US Corporation (ORUSC) for the Copperwood Mine, and supplemental documents amending, clarifying, or revising the initial submittal of the Permit Application, General Permit Conditions, and Special Permit Conditions.

- Comments received during the public meeting on July 17, 2018 through the comment period ending August 14, 2018.
- Response to the MDEQ Request for Additional Information, Copperwood Resources Inc. and addendums, submitted September 13, 2018.
- Updated Air Deposition Analysis, Copperwood Resources, Inc., submitted September 19, 2018.
- Part 632 Nonferrous Metallic Mineral Mining statute and rules.
- The extent to which other permit determinations afford protection to natural resources. The Mining Permit is not effective until all other permits required under NREPA for the Copperwood Mine are obtained.

In accordance with Rule 425.201(5) under Part 632, the department may impose terms and conditions in a mining permit, in addition to those specified in the application, that are necessary to implement the rules and statute. Based on the information available, the MDEQ proposes that the following Special Permit Conditions be added to the Mining Permit to meet the requirements for approval under Part 632 for the proposed changes:

- *A subsidence monitoring plan that is a revision of the plan referenced in Special Permit condition K30 shall be submitted to the MDEQ for approval prior to the start of mining operations. The revised plan shall take into account changes in the mine development plan as specified in the Mining Permit Application Amendment, March 2018.*
- *A plan to conduct confirmation baseline sampling prior to start of mining operations shall be submitted to MDEQ for approval.*
- *The outdoor ore stockpile area shall be reclaimed and area regraded to conform to the reclamation grading plan in accordance with the approved Reclamation Plan and Special Permit Conditions O-1, 2, 7, 11, and 13. The geomembrane liner shall be removed and disposed of at a local landfill in accordance with applicable solid waste regulations.*
- *Infrastructure constructed as part of the make up water supply shall be reclaimed as approved by US Army Corps of Engineers (USACE) and MDEQ, unless the permittee enters into an agreement with another party in which a property end use is established that includes beneficial use of the water supply infrastructure, and the party assumes the responsibilities for maintaining the system.*

- *Infrastructure constructed in the mining area as part of the power supply for the mine shall be removed once it is no longer necessary, unless the permittee enters into an agreement with another party in which a property end use is established that includes beneficial use of the electrical service.*

### **Application Review Process**

The MDEQ received an application from Copperwood Resources, Inc. on March 22, 2018 to amend Mining Permit MP 01 2012, originally issued to ORUSC. After Highland Copper Company Inc. acquired all outstanding shares of ORUSC in June 2014, it changed the name of ORUSC to Copperwood Resources Inc. by amending the articles of incorporation. MDEQ informed Copperwood Resources, Inc. on April 20, 2018 that the request for amendment constitutes a significant change from the conditions of the approved mining permit and that the review process of the amendment request may proceed as provided for a new permit application. Once MDEQ received confirmation that the application fee was received, the application was determined to be administratively complete and the technical review proceeded. A determination that an application is administratively complete does not preclude the MDEQ from requiring additional information from the permittee.

On June 26, 2018, the MDEQ received an addendum to the amendment application to address revisions to plans for power supply to the mine, specifically changing from on-site power generation using natural gas to the previously permitted grid-connected transmission line, as well as the addition of a heater at the fresh air intake location.

On June 28, 2018, public notice went out for the consolidated public meeting for the mining permit amendment application and hearing for the Inland Lakes and Streams, Wetland Protection, and Great Lakes Submerged Lands application. The public meeting/hearing was held on July 17, 2018 at the Gogebic Community College in Ironwood, Michigan. After the public meeting, a 28-day written comment period concluded on August 14, 2018, and all comments received were reviewed and considered in the proposed decision. Application documents were made available on the MDEQ website as soon as possible after they were received throughout the review process.

After reviewing the comments received, the MDEQ sent a request for additional information to Copperwood Resources, Inc. on August 29, 2018 to supplement and complete the review. To allow time for the permittee to respond and MDEQ to review the response, it was agreed to extend the deadline to reach a proposed decision from September 11, 2018 to September 25, 2018. Copperwood Resources, Inc. responded to most of the items in the request on September 13,

2018. The remaining item, a requested update to the air depositional analysis, was received on September 19, 2018, which was also forwarded to the Toxics Unit in the MDEQ Air Quality Division for review.

Based on the information available to date, the MDEQ has determined that the amendment to MP 01 2012 meets the requirements of Part 632. Section 63205(11) of Part 632 directs the MDEQ to issue a mining permit if the permit application meets the requirements of the law and the proposed mining operation will not pollute, impair, or destroy the air, water, or other natural resources or the public trust in those resources, in accordance with Part 17, Michigan Environmental Protection Act, of the NREPA.

The MDEQ is planning to hold a coordinated public hearing on October 24, 2018 at Gogebic Community College in Ironwood, Michigan to hear comments regarding the proposed decision to amend MP 01 2012 and the Michigan Air Use Permit to Install for the Copperwood Mine. Written comments will be accepted for 28 days following the public hearing on the proposed decision to amend the Mining Permit and will be considered in the final decision. Details of the hearing and comment period will be included in the public notice.