



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY

LANSING



LIESL EICHLER CLARK  
DIRECTOR

December 12, 2019

Mr. David Anderson  
Director, Environment and Regulatory Affairs  
Aquila Resources Incorporated  
E807 Gerue Street  
Stephenson, Michigan 49887

Dear Mr. Anderson:

SUBJECT: Back Forty Project – Mining Permit Modification – MP 01 2016

The Department of Environment, Great Lakes, and Energy, Oil, Gas, and Minerals Division (OGMD) has issued the attached modification as an addendum to MP 01 2016 issued under the authority of Part 632, Nonferrous Metallic Mineral Mining, of the Natural Resources and Environmental Protection Act, Act 451 of 1994, as amended (Part 632). The enclosed addendum is hereby issued by OGMD as directed by the administrative law judge in the Final Decision And Order issued May 3, 2019, for Docket 17-005710 and recently upheld by the State of Michigan Environmental Permit Review Commission in November of 2019.

Thank you for your attention and consideration in this regard. If you have any questions, please feel free to contact Ms. Melanie Humphrey, Area Geologist, Oil, Gas, and Minerals Division at 906-250-7564; [humphreym@michigan.gov](mailto:humphreym@michigan.gov); or you may contact me.

Sincerely,

Adam Wygant, Division Director  
Oil, Gas, and Minerals Division

cc: Mr. Mark Snow, EGLE  
Mr. Rick Henderson, EGLE  
Ms. Melanie Humphrey, EGLE  
File: Back Forty Project – OGMD files

Modifications to Mining Permit MP 01 2016  
STATE OF MICHIGAN  
MICHIGAN OFFICE OF ADMINISTRATIVE HEARINGS AND RULES  
Final Decision and Order Docket No.: 17-005710  
December 12, 2019

The Department of Environment, Great Lakes, and Energy hereby issues the following modifications to MP 01 2016, originally issued on December 28, 2016:

1. The Unanticipated Discovery Plan should be amended consistent with the suggested revisions of Dr. Anderson, as set forth in footnote 32.
  - The Unanticipated Discovery Plan shall be amended as follows:
    - Cultural Resources: (5) Once the archaeologist has developed an assessment of the significance of the cultural resource, either based on photographs and descriptions or on a visit to the discovery location, the archaeologist will notify the State Archaeologist. The on-site archaeologist, in consultation with the State Archaeologist, will determine the need for further action; and if needed an action plan will be developed and implemented including any necessary protection or mitigation measures.
    - Human Remains, Burial, or Grave Site: (6) If the archaeologist confirms that human remains or graves are present, either based on interviews with on-site personnel or from on-site study, he or she will notify local law enforcement and the State Archaeologist. (7) If law enforcement, in consultation with the on-site archaeologist, determines that the human remains or grave may be a crime scene, law enforcement will treat it as such. (8) If law enforcement, in consultation with the on-site archaeologist, determines that the human remains or grave are not a crime scene, an action plan will be developed and implemented
2. The Unanticipated Discovery Plan should be amended to provide that both the Menominee Tribal Historic Preservation Officer and the State Archaeologist should be consulted with respect to appropriate disposition and potential repatriation of any human remains or associated funerary objects discovered in the project area.
  - The Unanticipated Discovery Plan shall be amended as specified.
3. Special Permit Condition A(3) should be amended to provide that "the activity shall be monitored by a qualified archaeologist, as identified on a list of qualified candidates maintained by the State Archaeologist, until the disposition of the discovery is resolved."
  - Special Permit Condition A3: If work must proceed near the area of an unanticipated discovery of cultural resources or human remains before the disposition of the discovery is final, care must be taken to avoid disturbing the area in which the discovery was made. Further, the activity shall be monitored by a qualified archaeologist, **as identified on a list of qualified candidates maintained by the State Archaeologist**, until the disposition of the discovery is resolved.

4. The permit should be amended to provide for accelerated flooding of the backfilled pit. The water source for accelerated flooding of the pit is left to the discretion of the OGMD in its approval of the final closure plan. In addition, Special Permit Condition K(3) should be amended to provide for monthly monitoring of groundwater after pit closure during flooding; but after the pit is flooded, groundwater monitoring may occur on a quarterly basis.
  - Special Permit Condition O2: Utilizing the data collected in Special Permit Condition E12, prior to commencement of Phase 3 of Reclamation, the permittee shall submit to the department a final design plan for backfilling of the pit, including buffering amendment and procedures for the backfilling process such that leachate will not be released into the environment during the backfill process, for review and approval. **The plan shall include accelerated flooding of the backfilled pit including a water source.**
  - Special Permit Condition K3A: The permittee shall monitor surface water quality quarterly at locations specified in the amended MPAA/EMP Figure 2-1. Alternative surface water monitoring locations require written approval from OGMD. **Frequency of groundwater monitoring of the pit as specified in SPC K2A shall increase to monthly during accelerated flooding of the backfilled pit, and quarterly monitoring may resume after it is determined that water levels in the pit have reached equilibrium.**
  
5. The permit should be amended to provide for groundwater monitoring locations at those locations identified by the OGMD on page 9 of Exhibit R- 28, as well as the three locations identified by Dr. Hyndman, being the small streams west of MSG-15, east of MSG-15, and south of MSG-8 identified on Exhibit 9 (Figure 3-16) at p 129, provided that the property owners grant access for the placement of the monitoring wells.
  - Special Permit Condition K2A: The permittee shall monitor groundwater quality and elevations at leachate and compliance monitoring well locations that meet the requirements of R425.406(5), and as identified in the May 2019 revised Figure 1-2, **with the addition of groundwater monitoring locations, provided that the property owners grant access for the placement of monitoring wells, west of MSG-15, east of MSG-15, and south of MSG-8.** Alternative groundwater monitoring locations require written approval from OGMD. Well boring logs and final surveyed locations for monitoring wells installed during construction shall be submitted to OGMD.