



November 3, 2016

MDEQ Back Forty Comments
c/o Joe Maki
Office of Oil, Gas, and Minerals
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DEQ-Mining-Comments@michigan.gov

Mr. Maki,

The Michigan Environmental Council (MEC) is a coalition of more than 70 member organizations across the state, and our staff in Lansing have followed the evolution of sulfide mining proposals in Michigan's Upper Peninsula for the last decade, including serving on the committee to help craft the mining statute (Part 632), commenting on the subsequent rules package, and putting in comments on the first proposal under this new regime, the Eagle project.

Given that background, we are particularly concerned with the DEQ's intent to grant a Part 632 mining permit for the Back Forty project proposed by Aquila Resources. The draft proposed permit should be pulled back and reexamined. Our review suggests that this project is clearly flawed in both design and intent. Based on the woefully incomplete and inadequate application that was submitted, we do not believe it could be legally permitted or developed using the proposed methods, in the proposed location, under current Michigan statute.

Please accept the following written comments outlining our major concerns with this project. We ask that a response to these items be made available to the public prior to a final decision on this permit to ensure that our concerns and those submitted by other concerned organizations and persons have been reviewed and considered. The five specific comments fall into three major categories of concern:

- Feasible and prudent alternatives to minimize actual and potential adverse impacts to natural resources were not adequately considered by the applicant, especially related to mining method (open pit) and on-site processing/beneficiation.
- The applicant's mining plan fails to fulfill legal requirements with regard to the protection of natural resources, particularly in not preventing leaching into ground and surface waters, and with a post-closure approach that

fails to create the required self-sustaining ecosystem and which would require perpetual care.

- Applicant fails to provide information necessary to review, let alone verify, that proposed techniques and plans to be implemented are adequate to achieve their intended outcomes.

Comment 1: Feasible and prudent alternatives to minimize actual and potential adverse impacts to natural resources were not adequately considered by the applicant related to the proposed mining method (e.g., a large open pit on the banks of the Menominee River).

Due to the sensitive location of the target ore body, adjacent to the Menominee River and close (<30 miles) to the Great Lakes, the most important freshwater resource in the continental United States, the required feasible and prudent alternatives analysis is particularly critical. Part 632 is clear in this regard:

63205(2)(b): The environmental impact assessment . . . shall address feasible and prudent alternatives.

and

63205 (3): The applicant has the burden of establishing that the terms and conditions set forth in the permit application; mining, reclamation, and environmental protection plan; and environmental impact assessment will result in a mining operation that reasonably minimizes actual or potential adverse impacts on air, water, and other natural resources and meets the requirements of this act.

Overall, the feasible and prudent alternatives analyses contained in the proposal and supporting documentation are woefully inadequate. This is especially true of a major aspect of the project – namely, the choice to create, and later backfill with reactive materials, a large (83 acre) open mine pit on the banks of the Menominee River.

The rules governing the implementation of Part 632 specify the contents of the required analysis:

Rule 425.202(c) An analysis of feasible and prudent alternatives for the mining activities consistent with the reasonable requirements of the public health, safety, and welfare. The analysis shall include all of the following:

- (i) A description of feasible and prudent alternatives.*
- (ii) A description of alternatives considered but not carried forward for further evaluation.*
- (iii) A description of why the chosen alternatives are preferred.*

The applicant provides no true analysis, just a short justification consisting of two short paragraphs (a total of 107 words), and fails to provide even a description of any feasible and prudent alternatives to the chosen open pit mining method. The justification provided primarily serves to explain “general” considerations regarding mining methods. The only project-specific justification for the chosen mining method in the entire EIA is a statement that, “A preliminary assessment of underground mining showed that underground mining is not a prudent alternative for this ore body. The shallowness of the ore body, specifically the shallow ore zones, heavily influences the effectiveness of open pit mining.”

This inadequate “analysis” does not stand up to scrutiny. No description or analysis of any alternative approaches (e.g., underground mining via tunnel) is provided, and therefore this cannot be considered a valid “alternatives analysis” under the statute. In addition, the rationale that is provided for dismissing alternatives is based solely on the applicant’s own economic considerations in accessing and removing the ore, not the long-term risks and tradeoffs related to environmental or natural resource concerns.

The state must request and require a full description and analysis of what an underground alternative might be for backfilling of the open pit with reactive materials as part of the closure and post-closure plans. The proposed mining method of open pit, for example, necessitates the construction of a cut-off wall to protect the river, a strategy in itself full of acknowledged uncertainties in terms of effectiveness. The open pit would also need to be flooded to stop ongoing weatherization that creates acid rock drainage (ARD), a process they estimate would take 20 years under ideal circumstances. Even after closure and reclamation, the pit would continue to create leachate that must be trucked offsite for 50 years, and would generate leachate for at least 100 years – the extent of the analysis.

Failing to analyze alternative methods to this approach that might not require the construction of the cut-off wall, or might shorten the period of leachate generation, for example, fails to satisfy the most basic of requirements of Part 632 in terms of “minimizing actual or potential adverse impacts,” and the lack of consideration of alternatives such as underground mining should alone justify a denial of the permit as proposed.

The DEQ rightly sought additional information about this inadequate alternatives assessment in its May 9, 2016 request for additional information (*DEQ Comment 176: “Mining method- preliminary assessment of underground mining showed that it is not a prudent alternative for this ore body - What is the reference for this assessment?”*)

The response from Aquila Resources, in a June 2016 letter to DEQ, is no more satisfactory:

Aquila Response to Comment #176: “The sinking of an underground mine shaft was evaluated in the 2014 Preliminary Economic Assessment (PEA) as reported by Tetra Tech (2014). Although the ore body was found to extend downward beyond the bottom of the pit and was deemed minable via underground methods, the grades, quantity, and distribution of the ore types were not adequate to efficiently process in the oxide and sulfide plants.”

An economic analysis is not the same thing as a feasible and prudent alternatives analysis, as it likely fails to evaluate much beyond the applicant’s own economic considerations in producing the target ore, not the risk or impacts to natural resources, which are the motivation of an Environmental Impact Assessment in the first place.

Alternative methods must be fully explained and analyzed to determine if they would have demonstrably different impacts to natural resources. The applicants’ own acknowledgement that the ore body is “minable via underground methods” suggests the applicant should more fully describe and analyze that option, and should be asked to do so in a robust and forthcoming manner. This seems obvious, given the sensitive, water-rich environment of the proposed project, and the intense pressure placed on this resource by choosing to open a large open pit, and locate a permanent storage facility for acknowledged ARD-generating materials, behind a dubious cut-off wall, immediately adjacent to a significant water resource like the Menominee River.

Finally, it appears the alternative was rejected based on economic efficiencies that are themselves predicated on other contingent aspects of the proposed operation (namely, the choice to use “oxide and sulfide plants”) which are themselves rightly subject to their own feasible and prudent alternatives analysis (see comment #2 below). Such a subjective decision, made by the applicant in one aspect of the project, should not become a de facto limiting factor in dismissing a full consideration of feasible and prudent alternative methods in another aspect of the project.

The mining permit should be denied until a full and robust alternatives analysis is conducted and presented which explores the option of underground mining, including the full life-cycle of the mine (from construction through operation, closure and post-closure) and its likely impacts and risks to natural resources, including specifically the likely quantities, mobility and movement of ARD to the waters of the state under both methods.

Comment 2: Feasible and prudent alternatives to reduce undue and unnecessary risk to natural resources were not adequately considered by the applicant, related to the proposed plans for on-site processing/beneficiation.

The applicant again fails completely to provide a description and analysis of an alternative mining approach in which the ore is removed immediately from the area and processed (including operations such as cyanide treatment, beneficiation, flotation, etc.) in an offsite location away from the ore removal operations on the banks of the Menominee River.

This inadequate alternatives analysis provided by the applicant (consisting of three paragraphs, 306 total words) begins with the assumption that “Processing for the Project will be performed at the same location as the mining. This has the advantage of reduced transportation costs when compared to mines with separated mines and mills.” No potential alternative sites for processing outside the footprint of the mining area are mentioned, let alone described or evaluated, a clear violation of the EIA requirements.

DEQ again asked for more information in their May, 2016 letter (*DEQ Comment 177: “Ore Processing location- same location as mining, advantage of reduced transportation costs - What other ore processing sites were considered?”*)

Aquila’s response was again inadequate, primarily addressing the location of the processing facilities within the mine site rather than off-site locations, and fails to meet minimal requirements of the statute:

Aquila’s Response to Comment #177: “The ore process facility location was selected based upon a number of criteria: 1) To limit disturbance to wetlands and other environmental features; 2) Close proximity to the mine pit to reduce ore transportation to the mill facility; 3) Be in close proximity to the facility administration building and main entrance road; and 4) Be in close proximity to the TWRMFs to limit tailings transport distance. Off-site ore processing facilities were evaluated for potential processing locations. However, the costs for ore shipment to off-site facilities is not sustainable for the project value.”

Again, the applicant acknowledges that offsite locations were evaluated, but fails to provide any supporting documentation. Moreover, economic considerations (e.g., the profit motives) of the applicant alone are NOT sufficient to dismiss potential alternatives. In this case, we believe that immediately hauling the raw material out of the mine area, adjacent to the Menominee River, to an offsite area with fewer high-value natural resources, warrants a full analysis under the statute as it clearly reduces the “actual or potential adverse impacts” to the natural resource by limiting the overall quantity of ARD-generating materials on site,

reduces the total volume of reactive material that must be dealt with, and keeps toxic chemicals such as cyanide out of the equation.

Estimates suggest that the mining operation will produce 54 million tonnes (Mt) of waste rock and an additional 12 Mt of tailings materials that have been processed in some manner. The addition of chemicals and other agents used in processing (including cyanide) also add significantly to the amount of high-risk, reactive and/or acidic-generating materials being dealt with onsite. Therefore, it is prudent to fully consider an alternative project design that relies on offsite processing. In such a scenario, most if not all of these additional processing-generated materials are not ultimately deposited in a backfilled pit on the shores of the Menominee River, and that option must be examined in full.

As stated in the permit application, “Reclamation of the pit is patterned after the successfully backfilled and reclaimed Flambeau Mine in Ladysmith, Wisconsin, and is designed to protect groundwater quality and the Menominee River.” However, as has been noted by other commentators, the Flambeau mine was markedly different than the proposed Back Forty project in that the processing was done offsite at the Flambeau project. Therefore, the reactive material used in backfilling the mine pit was very different and there was far less of it— a difference whose impact cannot be fully appreciated unless an alternatives analysis is provided that contemplates a scenario in which Back Forty ore is processed offsite. That analysis has not been provided or likely conducted, but should be.

The mining permit should be denied until a full and robust alternatives analysis is conducted and presented which explores actual and potential adverse impacts and risks to the natural resources, particularly the Menominee River and nearby Lake Michigan, of a mining plan in which all post-extraction ore processing is handled at an offsite facility.

Comment 3: Applicant mine plan fails to fulfill requirements with regard to protection of natural resources by not preventing leaching into ground and surface waters.

Part 632 is very clear that the mining plan must “prevent” (common definition: “to keep from occurring”) leachate from entering ground or surface waters. It appears that the Aquila project fails to meet this basic standard, and at a minimum contemplates at least three specific areas of the operation where leachate is created and allowed -- in known, anticipated amounts -- to enter ground or surface waters. These include the stockpiles, the Tailings and Waste Rock Management Facilities (TWRMF), and the proposed but not-yet designed cut-off wall.

Part 632 state that the mining, reclamation, and environmental protection plan shall include *“provisions for the prevention, control, and monitoring of acid*

forming or other waste products from the mining process so as to prevent leaching into groundwater or runoff into surface water.

The standard regarding leachate, therefore, is not the degree of contamination from leachate, or consideration of the quantities that would create “adverse” impacts. The standard in statute is that leachate be “prevented from leaching into” groundwater or surface water. The proposal and draft permit fail this standard.

The draft DEQ permit contains at least three “special permit conditions” that contemplate and plan for leachate entering ground or surface waters:

- *E(3): “Coarse ore and concentrate stockpiles shall be maintained to prevent leachate from contaminating the environment.”*
- *F(7). If the average daily flow rate in the [TWRMF] leak detection system exceeds 25 gallons per acre per day, the permittee shall notify the OOGM Upper Peninsula District Geologist, investigate the leakage source(s), and develop a corrective action plan to address the leakage.*
- *K(22). The permittee shall monitor the performance and integrity of the cut-off wall throughout operations . . . If seepage flow exceeds 200 gpm for 5 consecutive days, the permittee shall notify the OOGM UP District Geologist as soon as practicable, and conduct a review of all cut-off wall monitoring data to determine if the cut-off wall is ineffective for its intended purpose, and submit a report of findings to the OOGM UP District Geologist within 30 days of notification.*

The proposed cut-off wall, separating the open mine pit (active during operation, and permanent home to the neutralized ARD slurry according to post-closure plans) from the Menominee River, is of particular concern. It appears that the design is not confirmed, and in fact, the many special permit conditions related specifically to the cut-off wall suggest a great deal of uncertainty that the design will be effective.

The cut-off wall design itself – located in such close proximity to the river – does not seem to be the best choice (see feasible and prudent alternatives above). Moreover, the fact that the design for the cut-off wall does not appear within the mine application, but is raised in a slew of “special mine conditions” that will never be vetted by the public prior to construction, raises serious questions.

Additional DEQ draft permit Special Permit Conditions related to the cut-off wall include:

- *K(20). Prior to construction of the cut-off wall, the final design mix shall be determined by suitability tests to ascertain that the SCB (soil, cement,*

bentonite) mix will meet the minimum hydraulic conductivity and a shear strength requirement to meet the final design criteria.

- K(21). The permittee shall conduct geotechnical and hydrogeologic testing throughout mining operations to validate the design of the pit slope, Engineering Geology Model (EGM), and design of the cut-off wall.
- K(23): Prior to mining operations, the permittee shall submit final plans for location and design of piezometers to be installed to monitor the performance of the cut-off wall for review and approval.
- K(24). If the results of monitoring as required by Special Permit Condition K22 indicate that the cut-off wall is ineffective for its intended purpose, the following measures shall commence immediately: a. Implement measures, as necessary, to collect and divert the seepage. b. Determine the locations of leaks based on piezometer and flow monitoring results. c. Commence a site investigation and testing program to assess the integrity of the cut-off wall starting with the suspected location of leak(s), including coring of the cut-off wall for examination and laboratory testing, and inspection of the borehole wall. If necessary, downhole permeability tests may be carried out in the bedrock to further assess their hydraulic conductivities. d. Submit a report of the investigation results and a plan for remedial design and construction to the OOGM UP District Geologist. e. Carry out remedial measures as approved by the MDEQ.

We should state clearly: the cut-off wall is not an area where a “trial and error” approach should be entertained.

The mining permit should be denied as it fails to meet the standards outlined in law for preventing leachate from entering ground or surface waters. If the plans for stockpiles, TWRMF, and the cut-off wall, among other items, cannot all be demonstrated to prevent leachate from entering ground and surface waters, then the permit must not be granted.

Comment 4: Applicant mine plan fails to fulfill requirements with regard to protection of natural resources with post-closure and reclamation plans that fail to create a self-sustaining ecosystem and which will require perpetual care.

Part 632 is clear that mining reclamation must meet a high bar – a system that does not require human intervention to protect the natural resources once the mine is closed. It reads:

63209 (8) “Both the mining area and the affected area shall be reclaimed to achieve a self-sustaining ecosystem appropriate for the region that does not require perpetual care following closure.”

The mine plan fails this standard, contemplating a mine pit that will continue to generate and leach reactive material that must be trucked offsite for at least 50

years, and which will thereafter enter unchecked into the environment for at least another 50 years after that, long after the mine has ceased operations and the site has been “reclaimed.”

DEQ rightly asked for more information about this inadequate approach in its May 9, 2016 letter: (*DEQ comment 48: How long will water have to be removed and treated off site after final reclamation?*)

Aquila’s June response demonstrates that the perpetual care standard has not been met:

Schematic 5-4 in Section 5-4 of the Water Management Plan (Appendix D from the Treatment and Containment Plan) shows leachate from the TWRMF will report to the on-site wastewater treatment plant (WWTP) through Postclosure Year 6 (Mine Year 17). From Postclosure Year 7 to Postclosure Year 50 (Mine Year 61) leachate [estimated at 8.70 (year 10) to 2.76 gallons per minute (year 50)] will be pumped into tanker trucks and will be transported off-site for treatment. The estimated leachate generation rate during Postclosure Years 50 to 100 [estimated at 1.22 (year 50) to .58 GPM (year 100)] . . . is extremely small.

The standard regarding perpetual care is NOT that future care be “minimal” or that the amount of reactive leachate entering the environment for the foreseeable future be “extremely small,” but that no leachate enter ground or surface water and that no perpetual care be required to achieve that result.

The application falls short in this regard, as highlighted in other “special permit conditions,” such as:

O(12). Leachate shall be pumped and treated by the WWTP or other approved system before being released into the environment from the Final Closure TWRMF until such time the volume of leachate generated in the Final Closure TWRMF is determined to reach a rate that can be contained within the TWRMF indefinitely without causing adverse impacts to surface water or groundwater.

And in Aquila’s June 2016 response letter, which states:

Water quality in the closed TWRMF was not modeled because water quality during that period would have lower constituents of concern than open conditions. Due to the impermeable cover placed at closure, oxygen levels in the tailings will be reduced resulting in less reactive acid rock drainage (ARD) process. Therefore, worst case condition for leachate chemical concentrations would occur during open conditions. As

presented in Response to Comment #48, leachate will be pumped and transported off-site for disposal until Postclosure Year 50 (Mine Year 61).

and

Aquila can accelerate the flooding of the pit such that complete flooding of the pit is accomplished within 20 years by adding water from the fresh water supply wells or by adding treated water from the WWTP. . . . Prior to backfilling the mine pit, Aquila will prepare detailed procedures for the backfilling process such that flotation leachate will be not be released into the environment during the backfill process.

The mining permit should be denied as it fails to meet the standards outlined in law for requiring perpetual care.

Comment 5: Applicant fails to provide information adequate to verify that the techniques and plans to be implemented are adequate for the intended purposes.

The long list of cross-referencing and self-referencing “special permit conditions” within the proposed permit – 19 pages of them, with a total of 142 individual requests and requirements -- points to a permit review process that was simply cut short for some reason, and to a permit that should not be granted in its current form. There are simply too many unsubstantiated claims, missing plans, and “special permit” conditions seeking additional materials from the applicant “prior to construction.”

The cut-off wall is again a good example of the failures of the applicant and the lax approach taken by the DEQ in proposing to permit the operation as it stands. The cut-off wall, outlined in only general ways in the proposed special permit conditions, does not meet two key standards from Part 632 and therefore the permit cannot be granted: 1) “*demonstrate that all methods, materials, and techniques proposed to be utilized are capable of accomplishing their stated objectives in protecting the environment,*” and 2) showing that these methods, materials and techniques will “*prevent leaching into groundwater or runoff into surface water.*” These standards, with regard to the cut-off wall, must be incorporated into the permit review process, not permitted and then figured out later.

The cut-off wall is not an isolated example. The applicant simply leaves too much of the actual mine plan up in the air throughout the proposal. There are major components of this application that the DEQ should rightfully pull into the permit for full public scrutiny, not add after the fact, including but not limited to:

- B(11). Prior to construction, a bat survey shall be conducted in the project area by a qualified biologist. . . . The results of this survey shall be used to assess any potential impacts from mine construction or operations, and measures to mitigate those impacts shall be implemented.
- E (10). Prior to receipt of cyanide to the mining area, the permittee shall prepare a Cyanide Management Plan (CMP) that complies with applicable local, state, and federal standards..
- F(3). Construction of the TWRMF shall not begin until the permittee has provided to the OOGM Upper Peninsula District Geologist revised engineering plans and specifications, and a Quality Assurance and Quality Control (QA/QC) Plan that reflect the requirements outlined in Special Permit Conditions F1 and F5 for the TWRMF liner system, and has received written approval of the plans from the MDEQ.
- F(8). Upon approval by the MDEQ, the plan and specifications for the TWRMF and the operations plan for the TWRMF, including any MDEQ-approved modifications thereto, shall become incorporated into and enforceable under the permit issued pursuant to Part 632 of the NREPA. Final designs and construction specifications, as well as any modifications of, changes to, or deviations from the approved plans and specifications or operations plan, require approval by the MDEQ prior to construction of the TWRMF's.
- F(9). The permittee shall submit all design certifications of liners, covers, and leachate collection systems to the MDEQ and shall not begin placement of ore, waste rock, overburden, or tailings in storage facilities until approved by the MDEQ.
- H(3). The permittee shall submit a full set of WWTP engineering designs to the OOGM Upper Peninsula District Geologist prior to construction. The permittee must submit such designs in a timely manner to receive written approval of the engineering designs from the MDEQ before construction of the WWTP.
- H(7). Prior to operations, the permittee shall develop a harassment/hazing plan to reduce the use of the CWB's by aquatic birds, and this plan shall be implemented throughout operations.
- K(4). The permittee shall submit a plan to the OOGM Upper Peninsula District Geologist to monitor surface water and aquatic biota. The permittee must receive written approval of the plan from the MDEQ before commencement of mining operations.
- K(5). The permittee shall conduct additional surface water quality monitoring and macroinvertebrate and fish community surveys (quantitative and non-wadeable) prior to operations to confirm seasonal baseline conditions for the surface water monitoring locations specified in Special Permit Condition K3. A minimum of four water quality sample results spaced over a period of one year are needed to compare with ambient water quality standards.

- K(20). Prior to construction of the cut-off wall, the final design mix shall be determined by suitability tests to ascertain that the SCB (soil, cement, bentonite) mix will meet the minimum hydraulic conductivity and a shear strength requirement to meet the final design criteria.
- K(21). The permittee shall conduct geotechnical and hydrogeologic testing throughout mining operations to validate the design of the pit slope, Engineering Geology Model (EGM), and design of the cut-off wall. A report of this testing shall be included in the Annual Mining and Reclamation Report.
- K(22). The permittee shall monitor the performance and integrity of the cut-off wall throughout operations by implementing the following as part of the geotechnical monitoring program: (f): If seepage flow exceeds 200 gpm for 5 consecutive days, the permittee shall notify the OOGM UP District Geologist as soon as practicable, and conduct a review of all cut-off wall monitoring data to determine if the cut-off wall is ineffective for its intended purpose, and submit a report of findings to the OOGM UP District Geologist within 30 days of notification.
- K(23): Prior to mining operations, the permittee shall submit final plans for location and design of piezometers to be installed to monitor the performance of the cut-off wall for review and approval.
- K(24). If the results of monitoring as required by Special Permit Condition K22 indicate that the cut-off wall is ineffective for its intended purpose, the following measures shall commence immediately: a. Implement measures, as necessary, to collect and divert the seepage. b. Determine the locations of leaks based on piezometer and flow monitoring results. c. Commence a site investigation and testing program to assess the integrity of the cut-off wall starting with the suspected location of leak(s), including coring of the cut-off wall for examination and laboratory testing, and inspection of the borehole wall. If necessary, downhole permeability tests may be carried out in the bedrock to further assess their hydraulic conductivities. d. Submit a report of the investigation results and a plan for remedial design and construction to the OOGM UP District Geologist. e. Carry out remedial measures as approved by the MDEQ.
- K(26). The permittee shall install a well nest within WL40 to monitor for impacts that may occur due to mine dewatering. If the groundwater levels in WL40 and/or other groundwater monitoring locations indicate that there is potential for impact to occur to WL40, the permittee shall submit a plan to MDEQ to prevent that potential impact.
- L(16): The permittee shall notify the MDEQ as soon as practical after identifying a leak in the tailings transport system that results in a tailings slurry spill that is not contained by the transport system. An approved corrective action plan shall be implemented by the permittee to include cleanup and any necessary remediation

- M(1): Prior to operations, the permittee shall submit and obtain approval for a finalized SAP that includes the details specific to the project, in accordance with Part 632 rules and conditions of this permit, and as outlined in the Preliminary Quality Assurance Project Plan.
- O(2): Utilizing the data collected in Special Permit 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.

These are by no means the only examples of the “wait and see” approach taken with this proposed permit. The proposed permit drafted by the DEQ should not be granted. Many, if not all of those items listed above appear to be significantly lacking in meeting the basic requirement that the applicant demonstrate the viability of proposed techniques. Such verification cannot be undertaken on plans that have not been required by the DEQ or provided by the applicant.

It appears that DEQ proposes to grant the permit without requiring even basic, common-sense details about what plans and techniques are being proposed, and if they will work as proposed. This is a clear violation of Michigan statute, which states that the mining, reclamation, and environmental protection plan for any proposed mining operation must include both “a description of materials, methods, and techniques that will be utilized,” and “information that demonstrates that all methods, materials, and techniques proposed to be utilized are capable of accomplishing their stated objectives in protecting the environment and public health.”

The DEQ should pull back the proposed permit and demand that the applicant address the gaps – many currently listed as special permit conditions – and that new information become part of the official permit application, reconsidered for proposed DEQ action, and noticed again for public input and comment.

Thank you for considering and responding in writing to these concerns. We look forward to your response.

Sincerely,

Brad Garmon



Director of Conservation and Emerging Issues