MENOMINEE INDIAN TRIBE OF WISCONSIN
CHAIRMAN'S OFFICE
P.O. Box 910
Keshena, WI 54135-0910

November 28, 2016 ***Sent via Electronic Mail & USPS***

Peter Swenson, Chief
Wetlands and Watersheds Branch
U.S. Environmental Protection Agency (ww-16j)
77 W. Jackson Blvd.
Chicago, IL 60604-3590

Re: Aquila Resources Back Forty Project Stephenson, Michigan

Dear Mr. Swenson:

I am writing to express the concerns of the Menominee Indian Tribe of Wisconsin about Aquila Resources' Back Forty Project, a proposed open pit mine to be located on the banks of the Menominee River near Stephenson, Michigan, and to request greater federal oversight of this project. As you may be aware, the proposed mine is subject to Michigan's permitting process for four required permits—a nonferrous metallic mining permit, a minor source air permit, a National Pollutant Discharge Elimination System permit, and a wetlands dredge-and-fill permit under Michigan law, pursuant to a federal delegation of authority to Michigan under Section 404 of the Clean Water Act.

The Tribe has submitted comments to Michigan multiple times, both in writing and verbally, expressing its concerns about this project, and has engaged with Michigan's State Archaeologist, Michigan and Wisconsin DNR, Michigan and Wisconsin elected officials, EPA Region V, the U.S. Army Corps of Engineers in Detroit, the Advisory Council on Historic Preservation and the Great Lakes Advisory Board. Copies of the Tribe's written comments that were submitted to Michigan Department of Environmental Quality (DEQ) are attached hereto. However, it is the position of the Tribe that its concerns still have not been addressed.

The Tribe hereby requests that the EPA and the Army Corps of Engineers exercise federal oversight over this project because the State of Michigan has given insufficient consideration to the Tribe's interests and protection of human health and the environment. It is the Tribe's position that Michigan DEQ is obligated under Michigan's Part 632 regulations to reject Aquila Resources' non-ferrous metallic mining permit and related permits for the following reasons:

- The application is incomplete and contains insufficient information upon which Michigan DEQ could adequately base a determination of the proposed project's protectiveness.
- The initial application and Aquila Resources' May 9, 2016 responses to Michigan DEQ's follow-up questions about the application were wholly inadequate; in many cases consisting only of an assertion that critical plans or procedures would be developed at a later date (for example, Cyanide Management Plan, Wastewater Treatment Plant plans; plan for on-site mixing or storage of blasting agents; Spill Prevention and Pollution Control Plan, Mussel Relocation Plan, etc.). This information is required under Part 632 and should have been provided in the application process for public review and comment.
- Aquila Resources' mine permit application refers to a life of mine of seven years; multiple other sources of information published by Aquila Resources project a much longer life of mine; accordingly, the true environmental impacts of the proposed mine have been misrepresented in the permit application and have not been fully considered by MDEQ. MDEQ has not provided a response to this concern, which has been voiced repeatedly, or required Aquila Resources to address this discrepancy.

- Insufficient time was provided for public comment; due to the volume and complexity of the materials, additional time should have been provided and separate public hearings should have been provided for each of the three pending permit applications. Members of the public, including myself, were cut off at the public hearings and time to speak was reduced. Also, various documents were removed from the Michigan websites, including critical documents related to the NPDES permit, or were inaccessible for periods of time.

- No consideration has been given to the Tribe's repeated requests that the site undergo a full cultural resources survey prior to any final decision on the permit applications. Michigan's proposed nonferrous metallic mining permit provides only that in the event of inadvertent discoveries of cultural resources, work should stop. The idea that a bulldozer or backhoe operator will be qualified to accurately identify cultural resources such as burial or ceremonial sites, or village or agricultural sites, is illogical at best.

- The proposed mine site is adjacent to the largest watershed in the Upper Peninsula of Michigan, emptying directly into Lake Michigan, with the potential to pollute millions of gallons of public drinking water supply and Michigan DEQ has not required Aquila Resources to sufficiently address the risks of accidental spills into surface waters and ongoing groundwater pollution, and the attendant risks to human health and the environment, including to a number of species that are either endangered or listed as species of concern.

- Michigan DEQ has proposed to justify the degradation of the surface water downstream of the project based upon economic benefits; however, the economic costs including loss of property values, loss of tourism revenue, and loss of recreational use of the Menominee River and surrounding areas were not considered. Currently, EPA is funding studies in Michigan to determine the economic value of water quality of lakes and rivers; meanwhile, MDEQ has not considered the value of clean water in the economic analysis it used to justify the degradation of the surface water. Accordingly, Aquila Resources' antidegradation demonstration submitted with its NPDES permit application is insufficient.

- This proposed project threatens numerous projects funded by the Great Lakes Restoration Initiative – for example, it threatens to undo the work of recently completed projects to clean up heavy metals and other contaminants from the Menominee River, and ongoing projects to support the restoration of the breeding population of lake sturgeon in Lake Michigan, among other restoration initiatives.

It is critical that EPA exercise federal oversight over this project to the greatest extent possible to protect both the Menominee River and the larger Great Lakes watershed. In particular, we request that the wetlands dredge-and-fill permit (which was already deemed insufficient by both EPA and U.S. Army Corps of Engineers and has been withdrawn) and the NPDES permit, which will degrade the water quality of a major bi-state waterway emptying into Lake Michigan, be subject to vigorous federal oversight on the basis of the above-listed concerns and other concerns, included in more detail in the Tribe's comments to MDEQ. To meet the federal trust responsibility to the Menominee Tribe notwithstanding the delegation of CWA Section 404 to the State of Michigan, your agency must take every step within its authority to ensure this project is not approved until a full cultural resources survey is conducted with the assistance and expertise of Menominee Tribal Historic Preservation Office; and until the actual human health and environmental risks of this project, due to its location a mere 30 yards from a major watershed are fully addressed based upon an accurate representation of what the actual life of the mine is anticipated to be; and unless and until it can show the "proposed mining operation will not pollute, impair, or destroy the air, water, or other natural resources or the public trust in those resources" pursuant to MCL § 324.63205(11) & (12).

Sincerely,

Joan Delabreau

Joan Delabreau, Chairwoman
Menominee Indian Tribe of Wisconsin

Attach. (2)

MENOMINEE INDIAN TRIBE OF WISCONSIN
CHAIRMAN'S OFFICE
P.O. Box 910
Keshena, WI 54135-0910

February 16, 2016 ***Submission Via Electronic Mail***

Michigan Department of Environmental Quality
Office of Oil, Gas, and Minerals
1504 West Washington Street
Marquette, MI 49855

RE: Menominee Indian Tribe of Wisconsin – Aquila Resources Back Forty Mine Comments

Dear Mr. Joe Maki,

My name is Joan Delabreau and I serve as the Tribal Chairwoman of the Menominee Indian Tribe of Wisconsin. As you are aware, the Menominee Indian Tribe of Wisconsin is opposed to the Back Forty Mine proposal in Lake Township, Michigan. The proposed mine is situated along the banks of the Menominee River and will pose negative impacts to the Tribe's historical and cultural assets. These assets are located within the footprint of the mine and adjacent areas along the banks of the Menominee River. We are also concerned about impacts posed to the air, water, environmental, wild and aquatic life. Our comments will address each of these concerns. In addition, I have included a short synopsis of our historical, cultural, and modern-day connection to the area.

Thank you for your time. If you have any questions, feel free to contact me at (715)799-5114 or jodelabreau@mitw.org.

Sincerely,

for Joan Delabreau
Chairwoman, Menominee Tribal Legislature
Menominee Indian Tribe of Wisconsin

Enclosure: MITW Public Comments – Aquila Resources Back Forty Mine

Historical & Modern-day Connection:

The Menominee Tribe's history is unique because our origin or creation begins at the mouth of the Menominee River, a mere 60 miles east of our present Menominee Indian Reservation located in Wisconsin. This is where our five clans: ancestral Bear, Eagle, Wolf, Moose, and Crane were created. Not many tribes in this region can attest to a fact their origin place exists close to or near their present reservation. This is where our history begins.

According to early records, the Menominee lived in villages at the mouth of the Menominee River, and it was here the tribe had its beginnings. Awaehsaeh (The Great Bear) in the village where the river empties into The Bay, found himself alone. He decided to call Kine'u (Eagle/Thunderers) and said, "Eagle come to me and be my brother." While they were considering whom to call upon to join them, they saw a beaver approaching. The Beaver requested to be taken into the totem of the Thunderers, but being a woman, was called Nama' kukiu (Beaver Woman), and was adopted as a younger sister of the Thunderer. Soon afterward, as the Bear and Eagle stood on the banks of a river, they saw a stranger, the Nama'o (Sturgeon), who was adopted by the Bear as a younger brother and servant. In like manner Omas'kos (Elk) was adopted by the Thunderer as a younger brother and water-carrier.

At another time Bear was going up Wisconsin River and becoming fatigued sat down to rest. Nearby was a waterfall, from beneath which emerged Mahwaew (Wolf). While asking Bear why he was there Ota'tshia (Crane) came by. Bear called to him and said, "Crane, carry me to my people at the head of the river, and I will take you for my younger brother." As Crane was taking Bear, Wolf called out to Bear saying, "Bear take me also as a younger brother, for I am alone." This is how Crane and Wolf became younger brothers to Bear.

The Thunderers decide to visit the Bear village and ask the Bear to join them. They promised to give corn and fire in return for wild rice which was the property of the Bear and Sturgeon. From this time on the families untied into an organized body for mutual benefit.

According to these legends the Menominee came into possession of wild rice at the very inception of their tribal organization. When the Bear Clan and Eagle Clan got together to form the Tribe it was with the help of Meqnapus. To the leader of the Bear Clan Meqnapus said, "I give these things to you, and you shall always have them – the river, the fish, the wild rice and the sugar trees."

The Tribe continues to actively participate in educational and cultural activities at the site of our creation. More recently, the Tribe and City of Marinette have begun a collaboration to place educational kiosks in the area to educate on the Menominee Nation's creation and cultural connections to the area. Another example of our modern connection to the area occurred as recently as November 3, 2015 when the Tribe in cooperation with the City of Marinette, held a reseeding ceremony of wild rice at the mouth of the Menominee River.

The Menominee Nation values the oral tradition over the written word; our history teaches us that this area where this mine is located is immersed in our antiquity. Our oral history is situated along this river and in the land. There is a reason this river and county is called Menominee. We are "Kiash Matchitiwuk" - the Ancient Ones.

Cultural Properties:

It is important to emphasize that the Menominee Indian Tribe's creation began at the mouth of the Menominee River and later extended throughout Wisconsin, into Iowa and Minnesota. Our Tribe, unlike most other Tribes in Wisconsin, does not have a migration story. Our cultural identity is here where our villages occupied this territory and where our ancestors lay. Thousands of years of Menominee history, culture, and identity lay beneath the surface along the banks of the Menominee River and more importantly, within the footprint of the Back Forty Mine site. Today, much of our identity and occupation in this territory remains visible to the trained eye. For example, along the Menominee River and on the site where the proposed Back 40 Mine is to be located are Dance Rings, the Chalk Hill Mounds and Village sites, White Rapids mound site and the Backlund Mounds and Village sites. Some of these date as far back as 500 B.C. These are documented within the archeological and historical record and continue to be a significant source of study for our people and archeologists.

It is the view of the Tribe that the predictive models and site evaluation to identify cultural properties are unacceptably inadequate. The technical reports of the CCRG and 106 Groups are reconnaissance level surveys that provide only a basic overview. We are concerned with the level of testing, if any, of the predictive models. Furthermore, it is clear that evaluations have not been conducted on many sites. For those sites that have been evaluated, we do not agree with recommendations on which sites are eligible for the National Register of Historic Places. For example, there is existing evidence from work done by Bill Mognahan to indicate multiple building stages & episodes of the gardens. According to the technical reports, Me 61, the two miles of raised fields, are the only pristine raised fields left in Michigan.

To date, Section 106 of the National Historic Preservation Act has not been deemed to be applicable to the Project; however, the Tribe has serious concern about the potential impacts to historically and culturally significant sites, artifacts or remains located at or near the project site. While responsibility for issuing federal surface water discharge permits and wetlands permits has been delegated to the state, the federal trust responsibility owed to the tribes has not. Because the state permitting process does not afford the Tribes the same protections that would be available to them under Section 106, the Tribe seeks stipulations from Michigan DEQ, Office of the State Archeologist, and Michigan State Historic Preservation Officer that the valuable and irreplaceable sites, artifacts and human remains at issue will not be destroyed.

Below are additional comments that expand on the discussion above.

- The Tribe would like clarification from Michigan DEQ on what standards will guide their decisions relating to tribal trust issues, considering our Tribe's traditional cultural properties. Additionally, we are seeking clarification on what standards will protect and preserve identified and suspected burial sites. Moreover, we are asking that no ground be broken until these sites have been completely evaluated for listing qualification under the National Register of Historic Places.
- Little attention is given to Menominee history and prehistory at this location and the traditional ties of the Tribe to the Sixty Islands area. This topic needs to be further developed and incorporated into EIA cultural resources documents.
- If Menominee history and prehistory at this location and the traditional ties of the Tribe to Sixty Islands area were to be better developed the need for a formal Traditional Cultural Properties study program would be obvious. The Tribe has previously developed a Traditional Cultural Properties for the Wolf River and respectfully recommends that the

same should be compiled for the Menominee River. Study should meet the criteria outlined in various National Register bulletins, guidelines and texts but minimally should be carried out by Menominee speaker(s) fluent in their native language. The Scope of work for the Traditional Cultural Properties should include consultation with the Menominee Tribal Historic Preservation Officer and/or others whom he might wish to include.

- What specific procedures will be employed to guarantee formal identification, evaluation, and protection of these cultural resources venerated and held sacred by Menominee Tribal members? Why don't the Menominee have a significant role in determining significance for National Register of Historic Places? The impact assessment is vague and more discussion needs to be directed to "unevaluated,", "eligible" and "not eligible" sites and the reasoning for this conclusion. Because so little is known about most of the sites within the project boundary it seems inappropriate to make management recommendations in the absence of comprehensive evaluation data. Dismissing a site described as a "lithic scatter" or because it "lacks diagnostic artifacts" is unacceptable.
- Predictive modeling or so-called "sensitivity zones" has limitations. Not enamored of the sensitivity model—there is insufficient discussion as required in Rule202 (1), (a), (iii) and Rule 202 (1), (e), (ii). We submit that the only test of the model is a vague statement of use in Northern Wisconsin and Minnesota "with success". This needs clarification and demonstration of validity of methods employed. Also we believe that remote sensing may have defined anomalies but those anomalies have not been adequately confirmed to be cultural or non-cultural.
- Rule 202 (2) requirements of sub-rule (1) (a) and (b) of this rule apply to natural and human-made conditions and features including but not limited to, the following. [Note: following are the two sub-rules for which the MITW needs additional information and clarification.]
    - (a) Topography—we believe that the topography of the mine locale has been significantly altered by the Menominee and their ancestors. There is no doubt that the topography with its extensive raised agricultural fields and multiple mound groups and village sites can be characterized as a cultural or as an archaeological landscape. This needs to be directly addressed in the cultural resources document.
    - (p) Residential dwellings, places of business, places of worship, schools, hospitals, government buildings, or other buildings used for human occupancy all or part of the year.

  There should be no doubt that the Menominee River generally and specifically the Sixty Islands locality are places of worship in every sense of the word. The topography referenced in subparagraph (a) above would include summer bark lodges known to have been utilized by the Menominee of the ethnographic present and their prehistoric ancestors during the so-called "Late Prehistoric" eras. Placement and archaeological signatures of these structures should be part of any evaluation phase.
- Characterization of 47Me61 and its associated components are incomplete and distorted. Data that were not available to CCRG and 106 Group have been compiled through the cooperative efforts of the Menominee Indian Tribe of Wisconsin, College of the Menominee Nation, and Menominee Tribal Enterprise during the past several years. On-going research both on and off the Menominee Reservation provides new information regarding an adaptive strategy best described as "agro-forestry". There is also new information regarding models of settlement that may serve to differentiate between eastern Wisconsin "Oneota" or "Upper Mississippian" groups and their interaction with regional Late Woodland populations.

[Note: Menominee Indian Tribe of Wisconsin is willing to share this information with the applicants and their consultant(s) to ensure that their presence on the Menominee River throughout is addressed—the 1836 Treaty confirmed Menominee ownership of territory held exclusively for the Tribe's use and territories where seasonal resources were shared with other ethnicities. Furthermore, the Menominee Tribe never relinquished its usufruct rights in this territory ceded to the United States.]

- Densmore (1932) in her BAE Bulletin notes a tradition of pictographs made by twins on a quest on a west-facing rock outcrop—the reference is at "Menominee Falls." Are there pictographs on the Menominee River; and, is there another place-name for Menominee Falls on the Menominee River. The reference to these pictographs is in Densmore (1932, also 2015 reprint of *Menominee Music).*

Environmental:

The application for a permit to construct and operate the Back 40 Mine submitted by Aquila Resources (AR) should be required to provide additional information in multiple areas, and does not currently meet the requirements of Michigan's Nonferrous Metallic Mining Regulations (Part 632). We respectfully submit the following comments to the proposed permit.

- With regard to the possibility of negative impacts to surface water, the Environmental Impact Statement (EIS) states in §§ 3.5.2. & 3.5.4. that it will comply with the requirements of the Michigan Mining Regulations. However, the requirement is that when there is an unpermitted or unplanned release to surface water, a permittee must "implement a plan for response activity." Aquila Resources should be required to develop a more detailed plan for spills or releases of hazardous materials, particularly as the surface water in the Project Area currently is not contaminated.
- Water quality testing parameters are listed in Mine Permit Application (MPA), Volume I, Table 2-1, what factors were used in determining the list of parameters? What schedule is used to identify the parameters?
- What monitoring results will equate to changes in the noted parameters list in Table 2-1? Currently the list is indicated to have been developed based on baseline studies, but no other descriptions are provided. Please provide a description of what will determine the changes to the parameter list in Table 2-1.
- Mine Permit Application (MPA), Volume I, Section 3 Operations Water Quality Monitoring; this section is very general and does not define "operations water," which leads to confusion over the remaining language within the short section. Are samples collected from surface and groundwater at the identified locations? The plan indicates that chemical composition as a result of monitoring will assist in calibration of the water quality model predictions. There is no reference to what the model is or if it has already been developed based on the baseline data. Additionally there is no reference of how the National Pollutant Discharge Elimination System (NPDES) permit is being developed and how any of the baseline or operations monitoring will accommodate the permit development and compliance.
- Mine Permit Application (MPA), Volume I, Section 5; Surface Water Monitoring does not specify the sampling design or SOP's, only reference provided to R 425.406.
- Mine Permit Application (MPA), Volume I, Section 5.1 Monitoring Locations does not specify what the designed locations will be assessing as far as "potential impacts"? If locations are built around specific impacts, then they should be outlined in this section. For example; if turbidity is one of the parameters that are a "potential impact" then monitoring locations should be placed in an appropriate location so as not to biased the sample.

- Mine Permit Application (MPA), Volume I, Section 5.2.1 Surface Water Elevation Monitoring; what is the existing SOP? It is not clear from this description exactly how measurements will be taken and what quality assurances are in place.
- Mine Permit Application (MPA), Volume I, Section 5.2.2 Surface Water Quality Monitoring; there is reference to the DEQ Operational Memo, but that document isn't included for review. Please provide DEQ Operational Memo.
- The EIS states at § 3.6.4. That Aquila Resources (AR) does not expect the mine to be impacted by any flooding and that there would be no negative impact to the floodplain resulting from the mine. This statement is insufficient and the mine should be required to have a plan in place to deal with any flooding, including contingencies for a dam break upstream.
- The EIS § 3.10.2.3 states that the improvement of existing roads may be required to support the project. This issue needs to be addressed in depth, including any required permitting and/or public review process which should include analysis of any impacts that may be caused by road construction activity.
- In the EIS § 3.11.2, Aquila Resources (AR) states that there are "no public recreation areas located close to the property that will be affected by the proposed mining activities." However, it does not address the potential impacts of an unexpected release into ground or surface waters that may impact Shakey Lakes Park and its surrounding environment, and the loss of use of this park as a result. Decline in use of the park may result from the loss of public trust, which likely will result in loss of revenue to local businesses and units of government. In fact, the application does not address any possible negative secondary impacts to the surrounding community such as decreased use of use of the Menominee River, Shakey Lakes Park or other bodies of water or public lands for fishing, swimming or other recreation due to pollution or perception of pollution. Nor does the application address the likely economic impact due to loss of fishing, hunting, and camping tourism caused by the changed land use and associated public perception, and the reduction of property values of the landowners surrounding the mine or adjacent to potentially affected bodies of water. In fact, Aquila Resources (AR) rather cheerily suggests in EIS § 3.12.3. that any impacts to the land use in the surrounding area should be "relatively unaffected or affected in a positive manner." However, in Section 63202(c), the State of Michigan has acknowledged that waste materials associated with mining operations such as the proposed Back 40 mine, if "not properly managed and controlled,[...] can cause significant damage to the environment, impact human health, and degrade the quality of life of the impacted community." As discussed above, degradation of the quality of life of the impacted community has not been addressed in the permit application. While it is everyone's hope that releases of hazardous substances do no occur, it is the responsibility of Aquila Resources (AR) to fully assess such possibilities, and it is the responsibility of Michigan Department of Environmental Quality (DEQ) to ensure that it does so. Aquila Resources' dismissal of the very real possibility of environmental and economic damages with a one-paragraph assurance that the area will be "relatively unaffected" does not meet the requirements of Part 632.
- The groundwater flows either into the Menominee River or into Shakey Lakes then to the River. Is there a realistic way to prevent acid rock drainage and metal leachate from the mine from entering the Menominee River and nearby lakes through the groundwater over the long term?
- Which power company will supply power to the Project?
- What is the current status of the Air Use Permit, National Pollutant Discharge Elimination System (NPDES) Permit and Wetland Permit Applications?

- There is a reference to the National Pollutant Discharge Elimination System (NPDES) contained within Volume 1, to the Foth (2015b) NPDES application, but this document is not available for review within the mine permit application.
- If the application has not been prepared as part of the Mine Permit Application (MPA), then there should be specific language in the Mine Permit Application (MPA) detailing how the process is carried out and the associated schedule for the application/permit process.
- The Tribe would herein request that any public information available regarding the National Pollutant Discharge Elimination System (NPDES) permit application, in accordance with R 323.2117(2), draft and draft final permit, as well as any associated fact sheets, be provided to the Tribe immediately upon availability.
- According to the Mine Permit Application Volume I, Section 5.8.2.2, discharge volume is estimated at 1,080,000 gallons/day, which will enact the provisions of R 323.2121, indicating that the Department shall prepare and make available a fact sheet. The fact sheet requirements are listed in R 323.2122, but do not include information describing how the receiving waters standards may differ from the adjacent WI standards. Due to the immediate proximity of the WI waters, how will MDEQ comply with Wisconsin Water Quality Standards? The Tribe would request access to any pertinent information that the fact sheet lists for MI receiving waters and comparison to WI waters and compared to both States Water Quality Standards.
- The statement within section 5.8.2.2, "The WWTP will be designed such that the quality of the wastewater discharge will meet all numerical limits stipulated in the NPDES permit issued by MDEQ", is a general statement. What are the designated water quality standards that the quality of the discharge will have to meet?
- Pursuant to the Part 632 Regulations at Section 63202(4), a local unit of government may enforce ordinances, regulations, or resolutions affecting mining operations provided such ordinances, etc., do not duplicate, contradict, or conflict with Part 632. The local unit of government, Lake Township, in fact has a zoning ordinance, and a Mineral Extraction Ordinance. Nevertheless, Aquila Resources indicated in its permit application that no such ordinances apply to this project and has not addressed compliance with local zoning and Mineral Extraction requirements. AR should be required to address how it will comply with applicable local ordinances in its permit application.
- Pursuant to Section 63205(2) (c) (v), the proposed environmental protection plan shall include provisions to prevent acid-forming waste products from leaching into groundwater or runoff into surface water. While the application provides multiple mitigation measures, the long-term closure plan needs to clearly state how it will prevent leaching of acidic waste into groundwater. Is the proposed reclamation of the backfilled pit protective over the long term? Is the mine proposing to just dump limestone in the pit to neutralize the acidity? Is the effectiveness of the limestone diminished over time? Particularly as the post-closure proposal includes eventual flooding of the pit?
- Pursuant to Section 63205(2) (d), the application is supposed to include assessment of risk to the environment or public health and safety in the event of a potentially significant incident or failure. The application indicates in multiple places that risk of such incidents will be minimized via secondary containment, monitoring, etc. However, the application should address what happens to the water quality, aquatic life, flora, and what are the risks to the public health in the event of a catastrophic release into the river, groundwater, contamination of Shakey Lakes, etc. Merely stating that risk of such incidents is low is insufficient to provide actual information on the risks in the event such an incident does occur. The Contingency Plan at Appendix J only minimally addresses potential impacts of accidents or releases at the operation, and repeatedly characterizes potential impacts as

minimal. However, if there are accidental releases, there will be impacts and Aquila Resources should be required to discuss the actual impacts of such releases. Instead, the Contingency Plan repeatedly uses the same language to address each possible incident:

> *"Release of [pollutant] to the environment could pose a threat to wildlife in and near the Project Area by impacting surface water and/or groundwater quality. The Project Area is located in a remote, sparsely populated area, but a release of [pollutant] could potentially impact residents in the immediate vicinity of the Project Area by impacting surface water and/or groundwater quality."*

- This response provides almost no information as to what those impacts would be, how long the impacts would last, and whether the impacts could be reversed. This response does not meet the standard set forth in Section 63205(11)(b), which requires the applicant to make a showing that the operation will not pollute, impair, or destroy the air, water or other natural resources or public trust in those resources. In fact, it could be argued that the response clearly shows that there will be impairments to surrounding natural resources and/or the public trust in those resources, and fails to show whether such impairments would be corrected or permanent. The mine's proposed location in a remote area does not negate the responsibility to protect the surrounding resources; indeed, because of the current lack of impairments to the environment at the proposed site, Aquila Resources should be required to show that the environment will remain at least reasonably clean during and after operations and the provided Contingency Plan fails to do so. Discussing the mitigation of risk is not the same as assessing the damage in the event that risk mitigation measures fail and releases occur. In particular, Aquila Resources should assess the impacts to surrounding natural resources and public health both for catastrophic, one-time failures and for releases or leaks that may not be detected by the monitoring mechanisms and so continue over a long period of time. Pursuant to Section 63205(12), DEQ cannot approve a permit application if the proposed mining operation will pollute, impair, or destroy the air, water or other natural resources or public trust in those resources. The current application does not meet this standard.
- Pursuant to Section 63211(2), financial assurance requirements apply to all mining and reclamation operations, including remediation of any contamination of the air, surface water, or groundwater that is in violation of the permit. Appendix K of the application does not include financial assurance for remediation of contamination that violates the permit. Because of the mine's proximity to the Menominee River, Shakey Lakes and other bodies of water and the possibility of contamination of groundwater, Aquila Resources should be required to include in its Financial Assurances an adequate amount in the likely event that at some point during the construction, operation or post-closure period of the life of the mine, contamination to water in the vicinity of the operation will occur.
- Mine Permit Application (MPA), Volume I, Section 6 General Monitoring of Environmental Protection Measures; Are there other timelines for post-closure timelines to go beyond mine year 30? There are no descriptions of post-closure monitoring the Tailings Management Areas in this section.
- Mine Permit Application (MPA), Volume I, Section 9 Post closure Groundwater and Surface Water Monitoring; the plan indicates that monitoring of ground and Surface water will continue until mine year 30, but there are no other descriptions of what will occur after that point. The plan should identify what actions will be taken in the event of discovery of groundwater and surface water contamination. The plan should identify what the useful life of the liners in the Tailings and Waste Rock Management Facility is expected to be and what will the likely result of failure of liners equate to, listing catastrophic secondary.

Aquatic Life, Flora, Fauna:

- The EIS states in § 3.13. that hazardous spills may occur, and that "prompt cleanup and correction is incorporated into the plans," but does not assess actual results that may occur to aquatic life, flora or fauna in the event of such hazardous spills. Nor does it address how long such impacts may last, or how cleanup would be undertaken. This should be required, per Section 63205(2)(b), which requires the EIS for a proposed mine to include the potential impacts the proposed mining operation may have on the affected area, including, but not limited to, flora, fauna, hydrology, geology, and geochemistry. The application as a whole does not satisfactorily address the cumulative impacts of the mining operation as required under Rule 425.202(2).
- The application proposes the "rescue and relocation of listed mussels at the treated water discharge outfall" at EIS § 3.15.3. This indicates that the conditions for mussels will be negatively impacted—is Aquila Resources proposing to relocate affected mussels annually for the life of the mine? How will Aquila Resources identify and relocate affected mussels? Is this a typical solution for this sort of issue? Will United States Environmental Protection Agency be involved in managing the threat to this species? How will DEQ monitor whether AR is adequately protecting this species and whether, and how much, the mining operation is affecting the health and habitat of the listed mussels?
- During operations description indicates that monitoring will occur annually late summer to early fall for fresh water mussels. This seems very general in description and there should be specific reference to methods that will be used and what protocols will be established based on the goals of the sampling. It is unclear whether the sampling is just to "confirm baseline" and "document trends" or if the monitoring is to assess potential impacts and determine when the relocation efforts should take place as described above. Please add clarification and specific reference to methods, for example; *(Strayer, D. L., S. Claypool, and S. Sprague. 1997. Assessing unionid populations with quadrats and timed searches. Pages 163-169 in K. S. Cummings, A. C. Buchanan, C. A. Mayer, and T. J. Naimo, editors. Conservation and management of freshwater mussels II. Initiatives for the future. Upper Mississippi River Conservation Committee, Rock Island, Illinois*).
- Mine Permit Application (MPA), Volume I, Section 8 Monitoring of Flora, Fauna, Fish and Wildlife Habitats and Biodiversity; there is no mention of plans to address Northern Long-Eared Bat (NLEB), which is presently listed as a Federally Threatened Species under the Federal Endangered Species Act of 1973, in fact the report indicates that there have been no federally listed species identified. The Monitoring plan must be updated to address how the surveys will be conducted and what measures will be put in place to protect the Northern Long-Eared Bat (NLEB).
- Mine Permit Application (MPA), Volume I, Section 8.1.1 Aquatic Biota and Habitats; the statement, "treated water discharge from the facility is not anticipated to affect aquatic biota and habitats", is very general and nonspecific. There is no reference to support this statement.
- Mine Permit Application (MPA), Volume I, Section 8.1.2 Terrestrial Biota and Habitats Evaluation; there is reference to relocation of species prior to construction, but no reference to what type of methodology will be implemented for this plan. In many cases sensitive species are not able to be relocated, hence the reason they are listed as sensitive. Capture, movement and surrounding environmental conditions are all factors in survival of species that are captured and relocated. Generally, not all species are even able to be trapped successfully. This section does not address mortality and take of any listed species that

would be onsite, i.e. the Northern Long-Eared Bat. Taking of a federally listed species in prohibited unless very specific conditions can be met and generally a project with this size a scope would be challenged to meet such conditions for a species like the Northern Long-Eared Bat (NLEB).

- The last sentence discussed monitoring for confirmation of "baseline conditions' and "document trends" during operations. It will be impossible to confirm baseline conditions once operations have begun, as a disturbance this size and scope will likely have significantly changed most of the terrestrial biota patterns and habitat use in that area. Most wildlife will have moved away from the site due to habitat destruction or alteration, noise, lighting impacts and increased traffic.
- What effects with the mine have on lake sturgeon? The study at Attachment E-I merely stated that there was lake sturgeon in the area. Aquila Resources should be required to provide information on the effect the discharge into the Menominee River and any possible contaminants will have on the lake sturgeon population and the ongoing efforts to support the sturgeon population on the Menominee River. What other bodies of water in the state are comparable sturgeon habitats? Aquila Resources should be required to consult with N.E.W. Hydro Inc., The River Alliance of Wisconsin, U.S. Fish and Wildlife Service, the Wisconsin Department of Natural Resources, the Michigan Department of Natural Resources, and the Michigan Hydro Relicensing Team, and the Great Lakes Fishery Commission on whether the proposed mine will impact the fish passages on the Menominee River, work on which has been ongoing for more than ten years. The Lake Sturgeon is identified as a threatened species in Michigan, a species of special concern in Wisconsin, and a federal species of concern by the US Fish & Wildlife Service. Further, the sturgeon is of great cultural and spiritual significance to the Menominee Tribe and other tribes. Aquila Resources should be required to provide a fuller picture of potential impacts of its operations on this species, particularly in light of the current efforts to protect it and its habitat on the Menominee River. (See US Fish & Wildlife Service Finding of No Significant Impact on proposed construction of lake sturgeon passage facilities on the Menominee River (February 1, 2012) and Final Environmental Assessment (November 30, 2011) at: http://www.fws.gov/midwest/greenbay/hydropower/pdf/MenomineeRiverFishPassageEA.pdf)

Threatened and/or Endangered Species:

- The Mine Permit Application, Volume I – Threatened & Endangered Species 5.9 & Monitoring 5.10 does not include any reference or discussion on survey methods, occurrence, updated survey periods relating to the Northern long-eared bat (Myotis septentrionalis) or Gray Wolf (Canis Lupus) within the project area.
- It is not clear that all federally listed species were considered in the baseline surveys and no description has been provided to indicate that there are available habitats for several of the federally listed species.

EIS, Volume IIG, Appendix E – Biological Resources:

- Most of the studies and data were collected from 2007 to 2009, which seems relatively old for some parameters and results to be used today.
- The EIS p. ES-2 indicates that there are no aquatic macrophytic state endangered, threatened or special concern species identified in surveys on Resort, East or Baker Lakes, which apparently is only associated with the 2009 baseline data. Up to date surveys must be collected to assure that species composition hasn't changed and that methodologies for data collection are up to date and accurate. Cross reference should be made to assure that

any new species that have been added to the list of state or federal endangered, threatened or special concern species since 2009 have new surveys conducted for occurrence.

- EIS p. ES-3, it indicates that surveys 2008 and 2009 for mussels species have found two on state endangered species list (black sandshell and hickorynut) and one on the threatened list (slippershell) and two on species of concern list (elktoe and round pigtoe). No Federally listed species have been found. Up to date surveys must be collected to assure that species composition hasn't changed and that methodologies for data collection are up to date and accurate. Cross reference should be made to assure that any new species that have been added to the list of state or federal endangered, threatened or special concern species since 2009 have new surveys conducted for occurrence.
- Fishery surveys in the Menominee River indicate that the only listed species is lake sturgeon, which is listed as state threatened. Up to date surveys must be collected to assure that species composition hasn't changed and that methodologies for data collection are up to date and accurate. Cross reference should be made to assure that any new species that have been added to the list of state or federal endangered, threatened or special concern species since 2009 have new surveys conducted for occurrence.
- Fish contaminant tissue testing results were considered low for all water bodies sampled, yet there is reference in the water quality sampling results that there were high results for mercury detected in several samples. A summary should be provided that correlates mercury detections in surface waters with results listed for all fish species included in the sample set. In addition fish contaminant sampling should be designed to fish targeted for consumption and the appropriate size classes of those species. According to the report, Aquatic Biota Report, Environmental Baseline Studies, Aquatic Resources Inc. Oct. 2011, fish species were collected based on taxa present at the time of sampling, which limits the ability to acquire representative samples that would provide a quality data set to adequately assess the potential for contribution to fish contaminants in the surrounding water bodies.

MENOMINEE INDIAN TRIBE OF WISCONSIN
RESOLUTION NO. 15-93
OPPOSITION TO MINING ACTIVITY THAT THREATENS MENOMINEE CULTURAL RESOURCES AT TRIBES PLACE OF ORIGIN

WHEREAS, we, the Menominee people, are indigenous to what is now known as the State of Wisconsin, our place of origin was at the mouth of the Menominee River where the five clans of the Menominee were created and include the Awäëhsaeh (Bear), Kenëw (Eagle), Mahwäëw (Wolf), Mōs (Moose), and Otäëchiah (Crane), and we continue to live on our ancestral land that was granted by the Mäëcawäëhtok (Great Spirit); and

WHEREAS, the Menominee Indian Tribe of Wisconsin (the "Tribe") is a federally recognized Indian Tribe as provided by the Menominee Restoration Act, Act Dec. 22, 1973, Pub. L No. 93-197, 87 Stat. 770, which appears generally as 25 U.S.C. §§ 903 et seq.; and

WHEREAS, the Tribe, acting through its duly elected governing body, the Menominee Tribal Legislature (the "Legislature"), has powers to make and enforce laws, negotiate with Federal, State and Local governments and otherwise exercise its powers consistent with the limitations imposed by its Constitution and Bylaws; and

WHEREAS, Aquila Resources, Inc. is seeking approval from Michigan DEQ to mine gold, zinc, copper, silver and other minerals upstream from the mouth of the Menominee River on Michigan's Upper Peninsula, known as the "Back Forty Project";

WHEREAS, the location on the Menominee River is historically and culturally significant to the Menominee people due to the existence of cultural properties by way of raised agricultural fields, funerary objects, multiple mounds, burial sites, and villages and is an area that is the place of origin for the Menominee People; and

WHEREAS, Aquila Resources, Inc. will utilize open-pit mining for extraction and removal processes, a process which has historically caused detrimental impacts to water, environment, wildlife, animals, and cultural properties as demonstrated with other mines of similar nature; and

WHEREAS, the Menominee Tribe has demonstrated its stewardship to protect the Tribal Culture and Resources, neighboring Tribal Nations, water, environment, wildlife, and animals that occupy these lands within our historical range;

NOW, THEREFORE, BE IT RESOLVED, that by this Tribal Resolution, the Menominee Indian Tribe declares

1. The Tribe's opposition to mining activity within the Tribe's historical range, specifically that mining activity that threatens the Tribe's place of origin at the mouth of the Menominee River;
2. The Tribe is dedicated to committing resources and technical support to protect the Tribe's cultural and historical resources within its historical range;
3. The Tribe is dedicated to assisting our neighboring Tribes in protecting the environment, water, wildlife, animals and cultural properties; and

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the Menominee Tribal Legislature hereby directs the Chairman of the Tribe to take necessary action to become involved in the Back Forty Project permitting process, to include the following:

1. Attending relevant meetings pertaining to the issue;
2. Submitting comments on the project permit by the February 2, 2016 deadline;
3. Contacting the Native American Liaison of the Detroit Corps of Engineers to intercede on the Tribe's behalf; and
4. Explore contact with other potential federal agencies that may intercede.

CERTIFICATION

We, the undersigned officers of the Menominee Tribal Legislature hereby certify that the foregoing resolution was duly adopted at a meeting held on December 03, 2015 with a quorum present, by a vote of 7 for, 0 opposed, 0 abstentions and 1 absent.

The undersigned further certify that the foregoing resolution has not been amended or rescinded in any way.

MENOMINEE INDIAN TRIBE OF WISCONSIN

GARY BESAW, TRIBAL CHAIRMAN
MENOMINEE TRIBAL LEGISLATURE

CRAIG CORN, SECRETARY
MENOMINEE TRIBAL LEGISLATURE

DATE: December 17, 2015

MENOMINEE INDIAN TRIBE OF WISCONSIN
CHAIRMAN'S OFFICE
P.O. Box 910
Keshena, WI 54135-0910

October 31, 2016

Submitted via USPS and Electronic Mail

DEQ Back Forty Comments
Office of Oil, Gas, and Minerals
1504 West Washington Street
Marquette, MI 49855

Alvin Lam
Permits Section
Water Resources Division
Department of Environmental Quality
P.O. Box 30485
Lansing, MI 48909

Re: Comments on Proposed Mining Permit to Aquila Resources, and NPDES Permit Application #MI0059945, submitted via email to *lama@michigan.gov* and *DEQ-Mining-Comments@michigan.gov*

Dear Sir:

Please find below the Menominee Tribe's comments to the proposed decision to grant a mining permit to Aquila Resources for the Back Forty Mine under MCL 324 63205. The Tribe maintains that if the proposed permits are approved, Aquila Resources will pollute, impair, or destroy the air, water, other natural resources and erode public trust in the management of their resources. Furthermore, the Tribe maintains its opposition and concern for our tribal ancestors burial sites, ancestral ceremonial and village sites, cultural and other funerary objects located within the footprint of the mine in what we view as a comprehensive cultural landscape. In addition, these comments include concerns with the NPDES Permit Application and the air use permit for the Back Forty Mine.

The Menominee Tribe's interest in the proposed mine site is unique because our origin or creation begins at the mouth of the Menominee River, 60 miles east of our present Menominee Indian Reservation located in Wisconsin. This is where our five clans: ancestral Bear, Eagle, Wolf, Moose, and Crane were created. Not many tribes in this region can attest to a fact their origin place exists close to or near their present reservation. This is where our history begins. The Tribe actively participates in educational and cultural activities at the site of our creation. More recently, the Tribe and City of Marinette have begun a collaboration to place educational kiosks in the area to educate on the Menominee Nation's creation and cultural connections to the area. Another example of our modern connection to the area occurred as recently as November 3, 2015, when the Tribe in cooperation with the City of Marinette, held a reseeding ceremony of wild rice at the mouth of the Menominee River. The Menominee Nation values the oral tradition over the written word; our history teaches us that this area where this mine is located is immersed in our antiquity. Our oral history is situated along this river and in the land. There is a reason this river and county is called Menominee. We are "Kiash Matchitiwuk" - the Ancient Ones.

One of the basic tenets in Indian law is the enforceable fiduciary trust relationship between the federal government and tribal governments. Virtually every piece of modern legislation dealing with Indian tribes contains a statement referencing the trust relationship the federal government shares with the tribe. *See* Cohen Handbook of Federal Indian Law at 414 – 15 (2012). The federal government has delegated authority related to certain permitting on projects that can affect waterways and historical sites to the state of Michigan. The federal government cannot circumvent its responsibilities under the trust relationship by delegating that authority to the

state. Accordingly, if a State applies to stand in the place of the federal government, the state has an obligation to engage in full and fair consultation with tribes regarding the mine and its implications to the Menominee Tribe under that delegated trust responsibility.

Government-to-Government Consultation

The State of Michigan's Department of Environmental Quality staff has claimed that they have engaged the Menominee Indian Tribe of Wisconsin on several occasions throughout the process. However, the Menominee Tribe disagrees with this statement. Incremental contact with individual members of the Tribes does not constitute adequate consultation with the Tribe's government. The only person with the authority vested by the Menominee Tribal Legislature to speak on behalf of the Menominee Indian Tribe is the Tribal Chairperson. What is the State of Michigan's definition of government-to-government consultation?

Furthermore, meaningful consultation includes the recognition of tribal sovereignty by the respective government. However, this too has been lacking as early on as 2011, when the Tribe reached out to the State Historic Preservation Office for information on the status of any Phase II Archeological Survey of the Back Forty project. At that time, the only contact the Tribe received was from the Company and not the State of Michigan. The Tribe was told as recently as October 2016, that the Department places this responsibility on the Company. Why has the Michigan Department of Environmental Quality attempt to place this responsibility of government-to-government consultation on Aquila Resources, Inc., a private entity, is entirely inappropriate. Aquila Resources cannot speak on behalf of the State of Michigan.

To date, Section 106 of the National Historic Preservation Act has not been deemed to be applicable to the Project; however, we do not agree with this determination as the Lower Menominee River has been designated as an "Area of Concern" under the Great Lakes Restoration Initiative (GLRI). The area of concern receives water directly from the planned point of discharge from the proposed Back Forty mine site. Under the GLRI, the Lower Menominee River includes management actions targeted for completion during GLRI Action Plan II. The United States Congress has appropriated millions in federal dollars to restore and protect the Great Lakes Basin, which includes designated areas of concern, from existing and future damage. The State of Michigan is issuing permits pursuant to authority delegated by the federal government under the Clean Air Act and Clean Water Act, and the impacts of these activities on the federally-funded restoration activities just a few miles downstream have not been sufficiently studied through the DEQ's process. The Menominee Tribe has interests in cultural resources on site, as well the cultural resources of sturgeon and wild rice that will be affected downstream, more fully discussed below. It is the Tribe's position that a full NHPA 106 review is therefore required.

Wild Rice and Lake Sturgeon's Significance to the Menominee

The Menominee Tribe's history begins at the mouth of the Menominee River. The Menominee came into possession of wild rice at the very inception of their existence, and the wild rice is still vital to them today. *See* David Beck, *The Struggle for Self-Determination: History of the Menominee Indians Since 1854* at xii, 5, 20. Lake sturgeon is also culturally significant to the Menominee people as the keepers of the wild rice. The Menominee people would gather each spring near Keshena Falls to harvest lake sturgeon. The creation of dams in the early 20th century led to the extirpation of lake sturgeon on the Menominee Reservation, but recent efforts by the state have seen a resurgence of lake sturgeon on the Menominee Reservation. See A. Runstrom, R.M. Brunch, D. Reiter, & D. Cox, *Lake sturgeon on the Menominee Indian Reservation: an effort toward co-*

management and population restoration, J. of Applied Ichthyology (December 17th, 2002). The establishment of this mine threatens the resurgence of both of these deeply important parts of Menominee ways and culture.

Mich. Admin Code R 323.1098 requires the water quality level to be maintained at a level that will protect existing uses. As mentioned above, growing wild rice in the mouth of the Menominee River has been a practice by the Menominee Nation since time immemorial, and continues to this day. *See* David Beck, *The Struggle for Self-Determination: History of the Menominee Indians Since 1854* at xii, 5, 20. In addition, both Michigan and Wisconsin currently are looking to work with tribes to ensure harvesting wild rice is protected. *See* Karen H. Usher, *New effort to track wild rice in Michigan*, GREAT LAKES ECHO (Oct. 10, 2016) http://greatlakesecho.org/2016/10/10/new-effort-to-track-wild-rice-in-michigan/. Aquila's Antidegradation Demonstration does not guarantee that mercury will not runoff into the river, which would affect the Menominee Nation's ability to grow wild rice and adversely impact the Sturgeon.

Characteristics of Pollutants

Many of the chemicals that will be discharged are known to be toxic to aquatic life and are heavy metals which will remain in the riverbed for years to come. Reviewing the characteristics of the chemicals listed in material safety data sheets is sobering, when the impacts to human health and the environment are considered over the long term. Some of the toxic materials pose risks to human health such as toxicity to the liver, pancreas, lungs, kidneys, central nervous system, damage to skin and eyes, fetal morbidity and reproductive impairments and, most frightening of all, risks that have not been determined or have not been studied with regard to combined exposure of multiple pollutants. Further, many of the listed pollutants are toxic to aquatic life.

The proposed permit sets parameters for some of these pollutants at levels which MDEQ states are meant to protect human health and the environment. But in waters designated for swimming, agriculture, public water supply, and fish habitation, these pollutants, discharged continuously for a period of years, cause real concerns to the people using the Rivers, drinking the water and eating the fish. The possibility of accidental spills, operational malfunctions, flooding, and impact of storms needs to be included in the benefit analysis, as well as the social and economic benefits of the alternative of denial of the permit.

In review of the draft permit there are two issues that should be addressed;

1. It is evident that there is no permit limit for sulfate, nor does the State of MI even have a Sulfate standard, and
2. Arsenic is definitely going to be discharged in limits that are significant enough to impact resources important to the Tribe.

In both instances these specific pollutants (sulfate and arsenic) are harmful to wild rice and to the people that use it.

It has been reported by "Authority Nutrition" that inorganic arsenic, which is the more toxic form, accumulates in significant amounts in rice. The report goes on to indicate that long term ingestion of inorganic arsenic may cause an increased risk of chronic diseases that include; Cancer, high blood pressure, vascular disease and type 2 diabetes.

Studies conducted by Dr. John Pastor of the University of Minnesota have demonstrated that wild rice is experiencing significant impact from increased levels of sulfate when it is converted to hydrogen sulfide in the

sediment. Impacts to wild rice have been shown to occur when surface water sulfate levels are within 4 - 16 parts per million.

Per US Fish and Wildlife Service the Lake sturgeon are listed as either threatened or endangered by 19 of the 20 states within its original range in the United States. Lake sturgeon are the only sturgeon species endemic to the Great Lakes basin and are the largest freshwater fish indigenous to that system. Lake sturgeon can be considered a nearshore, warmwater species with water temperature and depth preferences of low 50s to mid-60°F and 15-30 feet, respectively. Lake sturgeon are benthivores, feeding on small invertebrates such as insect larvae, crayfish, snails, clams, and leeches. A Plan needs to be drafted and published for public comment, and should discuss the long-term effects of heavy metals and other pollutants on the Lake Sturgeon habitat, which requires assessment both in the long-and short term.

In Aquila Resources response to MDEQ's request for further information, they indicate that a wild rice monitoring plan is not included in the current monitoring plans. How will the Michigan Department of Environmental Quality guarantee that the Menominee Tribes' ability to grow wild rice on the Menominee River will not be impacted by the mine discharge into the River? How and when will the MDEQ provide an analysis of the impacts that will occur to the wild rice and sturgeon as a result of the discharge of arsenic and sulfate into these waters from this proposed mining operation?

Historic Places

The Tribe's ancestral territory in Michigan included lands located in what is now known as Dickinson, Menominee, and Delta Counties. These lands were ceded to the United States in the Treaty of 1836. The Tribe retains a historical connection to the land, which includes the creation of the Menominee Indian Tribe at the mouth of the Menominee River and territorial use along the same. This area along the Menominee River remains significant to the Tribe and preservation of our history, culture and site of our ancestor's remains is of utmost concern.

There are approximately 25 known culturally relevant sites located within the footprint of the proposed mine. This area has never been defined as a "Cultural landscape" or surveyed as such. We believe the previous survey findings to be incomplete due in part to the reconnaissance-level techniques and the dismissal of this landscape as a comprehensive "cultural landscape." The proposed mine site includes pre-contact village sites, ceremonial dance rings, raised garden beds, and areas containing mounds which may be burial sites. The presence of these structures symbolizes the functional importance of this communal landscape of our ancestors and is not a mere scattering of "unevaluated sites." Ignoring the most basic communal concept of Native American culture demonstrates the lack of knowledge and understanding of customary tribal life. Furthermore, the Tribe was not involved in formal consultation during any surveying activity with the Commonwealth Cultural Resources Group (CCRG) or Section 106 group on the project site.

The Tribe has been asked by the Michigan Department of Environmental Quality to identify how the cultural sites will be impacted by mining activity. However, in the absence of an independent comprehensive archeological assessment and survey of the full project area, the Tribe is unable to provide a response. Until our request for an independent assessment and survey is completed and with the Tribes' active participation, no one, including Michigan Department of Environmental Quality, Michigan State Historic Preservation Office, the Canadian-based Aquila Resources company, or the Tribe, can fully understand the archeological value of this entire cultural landscape.

The Tribe is troubled about the disposition of our burial and cultural sites and the lack of commitment from the State of Michigan Department of Environmental Quality on the protection and preservation of such sites. Currently, there is no protection under Michigan Law that would provide for repatriation of human remains contained within burial sites or any associated funerary objects located within the cultural sites, when located on private property whether individual or business ownership exists.

The State of Michigan does not adhere to policies established by the National Historic Preservation Act and Native American Graves & Repatriation Act. These Acts provide the basis for protection and preservation of such sites and require formal consultation with affected Tribes. The Tribe has formally submitted documentation establishing a cultural affiliation claim on our ancestral lands. When approved, it is the Tribe's position that any Menominee human remains or funerary objects discovered or disturbed must be properly handled in accordance with federal law.

Michigan Public Act 247 took effect September 22, 2016, and provides, in part, that the Michigan Department of Natural Resources (DNR) is to:

> "work collaboratively with tribal governments...to [...]: assist and promote the making of applications for inclusion in the National Register of Historic Places and for Michigan historical markers for places significant to the history of Native Americans in this state; and assist and develop partnerships to seek public and private funds to carry out activities to protect, preserve, and promote the awareness of Native American cultural heritage in this state."

There is significant evidence that this site is eligible for inclusion in the National Register of Historic Places. Its unique attributes make clear that this site is "significant to the history of Native Americans." By not applying the parameters of Act 247, Michigan Department of Environmental Quality is only proposing cursory protections for inadvertent discovery of archaeological or historical resources during construction of the mine.

We believe that Act 247 is applicable to this area and project parameters due to the voluntary withdrawal of the Wetland Permit by Aquila Resources, which now renders the application incomplete. There are no grandfather clauses stated within Act 247 that would exempt these lands.

Pursuant to Section 72117, the Menominee Tribe believes that:

1) no permits should be issued until the site has undergone a comprehensive cultural resources survey in accordance with the requirements of Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108);
2) DEQ must collaborate with the DNR so that DNR may fulfill its obligations to assist with the preparation of an application for inclusion on the National Register of Historic Places, if such an application is warranted;
3) DEQ must ensure that identification of cultural resources on-site is done with the assistance of qualified experts adequately familiar with Menominee tribal cultural and archaeological resources which should absolutely include the expertise of the Menominee Tribal Historic Preservation Officer (THPO); and
4) No land swap should be approved prior to appropriate survey of the cultural and historical resources on the site.

When will the Michigan Department of Environmental Quality complete an independent traditional cultural properties investigation and ensure that the proposed "administratively complete" mine permit application does not violate established Michigan laws concerning government-to-government consultation and collaboration to promote, preserve, and protect historic and cultural places that Tribes hold significant?

Comments on Air Permit

It has been recommended by others that MDEQ accept the options provided by Aquila for the control of fugitive emission, such as enclosed covers on conveyors and chutes, conical covers over stockpiles, minimizing drop point from shovel to truck, watering roads, minimizing traffic speeds and maintaining a minimum moisture level in materials during transport, but also with the consideration that these may be the minimum standards applicable. If better control measures exist, MDEQ is urged to require those controls to minimize fugitive particulate emissions to protect human health and the potential deposition of toxic pollutants in the air and on soils and water.

A requirement that a staff position be in place specifically to insure daily compliance with pollution control measures on an ongoing basis, particularly for activities such as drop point distance and traffic speeds. Additionally, logbooks that chronicle these routine compliance checks should be kept on site and available for inspection.

The air permit should require regular opacity readings and that individuals assigned with taking opacity readings proposed as a control measure must be fully trained and have current certification in EPA Method 9 smoke school, and copies of certifications are kept on file and current.

Emission controls for mercury (Hg) from the Hg retort process are stated as being 99.50% effective for the condenser and 99.99% for the carbon adsorption. The Tribe believes that this control efficiency rate is very optimistic. The final air pollution permit should require stack testing for mercury emissions after operations begin to demonstrate the stated control efficiency is accurate.

There isn't anything in the air permit application suggesting what happens to the charcoal used to filter Hg in the Hg retort process. Is this handled in another section of the combined permit application? The paragraph at the bottom of page 2, carrying over to page 3 of Appendix I of the permit begins to somewhat address this concern but the sentence doesn't appear complete.

Table 5-3 appears to have an error for the PSD Class II increment for the 3-hour averaging period. Shouldn't this read 512 μg/m3 rather than 325?

Comments on Narrative NPDES Permit Application

According to the 2011 Memorandum of Agreement between the United States Environmental Protection Agency and State of Michigan, Section 3 **does not permit** the United States Environmental Protection Agency (USEPA), United States Army Corps of Engineers (USACE), or the United States Fish & Wildlife Service (USFWS) to waive the requirements of Section 404(j) for the following classes or categories of discharge:

- Section 3(c); Discharges with reasonable potential for affecting endangered or threatened species as determined by USFWS;
- Section 3(d); Discharges with reasonable potential for adverse impacts on waters of another state;
- Section 3(e); Discharges known or suspected to contain toxic pollutants in toxic amounts (Section 101(a)(3) of the CWA) or hazardous substances in reportable quantities (Section 311 of the CWA);
- Section 3(h); Discharges within critical areas established under state or federal law, including national and state parks, fish and wildlife sanctuaries and refuges, national and historical monuments, wilderness

areas and preserves, sites identified or proposed under the National Historic Preservation Act, and components of the National Wild and Scenic Rivers System.

Under Section 3(c), the point of discharge will impact State endangered species and a species of concern. To date, Aquila Resources has not provided the MDEQ with a relocation plan. There is no way to measure the true impact of Aquila Resources "rescue and relocation" activity will have on the threatened and endangered species. According to their own response, they do not intend to submit the relocation plan for approval by MDEQ until a time before construction. How can the Department or any federal agency adequately evaluate the impacts on threatened and endangered species without such a plan that includes the site of relocation, habitat conditions, known predators, and if the species will survive such a disruption? This has the potential to dramatically impact the diversity and ecosystem of the River.

Furthermore, there is no indication that surveys concerning the following threatened and endangered species that are known to or are believed to occur in Menominee County, Michigan, have been completed:

- Bird: Red Knot (Calidris canutus rufa); USFWS identified threatened species
- Flowering plants: Dwarf lake iris (iris lacustris); USFWS identified threatened species
- Insects: Hine's emerald dragonfly (Somatochlora hineana); USFWS identified endangered species
- Mammals: Gray Wolf (Canis lupus); USFWS identified endangered species
- Mammals: Canada Lynx (Lynx Canadensis); USFWS identified threatened species
- Mammals: Northern Long-Eared Bat (Myotis septentrionalis); USFWS identified threatened species

Under Section 3(d), the point of discharge is located on the Menominee River, which is border water between the states of Michigan and Wisconsin.

Under Section 3(e), the discharge will contain toxic substances as previously identified. The long-term exposure to such substances has yet to be evaluated for combined exposure to multiple pollutants. Has the MDEQ tested the validity of discharge levels? If MDEQ has not, has the Department requested an independent assessment of the pollutant discharge levels identified in the permit? If neither action has been taken, why not?

Under Section 3(h), mining activity and discharge may adversely affect the Tribe's historic, cultural, and burial sites; sites which have been identified as being eligible for the National Historic Places registry. While the Tribe has requested that an independent traditional cultural properties investigation be conducted of the entire project site and adjacent islands on the Menominee River, the Tribe has received the response from the Department that it is too late to complete such an investigation and that they cannot compel the property owner to complete this action. MDEQ is asking for solutions to a problem/concern when the extent of the problem or area of concern is not yet being fully identified.

Furthermore, under Section 3(h), why has Aquila Resources not been required to identify wild and scenic rivers in Wisconsin that are contained within the Menominee River watershed? The EIA only identifies that there are no wild and scenic rivers within Michigan that are close to the project site. However, the EIA fails to take into account the Pine and Popple Wild Rivers, located within Florence County and within the Menominee River Watershed. Both Rivers were designated by the Wisconsin State Legislature as Wild Rivers in 1965[1]. Will there be any assessment of discharge implications on these two "wild and scenic" river designations of Wisconsin? The EIA also fails to identify the Pike Wild River, located in Marinette County, Wisconsin. While

[1] Wisconsin Department of Natural Resources. 2016. http://dnr.wi.gov/topic/Lands/WildRivers/pinepopple/

this Wisconsin designated wild river flows into the Menominee River, there is a potential for impacts as sturgeon from the Menominee River migrate into the Pike River from downstream.[2]

Why has there not been a direct review of the permits by USEPA, USACE, and USFWS? Has there been a joint review of the permits between the identified federal agencies and the MDEQ?

Has the MDEQ transmitted a copy of the complete permit application received to include the Aquila Resources response to MDEQ's request for additional information? If not, when does the MDEQ intend to transmit such information to the United States Environmental Protection Agency for review?

How has MDEQ and Aquila Resources, Inc. responded to the federal objection issued in August 2016 from UDEPA to the approval of the permit?

Why was there no public involvement in the meeting between USEPA, the MDEQ and Aquila Resources, Inc., which occurred in September 2016 for the purposes of addressing the federal objection to permit issuance?

The Tribe understands that the 2011 Memorandum of Agreement is related to Section 404 and wetlands permitting, but the Tribe is including these comments herein as a demonstration of the connection between the mine operation and its impact to wetlands as a result of drawdown". The Tribe objects to the issuance of a permit to mine without the available information and draft wetlands permit application which would demonstrate any impacts between the mine operations and wetlands both onsite and near the proposed mine. For this reason the Tribe is submitting these comments regarding the MOA and wetlands issues that are overlapping with the mining permit.

Upon further review, the Tribe has identified the following within the NPDES draft permit:

On the top of page 5; there is reference to a Pollution Incident Prevention Plan, but no details as to when this plan would be developed or what types of parameters with would be addressing.

Section 1.2, p.3, mentions that an "optional pretreatment system addressing the Oxide TWRMF leachate is under consideration to enhance operations." Under whose consideration is the pretreatment system, and what are the circumstances under which this pretreatment system would be required, as opposed to optional? If the pretreatment system is constructed, how will the operations be "enhanced," and what modifications to permit conditions would result?

Section 1.4, the first paragraph references the designated uses to be protected, but there is no explanation or reference as to how the applicant plans on protecting those listed uses. There is a permit requirement noted for Part 41 Waste Water Construction Permit and the applicant states that this with be pursued as part of the final design to the Waste Water Treatment Plant final design. Although this appears to be consistent with the regulatory requirements, it is unclear what role the public has for opportunity in reviewing these details of the construction and the specific final design. Please clarify how the public is involved in this part and what timelines are included.

Section 1.4, p. 6, references to the use of cyanide in the process to extract gold, but gives no further details or reference as to how the WWTP will address cyanide. Please provide details or reference where the details for WWTP cyanide treatment process is located. Wisconsin waters are immediately adjacent and downstream from the discharge point. Please define the regulatory role of Wisconsin in the NPDES process when the State is the recipient of discharge waters.

[2] Wisconsin Department of Natural Resources. 2016. http://dnr.wi.gov/topic/Lands/WildRivers/PikeRiver/

Section 1.4, p. 6, states that, "In the event recycled water within the mills develops contaminant concentrations that significantly interfere with the milling processes and that interference cannot be eliminated through appropriate treatment of the recycle water, the MDEQ may allow a discharge in an amount necessary to correct the interference problem after installation of appropriate treatment." This appears to be a reference to 40 C.F.R. § 440.104(b)(2)(ii), which also says, "This discharge shall be subject to the limitations of paragraph [40 C.F.R. § 440.104 (a)]. The facility shall have the burden of demonstrating to the permitting authority that the discharge is necessary to eliminate interference in the ore recovery process and that the interference could not be eliminated through appropriate treatment of the recycle water." Please explain under what circumstances, and how often, the facility would be allowed to make such discharges, what DEQ's criteria would be for making a determination that the discharge was necessary, and how it would be determined that any such discharges are below the limits set in § 440.104(a)? What assurances have been or will be provided that such discharges would be rare, rather than routine? Has the permit applicant provided any information on the basis of the projected frequency of such discharges? If not, how will DEQ make a determination as to the actual level of pollutants that will be discharged in a set period of time, say, a month or a year?

Section 1.6, as stated above the State of Wisconsin is adjacent to the mine site, yet there is no mention of this fact or how the site impacts any of Wisconsin land or water resources. Please provide clarification on those projected impacts

Section 2.0, Figures 2-1 and 2-2 are based on annual average precipitation, but there is no reference to where the actual precipitation data is derived. The scale of precipitation can vary greatly across the region and even across the State. Note 2 in Figure 2-1 indicate that the average maximum rainfall is 1.06 m/yr., but there is no reference to where this data is produced.

Section 2.1, p. 8, indicates that the groundwater inflow modeling is described over a seven year mine life. However, in the land swap proposal currently posted for public comment, the estimated life of the mine is listed as sixteen years. Given this discrepancy that also is present in the mining permit currently pending before DEQ, and which is referenced in the NPDES permit application, how will DEQ determine whether the mine drainage water characteristics, groundwater flows down exposed pit walls, and constituent concentrations currently projected are representative of the actual concentrations and characteristics of the groundwater that will occur over the life of the mine?

Section 2.2.1, Mill Reagents; what is the consumption rates based on? Once again if the mine life is the driving factor and it is estimated at seven years, but other information in the MPA indicate it could be 10 years or longer, would this change these consumption rates? If so please provide the alternative rates.

Section 2.2.3, Make-up Water; the description in this section should add estimates of additional volume that will be added to the process as a result of the make-up water. This could change contaminant loadings and composition of discharge as a result of additional water. Please add details to address this.

Section 2.3, p. 9, states that contact water will be routed into the Contact Water Basins, which will be lined. Will the ditches routing the contact water to the Contact Water Basins be lined? If not, what are the estimates for potentially reactive material leaching from and/or escaping the ditches, both during normal operations and times of greater precipitation, flooding, snowmelt, etc.? Further, Table 2-1, estimating the water quality characteristics, also is based on an estimated seven year life of mine. Aquila Resources' stated projection of a sixteen-year life of mine calls into question the validity of these estimates. The sixteen-year life of mine estimates should be required as well.

Section 2.3.4, TWRMF Leachate; there are several general statements made in the two paragraphs that should be specified to provide details on issues like volumes, contaminants, model inputs and options selected. The Tribe submitted a request for information on January 22, 2016 that detailed specific modeling questions and a request for the model (see attached letter). The Tribe is awaiting the information and is again requesting it be provided in order that our experts may better determine how water quality will be managed as part of the TWRMF and treatment of wastes during mine operations.

Section 2.4, p. 10, states that the CWBs are designed for a 100-year, 24-hour storm event. Given the proximity of the proposed facility to the Menominee and Shakey Rivers, the floodplain, and regulated wetlands, it is only prudent that the CWBs should be designed for a 500-year storm event.

Section 2.4.1, Basin Designs; please provide description of how monitoring will occur after operations. What is the expected life of the HDPE liner? Monitoring well CW-13 appears to be in the Tailings Management Facility? Please provide clarification as to how this well will function if it is in the boundaries of the waste rock management area.

Section 2.5, p. 10, mentions that a Storm Water Pollution Prevention Plan and Pollution Incident Prevention Plan will be developed at some time in the future "when further information becomes available." This section is vague and provides the public no opportunity to review and comment on these aspects of the permit application. Please describe how the SWPPP will be reviewed before finalization and the Tribe would request that a draft copy be provided prior to approval. Will the discharge wetlands from the non-contact storm water areas experience a community type change? This type of impact should be assessed as it will result in potential loss in functional values. See comment above under Section 2.4. This comment applies to both the NCWB and CWB.

There are no discussions related to factors associated with climate change predictive models. These types of predictive data could significantly impact the volume of storm water currently calculated through the CWB Design Procedure. Please provide a discussion that details how predictive climate change models are factored into the procedure.

During reclamation the plan states that alternative methods could include periodic pumping to tanker trucks for disposal at a local WWTP. Please specify where this plant is located and how the local WWTP plans on treating and disposing of excess waste materials and volume. Have all local permits to utilize the local WWTP been applied for?

Section 3.1.3, Reactor Tanks; Will optimization of the facility during operation, require additional public notice and comment period?

Section 3.1.6., p. 12 states that to meet the required effluent PH limit, sulfuric acid or sodium hydroxide will be added to the water, which will then be discharged into the Menominee River. Sulfuric acid is highly corrosive, known to contribute to acid rain, and known to be toxic to aquatic life. Sodium hydroxide, which is corrosive, known to cause eye and skin irritation, and is used for oven and drain cleaners, is known to be toxic to aquatic life. Were any other alternatives considered, or is the addition of these chemicals the only option prior to discharging the effluent into the Menominee River? How will the addition of sulfuric acid be treated within the facility before discharge occurs? The statement regarding pH effluent limits should be referencing the actual limits. Please provide a reference to pH limits set for the discharge and what the expected pH of discharge water will be.

Section 3.1.7, Solids Handling System; there are no specific details provided for the offsite disposal facility or characterization of the waste that will be sent to the disposal site. Please provide the location of the facility and waste characterization information for the solids.

Section 3.1.8, p. 12, discusses the optional pretreatment system, which is projected to be assessed at a later date, as a "part of final engineering." How will DEQ assess this facility after the fact (issuance of a permit)? How will the public have an opportunity to get comments in when there will only be DEQ Staff reviewing final engineering plans after a permit is issued? At what point will the public be provided with the information on the "optional pretreatment system," who will determine whether or not it is optional, and based on what criteria?

Section 3.2, Estimated WWTP Influent Water Quality; the last sentence is ambiguous and out of place for this section, which is "influent water quality". The statement should be removed unless reference is provided to details of the previous sections and address specifics of the effluent as stated in above comments provided by the Tribe. Why are BADT's referenced here? Since the BADT's aren't enforceable, the only reference to standards should be the MDEQ rules that would eventually result in the permit limits if issued.

Section 3.3.1, Certified Wastewater Treatment Operator; there are conflicting statements in the descriptions of certified operators. In the first sentence is identifies one or more, yet later in the paragraph it is clear that there will be multiple operators required that will handle operations for industrial, storm water and construction. Please add clarification to this section to identify how many operators will be employed.

Additionally the last sentence is confusing to the extent that the classifications are identified, yet there are no definitive criteria provided that reference what is actually required by MDEQ for an operator classification in an Industrial Wastewater Operation. Please provide proper reference to the actual MDEQ or other Michigan rules that regulate Industrial Operators.

Section 3.3.2, p. 14, requests waivers for Biochemical Oxygen Demand – 5 days and Chemical Oxygen demand, stating that these two parameters are not expected in mine waters. Please explain why they are not expected and whether DEQ will grant the waivers, and on what basis.

Section 3.3.2, Monitoring; effluent monitoring should be conducted at the outfall location and not somewhere within the discharge line. Additionally there is no mention of surface water monitoring in the river. There are no references to a mixing zone or plans for sampling at mixing zone location. Will Wisconsin Department of Natural Resources be part of the monitoring plan since the adjacent water is within the WDNR jurisdiction?

Section 3.4, Outfall for Treated Water Discharge to the Menominee River; there in no mention of Wisconsin Department of Natural Resources, 401 Certification, mixing zone or Total Maximum Daily Loads. Please provide clarity regarding these aspects of the discharge.

There is a listing provided for Michigan special status mussel species, but no reference to potentially listed Wisconsin mussels? Please include a description of how other species will be protected. There is no mention of any other listed species (Federal or States) or potential impacts as a result of discharge; a listing and description should be provided for any invertebrates, fish, amphibians or reptiles. A description should be included to address long term impacts that will result due to the discharge of pollutants and additional large volume of water to the system.

Section 3.4, p. 14, states that a Mussel Rescue Plan will be developed and implemented. This Plan needs to be drafted and published for public comment, and should discuss the long-term effects of heavy metals and other

pollutants on the mussels, which constitute a critical filtration component of the aquaculture, both in the long- and short term.

Antidegradation Demonstration

Background

The Draft Permit includes a section stating that The Department has determined that the permittee's Antidegradation Demonstration, based on information required by Subrule (4) of R 323.1098, shows that lowering of water quality is necessary to support the identified important social and economic development in the area.

The Antidegradation Demonstration is required under the Federal Clean Water Act, Section 303, 33 U.S.C. 1313, and was developed to protect the public health and welfare, enhance the quality of water, and meet the objective of the Act to "restore and maintain the chemical, physical and biological integrity" of the nation's waters. Pursuant to the Federal Antidegradation requirements at 40 C.F.R. § 131.12(a)(2)(ii), "Before allowing any lowering of high water quality, pursuant to paragraph (a)(2) of this section, the State shall find, after an analysis of alternatives, that such a lowering is necessary to accommodate important economic or social development in the area in which the waters are located. The analysis of alternatives shall evaluate a range of practicable alternatives that would prevent or lessen the degradation associated with the proposed activity. When the analysis of alternatives identifies one or more practicable alternatives, the State shall only find that a lowering is necessary if one such alternative is selected for implementation." Mich. Admin. Code R. 323.1098(4)(i). If no practicable alternative is available, the discharger must evaluate and implement enhanced treatment techniques that have been demonstrated to eliminate any BCC's at a reasonable cost. R 323.1098(4)(ii).

Determination of Benefits

EPA's Antidegradation guidance stresses the importance of identifying and protecting Tier 2 (high-quality) waters and of obtaining local input into the NPDES permitting process. The CWA Antidegradation provision was put into place as an additional protective measure and should not be easily bypassed if the applicant can merely make a showing that there will be some short-term increase in economic activity.

Michigan's analysis of whether the lowering of the water quality is "necessary to accommodate important economic or social development in the area in which the waters are located," requires more than a showing that the degradation will result in some economic gain. It also requires a showing that the economic and social development is "important." The importance of the asserted economic and social development should be determined based on analysis of both the amount estimated gains, and by whom the gains will be realized; and the economic and social costs of the operation, and who will bear short-and long-term costs of those burdens.

Presently, there has been no demonstration of the accuracy and/or validity of the alleged economic and social benefit determinations made by Aquila Resources, Inc. While Aquila Resources, Inc.'s commissioned their own Research Report in November 2015, this report lacks pertinent information to access the true negative impact of nonferrous mining on the tourism industry, which is a major contributor to the economic base of this area, and lacks identification of the true impact to property values in the region. A presentation in June 2016 on the economic and social benefits of the Back Forty Project was a mere regurgitation of information asserted by

Aquila Resources, Inc. with no external validation of the information. In the past, the Tribe has requested ground water modeling files and other pertinent information from the Michigan Department of Environmental Quality who later acknowledged that they did not have the time, resources, or wherewithal to validate the Aquila Resources submission concerning ground water modeling and validity; has the Department taken the same approach concerning validation of the social and economic gain alleged by Aquila Resources, Inc.?

Aquila's Antidegradation Demonstration states that "on site personnel requirements during operations are expected to be approximately 100 employees during full production." See App. B Antidegradation Demonstration at Economic and Social Development. Roughly twenty of the employees will be hired from outside of the region resulting in a population increase, which Aquila considered a social benefit. Moreover, the Demonstration states there will be increased local revenue and consumer spending due to the investment. While it seems clear that there will be a real, if temporary, local economic boost, it is difficult to see how 100 jobs and a population increase of 20 people is "important" to a county of over 23,000 and has an unemployment rate below 5%. Further, it is unclear what the actual amount of capital and operating purchases that will be supplied by local vendors, the actual amount of taxes that will be generated, and the actual effect on the economy from the mining operations will be. Moreover, there is no indication that DEQ considered the loss of property value to the adjacent property owners and others nearby that will be subjected to the noise and light pollution that will accompany the blasting, excavating, crushing and hauling of tons and tons of material, much of it toxic or reactive, for years. Economic and social losses also will affect those who reside across the Menominee River in Wisconsin where the tax revenue to the local and state governments will not be realized. There also is the loss of the quiet enjoyment of the property of the adjacent and downstream landowners, and for those who frequent the nearby public areas for fishing, boating and other recreation. Finally, there will be a currently unquantified loss of the cultural resources known to be located on the proposed mine site, which is an area sacred to the Menominee Tribe of Wisconsin, and which will represent a depletion of the cultural resources in the area for both tribal members and Non-Indians.

There almost certainly will be a loss to the local tourism economy, which is difficult to quantify, particularly because such losses are likely to extend beyond the life of the mine. Currently, the longest estimate of the mine life is sixteen years. The degradation of the water after continual discharge of toxic materials for the life of the mine, coupled with the likelihood that contamination of groundwater will continue after mine closure, will affect the long-term social and economic character of the area. The DEQ's consideration of whether, the economic and social benefits are important should include an assessment of whether the benefits will continue to exist after the mine closes, and whether the degradation of the water quality, loss of use of the Menominee River, at least in part, for recreation, fishing, swimming, loss of irreplaceable cultural resources and diminishment of the quality of life over the long-term are less important than the short-term economic benefits.

It is nearly impossible to evaluate the loss of the character of the area from a quiet, recreational, rural area to a loud, bright, industrial site where toxic chemicals are continuously discharged into the water, air and soil, and heavy trucks carrying toxic waste pass by homes multiple times a day on narrow, curving rural roads. The determination of whether the proposed economic and social benefits are "important," therefore, must be based, on public input from people "in the area in which the waters are located." The only fair way to even attempt such a complex evaluation is to allow for a public hearing on the NPDES permit alone. In particular, the public hearing should address the issue of whether, in the face of the social and economic losses that will accompany the discharge into the Menominee and Shakey Rivers, the short-term economic and social benefits are, in fact, important to the people in the area in which the waters are located.

<u>Ample Alternatives and Enhanced Treatment Techniques</u>

the process by which Aquila eliminated each of these options and whether Aquila missed another plausible alternative. Further, MDEQ should consider whether there is another alternative that was not evaluated by Aquila that would eliminate the need for the point source discharge as required by Mich. Admin. Code R. 323.1098(4)(B)(i) With regards to Enhanced Treatment Techniques, Aquila stated in the Demonstration that it is evaluating a pretreatment system to reduce the more concentrated mercury that will be present in the wastewater, but Aquila has not guaranteed to use the pretreatment system. R. 323.1098(B)(ii) requires Aquila to implement this treatment system if the cost is reasonable; thus, the treatment system should be evaluated to determine if the cost is reasonable before a NPDES permit is granted

The Tribe would like a response to the comments provided herein. Thank you for your time and attention to this submission.

Sincerely,

Joan Delabreau

Joan Delabreau, Chairwoman

Menominee Indian Tribe of Wisconsin

Cc: Joe Maki, DEQ

Tiffany Myers, DEQ