DEPARTMENT OF THE ARMY
DETROIT DISTRICT, CORPS OF ENGINEERS
477 MICHIGAN AVENUE
DETROIT, MI 48226-2550

March 29, 2012

REPLY TO ATTENTION OF:

Engineering & Technical Services
Regulatory Office
Permit No. LRE-2010-00098-252-A12

Peter Swenson
Chief, Watersheds and Non-Point Source Programs Branch (WW16J)
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, Illinois 60604

Dear Mr. Swenson:

We are writing in response to Michigan Department of Environmental Quality's (MDEQ) Public Notice No. 11-52-0075-P, for the proposed work by the Marquette County Road Commission (MCRC), located in Marquette County, Michigan. The project as proposed would result in 25.45 acres of direct wetland impacts and 22 stream crossings (8 new crossings and 14 replacement crossings) along a 21.4 mile route. Other direct wetland impacts include 0.35 acres for the relocation of ATV Trail 5, and 0.01 acres for the East Branch Salmon Trout River bridge replacement. Additional fill is associated with culverts, and temporary access. The applicant proposes to restore approximately 3.53 acres of wetland at 26 locations by removing existing roads and trails through wetlands where these features will no longer be used due to the CR 595 road alignment. The applicant also proposes to create 49.4 acres of wetlands, and to replace the Triple A Road bridge over the East Branch Salmon-Trout River as mitigation. The project crosses through the Escanaba, Michigamme, Dead, Yellow Dog, and Falls River watersheds.

Our comments are being submitted pursuant to Section 404(j) of the Clean Water Act (404(j)), the regulations in 40 CFR §233, and further prescribed in the Memorandum of Agreement between the State of Michigan and the U.S Environmental Protection Agency. We provided previous comments to EPA on an application for an MDEQ permit by Woodland Road LLC for a similar project.

Project Purpose/Alternatives Analysis:

The regulatory agency is responsible for defining the purpose and need in accordance with NEPA Regulations (Appendix B, 7.), the objective of the project (33 CFR 320.4(a)(2)(ii)), and the "overall project purpose" under the 404(b)(1) Guidelines, and subsequent guidance. We do not support the project purpose as currently stated.

The primary beneficiary of the route as proposed would be Kennecott Eagle Minerals Company (Kennecott). Kennecott is the primary funding source for road construction and maintenance of the preferred alternative for the life of the mine. Kennecott is managing, supervising (in cooperation with MCRC), and funding the current permit application process.

The preferred alternative is the most direct route from the Eagle Mine to Kennecott's ore processing facility at Humboldt.

MCRC's stated project purpose varies in the application materials. In Section 4, the CR 595 project overview states that the purpose is to "...construct a primary county north-south road that (1) connects and improves emergency, commercial and recreational access to a somewhat isolated but key industrial, commercial and recreational area in northwest Marquette County to US-41, and (2) reduces truck travel from this area through the County's population centers. Other references to the project purpose, including Section 4, page 38, state that the purpose and need is for a primary county road west of the Silver Lake Basin (Basin), then further narrow the "Study Corridor" for a potential road location to within 2 miles east or west of the preferred alternative. We recognize that MCRC is the agency responsible for planning, constructing, and maintaining county roads in Marquette County, and has the expertise for determining what is desirable for efficient and safe movement of traffic in the county. However, the applicant has acknowledged there are no references to the need for a north-south connector west of the Basin, in county planning documents or resolutions prior to 2010. An alternate project purpose might be "to improve transportation between US-41 and northern Marquette County." This provides a sufficiently broad range of alternatives, including a combination of construction and non-construction alternatives to address the county's transportation issues. Alternatively, if the road is for the Kennecott mine, the purpose should reflect that.

The application does not appear to include enough information to support the determination of a preferred alternative. MCRC indicates that County Roads 550 and 510 are not useable by Kennecott because they are not entirely all-season roads. Upgrading these routes may be a less damaging alternative when compared to constructing an entirely new route on the preferred alignment, which is currently an ATV trail. We note that County Road 550 is the route that Kennecott designated as its primary ore-hauling route when seeking a mining permit. Although MCRC indicates that their budget would not support the development and maintenance of any of the County Road 510 routes, County Road 510 is already a primary county road, and Kennecott would only fund maintenance for a maximum of 7 years of the preferred alternative. If long term maintenance is an issue, the costs should be assessed for all alternatives. Similarly, construction costs should be fully supported, including ATV trail relocation, temporary impacts, any special techniques such as blasting, and mitigation. If outside funding is a factor in construction costs, it should also be explained.

Overall, the application does not adequately support the conclusion that Kennecott could not use either of these routes if they were upgraded.

Impacts Analysis:

The application does not provide comparison of the direct and indirect impacts of alternatives sufficient to support selection of the preferred alternative. A common set of factors should be assessed equally across practicable alternatives.

The application estimates direct temporary wetland impacts at 0.01 acres, although an unknown number of temporary access fill pads would be necessary. These potential impacts need to be addressed. The new ATV trail to replace Trail 5, associated with the preferred alternative, would have an estimated 0.35 acres of direct wetland impacts, and should be factored in with the preferred alternative when comparing it to the impacts of other alternatives.

Foreseeable secondary impacts must be included in the review of each alternative, and compared among alternatives when selecting the least environmentally damaging practicable alternative. For example, in the Project Purpose Use and Alternatives section, the applicant states that the "full economic benefits" for logging and mining interests "cannot be realized" without the preferred alternative. Therefore, for the preferred alternative, the marginal increase in logging, and currently permitted and future mining are directly tied to it and must be addressed as secondary impacts which would not occur but for a primary county road in the proposed location.

Water Quality/Hydrology:

Impacts associated with replacing existing stream crossings were not specific. The length of existing stream segments to be altered, and the lengths of the existing culverts to be replaced should be identified. Any downstream impacts (i.e. erosion from altered velocities during peak flows) from the channel changes should be evaluated.

Appendix B shows proposed floodplain compensating cuts contiguous to wetlands. Potential impacts to the hydrology of contiguous wetlands should be addressed.

Stream assessment findings from the Woodland Road application are provided, with no discussion of whether this adequately represents the currently preferred alternative.

Biota:

The preferred alternative (excluding Trail 5 relocation) will result in direct impacts to 25.45 acres of wetlands. If wetland impacts would occur in proposed borrow and grading areas outside of the identified wetland delineation corridor as shown on the Michigan Rapid Assessment Method (MiRAM) maps for the preferred alternative, they should be included in this total.

Alternatives should describe road right-of-way widths through wetlands. Since road widths could be changed to improve travel conditions within a right-of-way, the application should provide details about the total wetland acreage within the rights-of-way for all alternatives.

There are discrepancies and omissions in the wetland delineation for the preferred alternative. The locations of data points are not shown. The drawings and/or supporting information should clearly indicate the basis for the wetland boundaries. In some drawings, the wetland boundary appears to terminate abruptly within the 400' delineation corridor with no

explanation (pages 30 and 37.) Regardless of the alternative, wetland delineations and the determination of wetland boundaries must have adequate and consistent supporting information.

Direct wetland impacts for alternatives are not provided in a comparable format. National Wetland Inventory (NWI) map-based estimates and driving surveys are not comparable to wetland delineation results. Throughout the discussions of wetland impacts across alternatives, there appear to be discrepancies in acreage estimates, with unsupported and inconsistent quantitative and qualitative conclusions used interchangeably. Direct and indirect wetland impact assessment methods for all routes must be consistent and supportable, in order to provide a meaningful comparison that leads to a selection of the least environmentally damaging practicable alternative, with wetland impacts avoided to the maximum extent practicable.

The application includes MiRAM assessments for some of the alternatives. MiRAM assessments should be performed during the recommended season. Sample points should be labeled to correspond with the wetland delineation. Narrative summaries do not appear to accurately portray the survey results, and summary tables of wetland impacts do not differentiate between state-ranked and non-ranked rare wetland community types. Grouping impacts only under forested, scrub-shrub, and emergent wetland types obscures the substantial acreage of rare wetland community types that would be impacted under the preferred alternative. Since MiRAM assessment scores are based in part on the size of the wetland being assessed, MiRAM results do not inform the discussion regarding alternatives at this stage, when wetland boundaries have not been verified for most of the alternatives. In order for MiRAM to be an effective comparison tool it should be applied objectively and consistently. Impacts to different community types, including state-ranked communities, should be quantified.

The application proposes to direct some of the road drainage from the preferred alternative into adjacent wetlands. Secondary impacts on wetlands as a consequence of road runoff would be expected.

Vegetative community descriptions from the previous Woodland Road permit application were used for the current proposal. There is no discussion about whether the findings of the MiRAM are valid for new segments in the preferred alternative. In addition, rare plant surveys appear to be taken directly from the Woodland Road route, with no discussion of the potential for rare plant occurrences in new segments under the preferred alternative. Appendix M does not include accurate community descriptions for state-ranked wetland community types. Given the variety and abundance of rare plant communities and the lack of invasive species, the conclusion that the plant communities along the preferred alternative are: "...characteristic of much of the western Upper Peninsula, including Marquette County" seems incongruous.

Wolves, no longer a federally-listed species in Michigan, are still federally protected during the delisting monitoring period, and are protected by the State of Michigan. The ecological survey results state that a wolf pack was observed in 2008 less than 0.5 miles from the former Woodland Road route, and that tracks and scat were observed along the route. The survey summary concludes that wolves will not be impacted by the preferred alternative based on a

2008 memo from Iron Range Consultants, which states that the mine site itself would not have negative impacts on wolves. This memo explicitly limits itself to the mine site. There is no discussion of the potential direct or indirect impacts of a new, all-season paved primary county road on wolves.

Impacts to biota, including wetland impacts, wildlife habitat fragmentation, potential introduction of invasive plant species, release of ore dust, petroleum products and road salt runoff to wetlands and streams, impacts to wetlands from culverted road drainage, and barriers to movement of wetland-dependent terrestrial wildlife, must be addressed in comparable terms for each of the alternatives.

Recreation:

Increased recreation access is listed as one of the benefits of the preferred alternative. However, Section 3, Project Purpose Use and Alternatives, states: "Logging roads and trails lace the landscape as a result of past timber harvests. These roads and trails are actively utilized for recreation all year, due to most of the timber production lands being open to public use." The preferred alternative would likely change types of recreation use, but the preference for increased urban motor vehicle recreational access versus a more remote recreational experience are based on personal taste, and an overall conclusion that the preferred alternative would improve recreation is not supported.

Transportation:

The transportation analysis is based in part on information contained in the previous Woodland Road application, but does not explicitly identify what that information is, or how it was derived. Table 3-4 provides existing and projected use estimates for CR 550, CR 510, and the preferred alternative, based primarily on MDOT's US-41 traffic counts. The traffic counts do not appear to support the estimates, especially in the case of Trail 5, which is currently an ATV trail. The table cites other references but does not provide them.

The transportation analysis should include a map of abandoned railroad rights-of-way, which in combination with selected road improvements and active railroad lines, may provide a potentially viable alternative for transportation of ore and timber, as well as improve road access from US-41 to the northern portion of Marquette County. While MCRC would not be responsible for rehabilitating or leasing rail lines, the application lists Kennecott as the primary beneficiary of the proposed route, and therefore Kennecott would continue to be free to explore the use of rail lines for its needs.

This section does not include township or municipal plans to improve traffic in its analysis of future traffic patterns. For example, there is no information about Marquette Township's 2008 Road Facilities Plan, which shows proposed improvements to County Road hk leading from County Road 550 to US-41, bypassing the city of Marquette and the most populated portion of the township. This has a direct bearing on County Road 550 as a viable alternative. There is

also no discussion of options such as additional traffic lights, reduced speeds, or passing lanes for the increased truck traffic, for those alternatives which are deemed to be unacceptable because of current vehicle use, or potential safety concerns for school bus routes. There are qualitative statements and conclusions throughout this section about the benefits of the preferred alternative and the deficiencies of the alternatives, but the information provided does not support them.

Economics:

Construction jobs would be created by any of the alternative routes, either through upgrades or new construction. Job creation should be compared across alternatives.

Safety/Emergency Access:

Improved emergency access to northern Marquette County is described as one of the benefits of the preferred alternative. The alternatives consideration should include past emergency response needs by location. Alternatives should be equitably compared for their potential impacts on emergency response. Since Marquette General Hospital is the region's trauma center, alternative routes should include this as their destination.

Kennecott is listed as the primary potential recipient of emergency services. Emergency response could be provided by its own emergency service personnel or from Big Bay. A non-construction alternative is for Kennecott to support its own or additional Big Bay emergency staff, who could respond on an improved Triple A Road.

The comparison of traffic safety is not equitably compared across alternatives. The Michigan State Police support the reduction of traffic in urban areas, but it appears that the preferred alternative was the only alternative presented to them which did not involve increased truck traffic through the cities of Marquette, Negaunee, and Ishpeming.

Section 404(b)(1) Analysis:

The Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (Section 404(b)(1) Guidelines) in CFR 40 Part 230 requires that, for non-water dependent activities, the applicant overcome the presumption that a practicable, less environmentally damaging alternative site, outside special aquatic sites, exists. Current documentation does not appear to accomplish this. Utilizing existing routes would limit additional aquatic impacts to areas which are already impacted by road crossings. A combination of establishing appropriate speed limits, installing additional traffic lights, adding turn lanes, widening intersections, or redirecting traffic in high use areas via improved connectors, and improvements to current county and local 4-season roads, are considered practicable alternatives with fewer aquatic impacts, which could improve connectivity between northern Marquette County and US-41.

Compensatory Mitigation:

Compensatory mitigation must be directly related to the impacts of the proposed activity and appropriate to the degree and scope of the impacts, and can only be considered after avoidance and minimization requirements under the Section 404(b)(1) Guidelines have been met. The goal of compensatory mitigation is to replace aquatic resource functions unavoidably lost as a result of a permitted activity.

The proposed mitigation involves a 1.5:1 ratio for emergent and scrub/shrub wetland losses, and a 2:1 ratio for forested losses. The proposed mitigation does not adequately compensate for the potential impacts. Rare communities will be directly and indirectly impacted by the preferred alternative. As proposed, three of the mitigation sites are located adjacent to the preferred alternative. Those locations are in fill borrow areas. The Dead River East mitigation site requires excavation of 32 feet in elevation for the constructed wetland to match the adjacent existing wetland elevation. There appear to be roads bisecting the Connors Creek and Peterson Holli sites. Support for the functional replacement value of the mitigation wetlands, particularly compensation for rare wetland communities, is absent. It is not likely that mitigation wetlands created along a primary paved county road would provide adequate compensation for remote wetlands. In addition, the applicant states that since 25% of the county is already wetland, perhaps a more extensive stream mitigation proposal could substitute for a portion of the wetland impacts. Overall, the proposed mitigation does not appear to have the same value as the wetlands that would be lost.

The 14 stream crossing replacements are counted in the application as stream mitigation. While undersized culverts would be replaced, there is not adequate support to show that these replacements will result in net benefits. Properly-sized culverts and the use of 3-sided box culverts and bridges where possible will reduce, but not necessarily compensate for, impacts from enclosure, change in sinuosity, and impacts on water quality.

There are references to wetland mitigation bank sites in Appendix B, Sheet M. These warrant explanation.

Mitigation monitoring must provide an accurate assessment of mitigation success. The mitigation monitoring plan as proposed is inadequate. An acceptable mitigation plan must assess whether the required acreage of each wetland type is developing throughout the monitoring period, and include a discussion of potential remedial actions in the event that the required acreage by wetland type is not achieved. Mitigation monitoring for forested systems is usually 10 years, rather than the 5 proposed. Financial assurance and a conservation easement are also not addressed.

Conclusion:

The County Road 595 application is deficient in several areas, including the project purpose, reasonable comparison of alternatives, an adequate Section 404(b)(1) analysis, and an

adequate compensatory mitigation proposal. The applicant must provide an impact analysis that includes a clear, logical, and supportable comparison of data across a full range of alternatives, including construction and non-construction combinations.

We appreciate the opportunity to comment on the proposed project. If you have any questions, please contact Jean Battle by telephone at (906) 228-2833, or by e-mail at Jean.M.Battle2 @usace.army.mil.

Sincerely,

John Konik
Chief, Regulatory Office
Engineering and Technical Services

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