



December 20, 2013

Timothy J. Myers, Engineer  
Gogebic Taconite, LLC  
402 Silver Street  
Hurley, WI 54534

Subject: Review of Revised Bulk Sample Plan dated November 25, 2013

Dear Mr. Myers:

In accordance with s. 295.45(3), Stats., the Department's letter dated December 10, 2013 identified the permits and approvals that are required to conduct the bulk sampling activity as described in your company's Revised Bulk Sample Plan. This letter supplements that earlier correspondence by requesting additional clarification regarding the bulk sampling activity and specifying certain procedural and informational requirements that will apply to the activity.

1. While the revised plan includes descriptions of the various elements of the activity, there is not a comprehensive discussion describing the sequencing of site disturbance. Please provide a description of the sequence of activities at the site including, but not limited to implementation of erosion control measures, preparation of the staging area, access road construction, specific sampling site preparation and excavation, sample site reclamation, access road reclamation and staging area reclamation.
2. It is not clear how the listed acreage for Access Road 6 was derived. Does it include only the disturbance related to the new portion of the road? Is it based on an average width or actual width of the road corridor? Does it include areas of new disturbance along the existing road, such as those areas needed safety and drainage berms and other features?
3. The plan includes a statement that the ground speed of the highway trucks is expected to be less than 10 miles per hour. It is assumed this anticipated speed is applicable specifically to travel over on-site roads. Is this correct?
4. What is the anticipated depth of excavation at Bulk Sample Site #5?
5. At what point in the process will a decision be made regarding the need to implement Plan B, the sampling process involving blasting? If Plan B is determined to be necessary, Gogebic Taconite, LLC should notify the Department as soon as possible after reaching the decision. How would implementation of Plan B affect the overall schedule for completion of the bulk sampling? Would there be a period of inactivity at the site, while the drilling/blasting contractor is mobilized? The plan indicates "bedrock will be cleared of extraneous materials" – where would such materials be stored?
6. The revised plan indicates blasting may occur at Sites 1 and 2, yet it also includes details regarding the number of blasting drillholes potentially needed at Site 5. Is blasting anticipated at Site 5? If Plan B is implemented, we assume it will be conducted to obtain enough sample to supplement the volume of rock

obtained through Plan A in order to reach the target of 800 tons per site. Given that assumption, wouldn't the number of drillholes needed at each site be far less than the number specified in the plan which appears to be based on obtaining the entire sample by Plan B methods? Please provide additional detail regarding the potential blasting process including the approximate anticipated quantity of explosive material per hole, approximate hole spacing and the extent to which delays are expected to be used in the blasts.

7. The plan suggests the staging area is a provisional facility, to be developed only if needed? Given the anticipated time frame during which bulk sampling is expected to occur, it seems likely that the staging area will be needed and it would be prudent to develop the area as part of initial site preparation to ensure that it is properly constructed and available when needed. If the area is intended to be used for any purposes other than handling of bulk sampling material, those uses should be described. Such uses might include, equipment storage, aggregate storage, vehicle parking, etc..
8. Do you anticipate leaving areas of bare rock as part of final site reclamation? If there is a need to import soils for purposes of establishing vegetative cover on the site, care should be taken to ensure the soil materials are from a local source and free of noxious weed species. Will the aggregate removed from the new road area be used on-site for purposes of final site grading or will it be hauled elsewhere?
9. The plan describes a procedure for evaluation of the bulk sampling sites and bulk sample material for the presence of sulfide minerals. Such evaluation should be thoroughly documented and the results of the evaluation should be submitted to the Department upon completion of the bulk sampling process. Will any measures be taken, such as adding neutralizing material to the backfill materials, if sulfide minerals are identified in the exposed bedrock at the bulk sampling sites? Records of any sulfide-containing material disposed of at a solid waste facility should be provided to the Department following acceptance by the waste facility.
10. The plan describes a procedure for evaluation of the bulk sampling sites and bulk sample material for the presence of asbestiform minerals. Such evaluation should be thoroughly documented and the results of the evaluation should be submitted to the Department upon completion of the bulk sampling process. Full identification of asbestiform minerals using standard field methods may be difficult. It is likely to be more realistic and feasible to base the segregation of materials on the presence of amphibole minerals, as determined with standard field methods. The material could then be temporarily set aside pending further mineralogical evaluation using other more detailed methods to determine the true nature of the minerals.
11. The wetland delineation report submitted as part of the revised plan indicates (p. 17) that "wetland boundaries will be staked prior to construction so that contractors are aware of wetland boundaries". If such delineation has not already been done, please notify the Department in advance of when such work will take place.

Please contact me if you have any questions concerning the information in this letter.

Sincerely,



Lawrence J. Lynch, P.G., Hydrogeologist  
Hazardous Waste and Mining Section  
Bureau of Waste & Materials Management