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EC File: 4703 001 080  
NWB File: 2BE-MEP0813

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Via email: [licensing@nunavwutaterboard.org](mailto:licensing@nunavwutaterboard.org)

**RE: 2BE-MEP0813 Comaplex Minerals – Type B Amendment – Kivalliq Region –  
Request for Review and Comments**

Environment Canada (EC) has reviewed the information submitted with the above-mentioned amendment application to the Nunavut Water Board (NWB). The following specialist advice has been provided pursuant to the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

Comaplex Minerals Corp. (Comaplex), a wholly owned subsidiary of Agnico-Eagle Mines Ltd. is applying for an amendment of water license 2BE-MEP0813 from the NWB. Comaplex is seeking to amend the water license to allow for the increase in water use from the licensed 30 m<sup>3</sup>/day to 299 m<sup>3</sup>/day. The water will be used solely for diamond drilling and be drawn from unnamed ponds or lakes close to the drill sites. Each drill uses 53 m<sup>3</sup>/day and up to 5 drills will be active at any one time. Approximately 294 m<sup>3</sup>/day will be returned to the receiving environment; up to 5 m<sup>3</sup>/day will be lost down drill holes upon the completion of drilling and a small amount of waste water with drill cuttings will be disposed of in natural depression close to drill sites. Calcium chloride (CaCl<sub>2</sub>) will be used in drilling resulting in high calcium and chloride in the receiving water. Reclamation is currently underway of the camp formerly known as Meliadine East with completion expected in early 2011. All drummed fuel and berms have been removed to the Meliadine camp.

Based on the information provided by Comaplex, EC provides the following comments for the NWB's consideration:

- The proponent shall not deposit, nor permit the deposit of chemicals, sediment, wastes, or fuels associated with the project into any water body. According to the *Fisheries Act*, Section 36 (3), the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.
- All mitigation measures identified by the proponent, and the additional measures suggested herein, should be strictly adhered to during project activities. This will require awareness on the part of the proponents' representatives (including contractors) during operations in the field. EC recommends that all field operations staff be made aware of the

proponents' commitments to these mitigation measures and provided with appropriate advice/training on how to implement these measures.

- Land-based drilling should not occur within 30 m of the high water mark of any water body and the proponent should follow mitigation measures preventing the degradation of permafrost.
- EC notes that the proponent plans to dispose of their drill wastes, including  $\text{CaCl}_2$ , into natural depressions close to the drill sites. Considering that  $\text{CaCl}_2$  is harmful to the environment when released in high concentrations, EC recommends that all drilling effluent should be directed to a sump that is properly constructed and adequately sized to ensure there is no runoff and that water bodies downstream of drilling activities are not affected. All efforts shall be made to prevent drill mud, drill additives, return water and cuttings from migrating from the drill site. Further, EC does not support the practice of relying on permafrost integrity to contain and isolate drilling wastes especially if they contain freeze depressants (e.g. salts).
- The proponent states that bulky items, scrap metal and empty barrels will be shipped off site for disposal for the remediation of the former Meliadine East camp. If solid waste is shipped to the nearest community for disposal, EC suggests that confirmation and authorization be obtained from the intended community landfill (i.e., Rankin Inlet) prior to shipment.

Comments previously submitted on behalf of EC regarding water license 2BE-MEP0813 would still apply to this project. If there are any changes in the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact the undersigned with any questions or comments with regards to the foregoing at (867) 975-4631 or by email at [Paula.C.Smith@ec.gc.ca](mailto:Paula.C.Smith@ec.gc.ca).

Yours truly,



Paula C. Smith  
Environmental Assessment Coordinator

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