



Environment Canada **Environnement Canada**

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Via Email

Re: NWB2MEL0507/TR/H1 – Comaplex Minerals Corporation – Submission of Abandonment and Restoration Plan

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of 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 Corporation (Comaplex) has submitted an Abandonment and Restoration Plan (A & R Plan) as a requirement of Part H, Item 1 of its NWB2MEL0507 water licence. This licence applies to the Meliadine West Gold Project located 25 km north of Rankin Inlet with coordinates of 63° 01' 30"N, 92° 10' 20"W. This project is in an exploration phase. Its camp is positioned on a peninsula that extends into Lake Meliadine and can accommodate 75 people. The proponent has conducted mineral exploration activities on Inuit Owned Lands in the Meliadine West area since June of 1995. It intends to perform both surface diamond drilling and underground exploration (bulk sampling) operations in the near future.

The project is accessible by truck through the use of a winter road that passes over tundra, fresh water ice, and the sea ice of Hudson Bay, having a haul route of 28 km. This seasonal road is used to transport most bulk supplies, including fuel, to the project area. In an effort to facilitate exploration activities and the development of a commercial mine, the proponent is considering the construction of an all-season road between the project's camp and deposit area in the late winter/spring of 2006.

The project's A & R Plan provides a list of company contacts, an infrastructure summary, demobilization procedures, and reclamation practices. If there is no further activity in the Meliadine West area when the proponent's lease expires, collected drill core will be restacked on durable gravel pads for long term storage and access.



Environment Canada encourages the proponent to consider the following recommendations when revising its Meliadine West Gold Project's Abandonment and Restoration Plan.

- The A & R Plan should address the eventual decommissioning of any winter and/or access roads related to this project. EC recommendations include:
 - Site preparation strategies that avoid erosion and sedimentation to any body of water.
 - Seeding with deep-rooted vegetation (i.e., native shrubs) to help stabilize stream and lake banks.
 - Disturbed soil shall be graded to a stable slope to minimize runoff and erosion.
 - Runoff shall be diverted away from exposed soil and runoff velocities shall be kept low.
 - The proponent should make every effort to trap sediment before it can enter water bodies and cause damage to fish habitat and resources.
- With respect to demobilization at the site, EC recommends the removal of as much infrastructure as possible. For combustible material that cannot be removed from the site, EC recommends the use of an approved incinerator. Should sites be chosen for open burning of remaining wood and other combustibles, it is expected that the selected sites will not include tundra (i.e, use a gravel pad).
- Chemical storage locations are to be indicated on a map along with those for fuels. This condition is outlined in Part H, Item 2 (iii) of the NWB2MEL0507 licence. Furthermore, the proponent is advised to fulfill Part H, Item 2 (iv) which requires the provision of a chemical inventory.
- EC requests the inclusion of abandonment and restoration procedures for diamond drilling activities in the A & R Plan. EC recommends the following practices:
 - Drilling wastes from land based drilling shall be disposed of in a sump such that the contents do not enter any water body.
 - All sumps shall be backfilled upon completion of drilling and contoured to match the surrounding landscape.
 - If an artesian flow is encountered, the drill hole shall be immediately plugged and permanently sealed.
- Should the proponent be granted permission to collect bulk ore samples and the establishment of a gravel quarry, the A & R Plan should be revised to include mitigation measures that will be practiced in their eventual decommissioning.
- When restoring fuel and chemical storage areas after their discontinued use, care must be taken in the final grade design to ensure that the potential for ponding is eliminated.
- It would be prudent of the proponent to consider temporary shutdown and long-term shutdown abandonment scenarios be implemented when possible.
- EC recommends that the project coordinates be presented in the A & R Plan.
- EC recommends that all field operations staff be made aware of the proponents' commitments to its project's abandonment and restoration and be provided with appropriate advice / training on how to implement mitigation measures



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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 me if you have any questions or comments with regards to the foregoing at (867) 975-4631 or by email via david.abernethy@ec.gc.ca.

Regards,

David W. Abernethy
Environmental Assessment Technician

cc: Colette Spagnuolo (Environmental Assessment & Contaminated Sites Specialist, Iqaluit)