



**Environment Environnement
Canada Canada**

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Our file: 4703 001 003

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Via Email at licensing@nwb.nunavut.ca

RE: NWB1GOO – Miramar Bathurst Resources Ltd. – Goose Lake Project Renewal

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*.

Miramar Bathurst Resources Ltd. is proposing to resume mineral exploration programs at the Goose Lake deposit. This deposit was recently acquired by the proponent from Kinross Gold Corp. through a Joint Venture partnership. Proposed activities include diamond drilling, trenching, bulk sampling, monitoring, and the establishment of an exploration camp at Goose Lake.

Environment Canada requires the following information in order to facilitate our review of the application:

- The application makes reference to the "odd grab sample" being taken from the grey water sump. Environment Canada requests clarification regarding the frequency at which this sump will be sampled and the parameters to be sampled for.
- The application and supporting documents currently provide two different water usage estimates. The NWB application (Question #7) states that water usage will not exceed 10 cubic meters daily, while the non-technical description indicates that the application is for 100 cubic meters daily. Environment Canada requests clarification regarding which of these numbers is correct.
- A map providing the location of any sumps created for the disposal of grey water or drill cuttings, as well as the location of the remediation disposal area (referred to the non-technical description) should be provided.

Environment Canada recommends that the following conditions be applied throughout all stages of the project:

- The proponent shall not deposit, nor permit the deposit of any fuel, drill cuttings, chemicals, wastes or sediment 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 other deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.
- Drilling additives or muds shall not be used in connection with holes drilled through



- lake ice unless they are re-circulated or contained such that they do not enter the water, or demonstrated to be non-toxic.
- For “on-ice” drilling, return water released must be non-toxic, and not result in an increase in total suspended solids in the immediate receiving waters above the Canadian Council of Ministers for the Environment Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100mg/L).
 - Land based drilling should not occur within 30 m of the high water mark of any water body. Drilling wastes from land based drilling shall be disposed of in a sump such that the contents do not enter any water body.
 - If an artesian flow is encountered, the drill hole shall be immediately plugged and permanently sealed.
 - The proponent shall not store materials on the surface ice of lakes or streams, except that which is for immediate use.
 - The Abandonment and Restoration Plan included with the application makes reference to using biodegradable peat moss to remediate petroleum spills or contamination around the waste incinerator. The proponent shall ensure that all contaminated soils receives proper treatment and disposal at an approved facility.
 - The Abandonment and Restoration Plan included with the application also refers to clearing the secondary containment area of the fuel farm of any debris and water in the event of closure. While EC supports the clearing of debris, additional information is required regarding the location to which water within the containment area would be decanted to and what parameters the water would be analyzed for prior to release to the environment.
 - Environment Canada recommends the use of an approved incinerator for the disposal of combustible camp wastes.
 - Any sumps, including those created for the disposal of drill cuttings, shall be located above the high water mark of any water body and in such a manner as to prevent the contents from entering any water body frequented by fish. Further, all sumps shall be backfilled upon completion of the field season and contoured to match the surrounding landscape.
 - All fuel caches shall be located above the high water mark of any water body. Further, given the large amount of fuel to be stored on site, EC recommends the use of secondary containment, such as self-supporting insta-berms, when storing barreled fuel on location rather than relying on natural depressions.
 - The proponent shall ensure that any non-combustible waste is disposed of appropriately at an approved facility.
 - The proponent shall ensure that any hazardous materials, including waste oil, receive proper treatment and disposal at an approved facility.
 - **All spills** are to be documented and reported to the 24 hour Spill Line at (867) 920-8130.
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- Environment Canada recommends that all activities be conducted outside the migratory bird breeding season, which extends from approximately June 1-July 15. These dates are approximate, and if active nests (i.e., nests containing eggs or young) are encountered outside of these dates, the proponent should avoid the area until nesting is complete (i.e., the young have left the nest). Paragraph 6(a) of the *Migratory Birds Regulations* state that no one shall disturb or destroy the nests or eggs of migratory birds.



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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 with any questions or comments with regards to the foregoing at (867) 975-4639 or by email at colette.meloche@ec.gc.ca.

Yours truly,

Original signed by

Colette Spagnuolo
Environmental Assessment / Contaminated Sites Specialist

cc: (Stephen Harbicht, Head, Assessment and Monitoring, Environment Canada, Yellowknife)