



Environmental Protection Operations Directorate  
Prairie & Northern Region  
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P.O. Box 2310  
Yellowknife, NT X1A 2P7

ECCC File: 61000 000 192/001  
NWB File: 2BE- WOL----

May 27. 2019

Via email at: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

Ida Porter  
Licensing Administrator  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0B 1J0

Dear Ida Porter:

**RE: 2BE-WOL---- – Rio Algom Exploration Inc. – Wolverine Project Exploration –  
Type B Water Licence**

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the above-mentioned Type B Water Licence and is submitting comments via email as requested by NWB. ECCC's specialist advice is provided based on our mandate in the context of the *Canadian Environmental Protection Act*, the *Migratory Birds Convention Act*, the *Species at Risk Act* and the pollution prevention provisions of the *Fisheries Act*.

The following comments are provided:

1. Migratory Birds

Reference

- Wolverine Project - Project Description

Comment

ECCC notes that Rio Algom Exploration Inc. (the Proponent) has stated that they will be reliant on wildlife monitors in order to avoid impacts from flying to musk ox and caribou. However, the Proponent does not appear to take into consideration requirements to avoid harm under the *Migratory Birds Convention Act* (MBCA).

Paragraph 6(a) of the *Migratory Bird Regulations* states that no one shall disturb or destroy the nests or eggs of migratory birds. Migratory birds, the nests of migratory

birds and/or their eggs can be inadvertently harmed or disturbed as a result of many activities including disturbance by aircraft.

Migratory birds potentially present in the area identified for exploration includes Buff Breasted Sandpiper, Peregrine Falcon, Red-Necked Phalarope and Red Knot Rufa. These migratory bird species may be found nesting in and around the camp and exploration areas from the end of May until mid-August.

#### ECCC Recommendation(s)

ECCC recommends that all staff present in the camps understand and are aware of the regulations relating to the MBCA. For further information on how to protect migratory birds and their nests and eggs when planning or carrying out project activities, consult Environment Canada's web page at:  
<https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html>

## 2. Incineration of Spilled Fuel on Snow and Ice

#### Reference

- Rio Algom Exploration Inc. Wolverine Project Fuel Spill Contingency Plan Section 6.2 Spills on Snow, Section 6.3 Spills on Ice.

#### Comment

The Proponent states in Section 6.2 Spills on Snow that "Where safe, disposal can be done through in-situ combustion with approval from government and safety consultants." The Proponent also states in Section 6.3 that "Fuel/petroleum products that have collected in ice slots may be disposed of by in-situ burning if sufficient holes are drilled in ice. Once all the holes are drilled, the oil which collects in the holes may be ignited. Consult with fire/safety consultants and government authorities to obtain approval." ECCC discourages the burning of spilled fuel since it is harmful to wildlife and aquatic life. Spilled fuel does not readily biodegrade both before and after combustion and has potential to bio-accumulate in the environment and runoff to waterbodies and potable water sources and must be avoided.

Snow is a natural sorbent which allows spills to be easily recovered. Small spills to snow can be easily contained, collected in sealable containers, stored and transported to an approved disposal facility. Additional sorbents found in typical spill kits can also be utilized.

In-situ combustion of spilled petroleum products to snow and ice presents inherent risks of introducing remnant hydrocarbons and combustion residue to the immediate environment, including to soil, ground water and surface water. Burning should therefore only be considered as a last resort if other approaches are deemed not to be feasible in the given situation.

ECCC notes that the risk of combusting-spilled fuel has a certain likelihood that when the snow melts it will release some of the hydrocarbons to the soil, which could then either absorb into the soil or run off to another receptor. Even if the underlying ground is frozen and most of the fuel burns. Some residuals would still exist and be left behind, which then could enter the soil and/ or water in the spring impacting waters frequented by fish, migratory birds and species at risk. The typical method utilized is to use the snow like an absorbent sponge and then collect it all up and transport it to an approved disposal facility.

#### ECCC Recommendation(s)

ECCC recommends that the proponent either remove the statement about burning spilled fuel from the Fuel Spill Contingency Plan or stress that burning of spilled fuel or any other hydrocarbons should only be considered as a last resort if other approaches are deemed not to be feasible in the given situation.

### 3. Incineration of Used Waste Oil

#### Reference

- Rio Algom Exploration Inc. Wolverine Project Water Licence Application Section 15 – Combustible waste and Hazardous waste/waste oil
- Rio Algom Exploration Inc. Wolverine Project Abandonment and Restoration Plan

#### Comment

ECCC notes that the Proponent stated in their water licence application that waste oil will be transported back to Cambridge Bay/ Yellowknife for disposal and that only paper and inert waste will be incinerated. However, in the Abandonment and Restoration plan under the section for waste the Proponent states that used motor oil will be burned in the incinerator. ECCC does not recommend the burning of combustible waste as a means of disposal, as it can produce smoke and pollutants including dioxins and furans.

#### ECCC Recommendations

ECCC recommends that the project be planned to ensure that the amount of combustible waste requiring incineration is minimized and that spent motor oil is taken back to Cambridge Bay/ Yellowknife for proper disposal.

ECCC recommends that if the Proponent should wish to use waste oil as an auxiliary fuel for the incinerator they should consult ECCC's Technical Document for Batch Waste Incineration ([http://publications.gc.ca/collections/collection\\_2010/ec/En14-17-1-2010-eng.pdf](http://publications.gc.ca/collections/collection_2010/ec/En14-17-1-2010-eng.pdf))

Should you require further information, please do not hesitate to contact me at (867) 669-4744 or [Eva.Walker@canada.ca](mailto:Eva.Walker@canada.ca).

Sincerely,

*[Original signed by]*

Eva Walker  
Environmental Assessment Coordinator

cc: Georgina Williston, Head, Environmental Assessment North (NT and NU)  
ECCC Review Team