



Environmental Protection Operations Directorate
Prairie & Northern Region
5019 52nd Street, 4th Floor
P.O. Box 2310
Yellowknife, NT X1A 2P7

ECCC File: 61000 000 193/001
NWB File: 2BE- HCP----

June 14. 2019

Via email at: licensing@nwb-oen.ca

Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Richard Dwyer:

RE: 2BE-HCP---- CANARC Resource Corp. – Hard Cash Project – 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. Incineration of Spilled Fuel on Snow and Ice

Reference

- CANARC Resource Corp. Hard Cash Project Fuel Contingency Plan: Section 6.0 Action Plans

Comment

The Proponent states in Section 6.3 Spills on Ice "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.

In-situ combustion of spilled petroleum products to 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 ice 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.

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

Sincerely,

[Original signed by]

Eva Walker
Environmental Assessment Coordinator

cc: Margaret Fairbairn, Manager Environmental Operations and Protection
Directorate, Prairie and Northern Division
ECCC Review Team