Environment and Climate Change Canada | Environnement et Changement climatique Canada

Environmental Protection Operations Directorate
Prairie & Northern Region
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ECCC File: 6100 000 115 /003
NWB File: 8BC-BRP----

January 8, 2018

Via email: licensing@nwb-oen.ca

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

**RE: 8BC-BRP---- - Sabina Gold & Silver Corp.- Back River Project - Type B Water Licence Application**

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

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

Sincerely,

*[original signed by]*

Loretta Ransom
Senior Environmental Assessment Coordinator

Attachment(s): ECCC Comments Table

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

**8BC-BRP---- - Sabina Gold & Silver Corp.- Back River Project - Type B Water Licence Application – ECCC Comments**

| Reference | Comments | Recommendation |
|---|---|---|
| Main Application Document (MAD) Section 3.1.2.9 page 29; Section 3.2.2.6 page 38 | In-water works include the installation of water intake and discharge structures in both the freshwater and marine environments. In both cases, Sabina Gold & Silver Corp. (the Proponent) states that "Total suspended solids (TSS) and turbidity levels will be monitored throughout construction and work will be delayed if TSS levels and turbidity become too high." It is not specified what would be considered as unacceptable levels.<br><br>Protective levels of TSS and turbidity could be specified either through the use of water licence criteria for TSS/turbidity for waters adjacent to in-water works, or with specified thresholds for triggering additional mitigation or shutdown of work. In either case, appropriate monitoring should be described. | ECCC recommends the Type B water licence include a mechanism for ensuring mitigation measures triggers for in-water works are explicitly defined. For example, this could be done through limits for TSS/turbidity in the waters adjacent to construction works, or by setting thresholds for mitigation in a TSS management plan.<br><br>ECCC also recommends TSS/turbidity monitoring be identified and included in a plan, along with QA/QC for the use of turbidity as a surrogate for TSS. |
| MAD Section 3.2.2.6 page 38 | The application describes mitigation measures to be used for in-water works at the Marine Laydown Area. These include installation of silt curtains to isolate the areas being disturbed by the work.<br>There is no information provided on tidal amplitude, which is presumed to be low this far inland, but it should be confirmed that tides will not affect the use of silt curtains. | ECCC recommends the Proponent confirm that mitigation measures such as the use of silt curtains will not be influenced by tides at the Marine Laydown Area. |
| MAD Table F-1 List of Permits, Licences & Authorizations | Submission and milestone timing has not been updated. | ECCC recommends the Proponent update specified timing of events and submissions. |

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| Environmental Management & Protection Plan<br>Table 3.3-1 | Section 3.3 discusses water quality monitoring. Table 3.3-1 lists proposed monitoring at Goose and the Marine Laydown Area for road construction and culvert installation. Frequency is listed for culvert installations as “Once during freshet; additional as required during construction”, and this is just for TSS and turbidity. Further details would be useful on the frequency of monitoring, and what would indicate that monitoring can be stopped.<br><br>Marine environment monitoring at the Marine Laydown Area is listed for BRP0-46 to 48; the marine group of parameters (group F) should be included in addition to groups A and C. This would pick up salinity variation in the area of the discharge, as well as the potential for hydrocarbons and a broader list of metals in the marine receiving environment and barge activity area. | ECCC recommends the Proponent further describe the proposed frequency and triggers for monitoring of road and culvert installation construction sites.<br><br>ECCC recommends monitoring of the marine receiving environment and barge area include Group F as well as A and C. |