



July 7, 2022

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

**Re: Application for Renewal of Water Licence 2BE-MLL1722**

Dear Richard,

Sabina Gold & Silver Corp. (Sabina) would like to request a renewal and extension to water license 2BE-MLL1722 (the Licence) for the Wishbone-Malley Project. Sabina is requesting a renewal of the license for a further 5 years from June 30, 2022 to June 30, 2027 to allow continued exploration in this area. This is an application for renewal without modification; no modifications or amendments to 2BE-MLL1722 have been identified as necessary.

Wishbone-Malley is an exploration area which has no currently erected infrastructure, although the Licence permits the construction of seasonal or temporary camps to support exploration activities. As in previous years, Sabina intends to continue to make use of existing Back River Project facilities, when possible, to support regional exploration and minimize exploration activity footprint. This includes utilizing existing camps and waste management infrastructure at Goose, George or the MLA for Wishbone-Malley exploration to the extent practical. Activities at these sites will adhere to all authorizations and approved management plans applicable to those camps and facilities.

As referenced in the Licence, there is also some overlap between the extents of this Licence and 2BE-GEO2025 and 2BE-GOO2028, which are both components of Sabina's wider Back River Project undertakings. Sabina will continue to treat exploration activities that overlap with either of these licences as if they were solely under the project extents of 2BE-GEO2025 or 2BE-GOO2028 (as applicable).

**Application Form**

A completed Nunavut Water Board (NWB) renewal application form is included as Attachment 1. A map showing the Project location is included as Attachment 2.

**Scope of Activities Proposed Under the Water Licence Renewal**

This renewal does not represent a change in scope for the Project. Activities and water use will be consistent with current authorizations.

## Previous Land Use Planning Conformity and NIRB Screenings

As per the requirements of the Nunavut Planning and Project Assessment Act, this application has been submitted to the Nunavut Planning Commission (NPC) for a determination of whether a land use plan conformity review and a screening by Nunavut Impact Review Board (NIRB) is required. This Project was last reviewed by the NPC during the 2017 renewal of this Licence. An NPC determination concluding that the Project was outside the area of an applicable land use plan and that it was exempt from screening by the NIRB was issued on March 22, 2017 (Attachment 3; NPC File # 148494).

The first Type B Water Licence for the Wishbone-Malley Project was issued in 2012. The Licence was renewed without amendment in 2017. This Project was initially screened by the NIRB in 2006 (see May 15, 2006 NIRB Screening Decision Report – Bolder Property – File No. 06EN033 (Attachment 4). A consolidated screening of all Dundee Precious Metals Inc.'s holdings in the Beechy Lake area (inclusive of the Back River and Wishbone claim areas) was completed in 2008 under NIRB file 08EA084 and a screening decision report issued by the NIRB on March 3, 2009 (Attachment 5).

Sabina notes that the Wishbone-Malley Project still lies outside of a planning region with an approved regional land use plan and, being a renewal application without change, it is anticipated that neither an NPC conformity review or a NIRB screening will be required, as was determined to be the case when last renewed.

## Updated Plans

Sabina's environmental management plans for the Wishbone-Malley Project and exploration project and Water Licence have been reviewed and updated, and revisions are provided with this application as Attachments 6, 7, and 8:

Date	Plan
2022 May	Back River Project Exploration Spill Contingency Plan
2022 June	Exploration Non-Hazardous Waste Management Plan
2022 May	Back River Project Abandonment and Restoration Plan, Wishbone – Malley

## Updated Security Assessment

A letter of credit is held by the Kitikmeot Inuit Association (KIA) for this Project under KTL312C004. Sabina is providing an Abandonment and Restoration Plan with this application (Attachment 8) which describes a theoretical camp and appropriate abandonment and restoration measures. It is noted that no infrastructure is currently located within the Wishbone-Malley project area.

## Updated Financial Statement

Sabina's most recent financial statements can be found on its website at <http://www.sabinagoldsilver.com/investors/financial-reports>. 2022 first quarter interim financial results indicated that the company had cash and cash equivalents \$181 million at March 31, 2022. More information is available at: <http://www.sabinagoldsilver.com/assets/docs/fs/2022-Q1-FS.pdf>

## **Compliance Assessment / Status Reports**

Water Resources Inspector inspection reports can be found on the NWB public registry. There are no outstanding compliance or Water Resources Inspector concerns related to this Licence.

## **English, Inuinnaqtun and Inuktitut Summaries of Renewal Application**

Plain language summaries of the activities contemplated under the renewal are included as Attachment 9.

## **Application Fee and Water Use Deposit**

The renewal application form requires submission of a \$30 application fee plus a water use fee deposit of \$30. A cheque addressed to the Receiver General for Canada is being forwarded to the Nunavut Water Board office in Gjoa Haven.

Should you have any questions or concerns or require additional information, please do not hesitate to contact me.

Regards,

Merle Keefe  
Manager, Environmental Permitting  
Sabina Gold & Silver Corp.  
#1800 – 555 Burrard Street  
Vancouver, BC  
V7X 1M9

### *Enclosed:*

*Attachment 1 – Application Form*  
*Attachment 2 – Project Map*  
*Attachment 3 – March 22, 2017 NPC Conformity Determination File 148494*  
*Attachment 4 – May 15, 2006 NIRB Screening Decision Report File No. 06EN033*  
*Attachment 5 – March 3, 2009 NIRB Screening Decision Report File No. 08EA084*  
*Attachment 6 – Exploration Spill Contingency Plan*  
*Attachment 7 – Exploration Waste Management Plan*  
*Attachment 8 – Abandonment and Restoration Plan*  
*Attachment 9 – Plain Language Summaries*  
*Attachment 10 – Certificate of Amendment of Registration*

## **ATTACHMENT 1 – APPLICATION FORM**

# ATTACHMENT 1



Application for Water Licence Renewal

Document Date: April 2013

Application Submission Date:

11/07/2022

Month/Day/Year

P.O. BOX 119  
GJOA HAVEN, NUNAVUT  
XOB 1J0  
TEL: (867)360-6338  
FAX: (867)360-6369

kNK5 wmoEp5 vtmpq  
NUNAVUT IMALIRIYIN KATIMAYIT  
NUNAVUT WATER BOARD  
OFFICE DES EAUX DU NUNAVUT

## DOCUMENT MANAGEMENT

Original Document Date: April 2010

### DOCUMENT AMENDMENTS

	Description	Date
(1)	Updated for public distribution as separate document from NWB Guide 7	June 2010
(2)	Updated NWB logos and reformatted table to allow rows to break across page	May 2011
(3)	New NWB logo and request for background information	April 2013
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		



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## APPLICATION FOR WATER LICENCE RENEWAL

Your application may be classified as a **renewal** only if all operations remain the same as previously licensed and only the term of the licence requires change. If your application contemplates:

- a change to the volume of water authorized for use;
- a new activity related to water use or waste disposal;
- a new component related to water use or waste disposal;
- a change in predicted environmental impacts(s); and/or
- a change to any term or condition of the original licence

your application is **NOT** classified as a renewal but rather an amendment and will require submission of an Application for Water Licence Amendment. Licensees applying for combined renewal / amendment are also referred to the Application for Water Licence Amendment.

The applicant is referred to the NWB's Guide 7: Licensee Requirements Following the Issuance of a Water Licence for more information about this application form.

Where possible, provide background information regarding the original licence application or attach previously submitted information.

EXISTING LICENCE NO: 2BE-MLL1722

### 1. LICENSEE CONTACT INFORMATION

Is the licensee the same as that referred to on the existing licence?

☒ Yes ☐ No

If No, a licence assignment must be completed and approved by the NWB. **A renewal will only be issued in the name of the current licensee in the absence of assignment of the licence.**

If the licensee is the same, but the name of the licensee has changed, attach a certificate of name change.

Name: Sabina Gold & Silver Corp.

Address: #1800 – 555 Burrard Street Box 220, Vancouver, BC V7X 1M9

Phone: 604-998-4175

Fax: 604-998-1051

e-mail: mkeefe@sabinagoldsilver.com



**2. LICENSEE REPRESENTATIVE CONTACT INFORMATION** – If different from Block 1.

Name: Merle Keefe

Address:

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

e-mail: \_\_\_\_\_

(Attach authorization letter.)

**3. NAME OF PROJECT**

Is the name of the project the same as that considered in the existing water licence?

☒ Yes ☐ No

Indicate the name of the project including the name of the location: Wishbone-Malley Project

**4. LOCATION OF UNDERTAKING**

Is the location of the undertaking the same as that considered in the existing water licence?

☒ Yes ☐ No

**Project Extents**

Latitude: 66° 00' 00" N Longitude: 109° 00' 00" W

Latitude: 66° 00' 00" N Longitude: 106° 45' 00" W

Latitude: 66° 45' 00" N Longitude: 106° 45' 00" W

Latitude: 66° 45' 00" N Longitude: 109° 00' 00" W (Project Extents)

As acknowledged in the Licence (2BE-MLL1722), there is some overlap between the extents of this Licence and 2BE-GEO2025 and 2BE-GOO2028, which are both components of Sabina's wider Back River Project undertakings. Sabina continues to treat exploration activities that overlap with either of these licences as if they were solely under the project extents of 2BE-GEO2025 or 2BE-GOO2028 (as applicable)

**Camp Location(s) –**

No camp is currently established.

Temporary and/or seasonal camps may be constructed to support exploration activities. Camp locations may include:

Latitude: 65° 28' 35" N Longitude: 107° 37' 31" W (Rocky Camp)

Latitude: 65° 24' 18" N Longitude: 107° 39' 48" W (Rocky 2 Camp)

GPS coordinates of other camp locations would be provided in the annual reports (per Licence Part B, Item 2), and notification would be provided prior to use of new water sources as per Licence Part C, Item 2.

**5. MAP**

Are the locations of the main components of the undertaking the same as those considered in the existing licence?

☒ Yes   ☐ No

Attach a topographical map, indicating the main components of the undertaking.

See Figure 1 – Location of Project and Mineral Claims (Attachment 2)

NTS Map Sheet No.: 076F09, 076F16, 076G03, 076G05, 076G06, 076G12, 076G13  
Lake, 076G Beechy Lake

Map Scale: 1:50,000

Map Name: 076F Nose

## 6. NATURE OF INTEREST IN THE LAND

Is the nature of the interest in the land the same as that considered in the existing water licence?

☒ Yes ☐ No

Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).

### Sub-surface

☐ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)

Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

☒ Mineral Lease from Indian and Northern Affairs Canada (INAC) - N2016C0011

Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: 2023-10-26

### Surface

☒ Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC) N2016C0011

Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: 2023-10-26

☒ Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA) - KTL312C004

Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: 2022-10-16

☐ IOL Authorization from Kivalliq Inuit Association (KivIA)

Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

☐ IOL Authorization from Qikiqtani Inuit Association (QIA)

Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

☐ Commissioner's Land Use Authorization

Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

☐ Other \_\_\_\_\_

Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

Is the name of the entity(s) holding authorizations the same as that considered in the existing water licence?

☒ Yes ☐ No

If No, a licence assignment must be completed and approved by the NWB.

Name of entity(s) holding authorizations: Sabina Gold & Silver Corp.

## 7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

Is the undertaking located in the same land use planning area as that considered in the existing licence?

☒ Yes ☐ No

Indicate the land use planning area in which the project is located.

☐ North Baffin  
☐ South Baffin  
☐ Akunnig

☐ Keewatin  
☐ Sanikiluaq  
☒ West Kitikmeot

Was a land use plan conformity determination required from NPC prior to the issuance of the existing water licence?

☒ Yes ☐ No

If Yes, indicate date issued and attach copy. March 22, 2017, Attachment 3

Does the proposed renewal change the original NPC conformity determination or the need to obtain one?

☒ Yes ☐ No

If Yes, indicate date issued (or expected) and attach a copy. This renewal application has been provided to the NPC for a conformity determination. A determination is anticipated within 45 days of this submission. Sabina notes that this Project Proposal lies outside of a planning region with an approved regional land use plan.

If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

## 8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION

Was a screening determination required from NIRB prior to the issuance of the existing water licence?

☐ Yes ☒ No

If Yes, indicate date issued and attach copy. This Project was initially screened by the NIRB in 2006 (see May 15, 2006 NIRB Screening Decision Report – Bolder Property – File No. 06EN033 (Attachment 4). A consolidated screening of all Dundee Precious Metals Inc.'s holdings in the Beechy Lake area (inclusive of the Back River and Wishbone claim areas) was completed in 2008 under NIRB file 08EA084 and a screening decision report issued by the NIRB on March 3, 2009 (Attachment 5).

Does the proposed renewal change the original NIRB screening determination or the need to obtain one?

☐ Yes ☒ No

If Yes, indicate date issued (or expected) and attach a copy. \_\_\_\_\_  
If No, provide written confirmation from NIRB confirming that a screening determination is not required. This application is being provided to the NPC who will make a determination on whether additional screening is required by the NIRB. This determination is anticipated to occur within 45 days of the submission to NPC.

## 9. DESCRIPTION OF UNDERTAKING

Is the description of the undertaking the same as that considered in the existing water licence?

☒ Yes ☐ No

List and attach plans and drawings or project proposal.

See the non-technical summary (Attachment 9) as well as the management plans provided in Attachments 6 through 8. No changes to the undertakings are proposed with this renewal.

## 10. OPTIONS

Are the alternative methods and locations that were considered to carry out the project the same as those considered in the existing water licence?

☒ Yes ☐ No

Provide a brief explanation of the alternative methods or locations that were considered to carry out the project. Sabina is committed to minimizing it's footprint due to on-going exploration activities. The option of supporting Wishbone-Malley exploration activities using existing Goose and George camp facilities is preferred. However, the need to ensure personnel safety means that they option of having temporary and/or seasonal camps in the project area is needed.

In considering locations for temporary camps, Sabina has identified a location of historic exploration. Ultimately, the primary locations will be chosen based on safety, operational needs, and environmental conditions. Sabina will notify regulators of the selected locations 30 days prior to installation, or as required.

## 11. CLASSIFICATION OF PRIMARY UNDERTAKING

Is the primary undertaking the same as that considered in the existing water licence?

☒ Yes ☐ No

Indicate the primary classification of undertaking by checking one of the following boxes.

- |  |  |
|--|--|
| <input type="checkbox"/> Industrial  | <input type="checkbox"/> Agricultural                    |
| <input checked="" type="checkbox"/> Mining and Milling (includes exploration/drilling/exploration camps) |  |
| <input type="checkbox"/> Conservation  | <input type="checkbox"/> Recreational                    |
| <input type="checkbox"/> Municipal (includes camps/lodges)   | <input type="checkbox"/> Miscellaneous (describe below): |
| <input type="checkbox"/> Power   |  |

See Schedule II of the *Northwest Territories Waters Regulations* for Description of Undertakings.

**12. WATER USE**

Is the type(s) of water use(s) the same as that considered in the existing water licence?

☒ Yes    ☐ No

Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> To obtain water for camp/ municipal purposes |   |
| <input checked="" type="checkbox"/> To obtain water for industrial purposes      | <input type="checkbox"/> To divert a watercourse                    |
| <input type="checkbox"/> To cross a watercourse                                  | <input type="checkbox"/> To modify the bed or bank of a watercourse |
| <input checked="" type="checkbox"/> To alter the flow of, or store water         | <input type="checkbox"/> Flood control                              |
| <input type="checkbox"/> Other: _____  |   |

### 13. QUANTITY OF WATER INVOLVED

Is the source of water the same as that considered in the existing licence?

☒ Yes

☐ No

Name of water source(s): Domestic Camp use – local lakes; Industrial use – lakes proximal to drilling targets

Is the quality of the water source and its available capacity the same as that considered in the existing licence?

☒ Yes ☐ No

Describe the quality of the water source(s) and the available capacity(s): In general, lakes in the area contain low TSS and turbidity levels, are nutrient poor, and contain low metal concentrations, typical of Arctic lakes. Most lakes have soft, near-neutral water, that is low in alkalinity. Naturally elevated metal concentrations occur in some lakes and likely results from the proximity of the lakes to metal-bearing minerals in the landscape. The quality of water for potable uses is tested prior to use to confirm it meets Canadian drinking water requirements and may be disinfected if necessary.

Is the overall estimated quantity of water to be used the same as that considered in the existing licence?

☒ Yes ☐ No

Provide the overall estimated quantity of water to be used: 200 m<sup>3</sup>/day

Are the quantity(s) of water to be used from each source the same as those considered in the existing licence?

☒ Yes ☐ No

Provide the estimated quantity(s) of water to be used from each source: As per Part C, Item 1 of the Water Licence, Sabina "...shall obtain all water for domestic camp use from sources proximal to the camp facility. Total camp water use shall not exceed seventy (70) cubic metres per day. Water for drilling shall be obtained from source(s), proximal to the drilling targets as outlined in the Application and shall not exceed one hundred and thirty (130) cubic metres per day. The volume of water for all purposes under this Licence shall not exceed two hundred (200) cubic metres per day."

Are the quantity(s) of water to be used for each purpose the same as those considered in the existing licence?

☒ Yes ☐ No

Provide the estimated quantities to be used for each purpose (camp, drilling, etc.): Domestic use: 70 m<sup>3</sup>/day; Drilling (including miscellaneous industrial use): 130 m<sup>3</sup>/day

Are the method(s) of extraction the same as those considered in the existing licence?

☒ Yes ☐ No

Describe the method(s) of extraction: same as existing licence; intakes equipped with fish screens/uptake rates meeting the DFO water intake guidelines. Water intake is quantified.

Are the quantity(s) of water returned to source(s) the same as those considered in the existing licence?

☒ Yes ☐ No

Estimated quantity(s) of water returned to source(s): 0 to 130 m<sup>3</sup>/day

Are the quality(s) of water(s) returned to source(s) the same as those considered in the existing licence?

☐ N/A ☒ Yes ☐ No

Describe the quality(s) of water(s) returned to source(s): Unused drill recirculation water is water circulated through the drill continuously but not used in the drilling process. This chemically unaltered water may be returned to the source watershed.

Any water which may be altered in any way is discharged at least 31m from any waterbody's high water mark.

**14. WASTE**

Are the type(s) of waste(s) to be generated and/ or deposited the same as those considered in the existing licence?

☒ Yes    ☐ No

Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Sewage                  | <input checked="" type="checkbox"/> Waste oil                      |
| <input checked="" type="checkbox"/> Solid Waste             | <input checked="" type="checkbox"/> Greywater                      |
| <input checked="" type="checkbox"/> Hazardous               | <input checked="" type="checkbox"/> Sludges                        |
| <input checked="" type="checkbox"/> Bulky Items/Scrap Metal | <input checked="" type="checkbox"/> Contaminated soil and/or water |
| <input type="checkbox"/> Animal Waste                       |  |
| <input type="checkbox"/> Other (describe): _____            |  |



## 15. QUANTITY AND QUALITY OF WASTE INVOLVED

Are the quantity(s) of the types of wastes involved the same as those considered in the existing licence?

☒ Yes ☐ No

Are the composition(s) of the types of wastes involved the same as those considered in the existing licence?

☒ Yes ☐ No

Are the method(s) of treatment for the types of waste involved the same as those considered in the existing licence?

☒ Yes ☐ No

Are the method(s) of disposal for the types of waste involved the same as those considered in the existing licence?

☒ Yes ☐ No

For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
Sewage	Pactio toilet waste in bags	2-3 bags/day	Backhaul to primary BRP facilities	Per Approved BRP Waste Management Plans (incinerated or used in landfarming) or on-site incineration and backhaul of ash
Solid Waste	Paper, plastic, wood, burlap, absorbent material, food wastes	20 bags a day	Backhaul to primary BRP facilities and/or Open burning on site (untreated wood and cardboard)	Per Approved BRP Waste Management Plans (landfilling, incineration, open burn) or on-site open burning/incineration (for allowable materials) and backhaul of ash
Hazardous	Batteries, contaminated materials	Variable	Backhaul to primary BRP facilities	Per Approved BRP Hazardous Materials Management Plan (shipped off site for final disposal)
Bulk Items/ Scrap Metal	Empty drums	Variable	Backhaul to primary BRP facilities	Per Approved BRP Waste Management Plans (landfilled or shipped offsite for recycling or disposal)
Waste Oil	Waste Oil	Variable	Backhaul to primary BRP facilities	Per Approved BRP Hazardous Materials Management Plan (shipped off site for final disposal or reused)
Greywater	Kitchen, bathing and laundry water	3 m3/d	Grease trap, Natural attenuation	Collection sump
Sludges	Water and rock mixture from drilling	500 gallons	Natural attenuation	Collection sump
Contaminated soil	Contaminated soil	1 m <sup>3</sup>	Backhaul to primary BRP facilities	Per Approved BRP Waste Management Plans (landfarmed or shipped offsite for disposal)
Contaminated water	Contaminated waler	1 m <sup>3</sup>	Backhaul to primary BRP facilities	Per Approved BRP Waste Management Plans (treated or shipped offsite for disposal)

## 16. OTHER AUTHORIZATIONS

In addition to the sub-surface and surface land use authorizations provided in Block 6, are the same authorizations required as considered in the existing licence?

☒ Yes ☐ No

For each provide the following:

Authorization: \_\_\_\_\_

Administering Agency: \_\_\_\_\_

Project Activity: \_\_\_\_\_

Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

There are no other authorizations required.

## 17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES

Are predicted environmental impacts of the undertaking and proposed mitigation measures the same as those considered in the existing water licence?

☒ Yes ☐ No

Describe direct, indirect, and cumulative impacts related to water and waste.

The potential environmental impacts related to the use of water and the disposal of waste from camp operation and drilling are as follows:

- Water will be sourced from lakes following DFO guidelines
- Camp waste is removed from site to primary BRP facilities where it is managed per the applicable BRP Waste Management Plan
- Greywater is discharged to a sump located at least 31 m from any waterbody high water mark
- Drills and drilling supplies are positioned using helicopters to minimize ground disturbance when the ground is unfrozen.
- When drilling on land, salt (calcium chloride) is added to drill water and water may be heated to keep the drill rods from freezing in the hole.
- Brine is not required for drilling on the ice into the bottom of larger lakes as these lakes are not underlain with permafrost.
- Water from drilling operations is recirculated to minimize the quantity of both water and salt used and to minimize runoff near the drill site.
- Drill cuttings are collected and subsequently deposited in a sump
- Drilling in lake bottoms occurs within a casing to minimize sedimentation.
- At each drill site (except those drilled from ice) drillholes are backfilled with cuttings and cement or bentonite.
- Drill casing and anchors are removed or cut and capped.

Cumulative impacts of drilling are minimized as a result of the above mitigation measures and progressive reclamation (backfilling) of drill holes. Sabina notes that past inspection reports by the CIRNAC Water Resources Inspector have commended Sabina on the handling of wastes and drill hole reclamation.

**18. WATER RIGHTS OF EXISTING AND OTHER WATER USERS**

Are the effects of the undertaking on any known persons or property including those that hold licences for water use in precedence to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature, the same as those considered in the existing water licence?

☒ Yes ☐ No

Provide the names, addresses and nature of use for any known persons or properties that may be adversely affected by the proposed undertaking, including those that hold licences for water use in precedent to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature.

Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.

**19. INUIT WATER RIGHTS**

Are the effects of the undertaking on the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL) the same as those considered in the existing water licence?

☒ Yes ☐ No

Advise the Board of any substantial affect of the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL), and advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO).

No substantial effects to the quality, quantity or flow of waters through IOL is expected to occur from water use and waste disposal contemplated in this licence renewal.

**20. CONSULTATION** - Provide a summary of any consultation meetings including when the meetings were held, where and with whom. Include a list of concerns expressed and measures to address concerns.

No consultation meetings were held in conjunction with this request. However, Sabina has carried out extensive consultation with nearby communities regarding it's Back River Project, as documented in Volume 3 of its Final Environmental Impact Statement and annual reports to the NIRB located on the NIRB public registry.

## 21. SECURITY INFORMATION

Is the financial security assessment the same as that considered in the existing water licence?

☒ Yes   ☐ No

Is the estimate of the total financial security for final reclamation the same as that considered in the existing water licence?

☒ Yes   ☐ No

Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken.

Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the *Mine Site Reclamation Policy for Nunavut*, Indian and Northern Affairs Canada, 2002.

The KIA holds security for this Licence under KTL312C004. Sabina is providing an Abandonment and Restoration Plan with this application (Attachment 8) which describes a theoretical camp and appropriate abandonment and restoration measures.

## 22. FINANCIAL INFORMATION

Is the statement of financial security the same as that considered in the existing water licence?

☒ Yes ☐ No

Provide an updated statement of financial security.

Sabina's most recent financial statements can be found on it's website at <http://www.sabinagoldsilver.com/investors/financial-reports> . 2022 first quarter interim financial results indicated that the company had cash and cash equivalents \$181 million at March 31, 2022. More information is available at: <http://www.sabinagoldsilver.com/assets/docs/fs/2022-Q1-FS.pdf>

If the applicant is a business entity please answer the questions below:

Is the list of the officers of the company the same as those considered in the existing water licence?

☐ Yes ☒ No

Provide a list of the officers of the company.

Bruce McLeod. President/CEO  
Wendy Louie. Vice-President. Finance & CFO  
Nicole Hoeller. Vice-President. Communications & Corporate Secretary  
Angus Campbell. Vice-President. Exploration  
Matthew Pickard. Vice-President, Environment & Sustainability

Is the Certificate of Incorporation or evidence of registration of the company name the same

☒ Yes ☐ No

Attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

See Attachment 11.

## 23. STUDIES UNDERTAKEN TO DATE

List and attach updated studies, reports, research etc.

Provide a compliance assessment and status report including a response to any inspector's reports. The licensee must contact the NWB for licence specific direction in completing the assessment and report.

If in non-compliance, a licence may not be issued until compliance is achieved. If in non-compliance, attach plans/reports for consideration. Application will not be processed if significant issues of non-compliance exist.

Sabina has conducted extensive studies related to the Back River Project (BRP) which includes the Wishbone-Malley area. The majority of these studies, reports and research can be found on the NIRB public registry and the NWB public registry

There are no outstanding compliance concerns in regard to this Licence.

## 24. PROPOSED TIME SCHEDULE

Is the time schedule for all phases of development (construction, operations, closure and post closure) the same as that considered in the existing licence?

☐ Yes    ☒ No

Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

### Construction

Proposed Start Date: June 2022      Proposed Completion Date: June 2027  
(month/year)      (month/year)

### Operation

Proposed Start Date: June 2022      Proposed Completion Date: June 2027  
(month/year)      (month/year)

### Closure

Proposed Start Date: \_\_\_\_\_      Proposed Completion Date: \_\_\_\_\_  
(month/year)      (month/year)

*Closure is not currently planned for exploration activities. Sabina anticipates that exploration will continue in parallel to mining activities at the BRP; throughout the mine life and beyond.*

### Post - Closure

Proposed Start Date: \_\_\_\_\_      Proposed Completion Date: \_\_\_\_\_  
(month/year)      (month/year)

For each applicable phase of development indicate which season(s) activities occur.

### Construction

☐ Winter    ☐ Spring    ☐ Summer    ☐ Fall    ☒ All season

### Operation

☐ Winter    ☐ Spring    ☐ Summer    ☐ Fall    ☒ All season

### Closure

☐ Winter    ☐ Spring    ☐ Summer    ☐ Fall    ☐ All season

### Post - Closure

☐ Winter    ☐ Spring    ☐ Summer    ☐ Fall    ☐ All season

**25. PROPOSED TERM OF LICENCE**

On what date does the existing licence expire? June 29, 2022

Indicate the proposed term of the renewal (maximum of 25 years): 5 years

Requested date of renewal issuance: June 30, 2022 Requested Expiry Date: June 30, 2027  
(month/year) (month/year)

(The requested date of renewal issuance must be at least three (3) months from the date of application for a type B water licence and at least one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's *Guide 5: Processing Water Licence Applications* for more information)

**26. ANNUAL REPORTING**

Is the annual report template expected to be the same as that considered in the existing licence?

☒ Yes ☐ No

If not using the NWB's *Standardized Form for Annual Reporting*, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

## 27. CHECKLIST

The following must be included with the application for renewal for the water licensing process to begin.

Completed Application for Water Licence Renewal form.

☒ Yes ☐ No If no, date expected \_\_\_\_\_

Updated plans, including designs and reports (see Block 23).

☒ Yes ☐ No If no, date expected \_\_\_\_\_

Updated security assessment (see Block 21).

☐ Yes ☒ No If no, date expected 30 days prior to camp construction

Updated financial statement (see Block 22).

☒ Yes ☐ No If no, date expected \_\_\_\_\_

Compliance Assessment / Status Report (see Block 23).

☒ Yes ☐ No If no, date expected \_\_\_\_\_

English Summary of Renewal Application.

☒ Yes ☐ No If no, date expected \_\_\_\_\_

Inuktitut and/or Inuinnaqtun Summary of Renewal Application.

☒ Yes ☐ No If no, date expected \_\_\_\_\_

Application fee of \$30.00 CDN (Payee Receiver General for Canada).

☒ Yes ☐ No If no, date expected \_\_\_\_\_

Water Use Fee Deposit of \$30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence.

A cheque addressed to the Receiver General for Canada is being forwarded to the Nunavut Water Board office in Gjoa Haven for payment of the Application Fee and the Water Use Deposit.

☒ Yes ☐ No If no, date expected \_\_\_\_\_



**28. SIGNATURE**

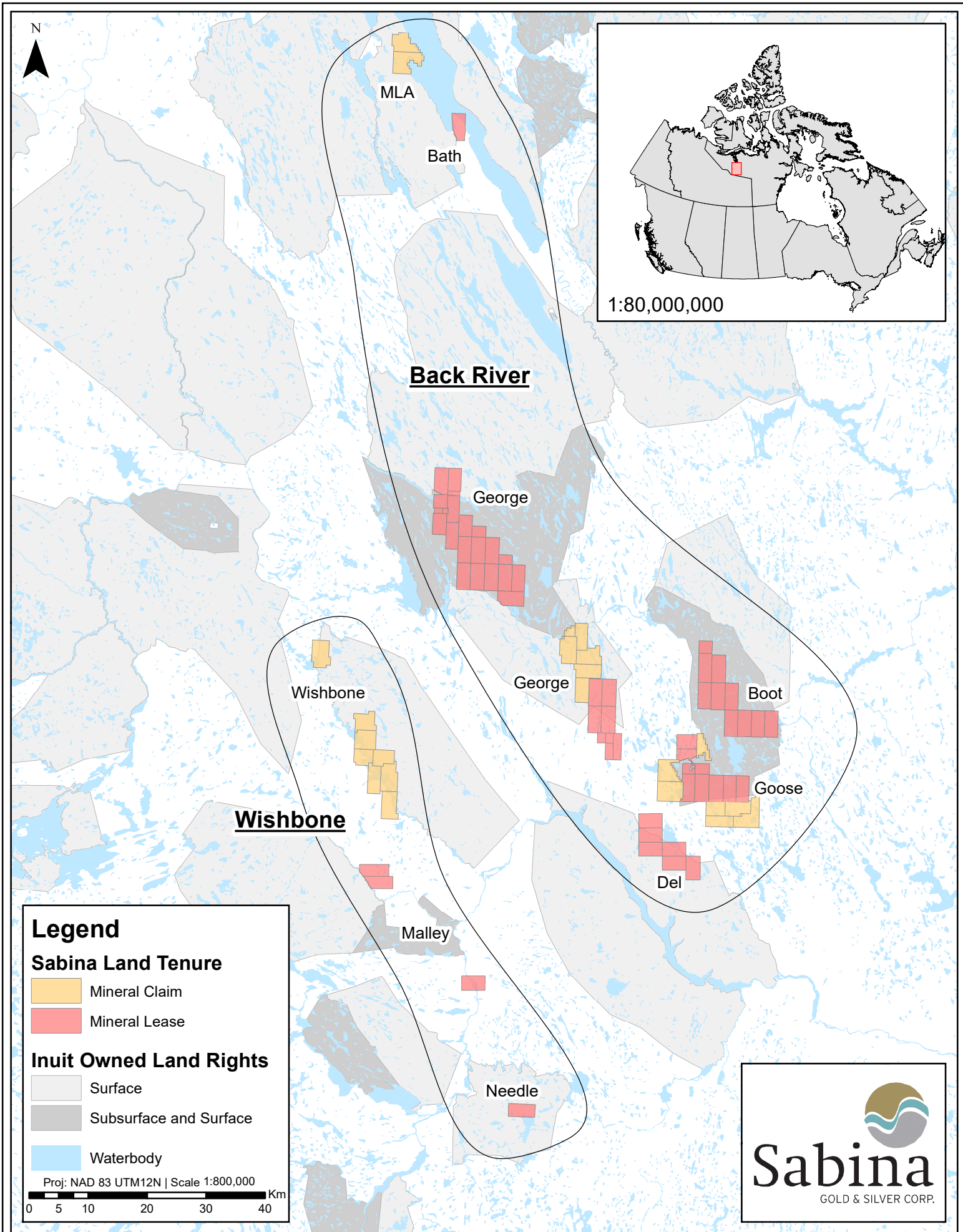
I, \_\_\_\_\_ (print name)

certify that the application requires no changes to water use or waste disposal as previously authorized and that the information given on this form is, to the best of my knowledge, correct and complete.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## **ATTACHMENT 2 - PROJECT MAP**



Back River and Wishbone Mineral Tenure Map

Figure 1

## **ATTACHMENT 3 - NPC CONFORMITY DETERMINATION**



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Nunavut Planning Commission  
Commission d'Aménagement du Nunavut

March 22, 2017

Karén Kharatyan  
Manager of Licensing  
Nunavut Water Board (NWB)  
P.O. Box 119, Gjoa Haven, NU X0B 1J0  
By email: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

Tracey McCaie  
Indigenous and Northern Affairs Canada  
P.O. Box 100, Iqaluit, NU X0A 0H0  
By email: [tracey.mccaie@aadnc.gc.ca](mailto:tracey.mccaie@aadnc.gc.ca)

Geoff Clark  
Director, Lands, Environment and Resources  
Kitikmeot Inuit Association  
P.O. Box 360, Kugluktuk, NU B0B 0E0  
By email: [dirlands@kitia.ca](mailto:dirlands@kitia.ca)

Jaida Ohokannoak  
Manager, Technical Administration  
Nunavut Impact Review Board (NIRB)  
P.O. Box 1360, Cambridge Bay, NU X0B 0C0  
By email: [info@nirb.ca](mailto:info@nirb.ca)

Matthew Pickard  
Sabina Gold & Silver Corp.  
Suite 375, Two Bentall Centre, 555 Burrard St.  
Vancouver, BC V7X 1M7  
By email: [mpickard@sabinagoldsilver.com](mailto:mpickard@sabinagoldsilver.com)

Dear Mr. Kharatyan, Ms. McCaie, Mr. Clark, Ms. Ohokannoak, Mr. Pickard:

**RE: NPC File # 148494 Application for Renewal of NWB Water Licence 2BE-MLL1217**

The following works and activities have been proposed in the above-noted project proposal:

1. Mine Development, Mineral Exploration, Trenching
  - a. Renewal and extension of the Nunavut Water Board water licence 2BE-MLL1217 for the Wishbone-Malley Project in the Kitikmeot Region for a further five (5) years. The renewal does not represent a change in scope for the project.

A complete description of the project proposal reviewed by the NPC can be accessed online using the link below.

The Nunavut Planning Commission (NPC) has determined that this project proposal is outside the area of an applicable regional land use plan, and the works and activities listed above were previously screened by the Nunavut Impact Review Board (NIRB FILE NO.: 08EA084). This project proposal is exempt from the *Nunavut Planning and Project Assessment Act* (NUPPAA) under section 235 of that Act. The above-noted project proposal is exempt from screening by the NIRB under section 12.4.3 of the Nunavut Land Claims Agreement as amended because it is for a component or activity that was part of the original proposal and its inclusion is not a significant modification of the project.

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ᐸᓄᓇᓂᓄᓐ 867-983-4625  
ᓄᓄᓐᓂᓄᓐ 867-983-4626

P.O. Box 2101  
Cambridge Bay, NU X0B 0C0  
867-983-4625  
867-983-4626

P.O. Box 2101  
Ikaluktutiak, NU X0B 0C0  
867-983-4625  
867-983-4626

By way of this letter, the NPC is forwarding the project proposal to the regulatory authorities identified by the proponent. Project materials are available at the following address:

<http://npc.strata360.com/portal/project-dashboard.php?appid=148494&sessionid=>

This decision applies only to the above noted project proposal as submitted. Proponents may not carry out projects and regulatory authorities may not issue licenses, permits and other authorizations in respect of projects if a review by the NPC is required.

If you have any questions, please do not hesitate to contact me at (867) 983-4634.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alana', with a stylized flourish extending to the right.

Alana Vigna  
Senior Planner,  
Nunavut Planning Commission

**ATTACHMENT 4 - MAY 15, 2006 NIRB SCREENING DECISION  
REPORT (FILE NO. 06EN033)**



**SCREENING DECISION REPORT**  
**Dundee Precious Metals Inc. Boulder Property**

NIRB File No.: 06EN033

May 15, 2006

Hon. Jim Prentice  
Minister of Indian Affairs and Northern Development  
Ottawa, ON

Via email: [minister@inac.gc.ca](mailto:minister@inac.gc.ca)

Dear Hon. Prentice:

**Authority:**

Section 12.4.4 of the Nunavut Land Claim Agreement states:

Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:

- a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;
- b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;
- c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or
- d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

**Primary Objectives:**

The primary objectives of the Nunavut Land Claims Agreement are set out in section 12.2.5 of the Land Claims Agreement. This section reads:

In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of the residents of Canada outside the Nunavut Settlement Area.



The decision of the Board in this case is 12.4.4 (a) **the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;**

**Reasons for Decision:**

NIRB's decision is based on specific considerations that reflect the primary objectives of the Land Claims Agreement. Our considerations in making this decision included:

- the impact of drilling activities on the ecosystem;
- disposal of drill cuttings and waste water;
- impact to water quality, aquatic habitat and wildlife and fish populations from chemicals, drill waste, drill fluids and potential fuel spills;
- storage and disposal of chemicals, fuel, garbage, sewage, and gray water, and impact of these on the ecosystem;
- the impact of noise from drilling activities and their disturbance to wildlife and traditional users of area;
- the potential impact of aircraft/helicopter on wildlife;
- the impact of campsite and equipment on terrain;
- the impact of exploration activities on archaeological sites or cultural landmarks in the area; and
- clean up/restoration of the camp site and drilling locations upon abandonment.

**Terms and Conditions:**

That the terms and conditions attached to this screening report will apply.

**General**

1. The Permittee shall maintain a copy of the Project Terms and Conditions at the sites of operation at all times.
2. The NIRB shall be notified prior to any changes in operating plans or conditions associated with this project.
3. Prior to commencing on-site activities, the Proponent shall submit to NIRB copies of all permits, licenses and authorizations required to undertake the project.
4. The Permittee shall submit to Board, at the end of the field season, a map showing the approximate location of drill sites.
5. The Permittee shall ensure that all on-site personnel, including any contractors, are familiar with these Terms and Conditions and any license or permit requirements.
6. This Permittee shall be aware they are required to register with the Government of Nunavut, Department of Environment – Environmental Protection Service regarding the movement of any hazardous wastes through a Waste Manifest.

7. The Permittee shall file a report with the Board no later than March 31 of the year following the calendar year reported, which shall contain the following information:
  - a. A summary of activities undertaken for the year, including but not limited to the amount of drilling;
  - b. A work plan for the following year;
  - c. The results of environmental studies undertaken and plans for future studies;
  - d. Wildlife encounters and actions/mitigation taken and any results from a Wildlife Monitoring/Reporting Plan;
  - e. A summary of local hires and initiatives;
  - f. A summary of community consultations undertaken and the results;
  - g. A summary of site-visits by inspectors with results and follow-up actions;
  - h. A summary of site-visits with community members;
  - i. Site photos;
  - j. The number of take-offs & landings from an airstrip with approved flight path with date and location;
  - k. The number of helicopter touch-downs on the land with date, location and reason (provide reason unless confidential);
  - l. Results of a Wildlife Monitoring/Reporting Plan;
  - m. Progressive reclamation work undertaken; and
  - n. A summary of how it has complied with all project Terms and Conditions.

### **Drill Sites**

1. The Permittee shall not conduct any land based drilling within thirty (30) metres of the normal high water mark of a water body.
2. The Permittee shall ensure that all drill cuttings are removed from ice surfaces.
3. The Permittee shall ensure that drilling wastes do not enter any water body. The use of biodegradable, salt free drill additives is encouraged over non-biodegradable types.
4. The Permittee shall not use drilling muds or additives in connection with drill holes unless they are recirculated or contained such that they do not enter the water, or are certified to be non-toxic. Further, the Permittee is hereby informed that the Canadian Environmental Protection Act has recently listed CaCl as a toxic substance. If CaCl is to be used as a drill additive, the proponent shall ensure that all sumps containing CaCl are properly constructed and located in such a manner as to ensure that the contents will not enter any waterbody.
5. The Permittee shall ensure that when “on-ice drilling”, the 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 (CCME) Guidelines for the Protection of Freshwater Aquatic Life (ie. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).

6. The Permittee shall ensure that any drill cuttings and waste water that cannot be re-circulated be disposed of in a properly constructed sump.
7. The Permittee shall ensure that the sump/depression capacity is sufficient to accommodate the volume of waste water and any fines produced to reduce additional impacts.
8. The Permittee shall not locate any sump within thirty (30) metres of the normal high water mark of any water body.
9. The Permittee shall ensure that disturbance of vegetation from deposit of drill fluids/cuttings is restricted to the area of the sump, and the ground prepared for revegetation upon abandonment.
10. The Permittee shall not use mechanized clearing within 30 meters of the normal high water mark of a watercourse, in order to maintain a vegetative mat for bank stabilization.
11. The Permittee shall, where flowing water from bore holes is encountered, plug the bore hole in such a manner as to permanently prevent any further outflow of water. The occurrence shall be reported to the Nunavut Water Board and Land Use Inspector within 48 hours.

## **Water**

1. The Permittee shall ensure that all water intake hoses are equipped with a screen with an appropriate mesh size to ensure that there is no entrapment of fish.
2. The Permittee shall only use water from sources approved by the Nunavut Water Board.

## **Fuel and Chemical Storage**

1. The Permittee shall update its Spill Contingency Plan on an annual basis. Once revised in the 2007 year, this plan must include the Government of Nunavut – Department of Environment Waste Manifest for tracking hazardous wastes, as well as updated contacts reflecting, but not limited to, the current ownership/optioning rights, and relevant Environment Canada officers.
2. The Permittee shall locate fuel caches and other hazardous materials in such a manner as to prevent their release into the environment.
3. The Permittee shall ensure that fuel storage containers are not located within thirty (30) metres of the ordinary high water mark of any body of water. Further, secondary containment such as self supporting insta-berms shall be used when storing barrel fuel on location, rather than relying on natural depressions.
4. Fuel storage containers in excess of 4,000 litres capacity shall either be double-walled, self bermed construction, or diked with adequate storage capacity. An impermeable liner shall be used to ensure that no fuel escapes. The Permittee shall take all reasonable precautions to

prevent the possibility of migration of spilled petroleum fuel or chemicals over the ground surface.

5. All fuel storage containers should be situated in a manner that allows easy access and removal of containers in the event of leaks or spills.
6. The Permittee shall examine all fuel and chemical storage containers daily for leaks. All leaks should be reported immediately.
7. The Permittee shall seal all container outlets except the outlet currently in use.
8. The Permittee shall mark all fuel containers with the Permittee's name.
9. The Permittee shall dispose of all combustible waste petroleum products by incineration and all ashes shall be removed from the site.
10. The Permittee shall ensure that all activities, including maintenance procedures and refueling, are controlled to prevent the entry of petroleum products or other deleterious substances into the water or onto the land.
11. The Permittee shall ensure that all on site personnel are properly trained in fuel and hazardous waste handling procedures as well as spill response procedures.
12. The Permittee shall immediately report **all** spills of petroleum and hazardous chemicals to the twenty-four (24) hour spill report line at (867) 920-8130. Spills shall also be reported to Environment Canada at (867) 920-5131.
13. The Permittee shall maintain a supply of spill kits, shovels, barrels, sorbents, and pumps on-site.
14. The Permittee shall use drip pans when refueling equipment and should consider having portable spill kits located at each drill site location.
15. Chemicals containing salts, which may attract wildlife to the site, should be stored so that they are inaccessible to wildlife.

## **Waste Disposal**

1. The Permittee shall not discharge or deposit any refuse substances or other waste materials in any body of water, or on the banks thereof, which will impair the quality of the waters of the natural environment.
2. The Permittee shall not locate any sumps or areas designated for waste disposal within thirty (30) metres of the ordinary high water mark of any body of water. Sumps and areas designated for waste disposal shall be sufficiently bermed or otherwise contained to ensure that substances do not enter a waterway unless otherwise authorized.

3. The Permittee shall use an approved incinerator for the disposal of combustible camp wastes. The Permittee shall incinerate all combustible and food wastes daily.
4. The Permittee shall keep all ash in a covered metal container until it is disposed of at an approved facility. The Permittee shall keep all non-combustible garbage and debris in a covered metal container until disposed of at an approved facility.
5. The Permittee shall deposit all scrap metal, discarded machinery and parts, barrels and kegs, at an approved disposal site.
6. The Permittee shall ensure that any hazardous materials, including waste fuel and oil, receive proper treatment and are backhauled for disposal at an approved facility.

### **Structure & Storage Facilities**

1. The Permittee shall not erect structures or store material on the surface ice of lakes or streams.
2. The Permittee shall locate all structures and storage facilities on gravel, sand or other durable land.

### **Camps**

1. The Permittee shall locate all camps on gravel, sand, or other durable land.
2. The Permittee shall not erect camps or store material on the surface ice of lakes or streams.
3. The Permittee shall keep the camp clean and tidy at all times so as not to attract carnivores.

### **Physical Environmental**

1. The Permittee shall ensure that the land use area is kept clean and tidy at all times.
2. The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface.
3. The Permittee shall not do anything that will cause erosion of the banks of any body of water on or adjacent to the land and shall provide necessary controls to prevent such erosion. The Permittee shall adopt such measures as required to control erosion by surface disturbance. Sediment and erosion control measures should be implemented prior to, and maintained during the work to prevent sediment entry into the water during a spring thaw.
4. The Permittee shall be required to undertake corrective measures in the event of any damage to the land or water as a result of the Permittee's operation.

5. The Permittee shall not remove any material from below the ordinary high water mark of any waterbody.
6. The Permittee shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging.
7. The Permittee shall suspend overland travel of equipment or vehicles if rutting occurs.

## Wildlife

1. The Permittee shall ensure that there is no damage to wildlife habitat in conducting this operation.
2. The Permittee shall ensure that there is minimal disturbance to any nesting birds and wildlife in the area. Harassment of wildlife is prohibited. This includes persistently worrying or chasing animals, or disturbing large groups of animals.
3. Pursuant to the Migratory Bird Convention Act Regulations the Permittee shall not disturb or destroy the nests or eggs of migratory birds. The period from May 15 to July 31 is the general migratory bird breeding season. If nests containing eggs or young are encountered, the Permittee shall avoid these areas until nesting is complete and the young have left the nest.
4. The Permittee must be in compliance with the *Migratory Birds Convention Act* and *Migratory Birds Regulations* during all phases and in all undertakings related to the project.
5. The Permittee shall be aware that the Species at Risk Act (SARA), came into full effect on June 1, 2004. Section 79 (2) of SARA, states that during an assessment of effects of a project, the adverse effects of the project on listed wildlife species and its critical habitat must be identified, that measures are taken to avoid or lessen those effects, and that the effects need to be monitored. This section applies to all species listed on Schedule 1 of SARA, but as a matter of best practice, species listed on other Schedules of SARA and under consideration for listing should also be included in this type of assessment.

Species at Risk	Category of Concern	Schedule of SARA
Grizzly Bear	Special Concern	Pending
Wolverine (Western Population)	Special Concern	Pending
Peregrine Falcon (subspecies tundris)	Special Concern	Schedule 3
Short-eared Owl	Special Concern	Schedule 3

The Permittee should consult with the Government of Nunavut and Environment Canada to develop appropriate status reports, action plans, and management plans to minimize effects to these species from the project. The Permittee should also consider the development of appropriate monitoring for these species.

6. The Permittee shall follow procedures outlined in the "Safety in Bear Country Manual", and should contact the Regional/Area Biologist or the Wildlife manager for information and

advice on measures which should be taken to minimize the possibility of conflicts/interactions with bears or carnivores. Should the Permittee encounter carnivores, they are advised to contact the local or regional wildlife officers.

7. The Permittee shall ensure that aircraft pilots adhere to flight altitudes of greater than 610 m above ground level, unless there is a specific need for low-level-flying which does not disturb wildlife. Concentrations of caribou and calves should be avoided by low-level aircraft at all times.
8. The Permittee shall ensure that aircraft maintain a vertical distance of 1000m and a horizontal distance of 1500m from groups/flocks of birds.
9. The Permittee shall ensure that the drill sites avoid known environmentally sensitive areas (denning, nesting etc.) by a minimum of 250 metres.
10. The Permittee shall not locate any operation so as to block or cause substantial diversion to migration of caribou.
11. The Permittee shall not construct any camp, cache any fuel or conduct blasting within 10 km, or conduct any drilling operation within 5 km, of any “designated caribou crossing”. The regional biologist should be contacted for known crossings.
12. From May 15 to July 15, the Permittee shall cease activities that interfere with caribou migration or calving, such as the movement of equipment, drilling activities and ATV or snowmobile use until the caribou and their calves have vacated the area.
13. The Permittee shall ensure that during the presence of caribou and muskox within sight and sound of a camp that all personnel will remain quietly in camp.
14. The Permittee shall not conduct any activity associated with the land use operation if critical periods of wildlife cycles are observed (eg. caribou migration, calving, fish spawning or raptor nesting).
15. That the Permittee shall ensure that there is no hunting by employees of the company or any contractors hired unless proper Nunavut authorizations have been obtained.
16. The Permittee shall ensure that there is no fishing by employees of the company or any contractors hired unless proper permits are obtained.
17. The Permittee shall not feed wildlife.
18. The Permittee shall contact the Kitikmeot Regional Biologist to identify areas which should be avoided. Raptor nesting sites and concentrations of nesting or molting waterfowl should be avoided by aircraft at all times.

19. The Permittee shall ensure compliance with Section 36 of the Fisheries Act which requires that no person shall deposit or permit the deposit of a deleterious substance on any type in water frequented by fish or in any place under any conditions where the deleterious substance may enter such a water body.
20. The harmful alteration, disruption or destruction of fish habitat is prohibited under Section 35 of the Fisheries Act. No construction or disturbance of any stream/lake bed or banks of any definable watercourse, is permitted unless authorized by DFO.
21. The Permittee shall not detonate explosives within fifteen (15) metres of any body of water which is not completely frozen to the bottom.

### **Archaeological Sites**

1. The Permittee/ Licensee shall keep a distance of 30 meters away from the known archaeological sit within the project area (See attached letter from GN-CLEY). An archaeological site is defined as a site or work within the Nunavut Settlement Area of archaeological, ethnographical or historical importance, interest or significance or a place where an archaeological specimen is found, and includes explorers' cairns.
2. The Permittee/ Licensee shall follow all terms and conditions for the protection and restoration of archaeological and palaeontological resources as outlined by GN-CLEY in the attached letter.

### **Reclamation**

1. The Permittee shall advise NIRB and the Land Use Inspector in writing at least 15 days prior to the completion of activities.
2. The Permittee shall remove all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building material upon abandonment.
3. The Permittee shall remove all empty barrels from its exploration sites as soon as possible in a progressive manner and shall ensure that all barrels are removed from the land by the end of each field season. Empty barrels shall be disposed of at an approved facility.
4. The Permittee shall complete all clean-up and restoration of the lands used prior to the expiry date of the permit.
5. The Permittee shall undertake ongoing restoration for any land which is no longer required for the Permittee's operation on the land.
6. The Permittee shall plug or cap all bore holes and cut off any drill casings that remain above ground to ground level upon abandonment of the operation.



### **Other Recommendations**

1. NIRB would like to encourage the proponent to hire local people and services, to the extent possible.
2. NIRB strongly advises proponents to consult with local residents regarding their activities in the region, and to do community consultation on the project to keep the communities informed.
3. NIRB would like to encourage the proponent to continue baseline monitoring.
4. Any amendment requests deemed by NIRB to be outside the original scope of the project will be considered a new project.

### **Validity of Land Claims Agreement**

#### Section 2.12.2

Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated \_\_\_ May 15, 2006 \_\_\_ at Cambridge Bay, NU



\_\_\_\_\_  
Elizabeth Copland, A/Chairperson

**ATTACHMENT 5 - MARCH 3, 2009 NIRB SCREENING DECISION  
REPORT (FILE NO. 08EA084)**



**SCREENING DECISION REPORT**  
**NIRB FILE NO.: 08EA084**

**INAC File No.:** N2006C0008

**KIA File No.'s:** KTL304C017, KTL304C018,  
KTL204C012, KTL204C020 & KTL107C018

**NWB File No.'s:** 2BE-GOO0510 & 2BE-GEO0210

March 3, 2009

Honourable Chuck Strahl  
Minister of Indian and Northern Affairs Canada  
Indian and Northern Affairs Canada  
Gatineau, QC

Via email: [strahl.c@parl.gc.ca](mailto:strahl.c@parl.gc.ca)

**Re: Screening Decision for Dundee Precious Metals Inc.'s "Beechey Lake Area Mineral Exploration" project proposal, NIRB File No. 08EA084**

Dear Honourable Minister:

The primary objectives of the Nunavut Land Claims Agreement are set out in section 12.2.5 of the Land Claims Agreement. This section reads:

In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of the residents of Canada outside the Nunavut Settlement Area.

Section 12.4.4 of the Nunavut Land Claim Agreement states:

Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:

- a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;
- b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;
- c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or
- d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

## NIRB ASSESSMENT AND DECISION

After a thorough assessment of all material provided to the Board (please see *Procedural History* and *Project Activities* in **Appendix A**), in accordance with the principles identified within Section 12.4.2 of the NLCA, the decision of the Board as per Section 12.4.4 of the NLCA is:

**12.4.4 (a):** the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5.

### RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS (pursuant to Section 12.4.4(a) of the NLCA)

The Board is recommending the following or similar project-specific terms and conditions be imposed upon the Proponent through all relevant legislation:

#### General

1. Dundee Precious Metals Inc. (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
2. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavut Impact Review Board (NIRB) prior to the commencement of the project.
3. The Proponent shall operate in accordance with all commitments stated in correspondence provided to Indian and Northern Affairs Canada (INAC Land Use Amendment and Extension Application, December 9, 2008) and the NIRB as follows:
  - a. NIRB Part 1 form (January 22, 2009), including non-technical summary (January 26, 2009)
  - b. NIRB Part 2 form, (January 22, 2009)
  - c. Abandonment and Restoration Plan (January 22, 2009)
  - d. Spill Contingency Plan (January 22, 2009)
  - e. Correspondence with additional information and maps (January 29, 2009)
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

#### Water

5. The Proponent shall not extract water from any fish-bearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams shall not be used for water withdrawal.
6. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

#### Waste

7. The Proponent shall incinerate all combustible wastes daily, and remove the ash from incineration activities and non-combustible wastes from the project site to an approved facility for disposal.
8. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of. All wastes shall be kept inaccessible to wildlife at all times.

9. The Proponent shall ensure that the disposal of combustible camp wastes comply with the *Canadian Wide Standards for Dioxins and Furans*, and the *Canadian Wide Standards for Mercury*.

### **Fuel and Chemical Storage**

10. The Proponent shall locate all fuel and other hazardous materials a minimum of thirty-one (31) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
11. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
12. The Proponent shall inspect and document the condition of all large fuel caches (in excess of 20 drums) on a weekly basis.
13. The Proponent shall ensure that appropriate spill kits are located at every fuel cache.
14. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site.
15. The Proponent shall ensure that all on site personnel are properly trained in fuel and hazardous waste handling procedures as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130

### **Wildlife**

16. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
17. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
18. The Proponent shall not touch, feed or entice wildlife to approach by holding out or setting out decoys or any such devices, foodstuffs or bait of any kind.
19. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.
20. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 metres and a horizontal distance of 1500 metres from any observed groups (colonies) of migratory birds.
21. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.
22. The Proponent shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Proponent shall take precaution to avoid further interaction and or disturbance.
23. The Proponent shall cease activities that may interfere with migration or calving of caribou or muskoxen, until the caribou or muskoxen have passed or left the area.
24. The Proponent shall not block or cause any diversion to caribou migration, and shall cease activities likely to interfere with migration such as airborne geophysics surveys, drilling or movement of equipment or personnel until such time as the caribou have passed.
25. The Proponent shall not construct, or operate any camp, or cache any fuel, near paths or crossings frequented by caribou.
26. The Proponent shall take all possible measures to avoid wildlife encounters. Any problem wildlife should be reported immediately to the Government of Nunavut, Department of Environment.

27. The Proponent shall ensure all project staff are trained in appropriate bear/carnivore detection and deterrent techniques. It is recommended the Proponent review the safety precautions contained within “*Safety in Grizzly and Black Bear Country*” which can be downloaded from the following link: <http://www.nwtwildlife.com/Publications/safetyinbearcountry/safety.htm>

### **Physical Environment**

28. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. The Proponent shall suspend overland travel of equipment or vehicles if rutting occurs.
29. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

### **Drilling on Land**

30. The Proponent shall not conduct any land based drilling or mechanized clearing within thirty-one (31) metres of the normal high water mark of a water body.
31. The Proponent shall not allow any drilling wastes to spread to the surrounding lands or water bodies.
32. If an artesian flow is encountered, the Proponent shall ensure the drill hole is immediately plugged and permanently sealed.
33. The Proponent shall ensure that all drill areas are constructed to facilitate minimizing the environmental footprint of the project area. Drill areas should be kept orderly with garbage removed daily to an approved disposal site.
34. The Proponent shall ensure that all sump/depression capacities are sufficient to accommodate the volume of waste water and any fines that are produced. The sumps shall only be used for inert drilling fluids, and not any other materials or substances.
35. The Proponent shall not locate any sump within thirty-one (31) metres of the normal high water mark of any water body. Sumps and areas designated for waste disposal shall be sufficiently bermed or otherwise contained to ensure that substances do not enter a waterway unless otherwise authorized.
36. The Proponent shall ensure all drill holes are backfilled or capped at the end of the project. The Proponent shall backfill and restore all sumps to match the natural environment prior to the end of project.

### **Drilling on Ice**

37. If drilling on lake ice, the Proponent shall ensure that any return water is non-toxic, and will not result in an increase in total suspended solids in the immediate receiving waters above the Canadian Council of Ministers for the Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).
38. The Proponent shall ensure that drill muds and additives are not 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.
39. The Proponent shall ensure that all drill cuttings are removed from ice surfaces at the end of each day.

### **Camp**

40. The Proponent shall not erect camps or store material on the surface ice of lakes or streams.

### **Restoration**

41. The Proponent shall remove all garbage, fuel and equipment upon abandonment.

42. The Proponent shall complete all clean-up and restoration of the lands used prior to the end of each field season.

#### **Other**

43. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.
44. Any activity related to this application, and outside the original scope of the project as described in the application, will be considered a new project and should be submitted to the NIRB for Screening.

#### **Monitoring and Reporting Requirements**

In addition, the Board is recommending the following:

1. The Proponent shall maintain a record of wildlife observations while operating within the project area. The reports should include locations (i.e., latitude and longitude), species, number of animals, a description of the animal activity, and a description of the gender and age of animals if possible. Prior to conducting project activities, the Proponent should map the location of any sensitive wildlife sites such as denning sites, calving areas, caribou crossing sites, and raptor nests in the project area, and identify the timing of critical life history events (i.e., calving, mating, denning and nesting). Additionally, the Proponent should indicate potential impacts from the project, and ensure that operational activities are managed and modified to avoid impacts on wildlife and sensitive sites.

A copy of this wildlife record or report should be submitted annually at the end of the operational season to the following Government of Nunavut (Department of Environment) contacts:

- a. Dustin Fredlund, Wildlife Manager, (867) 982-7441 or [dfredlund@gov.nu.ca](mailto:dfredlund@gov.nu.ca)
  - b. Allen Niptanatiak, Conservation Officer, (867) 982-7451 or [kugwildlife2@qiniq.com](mailto:kugwildlife2@qiniq.com)
  - c. Mathieu Dumond, Regional Biologist, (867) 982-7444 or [mdumond@gov.nu.ca](mailto:mdumond@gov.nu.ca)
2. The Proponent shall update its Spill Contingency Plan to include the up to date emergency contact numbers for the Government of Nunavut-Department of Environment (867-975-7700) and the Manager of Pollution Control and Air Quality (867-975-7748). In addition, remove Cindy Parker as the Environment Canada contact in Section 7.1.

#### **Other NIRB Concerns and Recommendations**

Please note that some components/activities associated with the current project proposal may have been screened previously by the NIRB under the following file numbers: 02EN013, 02EN021, 06QN027, 06QN028 and 06EN033. While information from these files were considered in the current screening, the NIRB noted that certain activities previously screened under these file numbers were not included in the current project proposal. These previous activities include quarry activities (06QN027, 06QN028) and winter haul roads (06QN027, 06QN028). If the proponent wishes to conduct any of these other activities in the future, the NIRB recommends that new applications be completed and forwarded to the appropriate authorizing agencies for review and to the NIRB for screening.

In addition to the project-specific terms and conditions, the Board is recommending the following:

#### **General**

All Authorizing Agencies shall notify the NIRB of any changes in operating plans or conditions associated with this project prior to any such change.

### Indian and Northern Affairs Canada

Indian and Northern Affairs Canada (INAC) impose mitigation measures, conditions and monitoring requirements pursuant to the Federal Land Use Permit, which require the Proponent to respect the sensitivities and importance of the area. These mitigation measures, conditions and monitoring requirements should be in regard to the location and area; type, location, capacity and operation of facilities; use, storage, handling and disposal of chemical or toxic material; wildlife and fisheries habitat; and petroleum fuel storage.

INAC should also consider the importance of conducting regular Land Use Inspections, pursuant to the authority of the Federal Land Use Permit, while the project is in operation. The Land Use Inspections should be focused on ensuring the Proponent is in compliance with the conditions imposed through the Federal Land Use Permit.

### Regulatory Requirements

The Proponent is also advised that the following legislation may apply to the project:

1. The Proponent is advised that the *Canadian Environmental Protection Act* (<http://laws.justice.gc.ca/en/C-15.31/>) lists calcium chloride (CaCl) as a toxic substance. The Proponent should assess alternatives (including biodegradable and non-toxic) to drill additives prior to the use of CaCl and try to avoid the use of CaCl.
2. The *Fisheries Act* (<http://laws.justice.gc.ca/en/showtdm/cs/F-14///en>).
3. The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (<http://www.canlii.org/ca/sta/n-28.8/whole.html>).
4. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (<http://laws.justice.gc.ca/en/showtdm/cs/M-7.01>).
5. The *Species at Risk Act* (<http://laws.justice.gc.ca/en/showtdm/cs/S-15.3>). Attached in **Appendix B** is a list of Species at Risk in Nunavut.
6. The *Nunavut Wildlife Act* which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat and species at risk.
7. The *Nunavut Act* (<http://laws.justice.gc.ca/en/showtdm/cs/N-28.6>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix C**.
8. The *Transportation of Dangerous Goods Regulations*, *Transportation of Dangerous Goods Act* (<http://www.tc.gc.ca/tdg/menu.htm>), and the *Environmental Protection Act* (<http://laws.justice.gc.ca/en/C-15.31/text.html>) The Proponent must ensure that proper shipping documents accompany all movements of dangerous goods. The Proponent must register with the GN-DOE Manager of Pollution Control and Air Quality at 867-975-7748.



## **Validity of Land Claims Agreement**

### *Section 2.12.2*

Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated March 3<sup>rd</sup>, 2009 at Sanikiluaq, NU.



\_\_\_\_\_  
Lucassie Arragutainaq, A/Chair

## **Appendix A**

### **Procedural History and Project Activities**

#### ***Procedural History***

On December 9, 2008 the Nunavut Impact Review Board (NIRB or Board) received an application for a Land Use Permit extension and amendment for Dundee Precious Metals Inc.'s (Dundee) "Beechey Lake Area Mineral Exploration" project from Indian and Northern Affairs Canada (INAC). The NIRB assigned this project proposal file number 08EA084. The project is located in the Kitikmeot region and does not require a conformity determination from the Nunavut Planning Commission.

After undertaking a preliminary completeness check, the NIRB determined that Dundee's project proposal did not contain sufficient information for the NIRB to conduct an environmental screening. On December 17, 2008 the NIRB sent formal correspondence to Dundee, requesting submission of the required information by January 6, 2009. In email correspondence to NIRB dated January 5, 2009, Dundee requested an extension to the deadline for providing the requested information, to January 21, 2009. The NIRB deemed this request reasonable and subsequently granted the extension.

On January 16, 2009, the NIRB requested additional time from the Minister of INAC to complete the screening of this project proposal. By January 26, 2009, Dundee provided all the required information for the NIRB to conduct the environmental screening.

This application was distributed to the communities of Bathurst Inlet, Cambridge Bay, Gjoa Haven and Taloyoak, to interested Federal and Territorial Agencies, and Inuit Organizations. NIRB requested that interested Parties review the application and provide NIRB with comments by February 23, 2009 regarding:

- Whether the project proposal is likely to arouse significant public concern; and if so, why;
- Whether the project proposal is likely to cause significant adverse eco-systemic and socio-economic effects; and if so, why;
- Whether the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (please provide any recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

On or before February 24, 2009, NIRB received comments from the following interested Parties (see Comments and Concerns):

- Government of Nunavut, Department of Culture, Language, Elders and Youth (GN-CLEY)
- Environment Canada (EC)
- Kitikmeot Inuit Association (KIA)
- Government of Nunavut, Department of Environment (GN-DoE)

All comments provided to NIRB regarding this project proposal can be viewed on NIRB's ftp-site, at the following location: <http://ftp.nirb.ca/SCREENINGS/COMPLETED%20SCREENINGS/>

#### ***Project Activities***

The project is located in the Kitikmeot region approximately 160 kilometre (km) south-south east of the community of Bathurst Inlet and approximately 400 km south of Cambridge Bay. The proposed project activities include mining exploration on claims within the Back River Area on both Crown Land and Inuit Owned Land (IOL). The claims will include the "Wishbone" area, (Wishbone, Del Lake, Lovechild,

Mahna Mahna, and Malley claims) and the “Core Properties” area (Goose Lake, George Lake, Boot Lake and Boulder Pond claims).

Exploration activities are proposed to occur March 1, 2009 to September 30, 2009 and continue in 2010. Dundee proposes to prospect areas to the north and south of the “Wishbone” area in 2009, once the areas have been awarded and appropriately defined by the Mining Recorder. These claim areas will be considered as part of the “Wishbone” area. Potential drilling may follow in 2010 or 2011 in these areas.

The project activities include:

- Base metal mineral exploration; including prospecting, sampling, soil sampling, exploration trenching, diamond drilling (on land and on ice), and air and ground geophysics.
- Use of existing Goose Lake Camp site as the base of operations, with maximum capacity of 80 personnel.
- Helicopter assisted drill program, including daily transportation of field crew to drill sites.
- Potential use of snowmachines around the Goose Lake area.
- Temporary storage of small fuel caches (up to 19 drums each) throughout the area to support exploring activities.
- Fuel storage at Goose Lake (6 bulk tanks) and George Lake (2 bulk tanks). Drummed fuel stored at George Lake.
- Storage of chemicals and hazardous materials at site.
- Water use for drilling purposes and camp use.
- Sewage, greywater and waste production related to camp operation.
- Incineration of sewage and combustible waste.
- Use of Goose Lake for site access via charter aircrafts. In winter, an ice-strip will be used on Goose Lake.
- Potential use of esker strip at George Lake camp or gravel strip northwest of Goose Lake during breakup period in spring.

## Appendix B SPECIES AT RISK IN NUNAVUT

This list includes species listed on one of the Schedules of SARA (*Species at Risk Act*) and under consideration for listing on Schedule 1 of SARA. These species have been designated as at risk by COSEWIC (Committee on the Status of Endangered Wildlife in Canada). This list may not include all species identified as at risk by the Territorial Government.

- Schedule 1 is the official legal list of Species at Risk for SARA. SARA applies to all species on Schedule 1. The term “listed” species refers to species on Schedule 1.
- Schedule 2 and 3 of SARA identify species that were designated at risk by the COSEWIC prior to October 1999 and must be reassessed using revised criteria before they can be considered for addition to Schedule 1.
- Some species identified at risk by COSEWIC are “pending” addition to Schedule 1 of SARA. These species are under consideration for addition to Schedule 1, subject to further consultation or assessment.

Schedules of SARA are amended on a regular basis so it is important to periodically check the SARA registry ([www.sararegistry.gc.ca](http://www.sararegistry.gc.ca)) to get the current status of a species.

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Updated: January 3, 2007

Species at Risk	COSEWIC Designation	Schedule of SARA	Government Organization with Lead Management Responsibility <sup>1</sup>
Eskimo Curlew	Endangered	Schedule 1	EC
Ivory Gull	Endangered <sup>2</sup>	Schedule 1	EC
Peregrine Falcon (subspecies anatum)	Threatened	Schedule 1	Government of Nunavut
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Felt-leaf Willow	Special Concern	Schedule 1	Government of Nunavut
Peregrine Falcon (subspecies tundrius)	Special Concern	Schedule 3	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Fourhorn Sculpin	Special Concern	Schedule 3	DFO
Peary Caribou	Endangered <sup>3</sup>	Pending	Government of Nunavut
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO
Beluga Whale (Cumberland Sound population)	Threatened	Pending	DFO
Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO

Beluga Whale (Eastern High Arctic – Baffin Bay population)	Special Concern	Pending	DFO
Bowhead Whale (Hudson Bay-Foxe Basin population)	Threatened <sup>4</sup>	Pending	DFO
Bowhead Whale (Davis Strait-Baffin Bay population)	Threatened <sup>4</sup>	Pending	DFO
Porsild's Bryum	Threatened	Pending	Government of Nunavut
Atlantic Walrus	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO
Rusty Blackbird	Special Concern	Pending	Government of Nunavut
Barren-ground Caribou (Dolphin and Union population)	Special Concern <sup>3</sup>	Pending	Government of Nunavut
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Polar Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of Nunavut

<sup>1</sup> Environment Canada has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency. EC = Environment Canada, DFO = Department of Fisheries and Oceans

<sup>2</sup> Designated as Endangered by COSEWIC in April 2006 and it is expected that the category of concern in SARA will also be changed from Special Concern to Endangered.

<sup>3</sup> Peary Caribou was split into three separate populations in 1991: Banks Island (Endangered), High Arctic (Endangered) and Low Arctic (Threatened) populations. The Low Arctic population also included the Barren-ground Caribou - Dolphin and Union population. In May 2004 all three population designations were de-activated, and the Peary Caribou, Rangifer tarandus pearyi, was assessed separately from the Barren-ground Caribou (Dolphin and Union population), Rangifer tarandus groenlandicus. The subspecies pearyi is composed of a portion of the former "Low Arctic population" and all of the former "High Arctic" and "Banks Island" populations, and it was designated Endangered in May 2004. Although SARA lists Peary Caribou on Schedule 2 as three separate populations, the most current designation is the COSEWIC designation of the subspecies pearyi as Endangered.

<sup>4</sup> The "Eastern and Western Arctic populations" of Bowhead Whale were given a single designation of Endangered in April 1980 by COSEWIC. These were split into two populations to allow separate designations in April 1986. The Eastern population was not re-evaluated in April 1986, but retained the Endangered status of the original "Eastern and Western Arctic populations". The Eastern Arctic population was further split into two populations (Hudson Bay-Foxe Basin population and Davis Strait-Baffin Bay population) in May 2005, and both these populations were designated as Threatened. Both these populations are under consideration for addition to Schedule 1. Although SARA lists the Eastern Arctic population as Endangered (Schedule 2), the most current designation is the COSEWIC designations of the Hudson Bay-Foxe Basin and Davis Strait-Baffin Bay populations as Threatened.

**Appendix C**  
**Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders**



**BACKGROUND: Archaeology**

*As stated in Article 33 of the Nunavut Land Claims Agreement:*

The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence, which shall be expressed in terms of special rights and responsibilities. [33.2.1]

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary. [33.2.2]

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claims Agreement. [33.2.5]

**BACKGROUND: Palaeontology**

Under the Nunavut Act<sup>1</sup>, the federal Government can make regulations for the protection, care and preservation of palaeontological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*<sup>2</sup>, it is illegal to alter or disturb any palaeontological site in Nunavut unless permission is first granted through the permitting process.

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<sup>1</sup> s. 51(1)

<sup>2</sup> P.C. 2001-1111 14 June, 2001

## Definitions

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

“archaeological site” means a place where an archaeological artifact is found.

“archaeological artifact” means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.

“palaeontological site” means a site where a fossil is found.

“fossil” includes:

- (a) natural casts
- (b) preserved tracks, coprolites and plant remains; and
- (c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.

## Terms and Conditions

- 1) The permittee shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 2) The permittee shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 3) The permittee shall immediately contact the Department of Culture, Language, Elders and Youth (867) 934-2046 or (867) 975-5500 or 1 (866) 934-2035 should an archaeological site or specimen, or a palaeontological site or fossil be encountered or disturbed by any land use activity.
- 4) The permittee shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation, until permitted to proceed with the authorization of the Department of Culture, Language, Elders and Youth, Government of Nunavut.
- 5) The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological or palaeontological sites to an acceptable condition.
- 6) The permittee shall provide all information requested by the Department of Culture, Language, Elders and Youth concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.
- 7) The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.

- 8) The permittee shall avoid the known archaeological and/or palaeontological sites listed in Attachment 1.
- 9) The permittee shall have an archaeologist or palaeontologist perform the following functions, as required by the Department of Culture, Language, Elders and Youth:
  - a. survey
  - b. inventory and documentation of the archaeological or palaeontological resources of the land use area
  - c. assessment of potential for damage to archaeological or palaeontological sites
  - d. mitigation
  - e. marking boundaries of archaeological or palaeontological sites
  - f. site restoration

The Department of Culture, Language, Elders and Youth shall authorize by way of a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit, all procedures subsumed under the above operations.



## **ATTACHMENT 6 - COMPREHENSIVE SPILL CONTINGENCY PLAN**



## **Exploration Spill Contingency Plan**

May 2022



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# 1. Introduction and Background

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## 1.1. BACKGROUND

Sabina Gold & Silver Corp. (Sabina) is actively exploring the Back River property mineral rights including the Goose Property (and primary exploration camp at Goose Lake), as well as George Property (and a temporary exploration camp), unoccupied claim groups referred to as Boot Property, Boulder Property, Wishbone Property, Malley/Needle Property, and Del Property (Figure 1) (the Project).

## 1.2. PURPOSE

This Exploration Spill Contingency Plan (Plan) applies to activities related to water licenses 2BE-GOO2028, 2BE-GEO2025, and 2BE-MLL1722 and addresses applicable terms and conditions of NIRB Screening decisions for File No. 08EA084 (NIRB 2009).

Spill response related to Back River Project mining activities under Water Licence 2AM-BRP1831 and NIRB Project Certificate No. 007 are addressed separately in Sabina's Spill Contingency Plan and Oil Pollution Prevention Plan and Oil Pollution Emergency Plan (OPPP&OPEP).

This Plan has been implemented to ensure that Sabina respects all applicable laws, regulations and requirements from federal and territorial authorities during exploration activities. Sabina has obtained and complies with all required permits, approvals, and authorizations required for the operations. The following regulations and documents constitute an integral part of the Plan:

- Government of Nunavut's *Spill Contingency Planning and Reporting Regulations*.
- The Canadian Environmental Protection Act controls hazardous substances from their production and/or import, their consumption, storage and/or disposal.
- The federal *Fisheries Act* protects fish and their habitat from pollution and disturbances. Fisheries and Oceans Canada reviews permit applications and restoration plans submitted by other agencies.
- The federal *Transportation of Dangerous Goods Act* and Regulations ensure the protection of public health and safety, and the environment during the handling and transport of dangerous goods. The Regulations apply to all modes of transportation, by road, by sea, and by air.
- The federal *Territorial Land Use Regulations* define regulatory measures to maintain appropriate environmental practices for any land use activities on territorial lands that are under the control, management and administration of the Crown. These regulations require that land use permits be issued for operations such as mineral exploration and mining.
- The Guidelines for Preparation of Hazardous Material Spill Contingency Plans describe parameters that should be considered in the development of hazardous material spill emergency plans. It also defines the information that should be incorporated into a comprehensive contingency plan.
- The CCME Code of Practice for Used Oil Management defines appropriate environmental options for handling, storage, collection, recycling, transport, reuse, and/or disposal of used oils in Canada. It helps regulatory authorities formulate provincial and/or regional strategies for used oil management.



- The *Nunavut Environmental Protection Act* governs the protection of the environment from contaminants. The Act defines offences and penalties as well as the powers of government inspectors.
- The *Nunavut Spill Contingency Planning and Reporting Regulations* describe requirements for spill reporting and emergency planning.
- The Field Guide for Oil Spill Response in Arctic Waters developed for the Emergency Prevention, Preparedness and Response Working Group, describes precise response methods and strategies for emergency response operations and provides technical support documentation.
- The *Land Transportation Emergency Response Guideline* for Petroleum Spills developed by the Canadian Petroleum Products Institute outlines scope, emergency response code of practice, response time guidelines, response equipment and personnel capability requirements.
- The *Canada Shipping Act (CSA)*, as amended by Chapter 36, stipulates that operators of designated Oil Handling Facilities must have an on-site Oil Pollution Emergency Plan.
- The *Canada Shipping Act Response Environmental Emergency Regulations*

This document is a review and analysis of the preparedness for events which may occur due to unforeseen circumstances. The plan details response actions to be taken in the event of unintentional materials release during the ongoing exploration program and associated support such as camps and overland transport. The plan is dynamic and will be updated at least annually to address any significant changes in operating plans, should they occur.

A copy of the Plan will be available at the exploration camps and headquarter offices. Sabina believes building on experience and practices gained through implementation and management of spill measures under the existing water licences and supports the implementation of a coordinated approach to spill response.

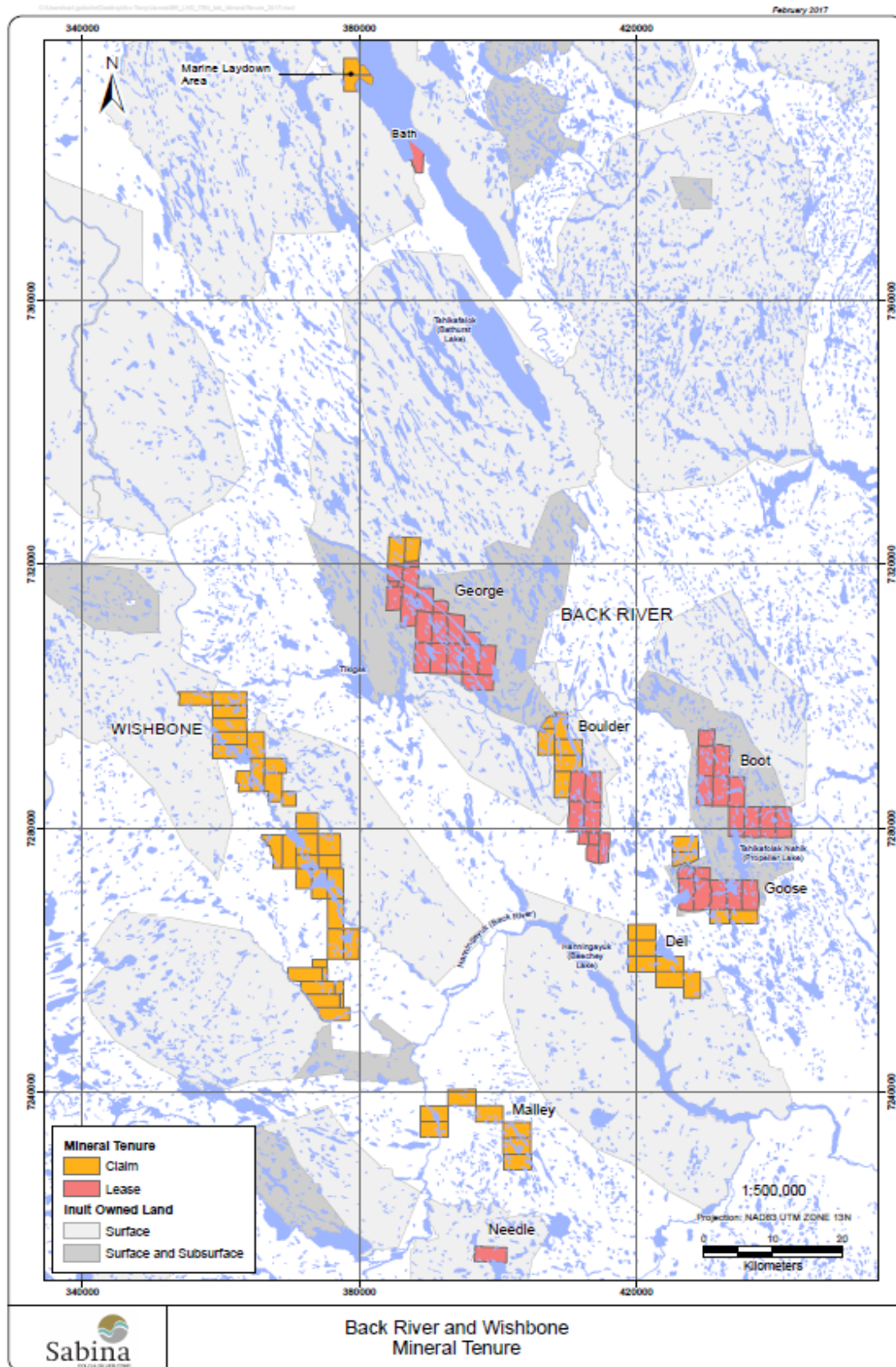


Figure 1. Location Map of Sabina Exploration Properties within western Nunavut.

### 1.3. SABINA SOCIAL AND ENVIRONMENTAL POLICY

Sabina is committed to environmentally responsible and socially acceptable exploration and mining practices. We are dedicated to creating and maintaining a safe environment for both the land we occupy and the people that drive its success. The company's philosophy is to conduct its operations to protect not only the environment, but the health and safety of its employees and the public as well.

Sabina also subscribes to the principles of sustainable development in mining. While exploration and mining cannot occur without an impact on the surrounding natural environment and communities, our responsibility is to limit negative environmental and social impacts and to enhance positive impacts.

To achieve these goals, Sabina is committed to:

- Seeking to be environmental leaders in the mining community by integrating responsible environmental management as an essential component of all business decisions;
- Comply with all applicable laws, regulations and standards; uphold the spirit of the law and where laws do not adequately protect the environment, apply standards that minimize any adverse environmental impacts resulting from its operations;
- Communicate openly with employees, the regulatory community and the public on environmental issues and address concerns pertaining to potential hazards and impacts;
- Assess the potential affects of operations and integrate protective measures into the planning process to prevent or reduce impacts to the environment and on public health and safety;
- Take appropriate corrective actions should unexpected environmental impacts occur. This will also include taking appropriate action to prevent reoccurrence of these impacts.
- Provide adequate resources, personnel and training so that all employees are aware of and able to support implementation of the environmental and social policy;
- Conduct and support research and programs that improve understanding of the local environment, conserve resources, minimize waste, improve processes, and protect the environment.
- Working with the appropriate local regulators and agencies, maximize benefits to the affected communities and residents;
- Balance all decisions with best management practices, scientific principles, and Traditional Knowledge.

### 1.4. SABINA POLICY ON INITIATION FOR CLEANUP ACTIVITIES

Sabina initiates cleanup activity when, in the opinion of management, Sabina is clearly associated, or likely associated with the spilled product. The guiding principles of Sabina's Exploration Spill Contingency Plan is to comply or exceed existing regulations to ensure protection of the environment, and to keep employees, government officials, and the public aware of our plans.

### 1.5. RISK MANAGEMENT

The likelihood of a significant spill event occurring at the Project at either the Goose or George tank farms is very low, due to the double-walled tanks contained in the lined, bermed area, and the prescribed procedures for fuel transfer and anti-siphon devices in the tanks.

The greatest likelihood of an incident is associated with drummed fuel including the rupture of drums during movement or leaks during storage. The first risk can be mitigated through proper operator training

of equipment operation, clear marking and segregation of fuel supplies and heightened operator awareness when working near fuel supplies. The second risk is mitigated with secondary containment and frequent inspection of the drums (carried out during regular yard duties). Additional hazards are present during refuelling operations (mitigated with drip trays and absorbent mat), and during local drum movement (e.g., from storage to helipads), which is mitigated by using experienced operators, carefully securing the drums to the loader during movement, and safe driving practices.

As salt is delivered in pelletized form, any spill is easily cleaned-up. Regular inspection of this storage area will allow for rapid detection of any spill.

Explosives will be delivered in designated compartments approved for transport of explosives and stored within the original packaging in the magazines. Strict housekeeping and tracking standards will be kept. Any spill of explosive material would be easily cleaned up and regular inspection will allow for rapid detection of any spill.

Frequent inspections of the greywater line will turn up any leaks in the system which can be quickly repaired. Any issues would likely be noticed by most people in camp as either moisture and/or an odour would be present.

The likelihood of drill additives entering a waterbody is extremely small. With the exception of on-ice drilling, drills are located at least 31 m above the high water mark of lakes, ponds and streams, unless otherwise approved by the Board, with vegetation and overburden material providing an effective mechanical barrier to the transport of materials to the waterbody. As an added mitigation measure, geo-textile cloth fences are constructed on the downhill side of all new drill setups. For on-ice drilling, excess return water is pumped to a point on shore more than 31 m from the estimated high water mark (difficult to determine conclusively due to snow cover). Snow and lake ice also create an effective barrier and containment mechanism for spills of material at the drill site, allowing for easy cleanup. Drill sites are inspected for cleanliness upon completion of the hole.

Despite the mitigation measures taken, should any incident arise as a result of human error or unforeseen circumstances, the operating procedures outlined in this document will be implemented.

## **1.6. EXISTING FACILITIES**

The Sabina mineral exploration camps are located in the Kitikmeot Region approximately 520 km northeast of Yellowknife, NWT and 400 km southwest of Cambridge Bay, NU.

### **1.6.1. Goose Exploration Camp**

The Goose Exploration Camp is the primary camp for the Project and is located on the slope of the western shore of Goose Lake. It has the capacity to support up to 120 people (as of June 2012) and is accessible by air only using Goose Lake (ice and open water), a gravel airstrip north of Goose Lake and an all-weather airstrip and road west of the camp. The lakeshore is approximately 50 m toward the north and the regional topographical gradient surrounding the camp ranges from 2 to 6% towards the north. The camp is approximately 300 m in length from east to west and 100 m wide from north to south, covering an area of 30,000 m<sup>2</sup>. The camp facilities are located on natural tundra underlain by a 10 cm organic layer overlying silt-sand parent material.

- Latitude: 65° 32'N, Longitude: 106° 25'W
- UTM Coordinates 569405 E, 7265007N on NTS Map Sheet 76G/09

### **1.6.2. Temporary Camps for Resupply for Exploration**

Temporary camps for approximately 20 people may be established for a season in target areas away from the main camps and would be established for safety, environmental, and economic reasons. The intent is not to establish a network of camps across the exploration area, but to have the opportunity and flexibility to establish these temporary camps as needed. No sewage system will be installed in the camp as no water is needed for Pacto toilets. All solid waste will be carried to the existing camps (Goose and/or George) and disposed as outlined in the approved waste management plan for those facilities.

Grey-water is pumped to a suitable disposal sump or natural depression located 31 metres away from the ordinary high water mark of any local waterways and would be allowed to naturally percolate into the underlying ground.

### **1.6.3. Overland Corridors**

A winter road links the two camps (Goose and George) and extends to Bathurst Inlet. Temporary camp facilities and fuel and chemical storage areas may also be accessed as needed to support exploration activities.

Overland transportation occurs during mid-February to mid-May depending on environmental conditions and operational requirements. Environmental conditions that will determine the route include:

- Ice thickness of a sufficient thickness to support heavy equipment so that pumping and using water to build up will be unnecessary.
- Snow thickness will be a minimum of 15 cm on land to prevent damage to soil and vegetation.
- Weather conditions permit safe transport of equipment and materials.

Diesel fuels and lubricants will be used during the construction and operation of the winter road. Other fuel and materials to be transported along the corridor include diesel fuel, aviation gas, drilling additives such as calcium chloride and construction materials.

Storage of these products and wastes will be in compliance with legislation and the National Fire Code that ensures the hazardous materials are stored safely, in a dry manner with clear labeling and secondary containment. All storage areas will be clearly identified with proper labeling and signage. All storage areas will be regularly inspected and stored at least 31 m from the high water mark of any waterbody within secondary containment.

Safety Data Sheets (SDS) information for the potential contaminants and products to be transported along the winter road are available on-site.

## 2. Materials Transport and Storage

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### 2.1. FUEL STORAGE

Diesel fuel is required to generate power on-site, heat buildings, and to fuel mobile equipment. The diesel fuel storage at the camps consists of 205 L drums, as well as double walled tanks (up to 75,000 L ULC-approved) and bladders (up to 40,000 L) situated within a lined secondary berm. Secondary containment (Instaberms) is used for all of the drummed fuel on-site.

Supplies will be replenished with quantities dependent on the scope of the program. Inventories of fuel at each site are dynamic and dependent on exploration activities and personnel in camp.

Drummed fuel is required to support drilling and helicopter activities outside of camp and strategically relocated as required. All drums are located at least 31 m above the high water mark of any waterbody. Specialized oils and greases used by the drilling contractors are stored in sheds or sea-cans designated for that purpose. Propane tanks are stored on pallets, strapped together, and area marked with pylons.

The Goose Property has thirteen 75,000 L double walled tanks and one 40,000 L bladder to support exploration activities.

During the construction of the Back River Project mine additional fuel storage facilities will be constructed at both Goose and the MLA. As previously identified, spills from these facilities and/or related to Back River Project bulk fuel transfer activities are addressed separately in Sabina's Spill Contingency Plan and Oil Pollution Prevention Plan and Oil Pollution Emergency Plan.

### 2.2. DOMESTIC GREYWATER, SEWAGE AND CONTACT WATER

Greywater from the kitchen and shower facilities is screened for coarse particles (e.g., food), and released to a sump for settling, after which it is released to the environment at least 31 m away from the closest waterbody. Sewage is dealt with using a Pacto toilet system with incineration of the waste generated.

Contact water is water that collects within the fuel secondary containment berms. Water collected in temporary berms is discharged using an oil/water separator unless an oily sheen is noted. Water collected in bulk fuel storage facility berms is tested and discharged according to applicable requirements outlined in 2BE-GOO2028 and 2BE-GEO2025.

### 2.3. SOLID WASTE

Combustible solid wastes generated from the camp activities are incinerated. Products such as putrescible domestic and office waste are burned. Noncombustible wastes such as scrap metal, non-reusable barrels, incinerator ash, etc., are placed in megabags and are removed from site using backhaul flights to Yellowknife or landfilling at the Back River Project mine landfill (per Sabina's Landfill and Waste Management Plan). Hazardous solid waste for backhaul is sealed in drums for transport to Yellowknife and disposal at an approved facility.

Although the potential for waste rock (including drill core) to be acid producing is unlikely, any such waste would be disposed of in an approved location and under acceptable practices.

Drill cuttings and sludge from core saws are collected and returned to designated drill cutting consolidation areas for disposal and management in a trench.

## 2.4. CHEMICALS

Waste chemicals that require special attention and handling include waste oil, hydraulic oil, lubricating oil, calcium chloride, grease, and ethylene glycol.

Waste oil is used to either heat the warehouse, maintenance and core logging facilities, or to fuel the incinerator at Goose Exploration Camp. If not used to fuel heaters or incinerator, waste oil and oil from filters are backhauled for appropriate disposal. Drained spent oil filters will be stored in drums for removal from the site for disposal at an authorized disposal facility.

There are minimal quantities of reagents such as dilute HCl (<5L), concentrated HNO<sub>3</sub> (vials of <10mL), and other materials on-site for geological testing and environmental sample preservation.

Sabina anticipates the maximum quantity of ammonium nitrate (in solid form) at the MLA during initial development works at any time during the calendar year to be 1525 tonnes.

Calcium chloride is added to the fresh water to form a brine solution that acts as antifreeze when drilling in permafrost conditions. The drilling return water is reheated and reused using a mega-bag system which catches the drill cuttings as well. Salt is stored in bags, with 28 sealed in a megabag and placed on a pallet.

Explosive products, when/if on-site, will be stored in appropriate facilities at designated explosives storage site(s).

Fire extinguishers and dust suppression is also used on-site as needed and is stored in appropriate facilities. Small quantities of various household chemicals are on-site for domestic use.

SDS's will be collected and kept at the site for all chemicals and fuel products. Appropriate storage and handling of these products will be undertaken.

For development works no additional management of hazardous waste is required. Management will be done in accordance with 2BE-GOO1520 and 2BE-GEO1520 water licence terms and conditions.

## 2.5. DRILLING FLUIDS AND CUTTINGS

Drilling activities make use of water to lubricate the drill and flush rock dust from the drill hole. When, when drilling in permafrost on land or on ice which is frozen to the lake bottom salt may be added to the drill water to make a brine solution, thereby lowering the water's freezing point and reducing the risk of the drill freezing in. Sodium Chloride or Calcium Chloride may be used for this purpose, with a preference for the latter due to its lower environmental impact.

During drilling, drill water (whether freshwater or brine) is pumped down the drill hole to lubricate the drill bit and is then recirculated back up between the drill rod and the drill casing, flushing the rock dust generated during drilling with it. On return to the surface, the water is pumped to the drill settling and recirculation bin. Water is drawn off the top of this settling bin for reuse, while cuttings (the settled rock dust) are periodically drained from the bottom of the bin and transferred to a portable container which is transported to one of the Back River Project cuttings consolidation sumps for management and disposal. Alternately, these cuttings may be pumped directly from the drill settling bin to a nearby sump or natural depression. All sumps are to be located at least 31 m from the high water mark of any adjacent waterbody where direct flow into a water body is not possible.

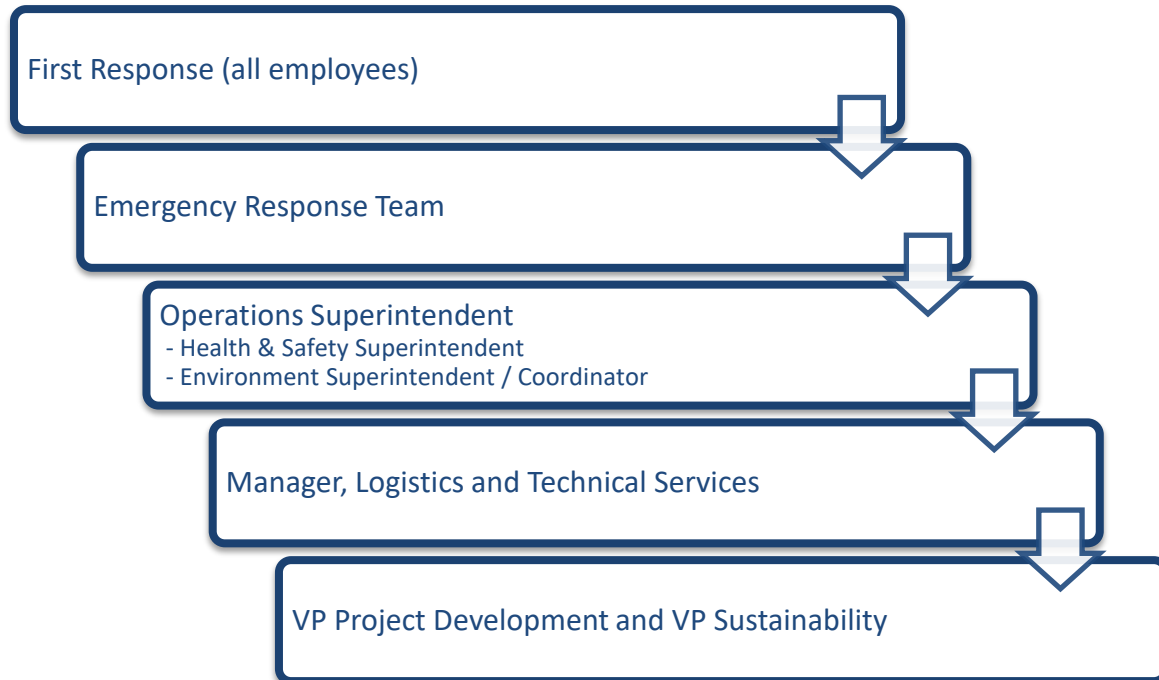
Drilling is conducted in a manner to prevent drilling wastes spreading to surrounding waterbodies. Drill sites are located at least 31 m from water or on ice, and sites are constructed in a manner to minimize impacts. Garbage is removed daily and sites are maintained in a orderly fashion and in accordance with applicable requirements of water licences 2BE-GOO2028, 2BE-GEO2025, and 2BE-MLL1722 and NIRB Screening decision for File No. 08EA084 terms and conditions.



### 3. Roles and Responsibilities

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The general response and notification chart is presented in the following:



#### 3.1. ALL EMPLOYEES (FIRST RESPONDERS)

- Immediately warn other personnel working near the spill area.
- Evacuate the area if the health and safety of personnel is threatened.
- Notify direct supervisor or Site Superintendent, who will initiate the spill response operations.
- In the absence of danger, take any safe and reasonable measure to stop, contain and identify the nature of the spill.
- Participate in spill response as directed by the Site Superintendent.

#### 3.2. EMERGENCY RESPONSE TEAM (SPILL CLEANUP CREW)

- Members determined by Site Superintendent based on response needs.
- Conduct cleanup of significant spills under direction of Site Superintendent.

#### 3.3. SITE SUPERINTENDENT

- Assemble and manage the Emergency Response Team, as required.
- Ensures cleanup is completed to Sabina standards in line with direction from the Manager, Logistics and Technical Services (TS), Health & Safety Superintendent, Environmental Superintendent and Environmental Coordinator.
- Notify Manager, Logistics and TS, Health & Safety Superintendent, and Environmental Superintendent/Coordinator of incident.

- Provides update within Sabina in camp and headquarters.
- Record date, location (GPS), material spilled, volume, reason for release, any negative impact, status of cleanup, and corrective actions taken.
- Keep and maintain database of all reportable and non-reportable spills as identified in the Plan.
- Conducts ongoing monitoring of cleanup operations leading to close-out.
- Notify HQ staff including VP Project Development and VP Sustainability for any reportable spills as identified in this plan
- Classify spill level as minor, moderate or major and ensure appropriate response initiated
- Assists in developing effective spill management and prevention practices.
- As directed by the VP Project Development and Manager, Logistics and TS report spill to 24-hour Spill Reporting Line.
- Liaise with NWT/NU applicable agencies regarding on-going cleanup activities.
- Co-ordinate inspections and spill closure by applicable agencies.
- Assist in spill response training and exercises.

### **3.4. MANAGER LOGISTICS AND TECHNICAL SERVICES**

- Provides advice and ensures cleanup is completed to Sabina standards in line with direction from the Site Superintendent and VP Sustainability.
- Ensures Emergency Response Team is adequately trained in spill response.
- Ensures Emergency response and/or monitoring equipment and supplies are regularly inspected and maintained
- Organize with Site Superintendent spill response training and exercises.
- Lead investigation and identify measure and/or training to prevent similar spills.

### **3.5. ENVIRONMENTAL SUPERINTENDENT AND COORDINATOR**

- Provides advice and ensures spill is documented appropriately as per this plan and regulatory requirements.
- Record date, location (GPS), material spilled, volume, reason for release, any negative impact, status of cleanup, and corrective actions taken; confirm these details with Site Superintendent.
- Obtain photographs of spill site before cleanup starts if possible and after the cleanup has been completed. Take pictures of undisturbed area beside the spill area for a comparison. If spill occurs on snow, stake or otherwise identify the affected area so that it can be evaluated once the snow melts.
- As directed by the VP Sustainability and Site Superintendent liaise with NWT/NU applicable agencies regarding on-going cleanup activities, inspections and incident closure
- Assist in initial and ongoing response efforts.
- Provide advice to assist with cleanup.
- Co-ordinate inspections and spill closure by applicable agencies.
- Assist with investigation and identify measure and/or training to prevent similar spills.

**3.6. HEALTH & SAFETY SUPERINTENDENT**

- Assist in initial and ongoing response efforts.
- Provide advice to assist with cleanup.
- Assist with investigation and identify measure and/or training to prevent similar spills.

**3.7. VP PROJECT DEVELOPMENT AND VP SUSTAINABILITY**

- Engage Legal Counsel and Sabina Senior Management and Board of Directors as required.
- Notify and update Senior Management and Board members as required.
- Notify and communicate with the Kitikmeot Inuit Association regarding any spills reported to the NT/NU Spill Report Line

## 4. Training and Testing

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### 4.1. TRAINING

#### 4.1.1. Site Orientation

On-site orientation will be provided to all on-site personnel to ensure employees are aware of:

- What First Responders are to do in case of a spill.
- The location of SDS sheets and Spill Report Forms.
- The location of the Spill Response Kits.
- The general locations of fire extinguishers and firefighting equipment.
- The location of the Spill Action Plan and the Fire Action Plan.

#### 4.1.2. Role Specific

Specific on-site training will be provided to employees whose job function may have a higher probability of experiencing a spill to ensure they are aware of:

- WHMIS and Transportation of Dangerous Goods.
- Identify and avoid the conditions which may lead to a spill.
- Develop an understanding of the potential environmental impacts of a spill.
- Develop an understanding of the financial costs of a spill.
- Recognize the hazards associated with sources of ignition (smoking, electrical sparks) near a fuel source.
- Spill kit contents and use of them.
- Turn off valves to stop the flow of fuel.

For employees involved in fuel handling, additional training would be provided regarding appropriate refuelling techniques and drum handling procedures.

#### 4.1.3. Emergency Response Team

Members of the Emergency Response Team will be provided a higher level of training to allow for safe and adequate response. This includes:

- All information given as part of the Role Specific Training.
- Fire extinguishers and water pump locations and use.
- Details of the Spill Action Plan and the Fire Action Plan.
- Identify, evaluate and mitigate the hazards posed by any spilled product by using appropriate PPE (personal protective equipment).

## **4.2. TESTING**

Spill drills and training are routinely conducted to ensure familiarization of on-site personnel with their responsibilities in case of a spill. Drills may also include hands-on scenarios where the Emergency Response Team utilizes equipment to deal with the spill scenario. Records of this training and testing are kept on file and posted to provide access for those who were unable to attend.

## 5. Spill Response Equipment

### 5.1. GENERAL EQUIPMENT

Heavy equipment and aircraft may be used in the area for emergency use to respond to spill incidents. Spill kits and spill response equipment are to be located in key locations and are to be accessible to responders.

Site specific maps illustrating spill kit locations onsite can be found in Appendix D.

### 5.2. SPILL KITS

**Table 1. Location of Spill Kits.**

Goose Exploration Camp	Marine Laydown Area	George	Seasonal Exploration Camp
Tank Farm	Shoreline Pad	Tank Farm	Fuel Cache
Drummed Fuel Storage	Freight Storage Pad	Helipad	Helipad
Generator Buildings	Generator	Each Diamond Drill	Each Diamond Drill
Coreshack	Camp Location		
Drum Crusher	Temporary AN and Fuel Storage		
Incinerator	Construction Laydown Pad		
Helipad Area	Mechanics Shop		
Dock	Quarry Area		
Each Diamond Drill			
South Quonset			
Shop North Quonset			

**Table 2. General Spill Kit Contents.**

Quantity	Item(s)
1	45 gal, 16 Gauge Open Top Drum, c/w Bolting Ring & Gasket
20	Short Putty Epoxy Sticks
1	48" x 48" x 1/16" Neoprene Pad (Drain Stop)
1	Splash Protective Goggles
1	Pkg. - Polyethylene Disposable Bags (5 ml) 10 per Package
1	Shovel (Spark Proof)
1	Case T-123" x 10' Absorbent Boom, 4-Booms/Case;
1	Pkg. - Universal absorbent Mats, 16 1/2" x 20", 100 Mats per Package
1	Roll - Oil only absorbent mats 150' x 33"

\* Drill rigs are equipped with a roll of absorbent mat for minor spills. Other appropriate equipment for spill response (PPE, shovel, bags) is typically already located at the drill for general use.

## EXPLORATION SPILL CONTINGENCY PLAN

An exhaustive spill kit appropriate for bulk fuel transfer activities per Transport Canada requirements is additionally available at the MLA. A complete list of it's contents as well as all heavy equipment, vessels, and fuel storage which may be available for use at the Back River Project can be found in Sabina's OPPP&OPEP.

## 6. Spill Response Procedure

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A spill is defined as the discharge of a hazardous product out of its containment and into the environment. Potential hazards to humans, vegetation, water resources, fish, and wildlife vary in severity, depending on several factors including nature of the material, quantity spilled, location, and season. Fuel is the main product that may be spilled and therefore spill response procedures focus on this hazardous material. Other chemicals that may be spilled include sewage water, and small quantities of lubricants and oils.

All site personnel are briefed on the procedures to be followed to report a spill and initiate spill response. The first person to notice a spill must take the following steps:

- Immediately warn other personnel working near the spill area.
- Evacuate the area if the health and safety of personnel is threatened.
- Notify their direct supervisor or Site Superintendent, who will initiate the spill response operations.
- In the absence of danger, and before the spill response team arrives at the scene, take any safe and reasonable measure to stop, contain and identify the nature of the spill.

The following details the steps to be taken in the event of a spill. Steps are listed in order of importance; however, circumstances and conditions may alter the order of these steps to meet a specific situation.

### 6.1. IDENTIFY AND ASSESS

- Ensure safety of all people in the area.
- Check for fire and explosion risk:
  - Extinguish all ignition sources in the area
- If unsafe, raise alarm and close off affected area

### 6.2. STOP FLOW

- Stop flow at source of spill (e.g. turning off a pump, closing a valve, sealing a puncture hole with almost anything handy (e.g., a rag, a piece of wood, tape, etc.), raising a leaky or discharging hose at a level higher than the product level inside the tank, or transferring fuel from leaking containers)
- Contain spill utilizing absorbent pads, drip pans, or other secondary containment berms to catch any slow or unexpected leaks.
- Attempt to limit the spread of the spill. Prevent movement using sorbent material and berms to form a barrier
- If the spill occurs on ice, attempts should be made to stop the spill from reaching ice-free ground.

### 6.3. NOTIFY SUPERVISOR

- Provide as much information as possible about the source, material, amount, fire risk, injuries etc.

### 6.4. SPILL CONTAINMENT

- For all spills, use absorbents to contain and soak up the fuel



- Prevent spread of fuel by using booms and berms
- Response operations should not be commenced in the affected area until it is safe.
- Evaluate the potential dangers of the spill in order to protect sensitive ecosystems and natural resources
- Block or divert the spilled material away from sensitive receptors (e.g. using absorbent booms, dykes, berms, or trenches (dug in the ground or in ice)).

### 6.5. RECOVERY AND CLEANUP

- Recover as much of the spill as possible using absorbent materials and/or digging up the affected area if applicable.
- Store any contaminated or recovered material in secondary containment
- Disposal should be by approved methods and facilities as per the Site Superintendent instructions.
- Ensure spill is recorded in Environmental Incident Log

### 6.6. RESPONSE BY SPILL LOCATION

#### 6.6.1. Spills on Land

Response to spills on land will include the general procedures previously detailed. The main spill control techniques involve the use of two types of barriers: dykes and trenches. Barriers should be placed down-gradient (down-slope) from the source of the spill, and as close as possible to the source of the spill. Barriers slow the progression of the fuel and also serve as containment to allow for recovery.

Depending on the volume spilled, the site of the spill as well as available material, a dyke may be built with soil, booms, lumber, snow, etc. A plastic liner should be placed at the foot of and over the dykes to protect the underlying soil or other material and to facilitate recovery of the fuel. Construct dykes in such a way as to accumulate a thick layer of free product in a single area (V shaped or U shaped).

Trenches are useful in the presence of permeable soil and when the spilled fuel is migrating below the ground surface. A plastic liner should be placed on the down-gradient edge of the trench to protect the underlying soil. Liners should not be placed at the bottom of the trench to allow water to continue flowing underneath the layer of floating oil.

The use of large quantities of absorbent materials to recover important volumes of fuel should be avoided. Large volumes of free-product should be recovered, as much as possible, by using vacuums and pumps, and containerized. Mixtures of water and fuel may be processed through an oil-water separator. Absorbent sheets should be used to soak up residual fuel on water, on the ground (soil and rock), and on vegetation.

#### 6.6.2. Spills on Water

Response to spills on water includes the general procedures previously detailed. Various containment, diversion and recovery techniques are discussed in the following sections. The following elements must be taken into consideration when conducting response operations:

- Type of waterbody or water course (lake, ocean, stream, river).
- Water depth and surface area.
- Wind speed and direction.
- Resonance and range of tides.

- Type of shoreline.
- Seasonal considerations (open-water, freeze-up, break-up, frozen).

Containment of an oil slick on the ocean requires the deployment of mobile floating booms to intercept, control, contain and concentrate (i.e., increase thickness) the floating oil. One end of the boom is anchored to shore while the other is towed by a boat or other means and used to circle the oil slick and return it close to shore for recovery using a skimmer. Reducing the surface area of the slick increases its thickness and thereby improves recovery. Mechanical recovery equipment (i.e., skimmers and oil/water separators) will be mobilized to site if required.

If oil is spilled in a lake it may not be possible to deploy booms using a boat. In this case, measures are taken to protect sensitive and accessible shoreline. The oil slick is monitored to determine the direction of migration. In the absence of strong winds the oil will likely flow towards the discharge of the lake. Measures are taken to block and concentrate the oil slick at the lake discharge using booms where it will subsequently be recovered using a portable skimmer, a vacuum, or sorbent materials.

In small slowly-flowing rivers, streams, channels, inlets or ditches, inverted weirs (i.e., siphon dams) is used to stop and concentrate moving oil for collection while allowing water to continue to flow unimpeded. In the case of floating oil, in a stream, heading for a culvert (i.e., at a road crossing) a culvert block is used to stop and concentrate moving oil for collection while allowing water to continue to flow unimpeded. In both cases oil will then be recovered using a portable skimmer or sorbent materials.

In the case of spills in larger rivers, with fast moving currents, diversion booming is used to direct the oil slick ashore for recovery. Single or multiple booms (i.e., cascading) may be used for diversion. Typically, the booms are anchored across the river at an angle. The angle will depend on the current velocity. Choosing a section of a river that is both wider and shallower makes boom deployment easier. Diversion booming may also be used to direct an oil slick away from a sensitive area to be protected.

Spills in the marine environment occurring during fuel offload will be managed in accordance with the Oil Pollution Emergency Plan (OPEP) and the Shipboard Oil Pollution Emergency Plan (SOPEP) required by Transport Canada.

### **6.6.3. Spills on Snow and Ice**

In general, snow and ice will slow the movement of hydrocarbons. The presence of snow may also hide the oil slick and make it more difficult to follow its progression. Snow is generally a good natural sorbent, as hydrocarbons have a tendency to be soaked up by snow through capillary action. However, the use of snow as a sorbent material is to be limited as much as possible. Snow and frozen ground also prevent hydrocarbons from migrating down into soil or at least slow the migration process. Ice prevents seepage of fuel into the water.

Response to spills on snow and ice includes the general procedures previously detailed. Most response procedures for spills on land may be used for spills on snow and ice. The use of dykes (i.e., compacted snow berms lined with plastic sheeting) or trenches (dug in ice) slow the progression of the fuel and also serve as containment to allow recovery of the fuel. Free-product is recovered by using a vacuum, a pump, or sorbent materials. Contaminated snow and ice is scraped up manually or using heavy equipment depending on volumes. The contaminated snow and ice is placed in containers or within plastic lined berms on land. If required, a contaminated snow storage site is to be located in close proximity to one of the four (4) main work sites to facilitate inspection and monitoring, in an area which is still easily

accessible once it is time to remove the snow (i.e., spring or summer), and at least 30 m away from any body of water or ditch. Once enough snow has melted, the oily water is removed from the storage and processed through an oil-water separator that would be mobilized to site. Hydrocarbons recovered will be burned in the camp incinerator or shipped off-site for processing.

## **6.7. RESPONSE BY MATERIAL SPILLED**

### **6.7.1. Fuel**

Detection of leaks will be using two methods - a fuel inventory reconciliation and inspection. A weekly reconciliation of storage volumes will be completed and a spill response will be initiated in the event of any unexplained loss over five or more weeks.

Weekly inspections will be conducted to ensure either there has not been a leak or that the conditions of the area could result in a leak. These inspections will include the fuel drums and storage containers, secondary containment sumps and associated spill containment devices, any pumps and product-handling equipment, and an overflow protection devices. These inspections will be recorded to include who completed the inspections, areas included in the visual inspection and any deficiencies noted.

Fuel spills, leaks at storage facilities or vehicle accidents will be handled by following these steps:

- Identify the source of the leak or spill.
- Contact the Environmental Coordinator/Site Superintendent.
- Stop leaks from tank or barrel by.
- Turning off valves.
- Utilizing patching kits to seal leaks.
- Placing plastic sheeting at the foot of the tank or barrel to prevent seepage into the ground.
- Contain the spill and the source if possible.
- Take photographs of the spill site before and after the cleanup.

Small spills will be cleaned up by removing the contaminated soil and storing it in empty 205 L drums for backhaul and disposal at an approved hazardous waste disposal site. Should a large spill occur, cleanup and disposal efforts will be coordinated as necessary with the appropriate authorities and agencies.

### **6.7.2. Domestic Sewage, Solid Waste, and Contact Water**

Any problems with the incinerator or other waste disposal mechanism will be immediately reported to the Site Superintendent.

In the event of a power failure, the stand by generator will be put into operation as soon as possible. Similarly, in the case of a pump failure, the backup pump will be put on-line. Any greywater drainage problems will be addressed as quickly as possible to minimize the chance of a spill. As necessary appropriate safety equipment and personal protective clothing will be available to site personnel.

### **6.7.3. Chemical**

Assess the hazard of the spilled material by referring to the relevant SDS sheet. Each response will vary based on the material. If the chemical is hazardous, ensure personnel protective equipment is utilized (latex gloves, eye protection, etc.) before approaching the spill. As chemicals are only used in extremely

small quantities on-site use absorbent mats to soak up spilled liquids and place in appropriate container for treatment and/or disposal.

#### 6.7.4. Drilling Salt, Brine or Cuttings

The Back River exploration programs use salts to produce brine for use when necessary when drilling in permafrost. The salts lower the freezing point of the water helping prevent the drill rods from freezing in. Calcium Chloride is used to create the brine. Salts are only added when drilling on land or through ground-fast ice and are recirculated in the sealed drilling process. In the winter and shoulder seasons the water is additionally heated to reduce freezing.

Drill equipment, including casings, are inspected daily to ensure suitable for use and water usage and return is monitored to ensure recirculation efficacy. To minimize spills, Sabina management practices include the installation of tarps underneath the rigs, coco matting, spill pads, drip trays, as well as a catchment basin for drips and return water directly where the bit enters the ground which houses an active sump pump.

The main risk of a salt and brine spill is to the environment, including both aquatic and terrestrial environments, and permafrost. However, care must be taken when handling the dry salts as well as the brine as they may be a skin irritant. Spill response for spills of dry salt product as well as of brine are outlined below:

##### 1. Spills of Dry Product

The source of the spill will be stopped as soon as possible. If there is risk of the spill entering a waterbody, all reasonable measures will be taken to prevent this from occurring. Spilled dry salt product will be picked up and repackaged for reuse if possible, if not it will be shipped off site to a licenced waste disposal facility. If appropriate, a shallow excavation of the material would be performed to remove contaminated material and minimize impact to downslope vegetation or waterbodies. Collected salt-contaminated soil will be disposed in one of the designated drill cuttings sumps.

##### 2. Brine Spills

The spill will be stopped as soon as possible, and, if feasible, the spilled brine will be pumped up (or if frozen; scraped up) and returned to the drilling circuit or to a drill cuttings sump. Similar to a hydrocarbon spill, a trench or diversion may be dug and lined with plastic to collect and remove flowing water. Additional remediation measures may be applied on a case-by-case basis.

##### 3. Spills of Cuttings

The spill will be stopped as soon as possible. Cuttings spills within 31 m of water or with the potential for direct flow into a waterbody will be removed to the extent practical and material placed in a designated cuttings sump. Runoff control measures may be placed downslope of the spill site if runoff of sediment to water is possible.

##### 4. Artesian flow

Should artesian flow be encountered while drilling, drilling will cease and the hole plugged and permanently sealed.

#### **6.8. RESPONSE TO A FIRE**

Various products, including fuel, may be flammable under certain circumstances. It is important to ensure that the spill does not present a risk of fire prior to commencing the cleanup. If a fire does break out refer to relevant site firefighting procedures.

#### **6.9. DISPOSAL**

Appropriate disposal, as directed by the Environmental Manager, for any recovered product and contaminated soil, water, or absorbent cleanup material is regulated and must be authorized by the agency investigating the incident. Obtain approval from all appropriate government agencies before disposal. A hazardous waste generator number has been acquired and used by the expeditor when disposing of camp waste.

Fuel contaminated soil can be remediated at camp through incineration or alternatively, the contaminated soil can be flown out to Yellowknife for disposal in an approved disposal/treatment site.

Any non-reusable recovered product, contaminated soil and cleanup material, which cannot be incinerated, will be stored in containers and returned to camp prior to disposal.

## 7. Spill Potential Analysis

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### 7.1. CAMPS

#### 7.1.1. Fuel

Fuel spills could potentially occur from:

- Fuel storage containment (tanks, barrels) leaks.
- Spills during drum transport from aircraft to fuel storage area.
- Spills from vehicles or equipment as a result of accidents.
- Spills during fuel transfer from barrels to equipment or heaters.
- Spills during transport from barge to fuel storage area.
- Spills during marine transport.

Spills occurring during fuel handling, transfer, or storage operations will be minimized by:

- Secondary containment and/or drip trays.
- Proper storage of barrels.
- Inspections of the storage facilities and barrels.
- Inventory tracking.
- Staff training in proper fuel handling procedures.
- Spill response training for personnel associated with fuel handling.
- Immediate cleanup of minor spills.
- Enclosing spigots on fuel containers with absorbent mat to collect any slow drips.
- Fuel line walkers will be used to monitor the fittings etc. during fuel transfers
- Implementation of approved OPEP and SOPEP for transport in marine waters.

The potential for spills affecting surface waters is low, as fuel storage and transfer points are located away from watercourses and lakes. Close inspection of fuel transfer activities will be undertaken during all times while fuel is being pumped/transferred to equipment. Secondary containment will be used at all refueling points and storage areas.

#### 7.1.2. Domestic Sewage and Solid Waste

Waste from the kitchen and Pacto systems are carried to the incinerator in a small trailer, with virtually no risk of spillage. The greywater lines are routinely inspected for leaks and repaired as necessary. The screens at the greywater sump are cleaned of debris daily.

### 7.1.3. Solid Waste

Failures may occur in the handling of solid waste through the following situations:

- Incinerator at Goose Exploration Camp fails.
- Accidental damage to the incinerator and its components, or the heaters and/or their fuel supplies.
- Mechanical breakdown.
- Improper maintenance.

Visual inspection of the incinerator and its combustion products will be carried out frequently, typically in the normal course of operation. The incinerator will be operated according to the manufacturer's instructions.

### 7.1.4. Chemicals

Any chemicals brought on-site are stored in manufacturers' approved packaging. Although unlikely, leaks may occur resulting in minor spills of chemical product in storage. It is more likely a leak will occur during the transfer of chemicals or from accidental failure of containers.

Sabina provides training to its staff in product handling and inspection procedures, which we feel, will result in reduced occurrences of chemical spills.

## 7.2. OVERLAND TRANSPORT

The following table identifies possible incidents which may occur along the winter and all-weather road, the consequences of that incident and the preventative measures to be implemented.

**Table 3. Summary of Potential Incidents and Preventative Measures along Transportation Corridors**

Incident	Description	Consequences	Preventative Measures
Refuelling of vehicles	Refuelling hose could break, spring a leak, overfilling of equipment tank, spillage from gas storage tank	Puddles of fuel over limited area Hose breaks at equipment and sprays a large amount of fuel over a larger area "slick" flows steadily from equipment	All refuelling will occur in area 30m from waterways in designated areas Personnel will be aware of emergency shut-off valves and trained in spills response Spill Kit available Refuelling occur within containment and/or absorbent material in place
Vehicle storage and operation	Vehicles could leak fuel while in operation or during a stop along route.	Puddles of fuel over limited area to the entire contents of a tank being discharged.	Vehicles will stop 31 m from waterways Vehicles parked on ice will have absorbent material placed underneath Personnel will be trained in spills response Spill Kit available
Fuel containers leaking	Fuel being brought to the vehicles could leak fuel while in operation or during a stop along route.	Puddles of fuel over limited area to the entire contents of a tank being discharged.	Regular visual inspection will occur to ensure tanks are not leaking Personnel will be trained in spills response Spill Kit available

(continued)

**Table 3. Summary of Potential Incidents and Preventative Measures along Transportation Corridors (completed)**

Incident	Description	Consequences	Preventative Measures
Vehicle accident	Accident on road that involves equipment going off road/overturning	This worst case scenario could result in a tank of fuel and any materials being transported spilling entire contents over a large area.	Safe road corridor will flagged Speed limits will be in effect Transportation of Dangerous Goods manifest if necessary Coordination and communication between the cat-haul and camps will be maintained Camp personnel will be ready to mobilize in case of accident Spill kit available with cat-haul and on-site
Temporary fuel storage leakage and/or spill	Fuel caches leak fuel or due to accident contents are spilled	Puddles of fuel over limited area Storage container breaks and fuel spreads over a larger area	All storage will occur in area 30m from waterways Secondary containment berms will be used for fuel caches Personnel will be aware of emergency shut-off valves and trained in spills response Spill Kit available Regular monitoring and inventory tracking will occur at these remote/temporary fuel storage areas
Calcium Chloride spill	Bags of salt could be torn and spilled in temporary storage area or in transport	Tears and bag breakages could lead to salt spread over limited area Bags could break in a manner that salt is spread over a larger area	Personnel will be trained in proper material handling and transport methods Salt will be stored and transported in 50lb bags on pallets wrapped in plastic Secondary containment will be used at temporary storage locations Spill kits and equipment available.

### 7.3. FIRE PREVENTION

The most serious spill incident would involve fire and a hydrocarbon-based fuel source. To minimize the risk of fire, **No Smoking** and **Flammable** signs will be posted as needed at storage areas and with the cat-haul train along with a dry chemical fire extinguisher. Workers will be trained in the use of the fire extinguisher and be instructed of the risk caused by electrical and open flame fire hazards near fuel.





## 8. Reporting Procedures

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All spills are to be reported to the Site Superintendent or their designated representative. It is their responsibility to notify headquarters staff and external parties as outlined in the roles and responsibilities of this plan.

An internal log of spills, no matter how small, is to be kept and maintained by the Site Superintendent. Each record will include date, location, material spilled, volume, reason for release, any negative impact, status of cleanup, and corrective actions taken. Photo's (before, during and after cleanup) shall also be taken of all significant spills. To assist with internal tracking a Sabina Spill Form is included in Appendix C.

Reportable spills, as identified in this plan, are to be externally reported to the NWT/Nunavut Spill Response Line. The Site Superintendent will ensure spills are reported externally as required. The Spill response form (Appendix B) is to be completed for all externally reported spills and forwarded to the NWT/Nunavut Spill Response Centre within the required 24 hour reporting period. The Manager, Logistics and TS, or their designate, will notify Sabina Headquarter senior management of any reportable spills as listed below.

Any spill, or incident that may likely result in a spill, of an amount equal to or greater than the amount listed in the table below shall be promptly externally reported. Spills adjacent to or into a surface water or ground water access shall be externally reported regardless of quantity.

Spills within secondary containment will be reported and included in the internal log. In the situation that the spill within the containment is above the thresholds noted below, an external report to the NWT/Nunavut Spills will be submitted if the spill exceeds 40% capacity of the secondary containment.

Notification of spills within the marine environment will also be provided to community representatives of Kingaok and Omingmaktok.

**Table 4. External Reporting Volumes**

<b>TDGA Class</b>	<b>Description of Contaminant</b>	<b>Amount Spilled</b>
1	Explosives	Any amount
2.1	Compressed gas (flammable)	Any amount of gas from containers with a capacity greater than 100 litres
2.2	Compressed gas (non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 litres
2.3	Compressed gas (toxic)	Any amount
2.4	Compressed gas (corrosive)	Any amount
3.1, 3.2, 3.3	Flammable liquid	100 litres
4.1	Flammable solid	25 kg
4.2	Spontaneously combustible solids	25 kg
4.3	Water reactant solids	25 kg
5.1	Oxidizing substances	50 litres or 50 kg
5.2	Organic Peroxides	1 litre or 1 kg
6.1	Poisonous substances	5 litres or 5 kg
6.2	Infectious substances	Any amount
7	Radioactive	Any amount
8	Corrosive substances	5 litres or 5 kg
9.1 (in part)	Miscellaneous products or substances,	50 litres or 50 kg
9.2	Environmentally hazardous	1 litre or 1 kg
9.3	Dangerous wastes	5 litres or 5 kg
9.1 (in part)	PCB mixtures of 5 or more parts per million	0.5 litres or 0.5 kg
None	Other contaminants	100 litres or 100 kg

## Appendix A. Sabina Spill Response Team

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(will be reviewed and updated on an as-needed basis)

### Sabina Contacts:

Environmental Permitting Manager	Merle Keefe	(604) 998-4175
Exploration Manager	Nicole Lesanen	(867) 988-6855
Site Supervisor - Goose	Rob Davidson	(867) 675-3318
Site Supervisor - MLA	Colin Fraser	(867) 675-0325
VP Sustainability	Matthew Pickard	(604) 998-4175
Environmental Coordinator	Thomas Bolt	(867) 675-3310

### Additional assistance may be obtained, as necessary, from the following organizations:

Det'on Cho Logistics	(867) 873-6970
Shell Canada, Mobile Environmental Response	(867) 874-2562
Kitnuna	(867) 983-7500
Nuna Logistics Ltd.	(866) 817-0924
Dupont (Fuel Dye)	(905) 821-5660
Frontier Mining (Sorbents)	(867) 920-7617
Acklands (sorbents)	(867) 873-4100 (867) 920-5359

### Key Government Contacts:

NWT/NU 24hr Spill Report Line		Phone: 867-920-8130 Fax: 867-873-6924 Email: <a href="mailto:spills@gov.nt.ca">spills@gov.nt.ca</a>
Nunavut Water Board	Stephanie Autut, Exec. Director Karén Kharatyan, Director of Technical Services	(867) 360-6338
Kitikmeot Inuit Association	John Roesch, Senior Project Office	(867) 983-2458
Environment and Climate Change Canada	Craig Broome, Enforcement - Operations Manager Wade Romanko, Env. Emergencies Officer	(867) 669-4730 (867) 669-4736
Crown Indigenous Relations and Northern Affairs Canada	Primary: Justin Hack, Manager of Field Operations Omer Pasalic, Senior Inspection	T: (867) 975-4553 F: (867) 975-6445(867) 975-4306
Government of Nunavut Department of Environment		(867)-975-7700
Government of Nunavut Department of Environment	Manager of Pollution Control and Air Quality	(867)-975-7748
Government of Nunavut Department of Environment	Director Environmental Protection	(867) 975-7729
Department of Fisheries and Oceans	Suzanne Erkidjuk, Area Admin Clerk	(867) 979-8000
RCMP (Yellowknife)		(867) 669-1111

## EXPLORATION SPILL CONTINGENCY PLAN

RCMP (Cambridge Bay)	(867) 983-2111
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## Appendix B. NWT/NU Spill Report

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Canada

# NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

**REPORT LINE USE ONLY**

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR		REPORT TIME		<input type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	<b>REPORT NUMBER</b> _____	
	<b>B</b> OCCURRENCE DATE: MONTH – DAY – YEAR		OCCURRENCE TIME				
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE)			WATER LICENCE NUMBER (IF APPLICABLE)			
<b>D</b>	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION				REGION		
					<input type="checkbox"/> NWT <input type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
<b>E</b>	LATITUDE			LONGITUDE			
	DEGREES	MINUTES	SECONDS	DEGREES	MINUTES	SECONDS	
<b>F</b>	RESPONSIBLE PARTY OR VESSEL NAME		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION				
<b>G</b>	ANY CONTRACTOR INVOLVED		CONTRACTOR ADDRESS OR OFFICE LOCATION				
<b>H</b>	PRODUCT SPILLED		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES		U.N. NUMBER		
	SECOND PRODUCT SPILLED (IF APPLICABLE)		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES		U.N. NUMBER		
<b>I</b>	SPILL SOURCE		SPILL CAUSE		AREA OF CONTAMINATION IN SQUARE METRES		
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY		DESCRIBE ANY ASSISTANCE REQUIRED		HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT		
<b>K</b>	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS						
<b>L</b>	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE		
<b>M</b>	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE		

**REPORT LINE USE ONLY**

<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLED	REPORT LINE NUMBER
		STATION OPERATOR		YELLOWKNIFE, NT	(867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					

## Appendix C. Sabina Internal Spill Report

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## SABINA INTERNAL SPILL REPORT FORM

This form is to be used for internal documentation of spills of any petroleum product, chemical, ethylene glycol (antifreeze), or other hazardous material. See recent Spill Contingency Plan for reporting thresholds and structure. Once complete file with the Operations Superintendent.

<b>Report Date and Time:</b>				<b>Spill Date and Time:</b> <input type="checkbox"/> Spill occurred <input type="checkbox"/> Spill observed			
<b>Spill Location:</b> <input type="checkbox"/> Goose <input type="checkbox"/> Other (e.g. Drill, Boulder Pond) <input type="checkbox"/> George				<b>Describe Location:</b>			
<b>Coordinates (Lat/Long or UTM):</b>							

<b>Product(s) Spilled:</b>	Jet fuel	Diesel (P50)	Gasoline	AvGas	Oil (type)	Antifreeze	Other (describe)
<b>Quantity (L or kg):</b>							

<b>Personnel Involved:</b>	<input type="checkbox"/> Sabina	<input type="checkbox"/> Contractor	<input type="checkbox"/> Visitor	<input type="checkbox"/> Other
----------------------------	---------------------------------	-------------------------------------	----------------------------------	--------------------------------

**Cause of Spill:**

**Containment/Cleanup Measures Taken:**

**Factors Affecting Spill or Recovery (weather, snow, ground conditions, etc.):**

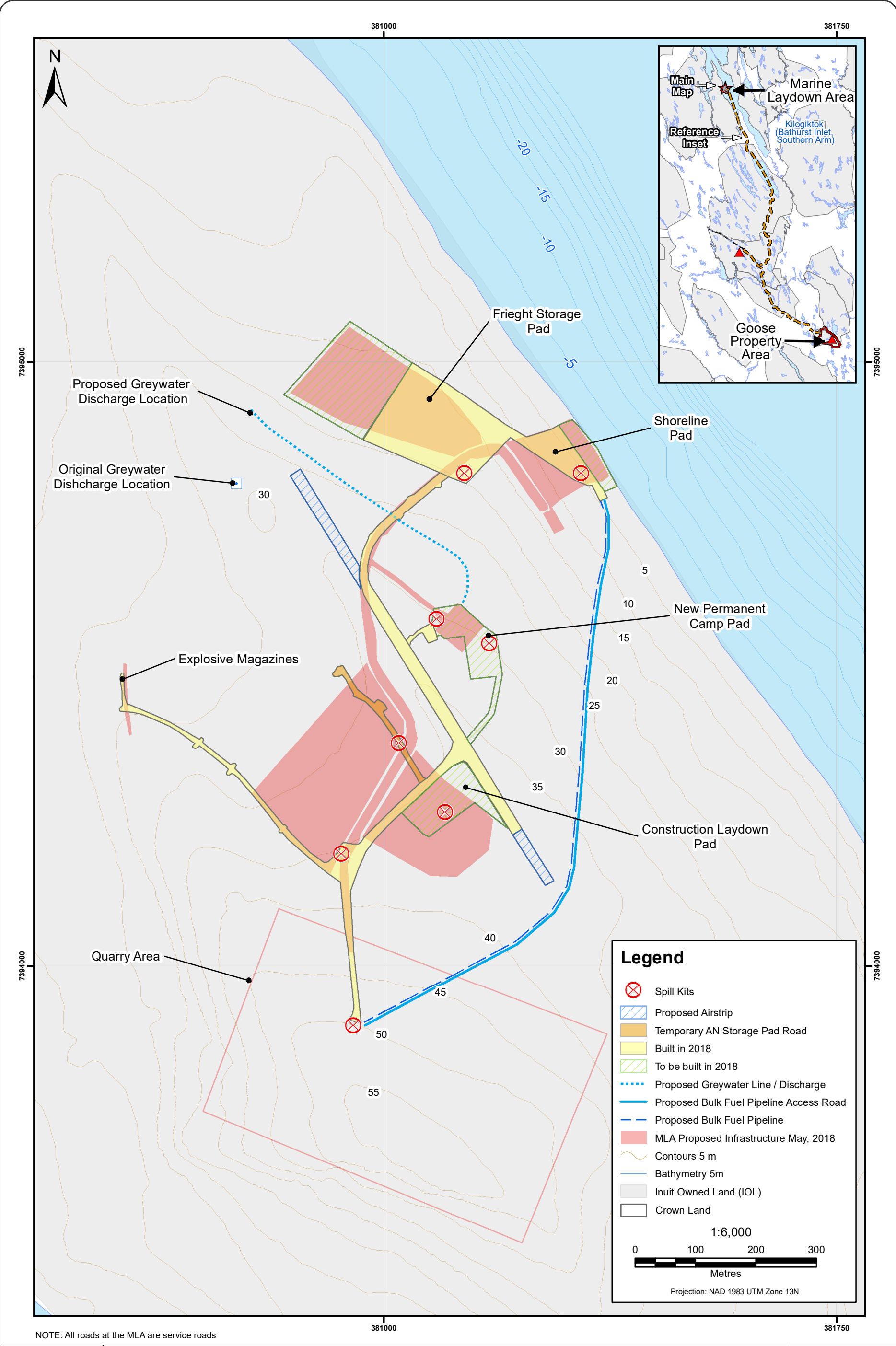
**Additional Action Required:**

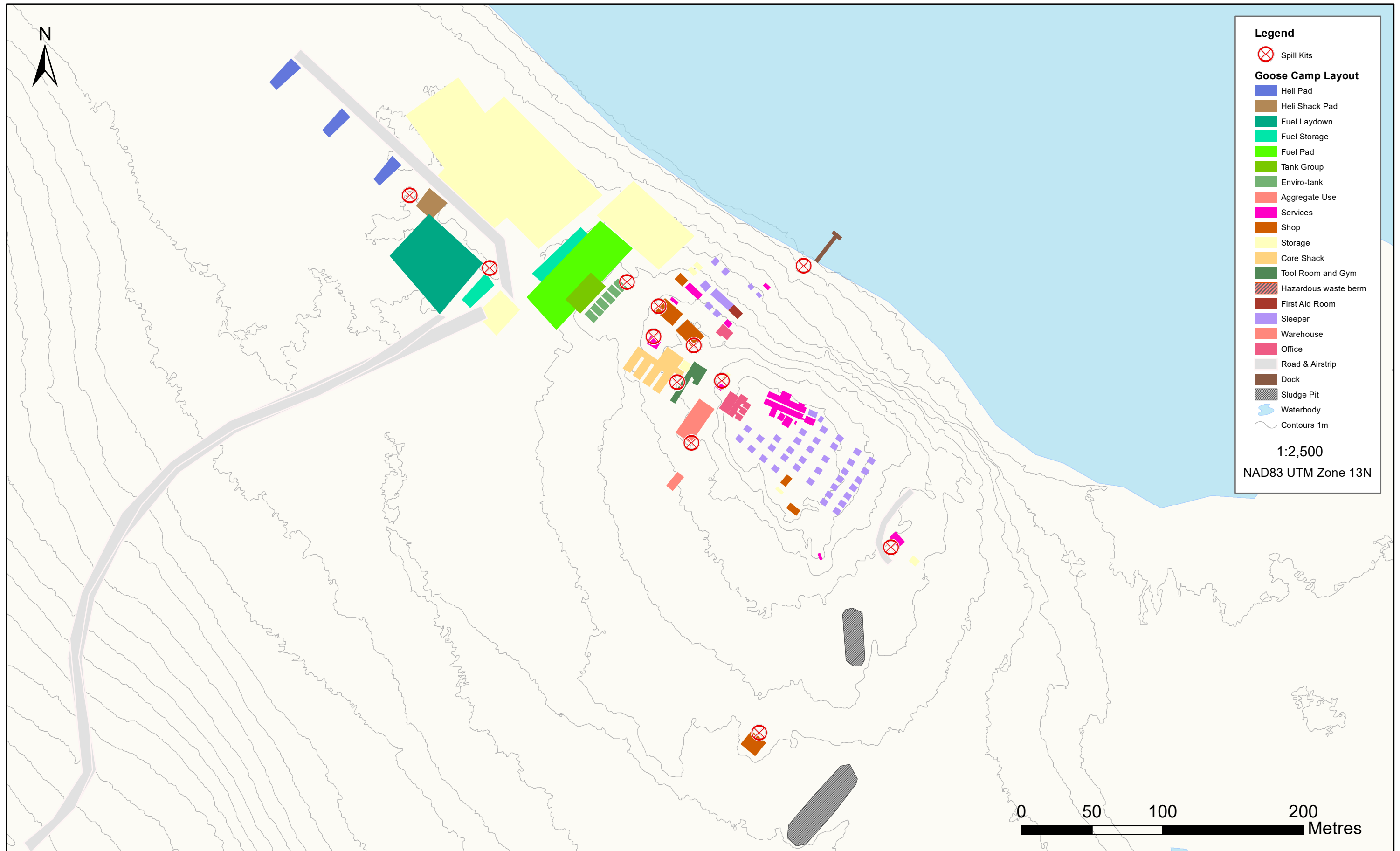
**Additional Comments:**

	<b>Name</b>	<b>Employer</b>	<b>Signature</b>
<b>Reported by:</b>			
<b>Reported to:</b>			

## Appendix D. Site Spill Kit Location Maps

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## **ATTACHMENT 7 - EXPLORATION WASTE MANAGEMENT PLAN**



**BACK RIVER PROJECT**  
**Exploration Non-Hazardous Waste Management**  
**Plan**

**June 2022**



# BACK RIVER PROJECT

## Exploration Non-Hazardous Waste Management Plan

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## Document Revision Record

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Date	Section	Page	Revision	Prepared by:
January 2013			Document prepared in support of Back River exploration activities	Sabina Gold and Silver Corp. (Sabina)
October 2019	All	All	Updates throughout, removal of overlap with the Comprehensive Hazardous Waste Management Plan and conversion to current Sabina management plan format	Katsky Venter on behalf of Sabina
June 2022	All	All	Updates throughout to focus on exploration activities and to outline use of existing Back River Project waste management facilities and approved plans	Katsky Venter (RainCoast Environmental) on behalf of Sabina

# 1. Introduction

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Sabina Gold & Silver Corp.'s (Sabina's) Exploration Non-Hazardous Waste Management Plan (the Plan) has been developed to outline waste management practices related to Sabina's exploration activities throughout the Back - Wishbone area. The purpose of this Plan is to ensure sound management of non-hazardous waste, to minimize the amount of waste generated, and to ensure the safe handling and disposal of all wastes.

This Plan is a part of Sabina's overall waste management program. It describes how combustible, non-combustible, recyclable, and reusable wastes as well as mineral waste and wastewater is managed. as non-hazardous wastes, mineral wastes, contact water, non-hazardous (both combustible and non-combustible) and hazardous wastes generated from exploration activities in the Back-Wishbone area are managed. In general, exploration waste management practices (along with exploration activities themselves) make use of the existing Back River Project facilities at the Goose Property, Marine Laydown Area (MLA), or George Property and follow the Back River Project (BRP) approved management plans.

## 1.1 EXISTING FACILITIES

The Back River project is located in western Nunavut, south of Bathurst Inlet within the Slave Structural Province. It lies approximately 525 kilometres northeast of Yellowknife, Northwest Territories and 400 kilometres south of Cambridge Bay, Nunavut. The Back River Project includes the established Goose and George camp and a seasonally operated Marine Laydown Area (MLA). The MLA is located on Bathurst Inlet and receives bulk supplies during the open water season which are then transported to Goose over a 160 km winter ice road.

Exploration activities are conducted seasonally with support from these permanent Back River Project facilities, including waste management infrastructure. Waste management infrastructure at Goose, George and the MLA is described in Sabina's various waste management plans.

For safety, environmental, and/or economic reasons temporary camps may also be established in seasonal exploration areas located 20 km or more from the main camps. With the exception of mineral and water waste, all wastes generated at these remote camps are transported by air or winter trail to the more permanent BRP facilities for management and disposal per the applicable management plan.

## 1.2 SCOPE AND OBJECTIVES

This Plan applies to all Sabina exploration projects in the Kitikmeot Region. Subject to internal review and revision this Plan will remain applicable until a material change in the scope of the Project occurs.

This plan outlines the waste management practices related to exploration activities, roles and responsibilities, and identifies how non-hazardous exploration wastes are managed.

The goal of any waste management plan is to reduce and prevent impacts to the environment. Managing wastes and working responsibly will also ensure personnel safety while involved in mineral exploration activities.

Sabina conducts waste management under the following guidance:

- Wherever and whenever possible, Sabina and its employees will work toward the 3Rs - reduce, reuse and recycle;
- Sabina is committed to considering additional best management practices and alternatives to hazardous products; and if an appropriate method and/or substitute is identified then it will be incorporated into exploration activities;
- Concerted effort will be made to purchase products from suppliers with programs and policies of return for used containers and/or unused product where available and economically feasible to do so; and
- Compliance with company policies, legislation and terms and conditions of water licenses and land use permits.

With this guidance, the steps of waste management to include:

- Understand waste streams
- Reduce amount generated
- Separate wastes
- Safe handling/transportation and disposal

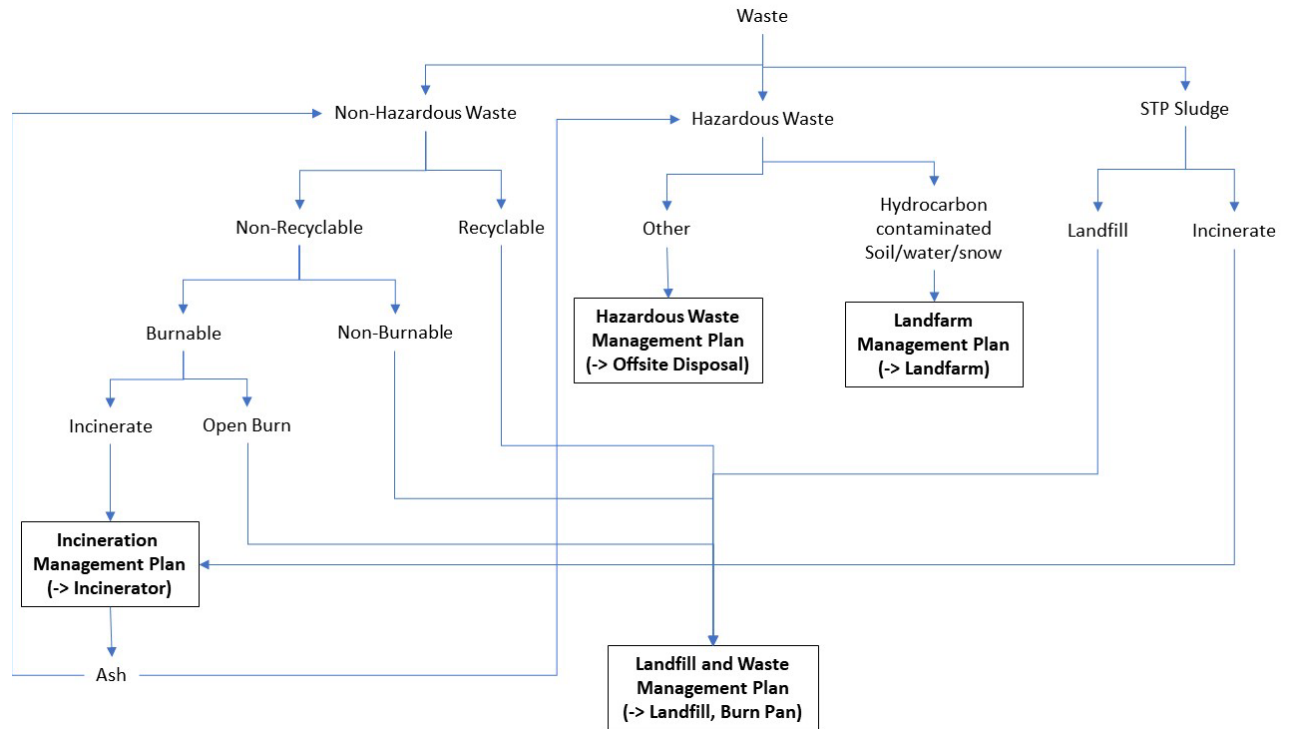
### 1.3 RELATED DOCUMENTS

This Plan is a part of the Back River Project's overall Waste Management Strategy. It is complimented by various waste management plans approved for the Back River Project, including:

- Incineration Management Plan (outlines procedures for incineration of appropriate wastes)
- Comprehensive Hazardous Materials Management Plan (outlines procedures for hazardous waste disposal and recycling related to exploration)
- Landfill and Waste Management Plan (outlines procedures for management and landfilling or burning of suitable non-hazardous wastes)
- Tailings Management Plan (outlines procedures for tailings waste)

An overview of how these plans relate to exploration wastes is provided in Figure 1-1.

## Exploration Non-Hazardous Waste Management Plan



*Figure 1-1. Overview of Exploration Waste Management at Back River Project Facilities*

## **2. Roles and Responsibilities**

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### **2.1 ALL EMPLOYEES**

- Place all waste in appropriate containers.
- Encourage and participate in general good housekeeping within camp boundaries and buildings.
- Ensure wastes potentially attractive to wildlife is never accessible to wildlife.

### **2.2 ENVIRONMENTAL SUPERINTENDENT/ MANAGER**

- Periodically verify waste management practices are being followed.
- Assist Operations Superintendent with tracking, monitoring and reporting as per terms and conditions of permits and licenses.
- Co-ordinate any inspections by applicable agencies.
- Ensure Waste Management Plans are updated as needed.

### **2.3 OPERATIONS SUPERINTENDENT**

- Evaluate waste reduction options
- Responsible for the overall management of waste as per this Plan.
- Ensure all staff are instructed on site waste management practices.
- Ensure appropriate waste receptacles are available and clearly labelled
- Ensure all legal requirements, including the completion of waste manifests, are filed prior to any shipment.
- Record backhaul volumes for non-hazardous waste.
- Conduct ongoing monitoring as required as per terms and conditions of permits and licenses.
- Summarize and report waste management information required by permits and licenses, or Sabina Senior Management.

### 3. Exploration Waste Classification and Management

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Exploration wastes may be generated by:

- Drill sites - used oil, antifreeze, used absorbent pads, greases, lubricants, batteries, scrap metal, empty fuel drums, timber/lumber scraps, drill rods, drilling fluids and additives, and drill cuttings.
- Generators and Heavy Equipment - used oil, antifreeze, used absorbent pads, greases, lubricants, batteries, scrap metal, empty fuel drums
- Camp (kitchen, offices, bathing and sleeping quarters) - recyclables, food, wood, cardboard, plastic, rubber, glass, batteries, solvents, scrap metal, empty fuel drums, sewage, greywater, construction debris, paint.
- Fuel storage - contact water from within berm, used absorbent pads, scrap metal, empty fuel drums

The non-hazardous wastes generated have been divided into:

1. Combustible
2. Recyclables & Reusables
3. Other Non-Hazardous Waste
4. Mineral Waste
5. Contact & Grey Water

To the extent practical, exploration waste is disposed of using existing BRP waste management facilities and in accordance with the approved BRP waste management plans. An overview of the destination of exploration wastes which are disposed of at the primary BRP waste disposal facilities, and the management plan which outlines the associated final disposal procedures see Figure 1-1. For a description of these wastes, along with mineral and wastewater, and how they are managed see the below sections.

Hazardous waste, including used oil, oil filters, used absorbent pads, paint, chemicals, batteries and used grease is addressed in Sabina's Comprehensive Hazardous Materials Management Plan.

#### 3.1 COMBUSTIBLE WASTES

Combustible wastes include kitchen waste, pacto sewage waste, cardboard, and wood. These wastes are kept separate and backhauled to an appropriate BRP waste management facility for appropriate disposal. The Back River Project Incineration Management Plan outlines specifically what wastes can

be incinerated and how, while Sabina's Landfill and Waste Management Plan outlines what may be landfilled or disposed of through open burning. Any wastes that are potentially attractive to wildlife must be backhauled daily or stored in a manner inaccessible to wildlife.

#### 3.2 RECYCLABLE AND REUSABLE WASTES

Recyclable and Reusable wastes may include plastic and aluminum drink containers, printer cartridges, metal containers, plastics (#1 thru #6) and scrap metal such as 205L drums. These wastes are collected,

sorted and stored until they can be backhauled to Yellowknife for inclusion in their recycling program or (for non-combustible inert recyclable or reusable waste only) managed as outlined in Sabina's Landfill and Waste Management Plan. Empty 205L fuel drums or other containers which may contain residual fluids that must be stacked and stored in secondary containment until disposed of.

### **3.3 OTHER NON-HAZARDOUS WASTES**

Non-combustible inert waste will be backhauled to an appropriate BRP waste management facility for management per Sabina's Landfill and Waste Management Plan. Any wastes that are potentially attractive to wildlife must be backhauled daily or stored in a manner inaccessible to wildlife.

### **3.4 CONTACT AND GREY WATER MANAGEMENT**

#### **3.4.1 Camp Greywater**

Greywater may be generated from camp kitchens and bathroom sinks and showers. Kitchen water is run through a grease trap and all greywater effluent is consolidated and periodically discharged to a sump approved by the inspector or defined in the applicable licence.

#### **3.4.2 Contact Water Management**

Contact water in this Plan refers to waste waters associated with fuel storage. It is the water that may accumulate in the secondary containment following precipitation or spring melt. The water is inspected for visible sheen and odour prior to release and, per licence requirements, may require additional testing prior to discharge criteria. Should water not meet licence requirements it will be treated with an oil-water separator and only released on receipt of compliant results and Inspector approval. For other fuel storage facilities (e.g., temporary fuel storage), water will be filtered through an oil-water separator prior to discharge. All discharges to the environment will occur in a manner that does not cause erosion or channelization and at least 31 m from the nearest waterbodies' high-water mark. Any water that is not suitable for discharge will be treated as hazardous waste.

### **3.5 MINERAL WASTE MANAGEMENT**

Where exploration drilling occurs without the use of calcium chloride, near or on lakes, the drill return water containing drill cuttings will be pumped well back from the shore of the lake to a natural depression or sump, the location of which is surveyed and recorded. Because drill cuttings are mechanically pulverized rock, they are geologically similar to the locally present glacial till. If the drill cuttings have a potential for acid rock drainage/metal leaching, it is anticipated that the distance from the water will minimize the impact if the potential is realized. It is expected that drill cuttings will, in time, be colonized by plants and lichen.

Mineral waste from drilling with brine or rock saw use is collected, consolidated through settlement and/or drying, and transported to a designated cuttings consolidation trench for permanent disposal.

In future, disposal of the cuttings with tailings or waste rock for management under Sabina's Tailings Management Plan and Waste Rock and Ore Management Plan may be possible, once these facilities have been constructed.



### **3.6 HAZARDOUS WASTE MANAGEMENT**

Hazardous wastes include petroleum products and lubricants such as diesel fuel, oils, greases, anti-freeze, and solvents used for equipment operation and maintenance, as well as chlorine (for water treatment) and calcium chloride for exploration drilling. Any such wastes are handled in accordance with their Safety Data Sheets and disposed of as outlined in Sabina's Comprehensive Hazardous Materials Management Plan. These materials are stored within secondary containment until disposed of off-site.

## **4. Plan Review**

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The activities and costing of waste management activities will be reviewed as required by changes in operations and/or technology and will be modified accordingly. Any necessary revisions shall be submitted to the Nunavut Water Board.

## **ATTACHMENT 8 - ABANDONMENT AND RESTORATION PLAN**



Back River Project

Abandonment and Restoration Plan

Wishbone-Malley

MAY 2022

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## 1.0 INTRODUCTION

### 1.1 General

Sabina Gold & Silver Corp. (Sabina) is actively exploring the Back River property mineral rights, encompassing the Goose Lake mining and exploration area, the Marine Laydown Area (MLA) at Bathurst Inlet, exploration camp at George Lake and unoccupied claim groups including the Wishbone-Malley Project area, which is the focus of this Abandonment and Restoration Plan (ARP; Plan).

Annual exploration activities at the Wishbone-Malley exploration area typically start in February or March, and end by October. Crew, equipment, and supplies are transported to the Goose Lake or the George Lake exploration camp by air from Yellowknife or by sea from the MLA. From there crews can be deployed to Wishbone-Malley Exploration Area and other claim groups. Aircraft from Yellowknife can utilize the all-weather or ice airstrips at Goose, the MLA, or George. Typically, equipment, personnel, and supplies are moved to the Wishbone-Malley area by helicopter or winter trail. Drill equipment and supplies may remain in remote exploration areas for use during subsequent exploration seasons.

There is currently no infrastructure or equipment at the Wishbone-Malley exploration area. Exploration drilling has taken place in this area in the past and may again be undertaken seasonally in future. Routinely, all drill sites are remediated as they are completed and all equipment and materials are removed from site annually.

As there is currently no infrastructure or equipment located at Wishbone-Malley, this Plan has been based on potential infrastructure which may be erected to support future exploration activities. This Plan would only be implemented if Sabina develops such infrastructure at the Wishbone-Malley exploration area.

### 1.2 Sabina Sustainable Development Policy

Sabina Gold & Silver Corp. regards itself as a responsible explorer and mineral developer. We are committed to fostering sustainable development throughout all stages of our activities. We constantly strive to conduct our operations in a manner that balances the social, economic, cultural and environmental needs of the communities in which we operate.

To build on this commitment, Sabina will:

- Meet or strive to exceed all relevant legislated sustainable development requirements in the regions where we work.
- Ensure appropriate personnel, resources and training is made available to implement our sustainable development objectives.
- Establish clear lines of responsibility and accountability throughout the company to meet these objectives.
- Implement proven management systems and procedures to facilitate our sustainable development objectives. A Priority will be placed on developing and implementing

management structures related to the environment, health and safety, emergency response and stakeholder engagement.

- Act as responsible stewards of the environment for both current and future generations. We will make use of appropriate assessment methodologies, technologies and controls to minimize environmental risks throughout all stages of mineral development.
- Work closely with local communities and project stakeholders to understand their needs, address their concerns and provide project-related benefits to create win-win relationships. Our goal is to earn and maintain a social licence to operate at all our operations while building partnerships.
- Pursue economically feasible projects in order to generate shareholder profitability and support long-term positive socio-economic development in the regions where we work.
- Utilize a precautionary approach as it applies to potential effects from our activities. Work with employees, contractors and stakeholders to promote a culture of open and meaningful dialogue to ensure that any known or suspected departures from established protocols are reported to management in a timely manner.
- Regularly review this policy to ensure it is consistent with Sabina's current activities and the most recent legislation.
- Continually improve our performance and contributions to sustainable development including pollution prevention, waste minimization and resource consumption.
- Implement programs at each of our operations to monitor and report compliance and proactively address potential deficiencies in our policies and procedures.

The objectives of our Sustainable Development Policy cannot be accomplished without the active involvement and commitment of many dedicated individuals. As such, we will regularly communicate this policy and its outcomes to our employees, contractors and relevant stakeholders. Together, we can foster a culture of sustainable development at Sabina.

### 1.3 Legal Requirement

Sabina is obligated to reclaim the Wishbone-Malley area within the applicable Kitikmeot Inuit Association (KIA) Land Use Licenses and the Nunavut Water Board (NWB) Water Use Licenses.

### 1.4 Site Location and Description

The Back River Project is located in the Kitikmeot, south of Bathurst Inlet within the Slave Structural Province. It is approximately 525 kilometres northeast of Yellowknife and 400 kilometres south of Cambridge Bay, NU. The Project area is within the zone of contiguous permafrost, and is represented on National Topographic System 1:250,000 scale map sheets 76F, 76G, 76J, and 76K.

The Project's primary base of operations is at Goose camp located near Goose Lake (Figure 1), supported by a satellite camp near George Lake and at the MLA (Figure 1). These permanent Back River Project camps are used to support wishbone-Malley area activities for resupply, staging, drill support, waste management, and emergencies.

The Wishbone-Malley Exploration Area (Figure 1) grid extents are listed below:

NW: 66°00' North, 109°00' West  
NE: 66°00' North, 106°45' West  
SE: 66°45' North, 106°45' West  
SW: 66°45' North, 109°00' West

As previously mentioned, the Wishbone-Malley exploration area currently has no infrastructure or equipment, although during exploration activities equipment and temporary infrastructure may be established in this area.

## 1.5 Scope

This Abandonment and Restoration Plan (Plan) outlined the abandonment and reclamation procedures to be undertaken for a potential future Wishbone-Malley camp and on-going exploration activities. This plan provides the base strategy for anticipated tasks of restoring the area in an event where exploration activity has ceased, either on a short term or a long term basis. This plan is reviewed periodically based on site activities and updated as necessary.

## 2.0 RESPONSIBILITIES

Senior personnel at the Back River Project and future Wishbone-Malley camp management are responsible for the implementation of this plan. Additionally, every employee, contractor, and visitor arriving on the Back River Project site has a responsibility to ensure that they adhere to Sabina policies include those aimed at minimizing environmental impact.

## 3.0 SCHEDULE

Should the infrastructure described below have been constructed, closure would take 14-21 days to complete, allowing for variable weather conditions. As exploration activities vary from year to year and the end of the field season is difficult to predict months in advance, any restoration programs will likely commence in the late summer and extend into the 4<sup>th</sup> quarter of the year. Wishbone-Malley closure activities would be supported by the existing permanent Back River Project camps.

### 3.1 Potential Future Infrastructure at the Wishbone-Malley Exploration Area

It is again noted that there is currently no infrastructure at the Wishbone-Malley exploration area. The below list details potential future infrastructure that Sabina could consider constructing. Before construction of any infrastructure at the Wishbone-Malley Exploration Area that will not be removed seasonally, Sabina will ensure the financial assurance for the project currently held with the Kitikmeot Inuit Association is suitable to complete the restoration.

The future Wishbone-Malley camp would be located adjacent to a lake and would be a 60-person camp



used primarily to support exploration activities across the Malley and Wishbone properties. The general camp facilities may include:

- 15 sleeper tents (20' x 20' weather havens);
- 1 kitchen/dining facility;
- 2 dries/ablution;
- 2 office tents;
- 1 storage tent/shed;
- 1 mechanic shed;
- Core cutting/core logging facilities;
- Generator;
- Fuel storage areas (up to 500,000L drummed fuel within secondary containment);
- Laydown area;
- 2 helipads;
- Ice strip;
- Terrain airstrip (if the existing terrain in the camp area is conducive to such use, the area would be reconditioned to meet operational needs);
- Communication towers and repeater stations as needed; and
- Equipment such as loaders, skidsteers, bulldozers, ATVs, snowmachines.

When in operation, the camp would be serviced with a Pacto toilet system. Greywater will be contained within sumps located a minimum of 31 m away from the high watermark of any waterbody. Wastes would be sorted and transported to one of the permanent Back River Project camps to be managed as outlined in their approved waste management plans. Any kitchen waste would be securely stored (e.g. in a sea container) until transported off site for incineration.

Potable water may be obtained from the local lake with the freshwater intake screened to reduce fish uptake; bottled water may be used as an alternative source.

## 3.2 Progressive Reclamation

Sabina has embarked on a program of progressive reclamation over the entire Back River Project area. Progressive reclamation will be ongoing throughout any exploration programs thereby reducing the need for a full-scale restoration program at the closure of each exploration phase. While no infrastructure currently exists at the Wishbone-Malley Exploration Area, should any facilities be developed, the possible ongoing significant restoration activities as described below would apply.

### 3.2.1 Contaminated Areas

#### 3.2.1.1 Recycle of Water Contaminated Fuel

Contaminated fuels are recycled primarily as fuel for the water heaters used in the drilling program, or as fuel for Back River Project incinerators. If present in sufficient quantities, contaminated fuel may be recycled for camp heating purposes. For water with minor amounts of hydrocarbons, an oil-water separator may be used and/or activated charcoal filters. As a last resort, water contaminated fuel may be transported off the property for disposal at an appropriate facility.

### **3.2.1.2 Contaminated Top Soil**

Spills are handled as per the Comprehensive Spill Contingency Plan. Enviromat (or similar) is immediately applied to absorb spills of hydrocarbons, minimizing the amount of soil required to be removed. Remaining contaminated soils are removed and stored in barrels for transportation to permitted disposal off site.

### **3.2.2 Non-combustible Solid Waste**

Solid waste including metal scraps, drill rods, household items, etc. are stored in an appropriate marshalling area for backhaul. The material is arranged in such a way that it can be easily removed from the exploration area, and disposal will be appropriate to the material being removed, either to an approved disposal facility, metal recycler, or an approved designated landfill.

### **3.2.1 Drilling**

Following completion of each drill hole all equipment, materials and wastes are removed from the site. Diamond drill site restoration is undertaken as soon as practical after completion of the hole and includes site clean-up of litter, debris, and drill fluids. Drill core and core boxes will be properly secured and stored at the designated core storage area.

Casings protruding above ground are cut off to a level that will not pose a hazard and capped. The cut portion will be disposed of off site; this will either be in an approved landfill or recycled as scrap metal. Drill holes which encounter artesian water flow will be plugged with cement and capped. The collar locations of all holes will be surveyed in and will be recorded in the exploration reports.

All drill sumps (if constructed) will be recontoured and allowed to naturally revegetate. Natural sumps (if used) will simply be allowed to revegetate.

Photos are taken prior to and after the drill work is completed and an inspection sheet is in place for the geologist to verify the site was left in good condition.

## **4.0 SEASONAL CLOSURE**

This plan is intended to cover short-term (seasonal) closures of any active areas at the Back River Project. The tasks involved are important to the success of future exploration programs but require significantly less effort than the full restoration plan. Currently no infrastructure exists at the Wishbone-Malley Exploration Area. Should any infrastructure be constructed in the future, these components would be seasonally closed as described below.

### **4.1 Buildings and Contents**

All tents and building complexes will be secured for the winter. All the office equipment, household furniture, kitchen equipment, recreational equipment, and other mobile heavy equipment will be winterized and left secured on site. Any equipment not capable of withstanding the harsh winter conditions will be removed from site and stored until the next camp open.

## **4.2 Water Supply System**

Water pumps, filtering systems, water lines, and any other equipment associated with the water supply system will be drained and winterized. The water pump shed will be secured.

## **4.3 Sewage System**

The camp will be serviced by a Pacto toilet system; greywater lines will be drained so no water remains in the discharge pipe. Solid waste will be backhauled to Goose or George camps for incineration.

## **4.4 Electrical System**

The generator and surrounding area will be inspected for signs of spills and remaining wastes such as oil and grease. If topsoil is contaminated, enviromat will be used to remove as much of the spill as possible; remaining contaminated soil will be stored in empty drums for disposal off site at an approved hazardous waste facility. The generator will be drained of its fuel. Remaining waste fuel, oil, and grease will be stored in approved storage containers which are labelled for that usage and reused during summer operations. The generator will be winterized and the shed will be secured for winter. Electrical wires, plugs, and sockets will remain in their installed locations. All electrical cords temporarily connected to a building or machinery during summer work program will be unplugged, rolled, and stored in the workshop.

## **4.5 Camp Heating Systems**

Any 205-L fuel barrel attached to respective tents or buildings will be secured within the secondary containment container. The remaining fuel in the line will be allowed to burn out. The lid of the containment container will be secured to prevent snow from filling up the designated containment area. All empty propane cylinders will be transported off site for recycling.

## **4.6 Petroleum Products and Storage Facilities**

An on-site fuel cache is of great importance during camp start-up. Diesel fuel will be stored in the 205 L drums within secondary containment. Minimal quantities of diesel and jet fuel in barrels will be stored within self-supporting artificial berms; these locations will be clearly marked to facilitate snow clearing activities during the following camp opening. The Site Superintendent will be responsible for determining the possible access to these fuel resources prior to the start of the next exploration program.

Empty drums at remote drill sites will be transported to the Goose camp, crushed, banded to pallets and either stored for future backhaul or transported off site for disposal/recycling. This work is typically done progressively as fuel caches are no longer required or as drill setups are dismantled.

Secondary containment areas will be cleared of any debris. In the springtime, meltwater within the containment area will be released if no visible sheen is noted. If visible sheen is noted an oil-water separator will be used to ensure the water is suitable for discharge, or the water will be transported off site for disposal. Residual water remaining after pump out as well as collected rainwater are allowed to evaporate over the summer and are unlikely to present a volume issue at camp shutdown in the fall.

The spill response team and camp management will be notified immediately of any spill based on actions outlined in the Comprehensive Spill Contingency Plan.

## **4.7 Chemicals**

Chemicals stored on site would include drill additives, oil, grease, drill salt, and household biodegradable cleaners. Chlorine is necessary and is used to treat the camp drinking water system. All drill additives are stored in poly-lined seacans and the remaining salt will be tarped and stored in designated areas on the property. Drill salt is in impermeable bags and stored on pallets. Empty bags will be disposed with combustible garbage off site. Sabina will inspect the storage area for possible spills and contamination.

## **4.8 Spill Response Kits**

Sabina will carry out an inventory of any spill kits located in the exploration area. Over the winter months, all spill kits will be relocated into a secured building, except for kits designated for any remaining petroleum storage areas.

## **4.9 Transportation**

All transport areas will be inspected for contamination. Areas will be remediated using enviromat and removal of contaminated soil should contamination be found.

## **4.10 Drill Sites**

Drills will be dismantled into the main components as per the drilling contractor procedure and secured along with ancillary equipment and drill rods. The drills will be moved by helicopter over the tundra and left at designated storage areas on the property and will undergo a drill close-out inspection. All drill sites will be inspected for contamination. Any remaining waste will be removed and disposed of accordingly. Diamond drill site restoration will commence as soon as practical after completion of the hole. Site clean-up of litter, debris, and drill fluids will commence immediately. Drill core and core boxes will be properly secured and stored at the designated core storage area. Photographs will be taken before and after the drilling has been completed.

## **4.11 General Camp Area**

A general inspection of the camp area will be carried out. Waste items will be picked up, and areas contaminated by petroleum products unnoticed from the previous year will be reclaimed.

## **4.12 Final Documentation**

A year-end inventory of all equipment and buildings remaining at the exploration area site will be carried out prior to leaving the site. Photos will be taken of the camp and drill laydown storage areas. Once the site is secured for winter, it will be documented with photos.

# **5.0 PERMANENT CLOSURE**

## **5.1 Administration**

### **5.1.1 Building Structures**

All the reusable tents, frames, tarpaulins, and wooden structures will be dismantled and where possible be recycled for use at another exploration site.

Other combustible, non-recyclable building structures will be incinerated off site or burned onsite. Non-combustible structures or materials such as nails, screws, or metal frames will be recovered, packed, and transported off site for proper disposal.

### **5.1.2 Office and Household Furniture**

All reusable office, household, kitchen, and recreational equipment will be packed and transported for use at other exploration camps. Some equipment, depending on what level of liability is accepted by Sabina, may be donated to local communities or schools. The equipment that is not reusable will be recycled or disposed of at an approved disposal facility off site, appropriate to the type of material.

### **5.1.3 Water Supply System**

Water pumps, filtering systems, water lines, and any other equipment associated with the water supply system will be drained, disassembled, packed, and transported off site for use at other exploration camps. Water lines that are not reusable will be disposed of at an approved facility.

### **5.1.4 Sewage System**

The Pacto toilet systems will be dismantled and relocated to another exploration camp or transported off site for disposal. All lines from showers, washing machines, and sinks will be drained, disconnected, securely packed, and transported off site to an approved landfill site.

### 5.1.5 Electrical System

All electrical wires will be removed from the buildings and any other installations at site. Extension cords and other fittings will be transported to other exploration camps for reuse. Used electrical wires will be packed and transported to off site for recycling. Unused bulbs and fluorescent tubes will be packed and relocated to other camps for appropriate disposal per their waste management plans.

The generator shed and surrounding area will be inspected for signs of spills and remaining wastes such as oil and grease. The area will be cleaned as necessary.

The generator will be drained of fuel. Remaining waste fuel, oil, and grease will be stored in approved storage containers, labelled, and transported off site. The generator will be dismantled and transported off site, either for reuse or for sale.

### 5.1.6 Camp Heating Systems

Each 205-L fuel barrel attached to tents or buildings will be disconnected, and any remaining fuel in the line will be allowed to burn out. The drums will be appropriately labelled and stored with other petroleum products. The secondary containment container will be closed, secured, and stored ready for transportation off site. The fuel burner will be dismantled and remaining fuel will be allowed to drain off into a waste oil collecting system. All fuel lines will be drained, disconnected, and packed for use in other camps or transported to an approved disposal facility. The area around each installation will be inspected for contamination and reclaimed as per the Comprehensive Spill Contingency Plan. All empty propane cylinders will be transported off site for recycling.

### 5.1.7 Petroleum Products and Storage Facilities

#### 5.1.7.1 205-Litre drums

The fuel storage area will consist of segregated groups of drums with empties stored separately from the full drums. An inventory of remaining fuel will be completed and all full drums will be inspected. Transportation of Dangerous Goods (TDG) labels will be attached to the drums before transportation off site. Remaining waste fuel will be labelled with TDG labels and transported to other camps for heating purposes or transported off site for disposal in an approved facility.

Empty drums will be crushed and palletized for backhaul and disposal. Some drums will be retained for waste containment and subsequent backhaul.

All unused jet fuel will be relocated to other exploration camps for use in further exploration programs, or backhauled off site. The areas around the drums will be inspected for contamination.

#### 5.1.7.2 Tidy Tanks

All Tidy tanks will be disconnected from any tents or buildings. All installations will be disconnected and drained. An inventory of the remaining fuel in each tank will be recorded. The tanks will be secured and transported to other camps or off site for sale or disposal. The area around the tanks will be inspected for contamination.

#### ***5.1.7.3 Aboveground Storage Tanks and Bladders***

All fuel storage systems will be disconnected and various hatches inspected and locked. An inventory of the remaining fuel in each tank will be recorded and all fuel tanks will be drained prior to transportation. Tanks may be moved during winter months via winter road to either another camp or the MLA to be loaded onto a barge for transportation off site during summer months.

#### **5.1.9 Household Chemicals**

Household cleaners will mainly be stored in the kitchen and mine dry/change room area. Upon camp closure, any unused products will either be transported to other camps or disposed of at an appropriate facility. Half-empty containers will be taken off site to be properly disposed in an approved discharge facility. Empty containers will either be recycled or disposed of with regular garbage, if appropriate.

#### **5.1.10 Transportation**

##### ***5.1.10.1 Airstrip***

No new prepared airstrip is proposed for the potential future Wishbone-Malley camp.

However, should an airstrip be constructed reclamation may include scarifying the surface to promote natural revegetation.

##### ***5.1.10.2 Helipads***

Helipads within the camp area would be dismantled, inspected for fuel spills, and original ground or gravel pad may be scarified or needed to promote natural revegetation.

#### **5.2 Exploration**

As part of Sabina's progressive reclamation activities, diamond drill sites are progressively reclaimed as soon as practical after the drill has been moved to the next site. Details of drill site progressive reclamation activities are provided in Section 3.2. Any outstanding activities will be completed in full for permanent closure.

All drilling equipment will be dismantled to the extent necessary for transport off site by helicopter or winter trail.

All remaining drill additives and salt will be inventoried, packed, and transported to other projects or transported off site for re-sale or disposal at an appropriate facility. Empty containers and pallets will be incinerated (pallets), recycled if possible or disposed of with regular garbage.

Drill core will be properly secured and stored at a designated core storage area on the property for long-term storage. A site reference plan will be maintained to catalogue the core.

## **5.3 Environmental**

### **5.3.1 Long-term Monitoring**

Ongoing monitoring will be conducted during the summer months to ensure the area has been cleared of any hazards that may cause a significant adverse impact to the receiving environment. The monitoring will continue on a set schedule after the final abandonment until the land is relinquished to, and accepted by, the owner. Any weather collection data and environmental baseline data (e.g. water sampling data) will be turned over to whoever takes over the property.

### **5.3.2 Documentation and Final Inspection**

A detailed site reclamation and remediation report for the Wishbone-Malley Exploration Area will be created by Sabina which will specifically document and catalogue the exploration area reclamation activities. This report will be generated for distribution to specific governing agencies. This report will identify all reclamation efforts undertaken at the exploration area and will be supported with information pertaining to contractors used, methodology, costs, and findings. Digital photographs will be taken which will support the reclamation activities. These will be appended to the report.

### **5.3.3 Land Relinquishment**

Once the reclamation plan is accepted and approved by Sabina, the permit holder will invite and organize a final site inspection visit with community representatives, Land Inspectors, Nunavut Water Board and the KIA. Other government organizations, such as Environment and Climate Change Canada, and Department of Fisheries and Oceans, will be invited to visit the area. A written submission will be sent to the regulatory authorities asking to relinquish the land.

## **5.4 Abandonment & Restoration Cost Estimates**

The total cost estimation for the Abandonment and Restoration Plan for the Wishbone-Malley Exploration Area would be based on the infrastructure and equipment constructed and positioned should a temporary camp be erected. The approximate costing would be reviewed periodically based on site activities and development and may include consideration of the following:

- Infrastructure Demolition Cost;
- Transportation – (Labour, equipment, recycle, relocation of waste, etc.);
- Labour Cost;



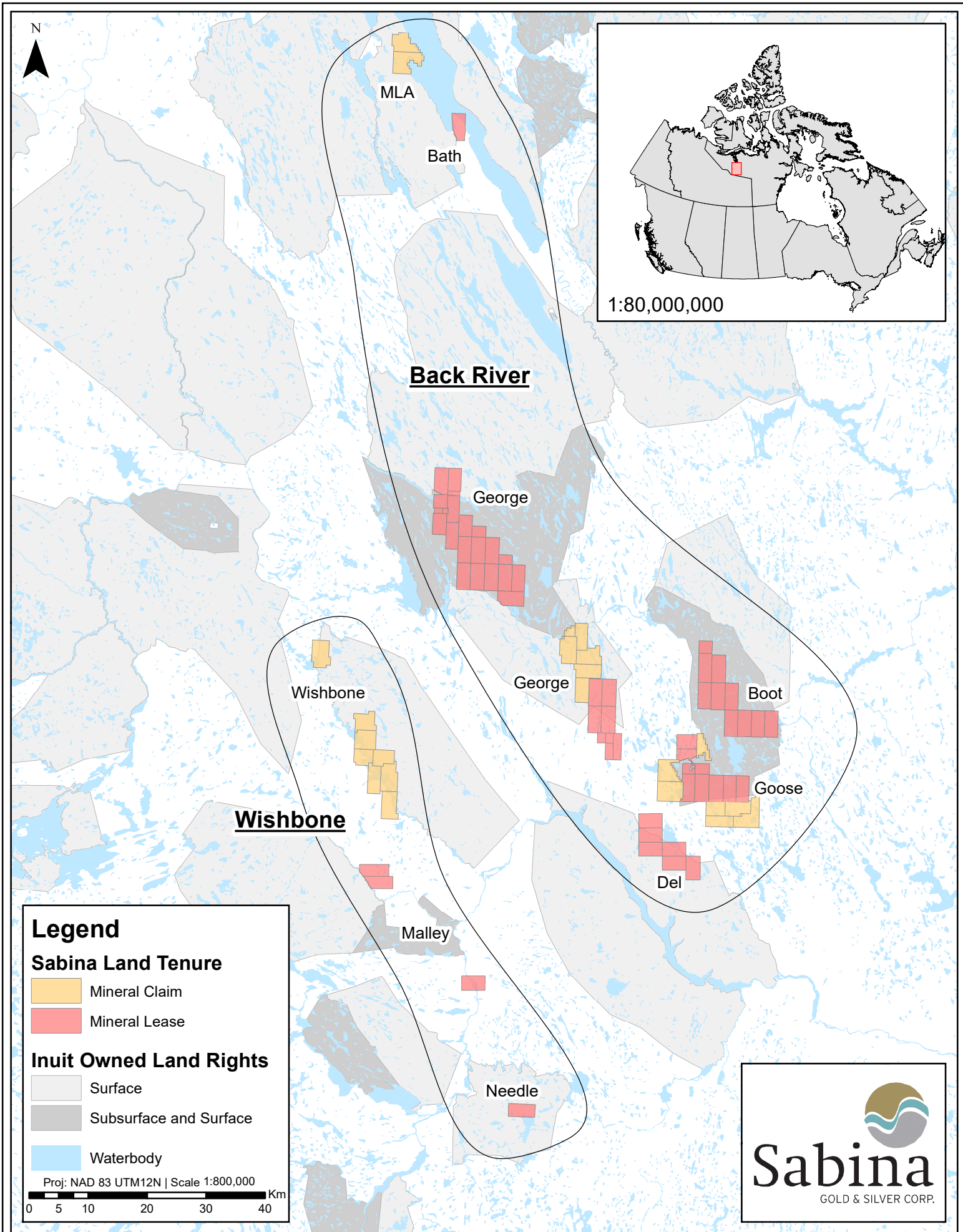
- 
- Offsite Administrative Cost;
    - Contractor;
  - Rehabilitation Cost;
    - Site Supervision – (Sabina);
    - Remedial supplies;
    - Native species supplies;
    - Contractor;
  - Environmental Monitoring Cost;
    - Labour - (Sabina or Contractor);
    - Transportation – (Field sampling);
    - Analytical Cost – (External Lab);
    - Reporting – (Sabina or Contractor);
    - Consultant Costs;
  - Final Documentation – (Labour Cost – Sabina or Contractor); and
  - Land Relinquishment – (Travel, Reports, Site Visits, Meetings, etc.).

## **6.0 REVIEW OF THE ABANDONMENT AND RESTORATION PLAN**

The Wishbone-Malley Exploration Area Abandonment & Restoration Plan will be reviewed based on changes in project development and activity and updated as needed.

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## **APPENDIX A – FIGURES OF BACK RIVER PROPERTY INCLUDING WISHBONE–MALLEY EXPLORATION AREA**



Back River and Wishbone Mineral Tenure Map

Figure 1

## **ATTACHMENT 9 - PLAIN LANGUAGE SUMMARIES**

**Attachment 6:**  
**Non-Technical Summaries**  
**(English, Inuktitut, and Inuinnaqtun)**

## Non Technical Project Summary

### Sabina's Malley – Wishbone Exploration Project

Sabina Gold & Silver Corp. (Sabina) is a Canadian-owned exploration company that is actively exploring the Back River and Wishbone Projects in the Kitikmeot, Nunavut Territory. The Back River exploration project is located approximately 525 km northeast of Yellowknife and is 400 km south of Cambridge Bay and includes the Goose, George, Del, Boot and Boulder Properties. Sabina's Wishbone Project is located approximately 60 km west of the Goose Property and includes the Malley and Wishbone Properties. Sabina is the owner and operator for the project and is responsible for maintaining all project permits.

Sabina sees an opportunity to continue exploration activities in the Malley – Wishbone area and is currently applying for new water license and land use permits for this area.

The exploration work may include:

- Staking, prospecting and reconnaissance geology
- Geological mapping and geochemical surveys
- Aerial, ground, and down hole geophysical surveys
- Mechanical and hand trenching/stripping
- Up to 4 drill rigs would complete diamond drill testing of the geophysical targets and step-out drilling on identified mineralized zones and deposits.
- Construction of ice airstrip may be needed depending on planned exploration and resupply activities and weather conditions.
- Transport of fuel and drilling supplies to the area and storing it in secure caches with secondary containment.
- A seasonal camp may be established as a centrally located base for exploration activities. This would include shelters (sleeping tents, dry and kitchen facilities) to accommodate up to 60 people and would include an ice airstrip, storage for fuel, salt and supplies, waste management (incinerator, open burning of untreated wood wastes and pactos), core logging/cutting facilities, and core storage.
- Temporary camps may be established on an "as-needed" basis for safety, environmental and economic reasons. These would include shelters (sleeping tents, dry and kitchen facilities) to accommodate up to 30 people and include an ice airstrip, and storage for fuel, salt and supplies
- Transport of drilled core to camp for geological logging, sampling and storage.
- Transport of personnel to and from the existing Goose camp, temporary camp and drill sites with a helicopter. Fixed wing planes will provide transport to and from the Goose camp to communities.
- Inspection and reclamation of drill sites upon drill hole completion and of temporary camps at end of season
- Site clean-up and progressive reclamation.

These exploration activities are not expected to have any significant environmental impacts on wildlife, the land or water, and no mitigation measures beyond current exploration best practices are required.

It is estimated that up to 200 cubic meters of water would be used every day for drilling, camps and general water use and waste disposal associated with exploration activities. The water would be from lakes in the vicinity of drill rigs and camps in the Malley - Wishbone area.

Drilling services and geophysical surveys will be provided by an experienced contractor. Several Inuit employees will be hired to help with exploration activities (which may include core splitting, sample shipping, maintenance, equipment operation, environmental monitoring and reclamation). Sabina is committed to ensuring its operations minimize environmental impact and best management practices for the exploration activities will be followed.

Piluaqnaqtuliquitaungittut Havanguyumut Nainaqhimayut  
Sabina-kut Malley – Wishbone Havikhaqhiuqtut Havanga

Sabina Guulit Silverlu Kuapurisan (Sabina-kut) tapkuat Kanatamiuni-nanminigiyauyut havikhaqhiuqniqmut nanminilgit tapkuat huliyut havikhaqhiuqniqmut tahamani Hanningayuq Kuugaqmi tamnalu Wishbone Havangi tahamani Kitikmeot, Nunavutagauyumi. Tamna Hanningayuq Kuugaq havikhaqhiuqniqmut havanga inilik mikhaani 525 kilaamitat ungalangata pingangnani Yellowknife tamnalu 400 kilaamitat nigingani Ikaluktutiak ilaqaqhunilu Goose, George, Del, Boot tamnalu Boulder Havakviinik. Sabina-kut Wishbone Havanga inilik mikhaani 60km pingangnani taphuma Goose Havakvia ilaqaqhunilu taphuminga Malley tamnalu Wishbone Havakvi. Sabina-kut aulattiyuyut taphuminga havanguyumik havaqaqhutiklu ihuaqhihimaninik tamaita tahapkuat havanguyut piyungnautai.

Sabina-kut qiniqtut pivikhanik kayuhininut havikhaqhiuqniqmut huliniit talvani Malley – Wishbone nunani tatyalu tukhigaqtut nutamik imaqmut laisamik nunaplu atuqninut piyungnautmik uumunga nunamut.

Tapkuat havikhaqhiuqniqmut havat ilaqaalat:

- Nappaqtuiniq, nalvaqhiuqniq naunaiyaqnilu nunaliquitit
- Nunaliginiqmut nunaayat nunap qanugitnilu naunaiyaqni
- Tingmitikkut, maniqakkut, anmutlu putut nunaliquitinut naunaiyaqni
- Hanalgutinut algakmutlu iluttuqtiginiq/qangiyainiq
- Tikitlugit 4 ikuutaqutit iniqtauniat qiplagiktut ikuutat uuktugutit nunaliginiqmut tugaqtat hanivanilu ikuutaqnit naunaiqhimayanut havikhaqaqnit nunat piqaqnitlu.
- Hanayauni hikukkut mittaqvik piyaqalaq piplugu upalungaiyaqni havikhaqhiuqniqmut atuqtakhatlu huliniit hilaplu qanugitnianut.
- Nuktiqni uqhukhat ikuutaqutitlu atuqtakhat tahamunga nunamut tutquqnilu hunnilaittunut tutqumaviknut aipaniklu hiamaktailihqhimaninut.
- Ukiup ilainanut hiniktaumavik pinguqtauyaqaqalaq qitiqpaumaniqmun inanut upaqattaqgakhaq havikhaqhiuqniqmut huliniit. Una ilaqaqalaq uqquaqn timer (hiniktaqv timer tupqit, paniqhivik niqhiuqviku havagutit) inuqqaqn timer inuqtit 60 inuit ilaqaqlunilu mittaqvikmik, tutqumavit uqhuqyuamut, tagiuq ilakhatlu, iqakut aulatauni (ikualattivik, maniqami ikualattiniq huniumaittunut qiyuknut iqakunut, anaqviuyunutlu), ikuutaqnikut titigaqni/kipluinit havagutit, pihimainaqtakhatlu ikuutaqnikut tutqumani.
- Hiniktaumaviulaktut pinguqtaulat tapkunani “piyaqaqata” piplugit nautiumatikhanut, avatiliginiqmut maniliqutinutlu pityutaayunut. Tahapkuat ilaqaqtut uquaqn timer (hinikniqmmut tupqit, paniumavit niqhiuqviku havagutit) inuqalanut tikitlugu 30 inuit ilaqaqtitlugulu hikumi mittaqvikmik, tutquqvikmiklu uqhuqyuamut, tagiut ilakhatlu
- Nuktiqni ikuutaqnikut hiniktaumavikmut nunaliginiqmut titigaqtauyukhat, naunaiyaqni tutquqtaunilu.



- Nuktiqni havaktit talvunga talvangatlu tatya atuqtumit Goose hiniktaumavik, hiniktaumaviulaktukhaq ikuutaqniqmutlu inainut halikaaptakkut. Tingmitinut piqaqtitauniat nuktiqni talvangat talvungalu Goose hiniktaumavik nunaliuyunut.
- Naunaiyaqni halumaqtiqnilu ikuutaqniqmut inigiya ikuuttat putut iniqtauyagangata hiniktaumaviulaktutlu kikkilittini ukiumut ilanut havakviuni
- Havakvik halumaqtiqnia atuguiqpalianinut halumaqtigauni.

Tahapkuat havikhaqhiuqniqmut huliniit nigugiyaungittut kitunikliqak angipyaktunik aktuanit angutikhanut, nunamut imaqmutluniit, ihuaqhautikhainiklu pihimaittut avataanut tatya havikhaqhiuqniqmut nakuuniqpanik pitquhinut piyalgit.

Mikhautauyut tapkuat tikitlugu 200 miitat kikkagiktumik imaq atuqtauniat upluq tamaat ikuutaqniqmut, hiniktaumaviknut tamaitnutlu imaq atuqtauni iqakutlu iqaqni piqatauni havikhaqhiuqtunut huliniit. Tamna imaq tahiqlingaqniaq tahamani hanianit ikuutaqviuyunit hiniktaqvikmitlu talvani Malley - Wishbone nunani.

Ikuutaqniqmut kivgaqtutit nunaliginiqmutlu naunaiyainiq piqaqtitauniat atuqpakhimayumit kanturaktimit. Qaphit Inuit havaktit havaktitauniat ikayuqtukhat havikhaqhiuqniqmut huliniit (tapkuat ilaqqalat ikuutaqnikut qupluqni, naunaiyaqqakhat aulaqtitni, ihuaqhainiq, hanalgutit aulaninik, avatiliginiqmik munaqtiunig halumaqtiginiqlu). Sabina-kut pinahuaqpiqaqtut aulaniqtik avatiliginiqmut aktuani nakuuniqpamiklu aulattiniq pitquhi havikhaqhiuqniqmut huliniit maliktauniat.

[illegible][illegible][illegible]

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- [illegible]

[illegible]



## **ATTACHMENT 10 - CERTIFICATE OF AMENDMENT OF REGISTRATION**



*BUSINESS CORPORATIONS ACT*

**CERTIFICATE OF AMENDMENT OF REGISTRATION OF  
AN EXTRA-TERRITORIAL CORPORATION**

*LOI SUR LES SOCIÉTÉS ACTIONS*

**CERTIFICAT DE MODIFICATION DE L'ENREGISTREMENT  
D'UNE SOCIÉTÉ PAR ACTIONS EXTRATERRITORIALE**

**I HEREBY CERTIFY THAT**  
the name of

**JE CERTIFIE PAR LA PRÉSENTE QUE**  
La dénomination sociale de

SABINA SILVER CORPORATION

Registered under Part XXI of the  
*Business Corporations Act of Nunavut*,  
has been changed to

Enregistrée en vertu de la Partie XXI de la  
*Loi sur les sociétés par actions au Nunavut*,  
a été changée pour

SABINA GOLD & SILVER CORP.

Effective as of

à compter du

**10/27/2009**

Dated  
Fait le

**04-Nov-2009**

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DEPUTY / REGISTRAR OF CORPORATIONS  
REGISTRAIRE OU REGISTRAIRE ADJOINT DES SOCIÉTÉS PAR ACTIONS