# **RIO ALGOM EXPLORATION INC.**

# ABANDONMENT AND RESTORATION PLAN (draft)

# **WOLVERINE PROJECT, NUNAVUT**

NPC XXXXXXX
NIRB – XXXXX
CIRNAC-XXXX
KIA - XXXX
NWB – XXXXXXX

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# Rio Algom Exploration Inc. (BHP) Wolverine Project, Nunavut Abandonment and Restoration Plan

#### 1. Preamble

This Abandonment and Restoration Plan (A&R Plan) is in effect until the expiry of Rio Algom's (BHP) water licence and land use permit, and applies to the work areas planned for the Wolverine property. These mineral claims are on Crown Land and on Kitikmeot Inuit Association (KIA) Inuit Owned (IOL) surface land and Nunavut Tunngavik Incorporated (NTI) subsurface land.

Rio Algom has received licences and permits from Crown-Indigenous Affairs and Northern Relations (CIRNAC) for exploration activities on Crown Land, a Mineral Exploration Agreement with NTI for exploration on Inuit Owned Land (IOL) subsurface, a Land Use Permit from the Kitikmeot Inuit Association (KIA) for exploration activities on Inuit Owned Land (surface), as well as a water licence from the Nunavut Water Board (NWB) for water use and waste disposal related to the project.

The company is requesting authorization for a two year exploration program to conclude by the end of September 2020.

Questions or concerns regarding this Plan can be directed to

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#### 2. Introduction

This Plan has been prepared for one temporary campsite as well as several fuel caches located at RIO ALGOM's Wolverine Project located on Victoria Island in the Kitikmeot Region of Nunavut. The North Block fuel cache is located at 72° 14' 48.41"N 109° 29' 40.64"W and the South Block campsite and fuel cache are located at 68° 45' 16.06"N 109° 4' 37.67"W. (see Map Attachment A)

The temporary small camp will generally consist of 3 Weatherhaven-style tents on plywood floors (kitchen, office and pilot/mechanic tent) with an additional up-to-10 pup-tent style tents, to accommodate a total of ten personnel.

Exploration based out of the camp generally consists of prospecting, till sampling and mapping.

# 3. Background Information on the Campsite

The South Block campsite is located at 68° 45' 16.06"N 109° 4' 37.67"W. The terrain is generally rocky without an abundance of vegetation. The fuel cache at the North block is located at 72° 14' 48.41"N 109° 29' 40.64"W.

#### 4. Schedule

The effective date of the plan is expected to be July 1, 2019. The final restoration of the camp will occur when the program has been completed, around August 15, 2019.

#### 5. Infrastructure

The Wolverine Project camp at South Block's is temporary 10 person camp located on Crown Land at Zone 12 W 493506 E 7609918 N.

Capacity: 10 people

South Block Camp:

One 14' x 32' Weatherhaven sleep tent heated with propane

One 14' x 32' Weatherhaven kitchen tent heated with propane

One 14' x 32' Weatherhaven office tent heated with propane

Eight pup-tent style tents

Two plywood outhouses

One heli-pad

One strip (existing at Ross airport)

Two fuel cache stored in "Insta berms" equipped with water drains

Spill response equipment located beside fuel berms and heli-pad

## Equipment

One 7.5 kW diesel generator

One 50 cc Honda water pump

One A Star BK2 helicopter

One Twin-Otter

Three tent diesel heaters

One propane kitchen stove/oven

One propane kitchen refrigerator

One Incinerator

A map showing the location of the campsite is attached (see Attachment A)

#### Waste

#### Combustible Waste

All combustible waste will be burned on site in an incinerator. Ash will be sealed in 45-gallon drums for transport to the Hamlet of Cambridge Bay's landfill or to Yellowknife.

#### Non-Combustible Waste

All non-combustible waste will be transported to the Hamlet of Cambridge Bay's landfill or to Yellowknife for disposal. This waste will only consist of metallic materials such as cans and steel strapping and wire.

#### **Used Motor Oil**

Used motor oil will be burned in the incinerator.

#### Grey Water Sump

Grey water from the kitchen and shower will be contained in a sump and buried at the end of use.

#### Sewage

The outhouse pits will be buried at the end of the season.

# **Contamination Clean Up**

Any soil at camp that has been contaminated will be treated according to procedures outlined in the Fuel Spill Contingency Plan. The soil will be transferred to the Cambridge Bay landfill or Yellowknife for incineration.

#### **Inspection and Documentation**

A complete inspection of all disturbed areas at the camp will be conducted prior to closure at the end of the program.

## 7. Final Abandonment and Restoration

#### **Tents and Contents**

At the end of each season, all tents will be dismantled and removed, using a local contractor. Removal will be carried out with a Twin Otter. All wood from the tent floors and e.g., the outhouses will be burned in the outhouse pits.

#### **Equipment**

All equipment will be removed from the project site by Twin Otter and helicopter. All material will be taken to the Cambridge Bay airport for final distribution.

#### **Fuel Cache and Propane**

All fuel drums and propane cylinders will be removed from the site. All sites that contained fuel will be inspected and any contamination will be dealt with according to the Spill Contingency Plan. Final photos of the fuel cache sites will be taken and forwarded to the NWB, NIRB, the Cambridge Bay and Kugluktuk Hunters and Trappers Organizations as well as the Kitikmeot Inuit Association and Nunavut Tunngavik Inc.

## Sumps

The grey water sump will be inspected and backfilled. Final photos will be taken and forwarded to the NWB, NIRB, the Cambridge Bay and Kugluktuk Hunters and Trappers Organizations as well as the Kitikmeot Inuit Association and Nunavut Tunngavik Inc.

# **Camp Sites**

Camp sites will be left in as near to the original state as possible with no debris left. A final inspection will be made. Photos will be taken and forwarded to the NWB, NIRB, the Cambridge Bay and Kugluktuk Hunters and Trappers Organizations as well as the Kitikmeot Inuit Association and Nunavut Tunngavik Inc.

# **Contamination Clean Up**

Any contamination will be treated according to procedures laid down in the Fuel Spill Contingency Plan. Any contamination and subsequent clean-up will be documented with photographs. All waste will be transferred to the Cambridge Bay municipal landfill for incineration.

## **Inspection and Documentation**

A complete inspection of all areas will be conducted prior to closure. Photographs will be taken for use in the final report. All appropriate agencies will be contacted upon final clean up.

## 8.0 Contact Numbers for Relevant Organizations

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CONTACT	CONTACT NUMBER (Tel / Cell)
Santiago Gonzalez, Project Supervisor	(520) 448-5864
Tim Stockhausen, Camp Manager	(520) 448-5888
Rio Algom Exploration Office, Tucson AZ	(520) 531-6922
24 Hour Emergency Spill Line phone / fax	(867) 920-8130, (867) 873-6924
CIRNAC Land Use Resource Management Officer (Kugluktuk)	(867) 982-4306
CIRNAC Water Resources Inspector	(867) 975 4295
Cambridge Bay Health Centre (24 hr phone line)	(867) 983-4500

Cambridge Bay RCMP; Office Hours / Emergency	(867) 645-0123 / (867) 645-1111
Keewatin Air Ambulance	(867) 645-4455
Discovery Mining Services	(867) 445-1641
	982-3310 ext. 223
Hamlet of Cambridge Bay	(867) 983-4560

# Attachment A

1. Camp and Fuel Cache site locations

