# ABANDONMENT AND RESTORATION PLAN Hood River Gold Project

**Kitikmeot Region, Nunavut** 

**April 2019** 



# **BLUE STAR Gold Corp.**

HOOD RIVER
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ARP
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# **PLAIN LANGUAGE SUMMARY**

This Plan describes what will be done when the site is closed annually, in the event of a temporary closure and at the end of the program associated with the Hood River Gold Project, near Kugluktuk, Nunavut.

# **REVISION HISTORY**

Revision #	Date	Section	Summary of Changes	Author	Approver
1	April 2019	-	New document	S. Hamm	P. Kuhn



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# 1.0 INTRODUCTION

The purpose of this *Abandonment and Restoration Plan* (the Plan) is to outline what tasks will occur to secure the Hood River Gold Project site (the Site) upon seasonal and temporary closure, and to outline how the Site will undergo final closure. This Plan considers the guidance and requirements provided in the documents listed in Table 1.

Table 1 Relevant guidance documents including legislation, permits and licences.

	В -8				
Document	Authority				
Nunavut Mine Site Reclamation Policy (2002)	Indigenous and Northern Affairs Canada				
Abandonment and Reclamation Policy for Inuit Owned	Qikiqtani Inuit Association				
Lands (Version 2.0)					
Dangerous Goods Regulations (2016)	International Air Transport Association				
Transportation of Dangerous Goods Act (1992) and	Transport Canada				
Regulations (2015)					
Canadian Environmental Protection Act (1999)	Environment and Climate Change Canada				
Interprovincial Movement of Hazardous Waste Regulations	Environment and Climate Change Canada				
(2002)					
Nunavut Water Nunavut Surface Rights Tribunal Act (2002)	Indigenous and Northern Affairs Canada				
and Nunavut Water Regulations (2013)					
Territorial Lands Act (1985) and Land Use Regulations (2016)	Indigenous and Northern Affairs Canada				
Screening Decision Report	Nunavut Impact Review Board				
Water Licence 2BE-HRP1419	Nunavut Water Board				
Land Use Licence (forthcoming)	Kitikmeot Inuit Association				

#### 1.1 SCOPE

This Plan applies to seasonal, temporary and final closure of the Hood River Gold Project (the Project) camp, associated fuel caches and the core storage areas.

#### 1.2 SITE DESCRIPTION

The Project is located within the Southern Arctic Ecozone and the Takijuq Lake Upland Ecoregion. Much of this region is composed of unvegetated rock outcrops. Vegetative cover is characterized by shrub tundra, consisting of dwarf birch, willow, northern Labrador tea, avens species and blueberry species. Organic Cryosols are the dominant soils in the lowlands and permafrost is deep and continuous (ECCC 2019). Snow remains for more than 250 days a year, typically from September to June; average annual snowfall rarely exceeds 0.5m, most of which falls during autumn and spring storms (Cowley 2014).

## 1.3 CLOSURE OBJECTIVES

The temporary closure objective for the site is to:

• ensure that the facilities are not posing a risk to the physical environment, wildlife or humans.

Final closure objectives for the site are to:

- re-establish pre-disturbance terrain conditions, where possible;
- restore areas occupied by the undertaking to a condition compatible with future land use.



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#### 1.4 FACILITY DESCRIPTION

The Project is located 200 km southeast of Kugluktuk, Nunavut, immediately adjacent to the Ulu Gold Project (see Figure 1). The Project abuts the Ulu site on three sides and occurs on Inuit owned surface and subsurface lands.

The camp is located within the boundaries of the parcel as indicated in the Mineral Exploration Agreement HOODRIVER-001 (coordinates to be provided once camp location is confirmed) and can support up to 60 persons. The site is accessible by air via the adjacent Ulu airstrip.

At its maximum capacity (60 persons), the Hood River Gold camp may consist of the following:

- Kitchen;
- Medical tent;
- Accommodations:
- Driller's dry and Worker's dry;
- Recreation tent;
- Shop;
- Office;
- Generator shack;
- Heli shack;
- Heli pads;
- Materials storage areas;
- Core shack.

Remote fuel caches may be established elsewhere on the property.

Should fixed wing access on floats be required, a dock may be established.

#### 1.5 PLAN MANAGEMENT

This Plan is intended to fulfill requirements associated with the water licence and land use licences. The Plan will be updated to reflect final camp location upon establishment.

The Plan will be reviewed annually by the Project Manager and updated as needed. When material changes occur, the updated document will be provided to the Nunavut Water Board and the Kitikmeot Inuit Association.

#### 1.6 PLAN IMPLEMENTATION

This Plan is effective upon approval and is valid throughout all phases of the Project.

The Project Manager or designate is responsible for Plan implementation.

A copy of this Plan is maintained on site in the Office.



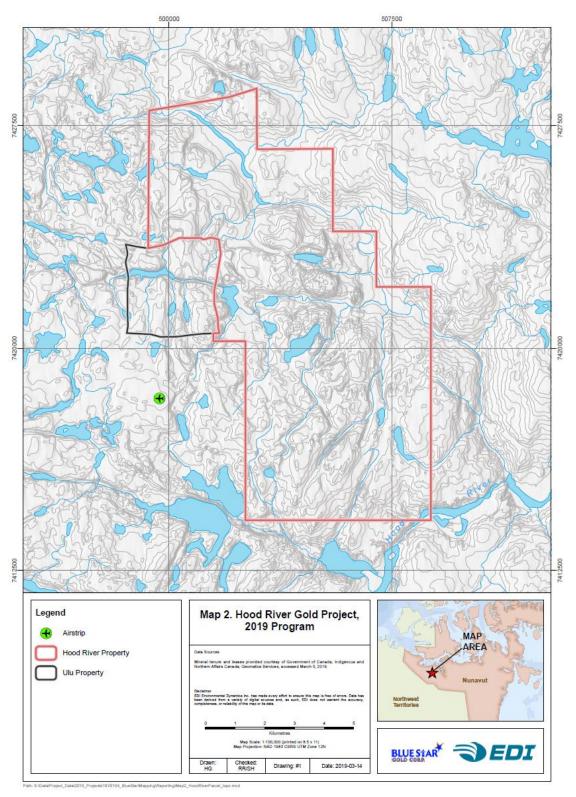


Figure 1 Hood River Gold Project site map



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# 2.0 ROLES AND RESPONSIBILITIES

Blue Star Gold Corp. (Blue Star) is responsible for activities associated with the Project, including implementation and management of this Plan. Blue Star's contact information is provided below.

#### Blue Star Gold Corp.

Suite 1125-595 Howe Street Vancouver BC V6C 2T5 Phone: 1 778 379 1433

Contact: Peter Kuhn, General Manager

Phone: 1 604 347 6999

Email: kjgold2010@gmail.com

#### 2.1 Blue Star Personnel

Blue Star personnel are responsible for directing, documenting and reporting pertaining to closure activities.

#### 2.2 DRILL CONTRACTORS

Drill contractors are responsible for ensuring each drill site is cleaned up to the satisfaction of a Blue Star inspector following each drill move and prior to commencing drilling at a new drill target. Closure-related activities to be undertaken include:

- Removing all drill timbers, hoses, equipment, debris and garbage from the drill site;
- Cut drill stems flush with the ground surface;
- Cap or plug drill holes;
- Backfill flush with the ground surface any areas that may have eroded or subsided around the drill stem:
- Remove to a sump any drill cuttings that may have been spilled to the surrounding land;
- Ensure cuttings sump is stable;
- Implement erosion control measures where necessary.

# 3.0 SEASONAL & TEMPORARY CLOSURE

Seasonal and temporary closure may occur for different reasons; however, related closure activities are the same. Typical activities associated with temporary closure of each project component are outlined below.

### **3.1 CAMP**

Valuables are removed from camp to off-site storage. Remaining items key to the closure and start-up of the camp are secured inside one hard-sided tent (ie. core shack), reinforced to withstand heavy snow accumulation.

Tents are cleaned out, fuel disconnected and doors wired shut to prevent snow and wildlife ingress.

All perishable food and most non-perishable food is removed to off-site storage. A small amount of non-perishable food may be left on site, stored in a manner such that it is not a wildlife attractant, as emergency rations.



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The kitchen is emptied and cleaned, including the grease traps, in a manner such it is not a wildlife attractant.

The greywater sump is inspected to ensure it is stable and free from wildlife attractants. Erosion control measures are implemented where necessary.

The incinerator and surrounding area are cleaned out, ash and debris removed, and incinerator secured in such a manner as to prevent snow ingress into the chambers and wildlife attraction.

If in place, the dock is removed from the lake.

#### 3.2 Fuel & Material Storage

Fuel and other materials such as drill additives, lubricants and coolants may remain in fuel caches for emergency use and to support camp closure and start-up. Fuel remaining in caches is inspected to ensure integrity of barrels or other storage containers, and is stored in covered secondary containment.

#### 3.3 WASTE

Hazardous and domestic waste generated during the preceding season is backhauled for off-site disposal or treatment.

#### 3.4 WATER INTAKE

The water intake facility is removed from the lake and securely stored on site. Fuel is removed from the water pump prior to storage.

#### 3.5 CORE SHACK

The core shack is cleaned out, fuel disconnected and doors wired shut to prevent snow and wildlife ingress, and is reinforced to withstand heavy snow accumulation. Core storage areas are inspected for stability.

#### 3.6 DRILLS

Drills are demobilized from the field and stored in a designated, durable area on site. Fuel lines are disconnected, and fuel tanks are stored in secondary containment. Drill cuttings sumps undergo a final inspection to ensure stability. The area around drill stems undergo a final inspection to ensure any areas of subsidence around drill stems have been backfilled in such a manner as to prevent water accumulation.

## 4.0 FINAL CLOSURE

Final closure at the end of the project involves a planned abandonment of the property, and entails removal of all temporary facilities rectified onsite.

Where possible, reusable equipment and supplies will be salvaged for reuse on other projects. Structures will be emptied and dismantled. Clean wood not suitable for reuse will be either chipped or open-burned on site. Chipped wood may be mixed with overburden, bentonite chips or drill cuttings and used to fill depressions (subsidence around drill stems, sumps). Materials not suitable for reuse or open burning will be transported off site for final disposal at appropriate facilities. Core will remain on site, stored in a stable manner.



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Fuel, hazardous wastes, recyclables and other materials will be bulked and packaged in a manner suitable for off-site transport and disposal, recycle or resale, as appropriate.

Fuel caches will be decommissioned. Instaberms will be inspected to determine if they are suitable for reuse on other sites. If not suitable for reuse, instaberms will be disposed of off site. Following fuel cache decommissioning, the land underneath will be visually inspected for evidence of leaks resulting in contamination. If any soil contamination is detected, contamination delineation and clean-up will be coordinated in consultation with the Kitikmeot Inuit Association and Crown-Indigenous Relations and Northern Affairs Canada.

# 5.0 REPORTING AND DOCUMENTATION

Annual reporting will occur in accordance with water licence and land use licence and permit terms and conditions. Temporary and final closure efforts will be photo-documented.

## 6.0 **SECURITY**

Security will be posted with the Kitikmeot Inuit Association in relation to the undertaking associated with the land use licence.



# 7.0 REFERENCES

Canadian Environmental Protection Act (CEPA). S.C. 1999, c.33

Interprovincial Movement of Hazardous Waste Regulations. SOR/2002-301

Nunavut Waters and Nunavut Surface Rights Tribunal Act. S.C. 2002, c.10

Nunavut Waters Regulations. SOR/2013-69

Territorial Lands Act. R.S.C., 1985, c. T-7

Territorial Land Use Regulations. SOR/2016 R-32, s.1.

Transportation of Dangerous Goods Act (TDGA). S.C. 1992, c.34

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