ABANDONMENT AND RESTORATION PLAN
HACKETT RIVER
EXPLORATION PROJECT

GLENCORE ZINC CANADA

Initial Submission: **March 5, 2005**
Latest Revision: **December 12, 2024**

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1. INTRODUCTION

Glencore Zinc Canada (Glencore) has actively explored the Hackett River area under the land use, mineral tenure, water use permits and licenses listed in Table 1. However, in August 2013, the Hackett River camp was brought into Care and Maintenance and the area is visited occasionally for short durations.

Table 1 List of Licenses and Permits issued for Hackett River Exploration Project, December 2020

Permit No.	Permit Name	Expiry	Issuing Agency
Surface lease 76F/16-2-2	Hackett River Camp	2047-03-31	AANDC
Land Use Permit N2017C0007	Exploration activities	2022-01-12	AANDC
Land Use Permit N2013F022	Hackett River Area	Closed	AANDC
Water License 2BE-HAK1621	Hackett River Camp	2021-03-21	NWB
Land Use License KTL313C005	Hackett River	2020-02-18	KIA
Land Use License KTL313F006	Hackett Winter Road	Closed	KIA

The purpose of this document, the *Abandonment and Restoration Plan, Hackett River Exploration Project* (the Plan), is to outline present and future abandonment and restoration activities associated with the Hackett River Exploration Project (the Project) in order to meet the requirements of the above listed permits and licenses as well as Glencore's corporate *Sustainable Development Policy*.

Glencore commits to implementing this Plan and will continue to look for opportunities to minimize or eliminate negative impacts to the environment as a result of its activities, products and services relating to the Project.

1.1 Scope

This Plan addresses requirements under the Nunavut Water Board (NWB) water license, Kitikmeot Inuit Association (KIA) land use license and Aboriginal Affairs and Northern Development Canada (AANDC) land use permit. The Plan addresses abandonment and reclamation of the Hackett River Camp and associated activities on mineral leases and claims. Subject to annual internal review and revision, it will remain applicable throughout the duration of the NWB license, or until a material change in the scope of the Project occurs.

The current revision of the Plan has been completed to address changes associated with the transfer of ownership of the Property to Glencore (from Xstrata Zinc Canada) and its current care and maintenance status. The Plan takes into consideration progressive reclamation, and abandonment and restoration activities associated with both temporary (short term) closure as well permanent (long term) closure. In either closure scenario, the Plan provides the base strategy for anticipated tasks to restore the Hackett River Exploration Project area. The Plan also includes an estimated cost for the final closure and reclamation of the area.

1.2 Glencore Sustainable Development Policy

As a diversified and metallurgical company, Glencore recognizes that our operations may have an impact on the communities where we operate. We are therefore committed to Sustainable Development (SD) by integrating economic, environmental and social responsibility aspects into our governance. This commitment is based upon the following principles:

- Implementation and maintenance of ethical business practices including upholding fundamental human rights and respecting the traditional rights of local communities.
- Prevention of environmental degradation, occupational injuries and diseases.
- Continuous improvement through the assessment, establishment, control and management of SD objectives and targets, and the allocation of appropriate resources to achieve them.
- Compliance with legislation as well as adopting the requirement of other applicable standards and exceeding them where reasonably practical.
- Open and honest engagement with relevant stakeholders to consider their opinions, suggestions, complaints and concerns regarding SD issues, taking these into account in our decision-making process, as well as managing responses in a positive way.

We address sustainability throughout our product life cycle and supply chain, and we expect our suppliers and partners to comply with our SD policy.

1.3 Site Location and Description

The Hackett River Project is located in the West Kitikmeot region of Nunavut, approximately 300 km south of Cambridge Bay, and 80 km south of Bathurst Inlet (Figure 1) at approximately 65° 55’ North Latitude, 108° 30’ West Longitude.

The Project lies within the Takijuq Lake Uplands eco- region, which covers the south central portion of the West Kitikmeot region. This area is made up of broad, sloping uplands, plateaus, and lowlands, along with the rugged ridges of the Bathurst Hills (Nunavut Planning Commission, 2005). Much of the area is largely composed of un-vegetated rock outcrops and boulder fields. The landscape is characterized by higher elevations, which are moderated by open water during the late summer and early fall. The Project lies within the Bathurst Inlet-Burnside watershed and the area is dotted by thousands of lakes, collected by streams or by one of the major rivers in the area (e.g., Burnside and Mara rivers).

The Hackett River property is geologically situated within the eastern portion of the Archean to Early Proterozoic Slave Province of the Canadian Shield. Its rocks form part of the metasedimentary and metavolcanic Yellowknife Supergroup. The Yellowknife Supergroup is subdivided into (oldest to youngest) the Hackett River, Beechy Lake and Back Groups, all of which demonstrate conformable relationships.

The Hackett River Group consists of gneissic and schistose rocks, overlain, locally, by metamorphosed mafic and felsic flows and pyroclastics. This unit however has not been recognized in the immediate property area but is found to the southwest. These basal units are overlain by the Ignerit Formation, which forms the top of the Hackett River Group and this is what underlies most of the Hackett River property and is the host of all the known sulphide deposits. The Ignerit Formation is a cyclic fining upward calc-alkaline assemblage of volcanics, volcanically derived sediments and chemical sediments.

The entire property area has been overprinted by greenschist to upper amphibolite facies metamorphism with diagnostic development of metamorphic garnet, biotite, cordierite-staurolite and sillimanite. Recrystallization has frequently obliterated primary features and bulk chemistry has been heavily utilized to determine protoliths. Upright and recumbent folding in the area has

Figure 2 Location map, Hackett River Exploration Project

imparted moderate to steep southerly dips to the stratigraphy, (adapted in part from Frith and Roscoe 1980).

The mean annual temperature is approximately -10.5ºC with a summer mean of 6ºC and a winter mean of -26.5ºC. The mean annual precipitation range is 200-300 mm (Environment Canada 2012). The region is characterized by long dark winters and short summers. The ground is covered in snow from October to June most years. Lakes are ice-covered from approximately October to June, with ice thickness reaching 2.0 m. The area is one of continuous permafrost, meaning the ground is permanently frozen throughout the year.

The Project consists of a single exploration camp located on the southwest shore of Camp Lake (Figure 2), a drill laydown area on the southeast shore of Camp Lake (Figure 3), 2 airstrips and 10 mining leases (11,800 ha) and 238 crown mineral claims totaling 199,196 hectares. The camp has a capacity of up to 120 people, all of whom directly support exploration activities including surficial mapping, geophysical surveys, core logging, diamond drilling and environmental monitoring. The exploration camp is located on AANDC Surface Lease 76F 16-2-2 which permits the presence of mineral exploration camp structures subject to certain terms and conditions.

Figure 3 Hackett River Camp, looking northwest (July 2015)

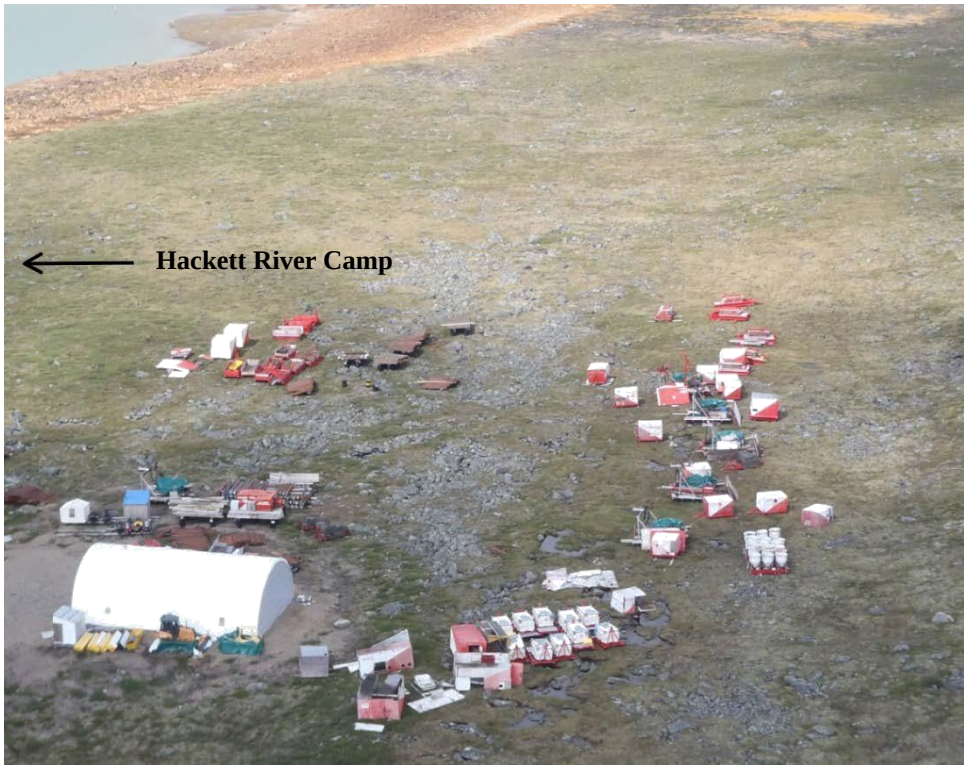

Figure 4 New Camp Lease Area (76F/16-1-7), looking northeast (July 2015)

1.4 Site History

The Project history extends back to 1956 and is detailed below in Table 2.

Table 2 Hackett River Exploration Project History

Date	Activity
1956	Copper mineralization was discovered by Rio Tinto Exploration at Camp Lake. This showing was initially called the "A" Zone and is now more commonly known as the "Main Zone".
1966	The precursor to Bathurst Inlet Mining Corporation acquired the property and carried out prospecting, geological mapping and geophysics. The first drilling was completed in 1969.
1969	Norsemines and Atlin-Yukon made discoveries of significant mineralization on adjacent ground. These companies and Bathurst Inlet Mining Corporation amalgamated as Bathurst Norsemines Limited.
1970-1975	Cominco Limited optioned the property and carried out airborne and ground geophysical surveys, geochemical sampling, geological mapping and diamond drilling. In 1970 an airborne electro-magnetic survey delineated a 30 km strike length of prospective stratigraphy. Subsequent groundwork led to the discovery of the East Cleaver Lake, Boot Lake and Finger Lake Zones.
1970-1979	In the 1970's, Noranda held several claim blocks, located to the north and west of the Hackett River leases. In 1977, Noranda conducted a reconnaissance mapping program over the whole northern portion of the Hackett River greenstone belt. Subsequent to this, selected areas were covered by an airborne survey flown at roughly 400 m line spacing and favourable areas were staked. The following year, all of the properties were mapped and ground geophysics was conducted over specific areas. In 1979, drilling was completed on selected targets. Additional work was conducted in the area to the south of D'Arcy Lake with the work focused to the immediate south of D'Arcy Lake, in the north of the lake (to the southeast of Watson Lake), near Bikini Lake and near Terry Lake. In the 1970's this area was owned by Mid-North Exploration. The property was under option by Cominco which completed all work in the area at that time. Geophysics, mapping, sampling and drilling were completed in these areas. A total of 6 holes were drilled, one in the north of D'Arcy Lake, two to the south, five in the Bikini Lake area and one near Terry Lake.
1986	Bathurst Norsemines was consolidated and renamed Etruscan Enterprise Ltd.
1990-1991	In the early 1990's Echo Bay was the operator in the area around D'Arcy Lake (see above work, from 1970 – 1979). Geophysics, mapping, sampling and drilling were completed in these areas. A total of 3 holes were drilled in the Bikini Lake area. .
1993-1994	Etruscan became operator of the Property, and carried out airborne and ground geophysical surveying as well as drilling. Emphasis was placed upon the Main and East Cleaver Zones.

1997-1998	Etruscan carried out a digital data compilation of geological, geophysical and drill data, and 300 line-kilometres of time-domain pulse electro-magnetic and gravity surveying over the area containing most of the known showings and drilling. Following Etruscan's work, the Property reverted to Teck Cominco, subject to a royalty payable to Etruscan.
2004	Sabina Resources optioned the property from Teck Cominco, carried out 144 km of Max-Min geophysical surveying, and drilled 61 holes with an aggregate length of 15,179 m. The existing camp was established in about 1970 and the last time the camp was in active use prior to Sabina's use in 2004 was in 1998. The camp is subject to a new regulatory environment as a result of the creation of Nunavut in 1999. The previous 35+ years of exploration work resulted in an accumulation of various waste products at the camp site, minor quantities of debris at or near several drill sites and at an esker airstrip located south of camp. The bulk of the waste was located at the historic camp and at the esker airstrip. Virtually all of the historical waste and debris was cleaned up and transported to Yellowknife or, in the case of old fuel in drums, shipped to a recycling / product recovery location near Edmonton for processing. On-going reclamation efforts continue throughout the 2004 to 2006 period.
2005	Sabina exercises its options to earn 100% interest in the property. CMP declined to exercise its back-in rights and Sabina continue to fund the project. The drill program resumed in March 2005 and continued until July. In 2005. 44 holes with an aggregate length of 9,357 m were drilled on the Main, Boot Lake and East Cleaver Lake Zones. Upon completion of an additional $5 million in exploration expenditures on the Property, Cominco Mining Partnership (CMP) declined to exercise its back-in rights and now holds a 2% NSR royalty.
2006	The 2006 drill program included 52 new holes and one existing hole from the 2005 drill campaign was deepened. A total of 17,293 m of drilling were carried out during the campaign. Sabina changes name to Sabina Silver Corp.
2007	Preliminary economic assessment indicates a mine plan with average annual production of 324.7 million pounds zinc, 12.4 million ounces silver, 20.7 million pounds copper, 37.0 million pounds lead, and 17.2 thousand ounces of gold over a mine life of 13.6 years. Additional definition and exploration drilling, geotechnical drilling and testing, further metallurgical testing and optimization, and selected geophysical surveys were also completed. Work also on-site also included the initiation of baseline environmental data collection to support the preparation of an Environmental Impact Statement (EIS).
2008	Additional definition and exploration drilling, geotechnical drilling and testing, and further metallurgical testing and optimization were completed. Work on-site also included limited baseline environmental data collection to support the preparation of an Environmental Impact Statement. A Project Description was submitted in January to the Nunavut Impact Review Board to initiate the environmental assessment and regulatory processes in Nunavut. By year end, the screening decision and scoping was completed and draft EIS Guidelines were under review.
2009	An additional 62 holes were drilled on the Hackett River property, with 14 more drilled on the Wishbone project (near D'Arcy Lake). The 76 holes drilled, totaled 14,570 m. In late 2009, an updated Preliminary Economic Assessment (PEA) was completed on the project, with indicated resources totalling 43.3 million tonnes grades of 4.65% zinc, 144 g/t silver, 0.42% copper, 0.64% lead and 0.30 g/t gold. An additional inferred resource totalling 14.6 million tonnes with grades of 4.46% zinc, 136 g/t silver, 0.31% copper, 0.57% lead and 0.31 g/t gold is also contained at Hackett River. Sabina Silver Corp becomes Sabina Gold and Silver Corp, to reflect diversification, after acquisition of Back River Properties.
2010	The main objectives of the work done in 2010 were to find higher grade copper/gold stringer mineralization, expand and improve the pit economics and identify new deposits. The 2010 work program included 78 holes, totalling 19,441 m, with more than half concentrated on the Main and East Cleaver deposits. An additional 42 holes, and 8,105 m was drilled on the Wishbone project. Beginning in 2010, Sabina Gold & Silver began searching for a partner to help develop the Hackett River property.
2011	In June, 2011, it was announced that a deal had been reached with Xstrata Zinc Canada to take over the Hackett River property, as well as selected Wishbone claims. The deal was finalized in November, 2011, and Xstrata Zinc became the sole operator on the project. The 2011 program was two-fold. During the winter months, 42 drill holes, for 10,200 m was drilled at Hackett River, while the summer program focused on drilling for gold targets, on Sabina's Wishbone claims (These results will be reported separately under the next Sabina revision to their Abandonment and Restoration Plan). To date, 590 holes, totaling 116,216m have been drilled at Hackett River.
2012	Exploration efforts in 2012 were focused on increasing tons at the known deposits, and to identify and drill new targets outside of the main deposit areas. A total of 203 holes were drilled, for 51,548 m. Airborne geophysical surveys were flown over a 10 week period in March – May, and again over 1 week in June. A large scale environmental program was undertaken, resuming the baseline studies from 2007 and 2008, and work included installation of more thermistors, meteorological stations and work along the proposed Bathurst Inlet Port and Road (BIPR) project corridor and at the proposed port site at Bathurst Inlet. Work at the Inlet included current measurements and geophysical studies to test submarine ground conditions.
2013	In August of 2013 the Hackett River project and camp was brought into Care and Maintenance; diamond drilling and associated core cutting was stopped at this time.
2014	The camp continued in Care and Maintenance and activities on site (between April and September) included monitoring fuel berms (monthly) and sumps, site clean-up, and removal of waste from site. Progressive reclamation works were undertaken through the removal of sludge from a limited number of drill sumps. Seeding of the area close to the camp dock was completed following removal of fuel berms. During a September visit to camp, a breach in the esker at the south end of Camp Lake resulting in a 6 m drop in water levels was observed (see Figure 2 above).
2015-2019	As of August 2015, the camp is in Care and Maintenance and activities were similar to 2014 with monthy monitoring of fuel berms, sump monitoring, camp clean-up, and removal of waste from site. Progressive reclamation activities included experimental plots at 4 sump locations for re-vegetation and seed casting at additional sumps.
2020-2024	Monitoring inspections carried out each season but at reduced frequency due to COVID-19 and Yellowknife wildfires limiting access to site.

2. CURRENT INFRASTRUCTURE

Infrastructure associated with the Project are summarized in Table 3.

Table 3 Current Infrastructure and Assets at Hackett River Camp, December 2020

Asset	Qty	Description
Buildings	36	Sleeping quarters – 4 with office space, 5 are historical wooden buildings, 3 are new wooden cabins
	2	Core processing facilities (historic core storage/saw rooms/shipping area)
	1	Core logging facility, with attached office space
	1	Core storage area, in old metal building
	1	Kitchen and ablution/dry building (general camp)
	2	Ablution/dry buildings (drillers)
	3	Office buildings (camp wooden structure), geology in tent, logistics
	3	Shop buildings (contractor and Glencore)
	3	Pacto buildings
	1	Medical/nursing station
	2	Recreation facilities, with TVs
	2	Helicopter maintenance/storage sheds
	1	Solid waste laydown area
	2	Water intakes, 1 for camp use, 1 for core saw use
	2	Waste incinerators, 1 old small one, 1 CA 50 dual stage, forced air unit.
Equipment	2	Swamp buggy (Nodwell), and 2012 HT60 tracked unit
	2	Case 850 Dozer
	3	Cat skid steers, 1 277,1 277B and 1 297 multi terrain units.
	3	Large gensets (2 @ 175 kW and 1 60 kW).
	2	Small gensets (40 kW and 12 kW)
	6	Diamond drill rigs.
	5	Boats and motors
	Up to 30	Snow machines, toboggans and sleds.
	2	ATVs and trailer
Fuel Storage	2	Primary storage areas for drummed diesel and jet fuel. Includes secondary containment.
	4	Bulk fuel storage tanks. 2 at Generator shacks, 2 at Incinerator, All with secondary containment.
Transportation	2	Airstrip (natural unprepared esker)
	3	Helipads
	1	Jetty

3. ABANDONMENT AND RECLAMATION SCHEDULE

Glencore intends to continue progressive reclamation as part of care and maintenance and concurrent with exploration activities, should they occur. This includes cleanup of the camp, areas affected by historic exploration activities, and areas affected by Glencore's future exploration activities. This work is reported to KIA and NWB as part of the annual report.

The camp is visited several times during the summer. A visit occurs as soon as the ice is off Camp Lake allowing a float plane to land. This visit is to conduct inspections of the camp, fuel berms and drill sumps, as well as identifying and repairing any winter damage. A second visit occurs in later summer allowing for a second round of inspections and any follow-up maintenance. On the final visit any equipment and tents that were used are stored or winterized respectively, for use the following year. All waste is removed from the camp where possible, and any supplies left on site are stored so as to minimize wildlife attraction, damage from winter storms, ice or snow accumulation.

At the end of each exploration season, temporary Hackett River camp closure takes approximately 14 to 21 days to complete. As exploration activities vary year to year and the end of the field season is difficult to predict in advance, temporary closure typically commences as early as mid-September each year and end no later than end of October.

The timing of final closure and abandonment of the Hackett River camp is difficult to predict. For planning purposes, a list of activities and associated costs to close the Hackett River camp permanently are included herein. It is assumed that the final land use at closure will remain that of an exploration camp in compliance with the surface lease.

4. PROGRESSIVE RECLAMATION

Current reclamation activities focus on diamond drill site locations after completion of exploratory drilling. During drilling, each drill site is occupied by the drill rig approximately 2 to 20 days with a typical affected area of approximately 12 m x 12 m. The affected area houses the rig on a platform, sumps/collection tank, water supply lines and any geotextile fences constructed down slope from a new drill setup, if needed, to contain any spills of drill-generated sludge. Site clean-up of litter, debris and drill fluids (biodegradable) is continuous throughout the drilling process. Sludge is collected in mega bags then deposited into a natural depression designated by Glencore staff in the field. Fuel for the drills is in 400 L "tidy" or day-use tanks, that are filled in camp and taken to the drill. All drill fluids at the drill are stored in secondary containment trays, within an enclosed structure.

Once the drill hole is completed, the diamond drill rig is dismantled and moved by a dozer (winter drilling) or helicopter (summer drilling), either to the next location or to designated storage areas on the property until the next drilling season. Diamond drill site restoration commences as soon as practical after drill removal. Any waste is taken back to camp and disposed in a manner appropriate to the waste stream. Any unused material, fuel and supplies are transported to the next drill site, or taken back to camp for storage or disposal. Drill casing is pulled out of all holes drilled on ice, and the holes are cemented and plugged. Drill casing that were left at holes where significant mineralization was encountered are cut to ground level and capped. The cut portions are disposed of in an approved facility in Yellowknife or recycled as scrap metal. The collar locations of all drill holes are surveyed and recorded in exploration reports. Drill core and core boxes are moved to the designated storage areas and properly secured.

During drilling, drill sites routinely inspected (See Appendix A: *Drill Site Environmental Compliance Checklist*). In the event of a spill, the *Spill Contingency Plan* is activated. In the event that the site is snow covered when drilled, the site is inspected once the snow is gone, in the spring, and again the following season to ensure successful reclamation has occurred. All historical sites are checked each year from the air, and also on foot, if anything is visible from the helicopter.

During care and maintenance progressive reclamation activities will include but not be limited to:

- Removal of sludge from drill sumps;
- Seeding of suitable areas within camp (e.g., close to the camp dock following removal of fuel berms); and
- Re-vegetation (seeding or vegetation transplants) of drill sumps.

5. TEMPORARY CLOSURE AND CARE AND MAINTENANCE

Typically, temporary closure of the camp is intended for short-periods of time (typically seasonal, over winter) to ensure that the site remains safe and secure, and is available to support future exploration activities. Temporary closure could also occur for the following reasons:

- Sudden drop in metal prices;
- Drop in resource grade to values lower than anticipated;
- Noncompliance with legislative requirements;
- Natural disasters;
- *Force majeur*; and
- Changes in ownership/operation.

Similarly for care and maintenance (current camp status), the camp remains closed except for short periods of time during the summer to support site maintenance and site inspections. During care and maintenance (and in the event of a temporary camp closure if exploration activities proceed), planned abandonment and restoration activities are described in the following sections.

5.1 Buildings, Contents and Equipment

All tents and buildings are secured by doors being screwed or wired shut and plywood installed to prevent them from opening. All stove pipes and tarps are inspected and secured against possible wind damage. All equipment, household furniture, kitchen equipment, recreational equipment and other mobile heavy equipment are winterized and secured on- site. Any equipment not capable of withstanding the winter conditions are removed and stored in Yellowknife, Thunder Bay or Montreal. All perishable food is removed from camp, and distributed.

The diamond drill rigs are dismantled and secured in drill laydown area, or other designated storage area, and removed from camp during care and maintenance.

Water pumps, filtering systems, water lines and any other equipment associated with the water supply system are drained and winterized.

The wastewater system is drained with no greywater remaining in the discharge pipe. The grease trap is emptied, cleaned, and any debris incinerated. The greywater discharge sump is checked for any particles of other material, cleaned up and any waste disposed of appropriately.

Combustible solid waste is incinerated on-site. Solid waste including metal scraps, drill rods, and non-burnable household or kitchen waste are stored in an appropriate marshalling area for backhaul to Yellowknife. Ash from the incinerator, and scrap metal from the drills and camp are stored in empty, covered 205 L drums for backhaul and disposal. At the end of each season, all kitchen or household waste, is bagged and taken to Yellowknife for disposal. This typically included non-burnable items, such as tin cans, glass bottles or jars, light bulbs, empty aerosol cans, etc. Recyclable materials (aluminum cans, plastic bottles, cardboard, etc) are sent to the recycling facility in Yellowknife, while used batteries and printer ink cartridges are sent in for recycling at a participating retailer who recycles these items.

The fuel supply for the incinerator is shut off using a series of valves. The fuel remains in a double-walled tank (in a berm), adjacent to the incinerator throughout the winter.

The generators are winterized, and the area inspected for petroleum spills or contamination; if any noted, the *Spill Contingency Plan* is activated. Remaining waste fuel, oil and grease is stored in approved secondary containment storage containers and labeled for that usage and secured on-site for future use, or disposed in approved facility. The generators are winterized and the sheds secured for the winter. Electrical wire, plugs and sockets remain in their installed locations. All electrical cords, temporarily connected to a building or machinery, are unplugged, rolled and stored in a workshop. The batteries for the generator (and larger mobile equipment) are sent to Yellowknife for the winter for charging, and to allow for a full charge upon camp opening.

As part of the long term camp closure under care and maintenance, where possible fuel drums are removed from all structures around camps, and where oil stoves are present (e.g., sleepers, and office tents). The drums in the secondary fuel stands are drained (with the expection of the main office, foreman's tent, and sleeper tent). Where possible the old drums in secondary containment are replaced with newer lined drums to prevent rust build-up (from condensation during the shut-down). Fuel lines from the drums to the stoves are also disconnected, and stored inside the tents to prevent decay caused from UV radiation. However for short-term closure (winterize camp), the 205 L fuel barrels that supply each individual structure's heating system are secured on stands, and oil sorbent padding is wrapped around the bung, hose and fittings. Each fuel line is routed through a 5 gal pail, and the low point on the fuel line is wrapped with oil sorbent pads to catch any leaks from the fittings at the bung. Stoves are all cleaned out, fuel conditioner applied and fuel barrels topped up and secured for the following year's camp opening. Bungs on fuel drums are tightened to prevent water from entering the fuel drums, and valves on the fuel lines are moved to the closed position. All drums at the structures in camp are enclosed in secondary containment stands, all of which are enclosed to prevent snow accumulation.

Empty propane containers are transported to Yellowknife for refilling or recycling.

5.2 Fuel and Chemicals

An on-site fuel cache is important during camp start-up after a temporary closure, however, fuel, along with consumable drill supplies will be drawn down through consumption to the lowest practical safe level. Barrels of diesel and jet fuel are stored in self-supporting, Arctic grade, secondary containment berms. Fuel cache locations are clearly marked to facilitate identification when snow clearing during camp re-opening. Fuel caches are covered to maintain secondary containment snow-free over winter. Empty drums are stored in a berm for winter transportation, from the ice strip, back to Yellowknife for recycling.

As part of care and maintenance fuel caches have been consolidated to a smaller number of berms for ease of monitoring. Berms are monitored on each visit of the year.

Any fuel-contaminated snow that has been stored in 205 L drum is allowed to melt, separated, and the fuel is used in the incinerator, while the water is disposed of in accordance with permit terms and conditions.

Chemicals stored on-site include biodegradable drill additives, oil, grease, drill salt and household cleaners. All drill additives are stored in buildings and salt is stored in designated areas of the camp in impermeable bags and on pallets. Any loose bags of salt are placed in mega bags and stored in berms. Drill oils and greases are stored in impermeable secondary containment, while the biodegradable drill fluids and additives are stored in pails in a building.

5.3 Transportation

All transport areas are inspected for spills or contamination. In the event of a spill, the *Spill Contingency Plan* is activated. Where contamination has been detected, contaminated materials are excavated and stored for backhaul and appropriate disposal.

Any materials being temporarily stored on or adjacent to the esker air strips and heli pads are removed, leaving the air strips and helipads free of supplies and equipment.

5.4 Exploration Drill Sites

The diamond drill rigs are dismantled and secured in the drill laydown area or other designated storage area near camp. All hydrocarbons and drilling additives are removed from drill sites and stored in camp into a designated storage facility. Exploration drill sites are inspected throughout the drilling season when a drill rig is removed from a drilling site. Sites are inspected for debris, sludge, and spills of any kind. Immediate actions are undertaken in the event of a non-conformity with Glencore Canada Corporation SD drilling standards, as represented in the Drill Site Environmental Inspection Form (Appendix A).

5.5 General Camp Area and Documentation

A general inspection of the camp area is carried out to ensure the closure is complete and the site is being left safe and secure. An inventory is also completed before leaving the site to document all buildings, equipment, fuel and supplies left on-site. This includes photographing the completed closure measures to assist with start up the following winter, when snow conditions are unknown prior to arrival in camp.

6. FINAL ABANDONMENT AND RESTORATION

Final abandonment of the Project is difficult to predict when, or if, it would occur. This section includes a list of possible activities necessary for final closure of Project, and is based on the assumption that an exit from the Project is anticipated and controlled with more than one season available to complete. It is also assumed that most of the demobilization would occur in the spring following the decision to permanently close the Project, when there is enough ice to permit an ice strip to be built, and the larger aircraft utilized to move materials out. All work will occur prior to the expiration of licenses and permits.

Following decision by Glencore on final closure, all camp infrastructure will be dismantled using procedures that are deemed appropriate and are approved by regulatory parties.

6.1 Buildings, Contents and Equipment

All re-useable tents and tarpaulins (including the Quonset hut) will be dismantled and where possible be deployed for use at another exploration site. Rented tents, stoves and equipment will be packed and transported back to the appropriate owner, including all drilling related equipment, which will be flown back to the contractor's base in Yellowknife.

All re-useable office, household, kitchen and recreational equipment will be packed and transported for use at other exploration camps, or donated for local use, where appropriate. Equipment not reusable will be packed and transported off-site for disposal in approved facility, appropriate to the type of material.

Water pumps, filtering systems, water lines and any other equipment associated with the water supply system will be disassembled, lines drained, packed and transported off-site either for use at other exploration camps, or disposal in approved facility.

The Pactos will be dismantled, packed and transported off-site either for use at another exploration project or disposal in approved facility. The greywater system will be drained and the discharge pipe removed. All supply and waste lines associated with showers, sinks and washing machines will be drained and packed up for removal.

Combustible solid waste is incinerated on-site. Ash from the incinerator is stored in empty 205 L drums for backhaul and disposal. Solid waste including scrap metal, drill rods, saw sludge, and household items is stored in an appropriate marshalling area for backhaul to Yellowknife and disposal at an approved facility. The incinerator will be broken down and removed, using large heavy lift aircraft, or medium lift helicopters.

The generators are broken down and removed, using large heavy lift aircraft, and medium lift helicopters, as needed.

6.2 Fuel and Chemicals

Any remaining consumable materials such diesel fuel, jet fuel, drill additives, salt and core boxes will be sold and transported to another exploration project in the region.

Remaining waste fuel drums will be labeled and transported off-site for disposal in approved facility.

Secondary containment berms will be dismantled and transported off site for either disposal or use at another site.

The area around all fuel storage, use and transfer areas will be inspected. Any hydrocarbon contamination will be cleaned up and areas remediated to meet objectives outlined in the *Environmental Guideline for Contaminated Site Remediation* (Government of Nunavut, 2009). Empty containers and pallets will be incinerated, recycled if possible, or disposed of in an approved facility.

Unused household cleaners will be transported off- site either for use in other camps or disposal in approved facility. Empty containers will either be recycled or disposed with regular garbage.

6.3 Transportation

All transport areas are inspected for spills or contamination. Any hydrocarbon contamination will be cleaned up and areas remediated to meet objectives outlined in the *Environmental Guideline for Contaminated Site Remediation* (Government of Nunavut, 2009).

Any materials being temporarily stored on or adjacent to the esker air strips and heli pads are removed, leaving the air strips free of supplies and equipment.

All roads and airstrips will be regraded to match natural contours and minimize erosion. All culverts will be removed, stream channels restored to match natural channel characteristics and stream banks will be regarded to match natural contours. Sedimentation and erosion control measures will be implemented throughout the culvert removal and channel restoration process.

The dock in Camp Lake will be dismantled and removed.

6.4 Exploration Drill Sites

Upon final site abandonment, exploration drill sites are remediated as per Section 4 of this report. Drills and all drilling related equipment will be flown back to the contractor's base in Yellowknife.

6.5 General Camp Area and Documentation

Following clean-up and removal of all structures and equipment, the site will be regraded, contoured and stabilized to conform with surrounding topography. All disturbed surfaces will be scarified to promote vegetation regrowth.

Upon completion of final closure activities, reporting required under permits and licences will be compiled and submitted to the appropriate agencies.

7. MONITORING

Post closure monitoring and inspection will occur annually for 2 years after final reclamation activities completed to confirm site stability.

8. COST ESTIMATE

A current cost estimate for abandonment and restoration activities associated with the project is provided in Appendix B.

9. REVISION HISTORY

The activities and costing of reclamation activities will be reviewed internally relative to the long-term exploration strategy for the Project

Previous Revisions:

March 5, 2005
July 31, 2005
March 20, 2006
July 31, 2009
May 25, 2011
March 29, 2012
April 29, 2013
September 30, 2015
April 4, 2019
December 3, 2020

10. REFERENCES

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Frith, R.A. and S.M. Roscoe. 1987. *Tectonic setting and sulphide deposits of the Hackett River Belt, Slave Province*. Geological Survey of Canada. Ottawa.

Government of Nunavut. 2009. *Environmental Guideline for Contaminated Site Remediation*. Department of Environment. Iqaluit, NU.

Nunavut Planning Commission (NPC). 2005. Draft West Kitikmeot Regional Land Use Plan. Cambridge Bay, Nunavut.

APPENDICES

Appendix A Drill Site Environmental Compliance Checklist

Drill Site Environmental Compliance Checklist

Job #:	**Rig#:**	**Inspection Date:**
Contractor:	**Model:**	**Job Supervisor:**
Location:	**Inspected By:**	
Drilling Crew Name:		

A. Employee	Y	N	Corrective Action Required	By Whom?	Due Date	Done/ Initial
1. PPE warn to standard (head, foot, hand, hearing, eye protection?)						
2. Fall arrest harness available and in good condition?						
3. Suitable clothing with reflective strips worn? No jewelry/loose long hair?						
4. All employees know emergency and reporting procedures for hazards, injuries, incidents, near-misses?						
5. WorkSafe Card & pre-ops completed accurately at beginning of shift?						

B. Workplace Environment	Y	N	Corrective Action Required	By Whom?	Due Date	Done/ Initial
1. Good housekeeping at drill & pump, free of slip & fall hazards?						
2. Lighting adequate with protection? Lighting properly grounded?						
3. Barricade tape or railings and signage over/around holes, sumps or banks?						
4. Are access trails, platforms, steps, walkways in good condition?						

C. Equipment	Y	N	Corrective Action Required	By Whom?	Due Date	Done/ Initial
1. Drill, pumps & mobile equipment clean and well-maintained?						
2. Drill rig and pumpshack set-up to standard and level?						
3. All rotating drill and pump parts guarded?						
4. All hydraulic hoses sheathed and in good order?						
5. Water line maintained in good condition? Whipcheck installed?						
6. Hand and power tools clean, in good repair and properly stored?						
7. Winch and cable maintained in good condition?						
8. Emergency shut down switch present and functional? Workers trained?						
9. All leaks are controlled or eliminated?						
10. Are proper pressure relief device installed?						

C. Natural Environment	Y	N	Corrective Action Required	By Whom?	Due Date	Done/ Initial
1. Matting lined drip pans used under engines and fuel/waste oil containers?						
2. Compressed gas cylinders stored upright, secured with signage posted?						
3. Fuel and other controlled productes properly stored?						
4. Fuel and other controlled products are stored in containment vessels?						
5. Risks of spillage of Fuel and other controlled products have been investigated?						
6. Spill kit in good order at drill and pump stn?						
7. Refuse stored in garbage cans with lid?						
8. Refuse removed from site on a daily basis?						

D. Documentation & Emergency Preparedness	Y	N	Corrective Action Required	By Whom?	Due Date	Done/ Initial
1. Emergency contact list posted?						
2. Communication system functional, tested daily and instructions posted?						
3. First aid kit in good order and visible?						
4. ABC extinguishers on equipment, at drill and pump stn inspected?						
5. Lockout kit at drill & on mobile equipment in good order??						
6. WHIMS material safety data sheets available and WHIMS labels affixed?						
7. 'Red book' of procedures and H&S documentation available?						

E. Other Findings, Remarks or Suggestions

Inspector: Name & Signature

Supervisor or Driller: Name & Signature

Follow-up Completion Date:

Confirmed Completed By:

Send with 'Daily Drilling Reports'

Appendix B Abandonment and Restoration Cost Estimate

Table B. Abandonment and Restoration Cost Estimate ($CDN 2020)

ITEM(S)	PLANE LOADS	DURATION	COST ESTIMATE	COMMENTS
Aircraft	-	-	-	$17,700 / plane
Consumables	58	-	$1,026,370.00	Estimate assumes backhaul through Yellowknife.
Equipment	13	-	$230,050.00	May be able to reduce # of plane loads to 10 by combining loads.
Office, Misc.	1	-	$17,700.00	Includes all printers, computers, supplies (paper, ink), radios and antenna, and all other items (geology field gear, scales, sat dishes, exercise equipment, TVs, etc)
Kitchen	3	-	$53,090.00	Includes ovens, fridges/freezers/metal shelves, leftover food, small appliances
Tool shop	2	-	$39,650.00	Includes hand and power tools in the tool shop
Labour	-	28 days	$420,000.00	28 days for 9 camp hands, manager, cook/First Aid for waste management, site cleanup, etc.
		28 days	$1,049,880.00	Include labour costs
Drills	51		$22,400.00	Includes camp costs and disbursements.
Oversight	-	-	$285,500.00	10% of costs listed above, for independent project compliance oversight
Estimated Total Cost of Reclamation			**$3,144,640.00**	