High Lake Project

Abandonment and Restoration Plan

Wolfden Resources Inc.

Updated by
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1. Preamble

The Abandonment and Restoration Plan is effective from January 19, 2007 to December 31 2008 and applies to the High Lake Project operated by Wolfden Resources in the Kitikmeot District of Nunavut, north latitude 67° 22' 46" and west longitude 110° 50' 31". The project is under agreement with Nunavut Tunngavik Incorporated (NTI). Land Use permit's with the Kitimeot Inuit Association (KIA) and Nunavut Water Board (NWB) are currently in place.

The following formal distribution has been made of this plan: KIA, NWB, Ewan Downie (President – Wolfden Resources).

2. Introduction

This abandonment and restoration plan has been prepared as an updated document for the High Lake Camp, originally built in April 2001 and for the drilling program to be carried within the High Lake volcanic belt. The fly-in camp is located 198 km east of Kugluktuk and 500 km northeast of Yellowknife. The camp supports a population of up to 40 people and is open seasonably between mid February and mid October.

3. Schedule

The seasonal shutdown of the camp site should take 5 days to complete and will take place after the drilling activities have ceased. It should be conducted between the 10 and 15 of September. The plan will be applied by the High Lake project personnel under the supervision of the field supervisor.

4. Infrastructures currently on site

1 wood frame kitchen, 16x32, wood floor, hot and cold running water, stove, refrigerator.
1 dry building, 14x16, wood floor, hot and cold running water, hot water tank, washing machine
1 driller's dry building, 14x16, wood, hot and cold running water
2 core-logging buildings, wood frame, 14x16, wood floor
1 office building, wood frame, 14x16, wood floor
9 sleep tents, 14x16, wood floor, 2 of which are wood frame.
1 foreman's office, wood frame, 12x12, wood floor
1 Generator shack housing 40 kW generator
2 wood frame outhouses
1 drill foreman shed

Section 1: Final Abandonment and Restoration Plan

1.1 Buildings and Content

All the reusable equipment like tents, tent metal frames, stoves, foamies, kitchen stove, refrigerator, other kitchen appliances and equipment, showers, hot water tank, etc…will be packaged and flown out from project site to Yellowknife. Wood structures like the kitchen, office, outhouses, dry, generator shed, tent wooden floors, beds and tables will be dismantled and burned. Nails, screws, anchors and other non combustible parts will be recovered, packaged and flow out to an approved municipal discharged.

1.2 Water System

Pump, tanks and hoses will be drained, dismantled, packaged and flown out to Yellowknife. The wooden pump shack built to protect the pump will be burned as for the other wood structures.

1.3 Electrical System

The generator shed will be inspected for remaining hazardous waste (oil, grease) and will be drained of its fuel. Remaining waste fuel and oil will be collected in the containers labeled for that usage and used through the summer. The shed will be dismantled and burned. The soil will be inspected for contamination. Electrical wires, sockets, etc…will be taken down and either returned with camp material to Yellowknife, or flown out to an approved municipal discharge.

1.4 Fuel and Chemical Storage Facilities

The fuel storage area consists of segregated groups of drums with empties apart from full drums. At the end of the field season, an inventory of remaining fuel will be made and full drums will be inspected. Full and empty drums will be flow out back to source or to an interested buyer. Propane cylinders will be flown out as well to source. Remaining waste fuel, stored in properly labeled drums will be flown out to a fuel outlet or discharge that accepts this type of fuel. Chemical stored on site will consists of drill additives, oil, grease and household cleaners. All drill additives will be stored in or by the drill foreman shed. Household cleaners will mainly be stored in the kitchen. Upon camp closure, any unused drilling additive, oil or grease will be returned to the drilling company warehouse. Half empty containers will be taken off site to be properly disposed in an approved discharge. Empty containers will be disposed with regular garbage.

1.5 Waste Facility and Incinerator

Once the camp is entirely dismantled, all remaining combustible waste stored at this site will be burned. The incinerator will be dismantled, reusable parts will be returned to Yellowknife and the barrel will be discarded in an approved municipal discharge.

1.6 Greywater Sump

The kitchen-dry greywater sump will be filled back and leveled.

1.7 Blackwater Sump

Not applicable. The outhouses consist of “pacto” style toilets where waste is collected in a plastic bag lined container and content burned on a daily basis.

1.8 Helicopter pad

The helicopter pad consists of a wooden platform built of a 2x4 base with plywood cover. Soil around the helicopter pad will be inspected for contamination. The wood will be burned as per other wooden structures on site.

1.9 Camp site

The camp site will have a final inspection. Areas showing too much wearing evidences will be covered with a layer of peat moss and lightly fertilized to promote natural growth. Drill core to be left on site will be properly stored and secured.

1.10 Drilling areas restoration

The drill will be dismantled into its main components as per the drilling contractor procedure, packaged and secured along with its ancillary equipment and rods. The drill will be flown out to another project or to a storage site designated by the drilling contractor. All drill sites will be inspected for soil contamination. Any remaining waste will be taken to camp to be burned if possible or to be flown out to an approved municipal discharge. Greywater and sludge sumps will be filled and leveled. A layer of peat moss will be spread on top and slightly fertilized to promote natural growth. As much as possible, drill sites will be restored immediately after the drill has been moved to the next site and sumps have drained enough to be leveled.

1.11 Documentation and Inspection

Photos of camp and drill sites prior to building of drilling will be taken. Monitoring will be done during occupancy and photos taken. Once the site restored, it will again be documented with photos. Soil contaminated by hydrocarbons and unnoticed before abandonment will be treated as per the spill contingency plan. A final site inspection visit with community representatives, Land Use Inspector and in collaboration with NWB staff will be organized by the permit holder.

Section 2: Seasonal Shutdown and Restoration Plan

2.1 Buildings and Content

All equipment will be stored inside the wooden buildings to ensure they will withstand the winter season. Canvas tents will be secured and braced internally to ensure they will withstand snow and wind loads. Wood structures will be secured with nailed plywood over windows and doors to prevent inadvertent opening. Snowmachines, argo's and quads will be stored inside the core shacks and shop building.

2.2 Water System

Pump, tanks and hoses will be drained and dismantled. Rented equipment will be flown out to owner. Hoses will be rolled and stored in the kitchen.

2.3 Electrical System

The generator shed will be inspected for remaining hazardous waste (oil, grease) and will be drained of its fuel. Remaining waste fuel and oil will be collected in the containers labeled for that usage and used through the summer. The generator will be winterized and prepared for startup in spring. The soil surrounding the generator shed will be inspected for contamination. Electrical wires, plugs and sockets will be stored in the kitchen.

2.4 Fuel and Chemical Storage Facilities

An inventory of remaining fuel will be made and full drums will be inspected and secured for the winter. Empty drums will be flown out to source. Empty propane cylinders will be flown out to source. Chemical stored on site will consists of drill additives, oil, grease and household cleaners. All drill additives will be stored in or by the drill foreman shed and secured for the winter. Empty containers will be disposed with regular garbage. The soil of the areas will be inspected for contamination

2.5 Waste Facility and Incinerator

Once the camp dismantled and remaining buildings secured, all remaining combustible waste stored at this site will be burned. The incinerator will be dismantled and stored in the kitchen. The soil will be inspected for contamination.

2.6 Greywater Sump

The greywater sump wood cover will be secured for winter.

2.7 Blackwater Sump

Not applicable. The outhouses consist of “pacto” style toilets where waste is collected in a plastic bag lined container and content burned on a daily basis.

2.8 Helicopter pad

The helicopter pad consists of a wooden platform built of a 2x4 base with plywood cover. Soil around the helicopter pad will be inspected for contamination.

2.9 Camp site

Areas showing too much wearing evidences will be covered with a layer of peat moss and lightly fertilized to promote natural growth. Soil contaminated by hydrocarbons and unnoticed before abandonment will be treated as per the spill contingency plan. Drill core to be left on site will be properly stored and secured in cross stacked piles or wooden cores racks .

2.10 Drilling areas restoration

The drill will be dismantled into its main components as per the drilling contractor procedure, packaged and secured along with its ancillary equipment and rods. The drill will be left on solid ground until next season. All drill sites will be inspected for soil contamination. Any remaining waste will be taken to camp to be burned if possible to be flown out to an approved municipal discharge. Greywater and sludge sumps will be filled and leveled. A layer of peat moss will be spread on top and slightly fertilized to promote natural growth. As much as possible, drill sites will be restored immediately after the drill has been moved to the next site and sumps have drained enough to be leveled.

2.11 Documentation

Equipment and buildings left on site will be inventoried. Photos of camp and drill sites prior to building of drilling will be taken. Monitoring will be done during occupancy and photos taken. Once the site secured for the winter, it will again be documented with photos.