



## **Abandonment and Restoration Plan**

**HTX Minerals Corporation**



**March 2013**

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# Abandonment and Restoration Plan

## 1. Preface

This Abandonment and Restoration Plan applies specifically to HTX Minerals Corp.'s (HTX) Itchen Lake Property. HTX Minerals Corp. is committed to the protection and conservation of the natural environment and the safety and health of all employees and contractors from any potential harmful effects from operations and stored materials. The proposed work for the Itchen Lake project includes mapping, prospecting, geochemical sampling, geophysical surveys, drilling, fuel transport, fuel caches and establishing a seasonal camp.

## 2. Introduction

The lands in the Itchen Lake exploration area are both Kitikmeot Inuit Owned Lands (IOL) and Federal Crown land (Figure 1). Land use permits for exploration on the Itch 4-19 claims (claims within Nunavut) are currently being submitted to the Kitikmeot Inuit Association (KIA), Aboriginal Affairs and Northern Development Canada (AANDC) and the Nunavut Water Board (NWB). Land use authorization for exploration activity on the Itch 1-3 claims (Northwest Territories) is not currently being applied for, as the 2013 program will focus on the portions of the Property which solely lie within Nunavut. In the event that HTX would like to proceed with exploration on the Northwest Territories portions of the Property, a land use permit application will be submitted to the Wek'èezhìi Land and Water Board (WLWB). This Abandonment and Restoration Plan will be filed with the relevant regulatory bodies. HTX Minerals Corp. is not only obliged, but is dedicated to restoring the land to its original natural state.

In 2013, HTX Minerals Corp. will be operating one camp site on the Property as well as approximately 10-12 drill holes within 8 drill sites (Figure 1). The proposed camp location is on low topography and is supported by the southernmost lake (Leanne Lake) on the Itch 19 claim (Figure 1 and 2). To accommodate 10-15, possibly up to 20, people in camp, tents will be set up to allow for an office, a kitchen, a medical tent, a dry, a core shack, generator housing, four to five sleeper tents and 2 outhouses (or small pacto units). Drill sites will be located throughout the Property, with approximately 6 drill sites located on IOL surfaces, and 2 drill sites on Crown land, in geologically favorable locations (Figure 1). Equipment and fuel will be temporarily stored at each drill site as it is being actively drilled. Personnel and equipment will be transported to the Property from Yellowknife via tundra tire-equipped fixed wing aircraft (i.e. twin otter). The fixed wing will be able to land on an esker located near the camp within claim 19 (Figure 1). Helicopter transportation will be used to move personnel and equipment to and from camp while conducting exploration on the Property.

**Table 1. HTX Minerals Corp. Proposed Camp location.**

Location	Latitude	Longitude
Camp	65°38'59" N	112°10'53" W

## 3. Schedule

Equipment and supplies will be mobilized to camp in early July. Approximately the second week in July will be designated to building and setting up camp. Fieldwork including mapping, prospecting, geochemical sampling and geophysical surveys is expected to start mid-late July with drilling expected to start early to mid-August 2013 and expected to continue through to October 2013 (or as weather permits). A seasonal shutdown of the camp will commence in mid-October (or as weather permits). Thereafter annual field seasons are anticipated to begin in March.

All work under this Abandonment and Restoration Plan will be completed prior to the date of expiry of the land use permits and water license unless a renewal is applied for. Empty fuel drums brought on site by HTX, or its contractors, will be removed from site regularly. Once a fuel cache is retired, a thorough inspection will be conducted. Any contamination will be cleaned up according to the Spill Contingency Plan and Environmental Procedures Plan. All waste will be removed from the site. The final restoration of the camp sites will begin on the termination of the Itchen Lake program.

#### **4. Infrastructure**

The camp will consist of:

##### **Structures**

- 14'x16' insulated tents on wood flooring will be constructed for: an office/common area, kitchen, dry\*, first aid station, core shack, and 4-5 sleeper tents.
- Two wood latrine facilities using "Outhouse" toilet or, if required, Pacto toilets, which uses a polyurethane flush foil to encapsulate the waste, which will then be transported to Yellowknife for proper disposal. Neither option requires electricity or water
- A wood generator shack, which will hold a 20 kW diesel generator and a back-up generator.
- A wood core processing and cutting shack
- A helicopter landing area
- A Fuel cache, within secondary containment
- A water pump (with fish screen) and hose line

\*The dry tent will hold: 2 showers, 1-2 sets of washers and dryers and a water tank

##### **Vehicles**

- |   |                             |
|---|-----------------------------|
| 1 | All-Terrain vehicles (quad) |
| 1 | Snowmobile                  |
| 1 | Helicopter                  |

##### **Drilling Equipment**

- |    |  |
|----|--|
| 1  | A5 (or similar) Diamond Drill plus miscellaneous drill equipment and spares. |
| 20 | Casing   |
| 50 | 100 ft Hose lengths  |
| 2  | NQ Core Barrels  |
| 1  | Overshot   |
| -  | Tools Bits Misc Parts  |
- Water Tanks, Pressure Pump, Mud Pump Baskets  
Supply pump and Coil heater

##### **Air Transport**

- Fixed wing- Twin otter or similar.  
Helicopter (A star, Long Ranger, 500, or similar)

## **5. Seasonal Shutdowns**

### **Inspection and Documentation**

A complete inspection will be conducted of all areas prior to seasonal closure. Photos will be taken to document the conditions prior to leaving the site for the winter. A full inventory will be conducted.

### **Building, contents and fuel**

Any contaminated soils around camp that have gone unnoticed will be treated as per the “Spill Prevention and Response Plan”. All fuel caches will be removed from the site and efforts will be made to use partially filled drums; if left for the season they will be angled so snow and water do not enter the drum and no leakage occurs. Fuel drums will be stored on their sides with the bungs in the three and nine o'clock positions. All chemicals will be stored in a sealed/secured tent. Wood shacks and wood floors/frames will be secured to protect from winter damage.

### **Water System**

Pumps and hoses will be drained and stored inside a sealed/secured tent

### **Waste**

Combustible Waste: Paper, cardboard, untreated wood and natural fibers will be burned on site in a modified burn barrel. Depending on results of the 2013 program and therefore camp growth, a larger scale engineered incinerator may be utilized. The remaining unburned product (ash) will be backhauled to Yellowknife for proper disposal. All disposals will comply with Federal and Territorial legislation, including the Nunavut Environmental Guideline for the Burning and Incineration of Solid Waste, and any other terms and conditions provided in the water license and land use permits.

Non-Combustible Waste: All non-combustible waste will be backhauled to Yellowknife.

Grey Water Waste: The sump will be covered securely and stakes will be placed around the sump to identify its location; an inspection of the grey water sump before departure will be conducted. The sump will be filled and leveled as required.

## **6. Final Abandonment and Restoration**

Prior to the claim lapsing, all structures, equipment and fuel will be removed from the Property with the exception of the core stacks, which will be permanently secured. Materials of value will be salvaged by HTX Minerals Corp. Local persons and businesses will have the opportunity to salvage remaining buildings/materials that will otherwise be destroyed by HTX Minerals Corp.

All of the drill core will be permanently stored at the camp location on stable gravel pads for future access. As per the drilling contractor procedure, drills and additional drill equipment will be dismantled, packaged, secured, and flown out. Inspection for soil contamination and any required treatment at each drill site will be completed.

Any contamination or debris will be removed and any contaminated soils will be treated as per the Spill Prevention and Response Plan. Sumps will be inspected to make certain there is no leaching or run-off and will be back-filled and returned as close as possible to the natural topography. A thorough inspection of all areas will be conducted and documentation, as well as photographs, will be taken and

included in the final report submitted to the Water Resource Inspector and as part of the annual report submitted to KIA, AANDC and the NWB. All designated agencies will be contacted and notified once the final clean-up has been performed.

## **7. Post Closure Site Monitoring**

After the completion of reclamation, two years of annual terrestrial and aquatic monitoring will take place in late summer. The monitoring will consist of measuring and documenting plant re-growth, ensuring that the core racks and/or boxes are stable and inspecting potential problem areas for erosion and run off. Reports, including photographs, will be submitted to the relevant regulatory bodies.

## **8. Emergency Contact Information**

### **Andrew Turner B.Sc. P.Geol –Primary Contact:**

Project Manager

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Kitikmeot Inuit Association: (867) 983-2458 (Cambridge Bay)

Kitikmeot Senior Environmental Officer: Luigi Torretti (867) 982-3310 (Kugluktuk)

Kitikmeot Land Officer: Wynter Kuliktana (867) 982-3310 (Kugluktuk)

Aboriginal Affairs and Development Canada (AANDC): 1-800-567-9604

Nunavut Water Board (NWB): (867) 360-6338

Environment Canada: 780-951-8600, 24-hr pager: 967-766-3737

Department of Fisheries and Oceans: 613-993-0999

## Appendix 1 Maps



