



# **Abandonment and Restoration Plan**

Thelon Project  
ATHA Energy Corp.  
October 2024

# Table of Contents

1.0 Introduction ..... 2

2.0 Infrastructure ..... 2

3.0 Seasonal Shutdowns..... 4

4.0 Final Closure and Reclamation ..... 5

# 1.0 Introduction

This Abandonment and Restoration Plan (Plan) applies to the Thelon Property (the Property or the Project) operated by ATHA Energy Corp. (ATHA) (through its subsidiary, ATHA Energy (NU) Corp. (ATHA NU)). This Plan shall be in effect from date of issue of applicable land use license(s) until the expiry of such licenses.

All employees and contractors working on the Property are to be aware of and follow this Plan. A copy of this Plan is to be posted in an office on the Project, once established. In addition, this Plan is available digitally on ATHA's internal network. Contact the Project Manager for a copy of this Plan.

The purpose of this Plan is to outline ATHA's procedures for seasonal shutdowns and final closure and reclamation of the Property. Progressive reclamation measures such as regular backhaul of materials are not included in this Plan, but rather in other management plans such as the *Waste Management Plan*. Reclamation work described in this plan will be completed prior to the date of expiry of the land use permits and water license unless a renewal is applied for and granted.

The Plan should be used in conjunction with other ATHA work procedures and management plans including the:

- Wildlife Management Plan
- Spill Contingency Plan
- Waste Management Plan
- Radiation Hazard Control Plan

## 2.0 Infrastructure

### 2.1 Camp

Camp infrastructure includes:

- Insulated tents (ranging between 14' x 16' and 20' x 40') on wood frames. These tents function as sleep tents, an office, core tent, a first aid station, a kitchen, a dry, a shop and storage
- Packed toilets
- Incinerator (seasonal camps may not have an incinerator)
- A generator shed and diesel generator(s)
- Helicopter landing area
- Natural gravel and/or ice airstrip

Camps are expected to be able to accommodate up to 40 people but would normally house approximately 20 people. Transportation to/from camp would be by both fixed wing and rotary wing aircraft. Camp location is still to be determined; suitable locations will be submitted to the appropriate regulators prior to any ground disturbance. Camps may be seasonal (installed and removed each season) or may remain between seasons for the duration of the permits.

## 2.2 Vehicles and Equipment

The following is a list of vehicles and equipment anticipated to be used to support the exploration activities and camp maintenance.

Equipment	Size / Details	Purpose	Expected Quantity
Helicopter	B2 or B3	Drill moves, transportation of crew and supplies	1-2
Snowmobile with sled	Bravo or similar	Winter re-supply, camp servicing	2
ATV with trailer	600 cc or larger	Camp servicing	2
Generator	30 kVa / 50 kVA	Primary and backup power	2
Toilet	Pacto toilet or similar	Human waste disposal	up to 6
2" Intake Pump	Gas	Camp water	2
2" Submersible Electric Pump	Electric	Camp water	2
Waterax fire pump and hose	Standard	Dedicated fire system with fire hoses	1
Portable Generator	Honda 2200 or similar	Gas portable construction generators	2
Diesel Stoves with fuel and extension kits	Toyotomi L730 diesel / electric or similar	Heating	24
Oil drip stove	Standard	Heating contingency and cold weather start-up	1
Incinerator	Dual chambered	Garbage disposal	1
Fuel transfer pumps with hose reels	Explosion proof standard	Fuel transfer	2
Core saw with ventilation set up		Cutting core	1-2
Snowcats		Winter overland equipment and fuel haul	Several
Challengers and Deltas		Winter overland equipment and fuel haul	Several
Heli-portable drills with pump shacks and centrifuge	~17,700 lbs total	Drilling core	up to 3
Aquatel water filtration and filters		Water treatment for human consumption	1
CAT Bulldozer	D6	Camp servicing	1
Skidsteer	CAT 257B	Camp servicing	1
CAT front end loader	928G	Camp servicing	1

## 2.3 Fuel Storage

ATHA is in the process of permitting a fuel storage of 1540 drums of fuel on the Property, including:

- 700 – 205 L drums of diesel
- 700 – 205 L drums of Jet fuel
- 100 – 205 L drums of gasoline
- 40 – 100 lb cylinders of propane

Please refer to ATHA's *Spill Contingency Plan* for additional information about fuel storage and ATHA's *Waste Management Plan* for additional information about progressive reclamation related to fuel.

## 3.0 Seasonal Shutdowns

Seasonal camps are to be removed at the end of the exploration field season unless further exploration is planned in a subsequent program. If the camp is not removed, it will be shut down using the following procedures.

### 3.1 Building Contents

- Wood structures and wood floors will be kept secured.
- Canvas tents will be removed from the site for drying and storage.
- Weatherhaven sleeping tents will remain in place.
- Wooden bed frames will be turned upside down and secured to the wooden floors for storage.
- The generator may be removed from the site for servicing and storage.
- Project equipment may be stored during shutdown periods in a shop tent. All heavy equipment in the shop tent will be underlain by Spilfyter RailMat, a 3-ply hydrocarbon absorbent fabric to catch drips or leaks while the equipment is inactive.

### 3.2 Water System

Pumps and hoses will be drained and stored inside to protect them over winter. Pumps may be removed from site for servicing and storage.

### 3.3 Fuel Caches and Chemical Storage

An inventory will be conducted prior to leaving at the end of the field season. A thorough inspection of all fuel caches will be completed, and empty fuel drums will be removed from the site. Every effort will be made to use partial fuel drums. If any partial fuel drums remain at the end of the work season, they will be placed on an angle to ensure that snow and water do not enter the drum and no leakage from the drum occurs. Full fuel drums will be stored on their sides with the bungs in the 3 and 9 o'clock- positions. All chemicals, including cleaning products, will be stored in a sealed building for the winter.

## 3.4 Waste

### Combustible Waste

All combustible waste will be incinerated or backhauled for disposal. Ash generated from incineration will be stored in sealed metal 45-gallon drums and removed from site via backhaul.

### Grey Water Sump

The grey water sump will be inspected and covered securely for the winter. Stakes will be placed around the sump so that it is easily identifiable when the camp is opened up again.

### Blackwater

Sewage is collected in Pacto toilets. Bags containing waste will be incinerated or transported off-site for disposal.

### Drill Sites

Any drill hole that encounters mineralization with uranium content greater than 1% over a length of more than 1 meter, with a meter-per-cent concentration greater than 5 will be sealed by grouting over the entire length of the mineralized zone and not less than 10 meters above and below each mineralized zone. The top 30 meters of the hole within bedrock will also be sealed by grouting for all drillholes.

If a hole is drilled on-ice, the drill cuttings will be collected and removed to an on-land sump.

The drill will be partially dismantled into its main components as per the drilling contractor procedure, packaged and secured along with its ancillary equipment and rods. All drill sites will be inspected for soil contamination. All sumps will be contoured into the natural topography. Any remaining waste will be taken to camp and either incinerated, if appropriate, or be backhauled to an approved disposal location. As much as possible, drill sites will be restored immediately after the drill has been moved to the next site.

Each drill location will be photographed pre and post drilling and a final inspection checklist will be completed by the Project Manager or designate. Records of these will be kept and submitted as part of the annual report.

### Radioactive Waste:

Sealed drums containing drill cuttings with uranium concentrations greater than 0.05%  $U_3O_8$  or equivalent are temporarily stored on an elevated flat dry outcrop, 100m from the high-water mark of any waterbody. Drums will be removed to be disposed of at an accredited facility at the end of the field season.

### Non-Combustible, Recyclable and Hazardous Waste:

All non-combustible, recyclable and hazardous wastes will be packaged in appropriate containers, labelled and backhauled or shipped south to an authorized disposal facility.

## 4.0 Final Closure and Reclamation

### 4.1 Buildings and Contents

The following section describes the final closure of camp. All buildings will be dismantled and removed. All wooden structures including floors will either be burned in a controlled open burn in compliance with the "Municipal Solid Wastes Suitable for Open Burning Guidelines" or removed. The burning of the tent floors and

waste lumber will only proceed with approval from the appropriate regulating authorities. As required, impacted sites may be re-seeded with indigenous species to encourage re-vegetation.

All combustible waste will be incinerated according to the *Environmental Guidelines for the Burning and Incineration of Solid Waste* and the *Canada-Wide Standards for Dioxins and Furans* by the Canadian Council of Ministers of the Environment.

## 4.2 Equipment

All equipment, including pumps, will be dismantled and removed from the Project area.

## 4.3 Fuel Caches and Chemical Storage

All fuel drums will be removed. All areas where there have been fuel caches will be thoroughly inspected. Any contamination will be cleaned up and any debris removed. Contaminated soil will be handled as per ATHA's *Spill Contingency Plan*. Final photos will be taken of all fuel caches for inclusion in the final report.

All chemicals will be removed from site. Areas where chemicals have been stored will be inspected to ensure that there has been no contamination. Any contamination from chemicals found will be treated as per ATHA's *Spill Contingency Plan*.

## 4.4 Waste

### Combustible Waste

All combustible waste will be incinerated adhering to the *Nunavut Environmental Guideline for the Burning and Incineration of Solid Waste*. Drums containing ash generated from the ongoing incineration will be removed from the site for disposal at an authorized facility.

### Grey Water Sump

Upon final closure, the grey water sump will be inspected and then backfilled and restored to the pre-existing natural contours of the land.

### Blackwater

Upon final closure, toilets will be cleaned and removed from camp.

### Non-Combustible, Recyclable, and Hazardous Waste

All non-combustible, recyclable, and hazardous wastes will be packaged in the appropriate containers and backhauled for disposal at a certified disposal facility.

### Radioactive Waste

All drums of radioactive waste will be removed to be disposed at an accredited facility.

Please refer to ATHA's *Waste Management Plan* for additional information on waste management.

## 4.5 Sumps

Sumps will be used for disposal of non-radioactive drill cuttings, located in a naturally occurring depression. Sumps will typically be located adjacent to each drill pad, but a centralized sump may also be used. A central sump will be used when it is not feasible to use a sump at the drill pad (e.g., in winter months or on-ice drilling). When using a central sump, non-radioactive drill cuttings will be transported to the central sump. On an ongoing basis, the sump will be inspected for contamination of mineralized cuttings and any materials used to transport the cuttings (e.g., bags) will be removed. Once the centralized sump is no longer required, it will be reclaimed by being contoured into the natural topography and may be covered by peat moss.

## 4.6 Drill Sites

The drill will be dismantled into its main components as per the drilling contractor's procedure, packaged and secured along with its ancillary equipment and rods. The drill will be removed from site.

All drill sites will be inspected for soil contamination. Any remaining waste will be taken to camp to be incinerated if possible or backhauled for disposal at a certified disposal facility.

An inspection will be conducted to ensure that all drill sites are/have been restored and sumps have been contoured into the natural topography.

## 4.7 Trenching

Upon final closure of exploration activities on the Property, trench extensions and excavations created by the Project will be backfilled and disturbed areas re-contoured to their original state, using best efforts and best practices. In areas where the historic trenches have been cleaned out, these trenches will be returned to conditions existing prior to the Project's work programs. Excavation and reclamation will be carried out using hand tools or a heli-portable mini-excavator after approval and authorization to mobilize equipment on site.

## 4.8 Contamination Cleanup

Any contamination, including any noted on the floor of the shop tent used for seasonal heavy equipment storage, will be treated as per ATHA's *Spill Contingency Plan*.

## 4.9 Inspection and Documentation

A complete inspection will be conducted of all areas prior to final closure. Photos will be taken to document the conditions prior to leaving the site for use in the final plan. In addition, a final inspection report is to be completed by the Project Manager or designate. All appropriate agencies will be contacted and notified once the final closure has been conducted. The photos will make up part of the final closure reports and submitted to regulators as required.