



EVRIIM

Closure and Reclamation Plan

Astro Project

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1. Introduction

Evrin Exploration Canada Corp. (Evrin) has proposed to carry out mineral exploration activities on the Astro Project. The Astro project is located on the Northwest Territories border with Yukon stretching from 63.3°N to 63.5°N. The project area is located within the settlement area of the Tulita District of the Sahtu Dene and Metis Comprehensive Land Claim Agreement (SDMCLCA). The property consists of 31 mineral claims totaling approximately 24,000 hectares.

In 2017 and 2018 Evrin explored in the Mackenzie Mountains as part of a larger Mackenzie Alliance. The Astro project was identified as a prospective target during this exploration and Evrin's future work will focus solely on Astro. Evrin is applying for a Type A Land Use Permit for the purpose of mineral exploration.

Activities associated with the proposed mineral exploration activities include:

1. Development of a seasonal camp;
2. Use of water for domestic needs and drilling;
3. Disposal of waste;
4. Storage of fuel and hazardous materials;
5. Exploration activities- prospecting, rock and soil sampling, diamond drilling and reverse circulation drilling.
6. Site closure, including progressive reclamation.

2. Guideline and Regulatory Requirements

This Closure and Reclamation Plan (CRP) is developed in accordance with the Mackenzie Valley Land and Water Board (MVLWB) and Aboriginal Affairs and Northern Development Canada (AANDC) Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories (2013). The development of a CRP is an ongoing and iterative process that progresses in level of detail over the life of a project. There is limited industrial development in the project area other than the already established outfitter camps.

3. Guiding Principles

The following guiding principles form part of this CRP:

- Always aim to return the site to as close to its natural condition as soon as possible after closure;
- Closure objectives that can be measured and are achievable;

- A CRP that is developed with meaningful input from regulators and any affected groups;
- A CRP incorporating lessons learned and best practices from similar undertakings.

Within the guiding principles, the CRP is intended to achieve a return of the site to as close to its natural condition as soon as possible after closure this includes:

- Physical stability of site features;
- Chemical stability of site;
- Minimizing the requirement for long-term site care;
- Providing an end land-use that is compatible, where practical, with future traditional uses of the site.

4. Site-wide short-term and long-term objectives

The following strategy will be followed for the CRP:

- Aim to return the site to as close to a natural state as possible
- Aim to remediate the site as soon as possible post closure
- Remediate the site with the best available technology or methods
- Comply with applicable standards, plus guidelines for requirements and objectives,
- Preference shown for minimal maintenance ('walk away') or solutions that minimize maintenance ('passive care'),
- Conduct progressive, ongoing reclamation of the exploration sites.

Progressive reclamation includes closure activities that take place prior to final closure in areas or sites that are no longer actively required to advance the current or future exploration program. Reclamation activities can be completed during operations using available equipment and labour resources. This will reduce future reclamation costs associated with the exploration activity. Progressive reclamation may shorten timelines for achieving final reclamation objectives, plus provide valuable experience on the effectiveness of proposed permanent reclamation measures.

4.1 Short-term reclamation objectives include:

1. Progressive reclamation of disturbed areas, such as drill sites, as soon as they are no longer required;
2. Maintaining safe working conditions at all reclamation activities;
3. Removal and disposal of base camp infrastructure and material, as appropriate, when no longer required to meet project objectives;

4. Off-site disposal of hydrocarbon contaminated soil materials;
5. Maintaining an environmentally safe site.

4.2 Long-term reclamation objectives include:

1. Returning all sites to a state similar to other habitats in the same region and time period that have not been affected by exploration activity;
2. Restoring or replacing any local habitat that may have been affected by exploration activities;
3. Returning the area to a state that supports a properly functioning ecosystem consistent with traditional and nontraditional land uses;
4. Creating a landscape compatible with end use of any exploration sites.

In line with the stated short-term and long-term objectives, Evrim makes the following commitments to:

- Minimize, to the extent practical, all areas disturbed by exploration activities;
- Recover as much disturbed soil as possible for use in reclamation activities;
- Seek opportunities for early reclamation of sites;
- Engage First Nations while developing each iteration of the CRP;
- Maintain active liaison with other mineral exploration operations in the Canadian North to understand the challenges and successes in reclamation.

Reclamation planning will be an ongoing and iterative process in consultation with regulators and First Nations. Traditional Knowledge will be incorporated, where practical, in reclamation and closure planning.

5. Specific Elements

There will be no Open Pit Mine Workings, Tailings Containment Areas, Permanent Structures, Mine Infrastructure, Transportation Route or Landfills associated with any activities associated with the proposed Land Use permit application for the Astro Property.

5.1 Camps

A temporary, soft-walled camp will be constructed within the permitted land area. All equipment, tents, materials and waste will be removed before final closure. Wood-framed tents and/or tent floors will be back hauled if treated wood or open burned if un-treated wood upon closure. The site of the camp will also be fully reclaimed; out house pits and grey water sumps will be back filled, re-contoured to original contours

and re-seeded with an area-appropriate seed mix or allowed to re-vegetate naturally if a commercial area-appropriate seed mix is not available.

5.2 Salvageable Materials

Structures, equipment and materials deemed economically salvageable at the time of final closure will be dismantled and removed from site. Equipment will be cleaned, drained and degreased as required prior to off-site transport.

Salvageable equipment is expected to include machinery and mobile equipment in working or repairable condition. Hazardous materials are expected to consist of waste oil, glycol, lubricants, solvents, paints, batteries and miscellaneous chemicals. Some of these materials may be suitable for recycling at an appropriate off-site facility.

Salvageable equipment to be shipped off-site will be prepared and stored at the camp location for final disposition. Hazardous materials will be stored in sealed containers and drums in a temporary enclosure. The equipment and materials will be shipped to appropriate disposal, recycling or salvage facilities when logistics permit.

5.3 Inert Solid Materials and RC Drill Chips

Non-salvageable and non-hazardous solid waste components from removal of the base camp buildings, structures and equipment will be dismantled, washed and/or degreased as necessary, and transported off-site.

At the end of each season rock chips generated by reverse circulation drilling will be scattered into natural depressions proximal to the drill hole or distributed across the drill site to aid with reclamation. A typical reverse circulation drill hole has a diameter of 100 mm and typical sample recovery of 16 kg/m. Assuming an average of 100 m long holes this would generate $\sim 0.8 \text{ m}^3$ of rock chips of which $\sim 0.7 \text{ m}^3$ would be left on site. Where applicable, the RC chips would be used to assist with re-contouring the site. Industry best practice is to scatter these chips across the RC drill pads to permit natural re-vegetation. Re-seeding would be carried out if an area appropriate seed mix is available. The exception will be with rock chips from massive-sulphide zones (>75% sulphide by volume as determined by visual analysis); these rock chips will be removed from site to avoid potential acid rock drainage (ARD). Removed rock chips will be disposed of at an appropriate facility in Whitehorse.

5.4 Core Storage

Diamond drill core will be stored in 1.5 metre long wooden core boxes proximal to the camp location at Mile 222, in a location approved by the Federal Land-Use inspector. Each wooden box contains between 4.5 and 6 metres of drill core. Core will be stored on pallets that are levelled. Each pallet will be a maximum of 10 core boxes high and the top box in each pallet will have a lid. At the end of each season the pallet will be secured with metal strapping onto the pallet to stabilize the boxes and tarped to minimize disturbance or disruption by wildlife or human activity. At the end of the permit life the core will remain on site.

Historically it has always been traditional for industry to store drill core either on or near the property where it was drilled so that it is always available as a significantly valuable record, or physical library, of geological data for the area. As well, for the same reasons, government has also previously indicated they would prefer that drill core be stored on or near the property with the proviso that the core storage location and storage method is properly reported in the assessment work reports that are required to be submitted to the NWT Mining Recorders Office.

Further, it is Evrim's understanding that the GNWT is currently considering the matter of drill core storage as part of the development of the new Mineral Resources Act (MRA) and Regulations process. Final determination of drill core storage and ownership will be made as the process of the MRA and the development of the accompanying regulations is undertaken and finalized.

5.5 Potentially Contaminated Soil and Hazardous Materials

The potential for ground contamination around fixed machinery installations plus fuel transfer and storage locations will be assessed. If any contamination is suspected this can be confirmed with testing and the material will be both sealed and removed for disposal, or land farmed if permitted.

Any other hazardous materials will be stored in sealed containers or drums in the waste transfer area for shipment to a licensed environmental disposal facility.

5.6 Fuel Storage

Before final closure the fuel supply will be assessed based upon the requirements of the decommissioning program in order to supply power and construction equipment. If there is a shortfall, drummed fuel may be brought in to help complete the final closure. This fuel will be stored in the fuel cache. All fuel drums (empty or full) will be back-hauled each season.

5.7 Solid Waste Management Areas

The open burn barrel will be removed from site for salvage or disposal. Potential for ground contamination around the open burn site and waste handling facilities will be assessed, and any required remediation undertaken.

5.8 Liquid Waste Management Areas

Grey-water sumps used for the kitchen and dry and black-water sumps used for pit toilets will be treated with lime and backfilled to grade. Sumps will be re-contoured to original contours and re-seeded with an area-appropriate seed mix or allowed to re-vegetate naturally if a commercial area-appropriate seed mix is not available. Any waterless toilet systems will be dismantled and removed from site for salvage or disposal.

Sumps containing drilling muds will be allowed to drain then backfilled recontoured and reseeded if an area appropriate seed mix is available.

5.9 Seasonal Shutdown

At the end of each field season (anticipated to be by mid-October of each year):

- All equipment is disassembled and completely removed from the campsite.
- All chemicals, detergents, additives and lubricants are completely removed from the campsite and properly disposed of in Whitehorse. Any potential spill sites are inspected and cleaned up.
- All fuel storage sites (caches) are removed at the end of the project. Any contamination will be cleaned up as per the Spill Contingency Plan. All fuel drums (empty or full) will be removed from the project site.
- All camp infrastructure (tents/shacks) will be completely removed and the land returned to as close to original condition as possible following industry best practices.
- A final and complete inspection will be taken by the Project Manager to ensure proper closure of the base camp facility for final closure.
- Photo documentation of the closed sites will be acquired by the supervisor for distribution.

5.10 Final shutdown or Closure

A full shutdown will be performed at the end of the 2021 field season or upon closure of the current or ultimate Land Use Permit.

During the final camp closure:

- All equipment is disassembled and completely removed from the campsite.
- All chemicals, detergents, additives and lubricants are completely removed from the campsite and properly disposed of in Whitehorse. Any potential spill sites are inspected and cleaned up.
- All fuel storage sites (caches) are removed at the end of the project. Any contamination will be cleaned up as per the Spill Contingency Plan. All fuel drums (empty or full) will be removed from the project site.
- All camp infrastructure (tents/shacks) will be completely removed and the land returned to as close to original condition as possible following industry best practices.
- A final and complete inspection will be taken by the Project Manager to ensure proper closure of the base camp facility for final closure.
- All altered sites will be reclaimed as laid out in this document
- Photo documentation of the closed sites will be acquired by the Project Manager for distribution.