



TerraX Minerals Inc.

*YELLOWKNIFE CITY GOLD PROJECT, NT*

## **CLOSURE & RESTORATION PLAN**

NTS 085J / 07, 08, 09 and 16

Latitudes  $62^{\circ} 20' 00''\text{N}$  and  $62^{\circ} 58' 00''\text{N}$   
Longitudes  $114^{\circ} 05' 00''\text{W}$  and  $114^{\circ} 32' 00''\text{W}$

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## **CLOSURE AND RESTORATION PLAN YCGP, NWT**

### **1. INTRODUCTION**

This Closure and Restoration Plan has been prepared specifically for the Yellowknife City Gold Project (YCGP) held by TerraX Minerals Inc. ("TerraX").

The Yellowknife City Gold Project (YCGP) is located in the south-central Northwest Territories. The YCGP is located immediately east, south and north of the City of Yellowknife and covers 782.23 square kilometers (78,222.50 hectares). It is comprised of 164 mineral claims totaling 715 square kilometers (71,513 hectares) and 134 mineral leases totaling 67.10 square kilometers (6,709.5 hectares). TerraX is the registered holder with 100% interest in all the mineral claims and mineral leases.

Access to the YCGP area is via truck, ATV, UTV and snow machine on existing trails, boat and helicopter on a year-round basis. Historic work has been completed over the area of the YCGP since the 1940's. The majority of which has been diamond drilling.

The annual diamond drill programs are expected to drill 40 to 80 drill holes and between 10,000 – 20,000 metres with anticipated depths between 50 to 650 metres per each drill hole. Coring will be completed at NQ size (47 mm diameter). The total area directly involved per each drill hole is approximately 30 X 30 metres (900 metres<sup>2</sup>).

During 2019 the drilling program will be carried out on the Northbelt portion of the YCGP, that is covered by Land Use Permit MV2014C0005, and will be entirely within areas previously drilled. This will initially involve the use of two (2) diamond drills. If a new Land Use Permit and Type B Water License are issued additional drills will be added to the 2019 program and all drilling programs after 2019 will use greater than two (2) drills.

Continued drilling on the YCGP will be contingent on drilling success, and the success of other ongoing below threshold exploration surveys (ie. mapping, prospecting, geophysics, geochemistry sampling). Based on historical results available to TerraX it is deemed highly probable that continuing drill programs will be needed to develop a possible economic deposit. In addition, it must be recognized that with continued below threshold exploration there is also a possibility of newly discovered areas of mineralization on all areas of the YCGP and that these may require drilling.

The YCGP is in the early stages of exploration. The current exploration plans involve techniques which leave little to no trace on the land. Once all work on the property is complete no equipment or waste will remain and all work sites will be inspected.

## 2. DESCRIPTION OF OWNERSHIP AND FACILITY

### 2.1 CORPORATE DETAILS

TerraX Minerals Inc.  
1605 – 777 Dunsmuir Street  
Vancouver, BC  
V7Y 1K4  
Canada  
Phone: (604) 689-1749  
Fax: (604) 648-8665

Attention: Alan Sexton

### 2.2 PROPERTY DETAILS

Project Manager Alan Sexton, Vice-President, Exploration  
TerraX Minerals Inc.  
(613) 843-8109 (office)  
(613) 843-8110 (office fax)  
(613) 864-3937 (office cell phone)  
(867) 3351880 (Field Cell phone)

Facility Drill Sites – a fuel storage/transfer area will be located at each active drill site. All core logging will be completed in Yellowknife.

Locations Fuel and drill additives (if required) will be stored in the vicinity of each drill site for immediate usage and placed a safe distance from the drilling equipment and well away (>30m) from the high water mark of any water bodies. Excess fuel will be stored in Yellowknife and delivered on a daily basis, or less frequently as required.

Size Fuel storage at each drill site location is projected to consist of approximately 400 litres of diesel within engineered tankage on the drill, one 600 litre double walled containment tank, one 100-lb cylinder of propane and one small safety container (20 litres) of gasoline for UTV, ATV and snowmobile use. In addition, water pumps will have approximately 50 litres of fuel stored in water pump tank, approximately 100 litres in 20 litre safety containers or 100 litre safety transfer caddy with rotary pump and one 100-lb or one 250-lb cylinder of propane. The volumes noted above are for one (1) diamond drill; if additional diamond drills are utilized these volumes will increase.

Storage Capacity Fuel temporarily stored at each drill site will be:

1150 litres diesel within engineered tanks  
1 container of gasoline (20 litres)  
1 to 3 propane cylinders (250 lb)

#### Fuel Caches and Fuel Transport

Storage at fuel caches and transport of fuel will be with engineered double wall containment tanks mounted on truck or tractor with engineered transfer pumps equipped with grounding cables. The combined maximum amounts of fuel at the drill sites, water pumps and fuel caches will be:

<b>Fuel Type</b>	<b>Maximum Amount</b>
Diesel	60,000 litres
Gasoline	5,000 litres
Aviation Fuel	40,000 litres
Propane	10,000 pounds

#### Fuel Spill Response

Spill response kits will be located at each fuel storage site. The fuel storage sites will be located a minimum of 100 metres from the ordinary high water mark of permanent water bodies. Drip pans will be used at all fuel transfer locations. All empty fuel containers will be backhauled on a daily basis and no empty containers will remain at the drill sites, water pump sites or fuel cache locations upon completion of each drill hole and demobilization at the end of each phase of drilling.

### **3. ONGOING CLOSURE AND RESTORATION PROCEDURES AND SEASONAL CLOSURES**

Restoration of the work sites will be performed on a continuing basis and all work under the Closure and Restoration Plan will be completed prior to the date of expiry of the land use permit unless renewal applications are submitted and approved. Empty fuel containers will be removed from site on a daily basis. Once a drill site is completed, a thorough inspection will be conducted (Appendix I). Any contamination will be cleaned up according to the Spill Contingency Plan and debris will be removed from the site.

All access trails, existing or potentially new, will require some clearing of trees and smaller vegetation. Cut timber will be stacked at the trail sides or bucked up so it lies flat on the ground surface in the adjacent forest. The brush from the larger timber and smaller vegetation will be spread over the access trails and drill sites areas in order to help with natural re-vegetation. In trails areas with steeper topography cut timber and brush will be laid down at a low angle to the topography in order ensure that water runoff from the freshette will not cause erosion. Cut timber may also be used to corduroy portions of trails prior to packing of snow and ice on top of the timber. Diligent

monitoring of all trails from the winter season to the spring season will be done in order to help ensure that the natural surface remains as intact as possible.

At the end of each active exploration program, work will be performed to ensure the site is left in a clean and tidy manner. Abandoned drill sites will be revisited on an ongoing basis as drill materials are often exposed as water levels in sumps and collars recede. As well various actions will be carried out to ensure the site is left secure between active periods of exploration work. The following details both the seasonal winterization procedures as well as the ongoing maintenance and restoration procedures that are practiced on a continuing basis throughout the land use operation:

### **3.1 Buildings and Contents**

Permanent camp facilities will be required on the far northern portion of the property in the Quyta Lake to Clan Lake area. Five (5) potential campsites (up to 49 persons maximum) locations have been identified. It is important to note that not all five (5) campsites would be utilized at one time, it will depend on exploration results throughout the claim Potential camps. The details on specific camp size are not known at this point in time.

### **3.2 Fuel and Chemical Storage & Transfer Areas**

All fuel containers will be removed from the property prior to leaving at the end of the field season. A thorough inspection of all fuel transfer areas will be completed and empty fuel containers will be removed from site on an ongoing basis (usually daily) throughout any active exploration program.

All chemicals will be removed from the site for storage and or disposal at the end of each exploration program.

### **3.3 Waste**

During active exploration programs all waste will be removed from site on an ongoing basis. Materials will be disposed of in the Yellowknife waste management facility.

### **3.4 Drill Sites**

Upon completion of each drill program the drill(s) will be dismantled into their main components as per the drilling contractor's procedures, packaged and secured along with its ancillary equipment and rods and removed from the property.

As much as possible, drill sites will be restored immediately after the drill has been moved to the next site. Drill holes are completed in three to seven days depending on the depth extent of the drill hole. Each location will be restored to previous conditions by performing the following activities:

- Drill cuttings will be deposited in a sump or natural depression located more than 100m from the ordinary high water mark;
- All drill casing and anchor rods will be cut to ground level;
- All drill casing will be capped;
- All fuel containers and drilling equipment will be removed from the site immediately upon completion of each hole; Cut timber will be stacked over the drill site or bucked up so it lies flat on the ground surface on the drill site;
- The brush from the larger timber and smaller vegetation will be spread over the drill site areas in order to help with natural re-vegetation;
- Each drill site will be inspected to ensure that all garbage (combustible and non-combustible) has been collected and removed from the area. Waste will be disposed of in the Yellowknife waste management facility;
- If the crew members discover waste of any type left behind by others during previous exploration activity, every effort will be made to remove it from the area and have it disposed of within the Yellowknife waste management facility; and
- A final inspection of the site (see Appendix 1) will ensure that there is no remaining material at the site and that there is little/no evidence of TerraX's land use operation upon completion of the drill hole.

### **3.5 Core Storage**

No core will be stored on the property. All core will be transported to Yellowknife and will be stored in core racks at TerraX's core facility at the Yellowknife airport.

### **3.6 Contamination Clean Up**

Any soil, snow or ice around fuel caches or drill sites that has become contaminated and gone unnoticed will be treated as per the Spill Contingency Plan. Contaminated material will be removed from site and disposed of at the Yellowknife waste management facility using the fees and procedures proscribed by that facility. *Before* and *after* photos will be taken to document the contamination and the clean up.

### **3.7 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.

## **4. FINAL CLOSURE AND RESTORATION**

As work on the YCGP is currently still in the "grass roots" stage of exploration activities it is not practicable at this time to subscribe to a definitive schedule for the conclusion of this land use operation, however upon its completion the following procedures will be followed to allow for proper closure and reclamation of the area:

#### **4.1 Buildings and Contents**

Not applicable.

#### **4.2 Equipment**

All equipment, including pumps, generators, etc. will be dismantled and removed from the project area.

#### **4.3 Fuel and Chemical Storage and Transfer Areas**

All fuel containers will be removed. All areas where there have been fuel storage or transfer areas will be thoroughly inspected. Any contamination will be cleaned up as well as any debris removed. Contaminated soil will be handled as per the 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.

#### **4.4 Drill Sites**

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, and transported off the property.

All drill sites will be inspected for soil contamination. Any remaining waste will be taken to the Yellowknife waste management facility.

An inspection will be conducted to ensure that all drill sites are/have been restored to the extent possible prior to natural restoration taking place.

#### **4.5 Contamination Clean Up**

Any contamination will be treated as per the Spill Contingency Plan. Before and after photos will be taken to document any contamination and the clean up.

#### **4.6 Inspection and Documentation**

A complete inspection will be conducted of all areas prior to closure. Photos will be taken to document the conditions prior to leaving the site for use in the final plan. All appropriate agencies will be contacted and notified prior to the final clean up and again once the final clean up has been completed.



**TABLE 1 - Emergency Contact Information**

CONTACT	TELEPHONE NUMBER
Alan Sexton – Project Manager	(613) 843-8109 (office) (613) 864-3937 (office cell) (867) 335-1880 (Yellowknife cell)
Brent McAllister – Drill Manager	(867) 668-1156 (Yellowknife cell)
Clint Ambrose - GNWT Land Use Inspector	(867) 767 – 9188 (office) (867) 446 – 0769 (cell)
Environment and Climate Change Canada	(866) 283-2333 (NEEC)
GNWT Environmental Health Office	(867) 669-8979
GNWT – Department of Lands, Inspector	(867) 873-7532
NWT-NU 24 hour Spill Line	(867) 920-8130
Department of Fisheries & Oceans, Yellowknife	(867) 669-4911
Yellowknife Fire Department	(867) 873-2222
Yellowknife RCMP	(867) 669-1111
Stanton Regional Hospital – Yellowknife	(867) 669-4111
Stanton Regional Hospital – Med Response	(844) 633-9999
Yellowknife Ambulance	(867) 873-2222
ENR - Forest Fire	(877) 698-3473

**APPENDIX 1**

**DRILL SITE CLEAN-UP  
CHECK SHEET**



**YCGP: DRILL SITE CLEAN-UP CHECK SHEET**

Hole Number: \_\_\_\_\_ Date: \_\_\_\_\_

Surveyed: \_\_\_\_\_ Easting / Northing(NAD83): \_\_\_\_\_ :

**✓ if satisfactory, X if unsatisfactory (remediation required), NA not applicable**

Casing/Rods removed or cut off and capped at ground level: \_\_\_\_\_

Hole plugged and cemented if on lake, <30m from lake shore or if aquifer intersected: \_\_\_\_\_

All material and equipment removed from drill site: \_\_\_\_\_

All litter removed from drill site: \_\_\_\_\_

All rock cuttings contained in a proper sump: \_\_\_\_\_

Application of peat moss and fertilizer on barren cuttings (if required): \_\_\_\_\_

No fuel, oil, grease spillage: \_\_\_\_\_

All fuel, oil, grease spillage properly absorbed: \_\_\_\_\_

Site Clearing minimal, all trees felled to ground level, all brush removed: \_\_\_\_\_

Collar picket in place with metal tag: \_\_\_\_\_

**OVERALL CLEAN-UP:**

**Further actions required if clean-up is unsatisfactory:**

\_\_\_\_\_  
\_\_\_\_\_

**Comments:**

\_\_\_\_\_  
\_\_\_\_\_

**(both signatures required before drill hole is considered completed and site abandoned)**

\_\_\_\_\_  
**Foreman**

\_\_\_\_\_  
**Site Geologist**

**Date:** \_\_\_\_\_

**Date:** \_\_\_\_\_