



ANIALIK RIVER PROJECT NUNAVUT

Abandonment and Restoration Plan

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ANIALIK RIVER PROPERTY, NU ABANDONMENT AND RESTORATION PLAN

1. INTRODUCTION

This Abandonment and Restoration Plan has been prepared specifically for the Anialik River Project (NTS 76M/1 to 12) operated by North Arrow Minerals Inc. ("North Arrow"). This project, located in the West Kitikmeot Region of Nunavut, approximately 180 kilometres southeast of Kugluktuk, consists of both Inuit-Owned Lands (surface and subsurface rights) and mineral claims on Crown Lands (see Appendix 1 for property location map).

The property is bounded in a general sense by the following minimum and maximum latitudes/longitudes:

MIN Latitude	67° 10' 01" N	MAX Latitude	67° 44' 15" N
MIN Longitude	110° 20' 15" W	MAX Longitude	111° 45' 43" W

Proposed exploration activities include airborne geophysical surveys, ground geophysical surveys (potentially up to 10 grids per year), geological mapping, prospecting, rock/soil/till sampling, and ground truthing. Depending on exploration results, diamond drilling may be conducted with up to 10 holes per year drilled, typically to a depth of less than 200 metres per hole. The drilling will be conducted with a lightweight, helicopter-portable, small diameter (1.5" to 2") diamond drill rig. All drill core will be racked and stored near the temporary camp constructed adjacent to Rush Lake.

A camp was previously constructed on the property, on the shore of Rush Lake on Inuit-owned Land parcel CO-81 (at latitude 67° 21'N, longitude 111° 04'W). The camp facilities included seven sleeping tents, kitchen and drying buildings, a generator shack, and fuel cache, adjacent to the helicopter landing site. The Rush Lake camp facility was completely removed and the site left in a clean condition during August 2008. At present there are no plans to replace this camp facility on the Anialik River Project. During the early phase of exploration work, up to five *below threshold* "fly" camps may or may not be established. These would consist of approximately four to six portable pup or dome-style tents for approximately five to ten days.

The number of individuals working on the property will vary between 9 and 12, depending on the type of exploration work program being carried out. Exploration work may take place year-round although it is more likely exploration work would be conducted during a short period (up to four weeks duration at any one time) during the months of July to October.

Year-round access to the property is via plane, equipped with skis or floats, or helicopter.

The property is in the very early stages of exploration. The current plans include exploration 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.

Should there be any change to the scale of operation or in the anticipated exploration work, North Arrow will review this Abandonment and Restoration Plan and will submit an amended document should this plan no longer cover the change in scale of operation or in the anticipated exploration work or due to any other changes in the overall Anialik River Project plans.

2. CURRENT PERMITS/LICENCES

<u>Land Use Permit</u>	N2008C0031 (Class "A") - issued by Indian and Northern Affairs Canada Term: 11 July 2008 to 10 July 2010 (with provision for one-year extension to 10 July 2011)
<u>Water License</u>	2BE-ANI0813 (Type "B") – issued by Nunavut Water Board Term: 30 October 2008 to 31 October 2013
<u>Inuit-Owned Land Use Licence</u>	KTL306C001 – one-year extension issued by Kitikmeot Inuit Association (currently held by sister company, Strongbow Exploration Inc. – licence to be assigned to North Arrow Minerals Inc.) Term: 22 July 2008 to 21 July 2009

3. DESCRIPTION OF FACILITY

<u>Project Supervisor</u>	Gordon Clarke North Arrow Minerals Inc. Suite 204, 4817 – 49 th Street Yellowknife, NT X1A 3S7 Phone: 867-873-8483 Fax: 867-873-8493
<u>Facility</u>	At present, no temporary camp facility is situated on the Anialik River Project lands
<u>Locations</u>	Fuel will be stored in the appropriate facility a safe distance from the accommodations and well away (>31m) from water bodies (Appendix 1); drums will be stored on flat stable terrain during the summer to reduce chances of a leak. If available a natural depression situated well away from water bodies will be utilized for storage.
<u>Size</u>	Fuel stored at above ground facility in sealed 205 litre (45 gal.) steel drums
<u>Storage Capacity</u>	<p>Maximum fuel stored at a future camp facility will be 60 drums (12,300 litres) of Jet-B, 60 drums of diesel (12,300 litres), four (4) drums regular gasoline (820 litres) plus six (6) 45 kg-propane tanks (270 kg).</p> <p>A minor amount of fuel will be stored at each "fly" camp or active drill site and will be removed promptly upon completion of each drill hole or the demobilization of each "fly" camp. On-site storage will be a safe distance from drilling activities, with fuel stored in sealed steel drums. Maximum fuel storage will be 2 drums (820L) of diesel and 2 drums of Jet B (410).</p> <p>During active periods of camp occupation, fuel will be located as follows: Diesel – one drum located at each tent for heating, one at the generator, remainder at fuel cache Jet B – all stored at fuel cache Propane – two cylinders each located at kitchen (heating/cooking) and dry (heating), remainder at fuel cache</p>

Gasoline – all at fuel cache

Purchasing Policy North Arrow and its expeditor will endeavour to reduce extraneous packaging waste by implementing a purchasing program whereby groceries and other supplies are supplied with a minimum of packaging material.

4. ONGOING ABANDONMENT AND RESTORATION PROCEDURES AND SEASONAL CLOSURES

This section deals with both exploration work sites and at a camp facility should one be re-established on the Anialik River Project lands. All camp references relate to the structures and procedures to be undertaken at a temporary camp facility.

Restoration of the work sites will be performed on a continuing basis and all work under the Abandonment and Restoration Plan will be completed prior to the date of expiry of the various land use permits and licences unless renewal applications are submitted. Empty fuel drums will be removed from site on a regular basis. 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 debris will be removed from the site.

At the end of each active exploration program, work will be performed to ensure the site is left in a clean and tidy manner. 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 season winterization procedures as well as the ongoing maintenance and restoration procedures that are practiced on a continuing basis throughout the land use operation:

4.1 Buildings and Contents

Winterization of the facilities includes the securing of all wooden structures (all camp structures including kitchen, dry, office, sleeping tents and generator shed) at the camp location. The camp generator will undergo winterization procedures including the draining of all operating fluids. The water pump will be drained and stored in one of the camp structures and all water hoses will be drained, rolled up and stored on site in one of the camp structures.

4.2 Fuel Caches and Chemical Storage

All fuel storage and handling is to be guided by the procedures set out in the Spill Contingency Plan for the Anialik River Project. Empty fuel drums are to be regularly backhauled to Yellowknife for proper disposal.

Chemicals will not be stored on site over winter. All chemicals will be removed from the site for storage and/or disposal.

At the end of each active exploration program period, a full inventory will be completed prior to departing from the property.

4.3 Waste

All waste will be removed from site on an ongoing basis. All non-food waste will be separated and stored until transported off site for disposal or recycling.

Greywater and human waste will be collected in a natural depression sump that will be back-filled.

North Arrow has investigated the acquisition and transport of an incinerator to the Anialik River Project. As the Anialik River Project is a very early stage exploration property, it is not economically feasible to acquire an incinerator at this time. As a result, very limited burning of waste will be conducted utilizing a burn barrel. Only combustible items that are suitable for incineration in the burn barrel will be burned. Any waste wood treated with preservatives such as creosote, pentachlorophenol or heavy metal solutions will not be burned. Additionally, plastics, electrical wire, or other materials that are likely to produce dioxins and furans when burned will be excluded from incineration. As well, burning will only be conducted on days when winds are light and blowing in a direction away from the camp.

4.4 Drill Sites

The diamond drill used at site is a recirculating system with only non-toxic drilling additives to be used. Upon completion of each drill program the drill will be dismantled into its 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 (on average, each hole is completed in less than one week). Each location will be restored to previous conditions by performing the following activities:

- All drilling sumps will be back-filled, burying the cuttings and sludges if appropriate.
- All drill casing materials will be removed and each hole capped with a permanent seal.
- All fuel drums and drilling equipment will be removed from the drill site immediately upon completion of each hole.
- Each drill site will be inspected to ensure that all garbage (combustible and non-combustible) has been collected and removed from the area.
- If the crew members discover waste of any type left behind by others, every effort will be made to remove it from the area and have it disposed of in an acceptable manner.
- A final inspection of the site will ensure that there is no remaining material at the site ensuring that there is little/no evidence of North Arrow's land use operation upon completion of the drill hole.

4.5 Core Storage

The core storage area is located more than 30 metres from the high water mark of all water bodies.

4.6 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 in an approved area. *Before* and *after* photos will be taken to document the contamination and clean up.

4.7 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.

5. FINAL ABANDONMENT AND RECLAMATION

This section deals with both exploration work sites and at a camp facility should one be re-established on the Anialik River Project lands. All camp references relate to the structures and procedures to be undertaken at a temporary camp facility.

As work on the properties comprising the Anialik River Project 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 abandonment and reclamation of the area:

5.1 Buildings and Contents

Any structures remaining will be dismantled and removed. All wooden structures including floors will either be burned (providing the wood is “clean”) or removed. The coals and ash will be raked for non-combustible items (i.e. nails etc) which will be collected and removed from the site. The remaining coals will be buried. A last inspection will ensure that there is no remaining material at the site and that there is little/no evidence of North Arrow’s land use activity upon completion of the operation.

5.2 Equipment

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

5.3 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 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 cache locations 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.

5.4 Waste

All waste will be removed from site. The greywater and sewage sumps will be back-filled and leveled as per the natural contours of the land.

5.5 Drill Sites

The drill will be dismantled into its main components as per the drill contractor’s procedures, packaged and secured along with its ancillary equipment and rods and will be removed from the property.

All drill sites will be inspected for soil contamination and treated as per the Spill Contingency Plan.

Any remaining waste will be taken to camp to be burned if appropriate or flown out to an approved disposal location. Grey water and sludge sumps will be back-filled and leveled as per the natural contours of the land.

An inspection will be conducted to ensure that all drill sites are/have been restored and sumps have been back-filled and leveled.

5.6 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.

5.7 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. 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
INAC – Water Resource Officers, Kugluktuk and Iqaluit, NU	Kugluktuk (867) 982-4308 Iqaluit (867) 975-4298
North Arrow Minerals Inc. – Gordon Clarke, President	(867) 873-8483 24 hour contact (867) 445-6527
Kitikmeot Inuit Association	(867) 983-2458
Nunavut Tunngavik Inc., Cambridge Bay	(867) 983-2517
Environment Canada	(867) 975-4644, 24 hr page (867) 920-5131
Air Tindi	(867) 669-8212
Great Slave Helicopters	(867) 873-2081
Yellowknife Fire Department	(867) 873-2222
Kugluktuk RCMP	(867) 982-4111
Stanton Regional Hospital, Yellowknife	(867) 920-4111
On-Site Project Geologist	<i>Information to be supplied once phone system is established on the property</i>
Discovery Mining Services	(867) 920-4600
Fisheries and Oceans	(867) 979-8007
Department of Environment, Govt of Nunavut	(867) 975-7700
Manager Pollution Control & Air Quality, Environmental Protection, Govt of Nunavut	(867) 975-7748, Fax (867) 975-7739
Nunavut Department of Environment, Waste Manifests (Rob Eno)	(867) 975-7748

APPENDIX 1

Anialik River Property, NU

Property Map

