

AREVA Resources Canada Inc.

Kiggavik Sissons Project, Nunavut

Appendix B

ABANDONMENT AND RESTORATION PLAN

Date of Issue: 20 March 2007

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1 PREAMBLE

This Abandonment and Restoration (A&R) Plan will be in effect from the time the exploration licence is issued up to when it expires and applies to the Kiggavik Sissons Project located about 80 km west of Baker Lake. The property is located at (see Figures 1 and 2):

- West Boundary 97° 57' 50.4" W Longitude;
- East Boundary 97° 20' 56.4" W Longitude;
- North Boundary 64° 39' 28.8" N Latitude; and,
- South Boundary 64° 17' 02.4" N Latitude.

1.1 Abandonment and Restoration Plan Objectives

Abandonment and restoration considerations will be on-going during the life of the exploration program. Progressive restoration will provide an opportunity to reduce the extent of disturbed land over the life of the program.

The objectives of the A&R Plan are to:

- protect public health and safety by using safe and responsible reclamation practices;
- reduce or eliminate environmental effects, such as ground disturbance, once the exploration program ceases operations;
- re-establish conditions which permit the land to return to a similar pre-exploration land use; and;
- reduce the need for long term monitoring and maintenance by establishing physical and chemical stability of disturbed areas.

The A&R Plan will comply with the conditions of exploration permits, regulations and industry standards. The following principles have been established to guide the development of the overall A&R Plan:

- plan and implement in accordance with regulations;
- apply cost effective and appropriate abandonment and reclamation practices to reduce environmental risks and allow for traditional use of the land;
- maintain program of progressive abandonment and reclamation as an integral part of the program; and,
- incorporate new abandonment/reclamation methods and procedures, when applicable.

2 INTRODUCTION

This A&R plan has been prepared for an exploration and environmental baseline program to be carried out by AREVA Resources Canada Inc (AREVA). The program will be based out of a fly-in camp, currently located at the Kiggavik site.

The proposed program would first involve establishing fuel caches at the Kiggavik Sissons sites in April 2007, and refurbishing the Kiggavik camp starting May 2007. The existing Kiggavik camp has supported exploration drilling programs between 1977 and 1986, and again between 1993 and 1997. The camp was cleaned-up in 2003 and 2004, and has since remained under care and maintenance. Existing buildings at the Kiggavik camp will be repaired and used, where possible for this program. It is planned to bring five additional new buildings onto the site to supplement what is currently there.

The Kiggavik camp is located approximately at:

- Min Lat (degree/minute) 64° 26' 24"
- Min Long (degree/minute) 97° 39' 24"
- Max Lat (degree/minute) 64° 26' 30"
- Max Long (degree/minute) 97° 39' 48"

The camp may be moved to another location within AREVA's lease areas during the winter of 2007 or in 2008, following consultation with the community of Baker Lake and agencies. In this event, the A&R Plan will be modified to reflect this change.

3 SCHEDULE

The Kiggavik Camp will be temporary and seasonally occupied. No buildings, equipment or waste will remain beyond the expiration date of the permits (*i.e.*, Access to Inuit Owned Land; Land Use Permit; Water Licence), unless new permits have been obtained permitting the camp to remain. The project site will be secured and readied for each seasonal shutdown; the final restoration will begin once the program is complete.

4 INFRASTRUCTURE – MAIN CAMP

The temporary camp is expected to accommodate a maximum of 32 persons at peak times in 2007 and a maximum of 40 in 2008. The camp is expected to consist of the following buildings in 2007, with more to be added in 2008, as needed:

- one storage shed/generator/shop (former kitchen);
- one dry building (new);
- one kitchen (new);
- two offices;
- nine sleeping units (includes two new units);
- one latrine shack (new);
- two fuel storage areas (a number of new containment berms will be used for fuel cache locations at the Kiggavik site and at the Andre Lake core storage area); and,
- greywater sump.

In addition, there may be small core logging sheds located in the vicinity of where the drilling will take place (e.g., Kiggavik, Andrew Lake, End Grid) and core storage racks. A shed and core storage currently exist at the Andrew Lake drill site, as well as core storage at the Kiggavik site and at Pointer Lake.

5 SEASONAL SHUTDOWN

5.1 Buildings and Contents

All equipment will be stored within buildings if possible to ensure they can withstand the winter season. Canvas tents will be secured and braced internally so they can withstand snow and wind. All wooden buildings will be secured with nailed plywood over the windows and doors to prevent inadvertent opening. The generator may be removed from site for servicing and storage.

5.2 Water System

Pumps and hoses will be drained and dismantled. Pumps may be removed from site for servicing and storage. Hoses will be stored on site in the generator shack.

5.3 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 the remaining empty fuel drums will be removed from site. Chemicals will not be stored on site over winter. All chemicals, including cleaning products, will be removed from site for storage and or disposal.

5.4 Waste

Combustible waste: All non-hazardous combustible waste will be burnt in an approved incinerator. The incinerator will be stored at the camp site for use the following year.

Greywater sump: The greywater sump will be inspected, marked and covered securely for the winter.

Black water: The latrine sump will be inspected, marked and covered securely for the winter.

The Waste Management Plan (Appendix D) and Radiation Protection Plan (Appendix F) shall be in effect from the time the exploration licence is issued to the time it expires.

5.5 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. The drill components may winter at site, or may be flown out by the drilling contractor.

All drill sites will be inspected for soil contamination. Any remaining waste will be taken to camp to be burned if possible or to be flown out to an approved disposal location.

Upon completion of the exploration, drill sites must be cleaned to the extent that gamma dose at a height of 1m is less than 1 $\mu\text{Sv/h}$. To the greatest extent possible, all residual radioactive materials accumulated during drilling will be disposed of down a drill hole. Where this is not practicable, radioactive material will be collected, appropriately packaged and stored in the existing core storage areas. Gamma radiation levels at 1 m from the surface of the core storage area should be reduced to 1 $\mu\text{Sv/h}$ and in no instances exceed 2.5 $\mu\text{Sv/h}$. As is necessary, residual radioactive material will be transported to the McClean Lake Operation for storage and disposal.

Greywater and sludge sumps will be filled and levelled. As much as possible, drill sites will be restored immediately after the drill has been moved to the next site.

5.6 Contamination Clean Up

Any soil around camp that has become contaminated and gone unnoticed will be treated as per the Spill Contingency Plan. Before and after photos will be taken to document the contamination and the clean up.

5.7 Inspection and Documentation

A full inventory will be conducted, and a complete inspection of all areas prior to seasonal closure. Photos will be taken to document the conditions prior to leaving the site for the winter. These photos will make up part of the final report to be submitted to the Water Resource Inspector following any spill and will also be attached as part of the Annual Report submitted to the Nunavut Water Board, INAC, and the Kivalliq Inuit Association.

6 FINAL ABANDONMENT AND RESTORATION

6.1 Buildings and Contents

All buildings will be dismantled and removed or burned. All wooden structures including floors will either be burned or shipped off-site, depending on the nature of the wood (see Waste Management Plan).

6.2 Equipment

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

6.3 Fuel Caches and Chemical Storage

All fuel drums will be removed. All areas where there have been fuel caches will be thoroughly inspected. The liner of the secondary containment will be removed and taken to an approved disposal facility. Any contamination at fuel cache sites will be cleaned up as well as any debris removed. Contaminated soil will be tested for petroleum hydrocarbons (fraction F1 through F4) as per Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil (2001) and benzene, ethylbenzene, toluene and xylene as per Canadian Soil quality Guidelines for the Protection of Environmental and Human Health (2004). Any contaminated soil will be handled as prescribed by 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.

6.4 Sumps

All sumps will be properly closed out at the end of the project and will be inspected to ensure that there is no leaching or run-off. Sumps will be back-filled and leveled as required. Final photos will be taken.

6.5 Camp Site

A final inspection of the camp site area will be conducted to ensure that there is no waste left behind. All wastes that are not burnable will be removed from site and taken to an approved disposal facility.

6.6 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. The drill may be flown out by the drilling contractor or taken out overland during the winter.

All drill sites will be inspected for soil contamination. Drill holes will be sealed by cementing the upper 30 meters of the bedrock or the entire depth of the holes; whichever is less. All drums and or buckets used for the collection and storage of radioactive sediments will be taken to approved disposal facilities. Any remaining waste will be taken to camp to be burned if possible or to be flown out to an approved disposal location. Greywater and sludge sumps will be filled and levelled.

Drill holes that encounter uranium mineralization with a uranium content greater than 1.0% over a length of more than 1 meter with a meter percent concentration greater than 5% should be sealed by cementing over the entire mineralization zone; this should be at least 10 metre above and below each mineralization zone.

An inspection will be conducted to ensure that all drill sites are/have been restored and sumps have been covered and levelled.

6.7 Helicopter Pad

The helicopter pad consists of a wooden platform. The wood will be burnt or taken off site to an approved disposal facility. The soil around the helicopter pad will be inspected for contamination. As the ground has not been altered, scarification will not be necessary. The ground will be left to re-vegetate on its own.

6.8 Landing Eskers

The esker which has been used as a landing strip will be inspected for wearing and if need be restored to pre-use conditions.

6.9 Contamination Clean Up

Any contamination will be treated as per the Spill Contingency Plan.

6.10 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. Before and after photos will be taken to document the contamination and the clean up. These photos will make up part of the final report to be submitted to the Water Resource Inspector following any spill and will also be attached as part of the Annual Report submitted to the Nunavut Water Board, INAC, and the Kivalliq Inuit Association.

All appropriate agencies will be contacted and notified once the final clean up has been conducted.