AREVA Resources Canada Inc.

KIGGAVIK PROJECT, NUNAVUT

ABANDONMENT AND RESTORATION PLAN

May 2013 – Version 4 Revision 3

REQUIRED USERS

Required and other users are responsible for using the current version of the Abandonment and Restoration Plan as posted on Q:\Exploration\IMS. Users may print copies of this plan, but are ultimately responsible for ensuring they are using a current copy as posted. Users are requested to destroy all previously printed copies of the plan when they are informed of revisions.

HISTORY OF REVISIONS

Version	Revision	Date	Details of Revision
1	0	March 2007	Original submission
2	0	October 2007	Updated to reflect changes in field activities/capabilities and areas of continual improvement
2	1	May 2008	Updated to reflect comments and conditions received by the Nunavut Water Board associated with the issuance of water licence no. 2BE-KIG0812
3	0	January 2009	Updated to reflect changes in field activities/capabilities and areas of continual improvement
4	0	January 2010	Updated to reflect changes in infrastructure
4	1	May 2011	Updated personnel titles and grammatical changes
4	2	May 2012	Updated to reflect personnel changes.
4	3	May 2013	Updated to reflect personnel title changes, update land ownership details, and input coordinates

Original Copy of this Manual:

Approved and Signed by title: **Naomi Stumborg**

Safety Health Environment and Quality Supervisor, Exploration

Approved by:

May 16, 2013

Signature and Date

Approved and Signed by title: **Patrick Ledru**

Vice President, Exploration

Approved by:

Patrick Ledru May 16, 2013

Signature and Date

The original hard copy of this approval page has been signed and is located at the AREVA Resources Canada Inc. corporate office.

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1 PREAMBLE

The AREVA Resources Canada Inc. (ARC) Abandonment and Restoration Plan (A&R Plan) is in effect from the time licences and permits are issued up to the expiry date. The A&R Plan applies to the Kiggavik Project located approximately 80 km west of Baker Lake, Nunavut.

1.1 Purpose and Scope

Abandonment and Restoration considerations are on-going during the life of the project. Progressive restoration provides an opportunity to reduce the extent of disturbed land over the life of the project.

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;
- following cessation of project activities, 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 complies with the conditions of permits, licences, 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 project; and,
- incorporate new abandonment/reclamation methods and procedures, when applicable.

1.2 Revision to the Plan

The Abandonment and Restoration Plan is reviewed on an annual basis and is updated as required to keep the information current and consistent with regulatory and procedural changes. A History of Revisions can be found at the front of this Plan.

1.3 Responsibilities

The District Geologist, Nunavut is responsible to ensure that this plan is implemented, and the implementation may be completed by:

- Project Geologist
- Safety Health Environment and Quality (SHEQ) Supervisor
- Or designate

The Vice President, Exploration is ultimately responsible for any activity being carried out by Kiggavik Project personnel.

2 INTRODUCTION

This A&R Plan has been prepared for a project that includes advanced exploration activities and environmental baseline program to be carried out by ARC.

AREVA Resources Canada Inc. head office location:
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2.1 Location

The Kiggavik Project includes two properties:

- The Kiggavik site is located at approximately 64°26'N and 97° 37'W. The property consists of 15 mineral leases totalling 9,267 ac (3,753 ha). The leases are currently on Crown Land (i.e., surface and subsurface rights are administered by Aboriginal Affairs and Northern Development Canada (AANDC)).

- The Sissons site is situated roughly 17 km south-west of Kiggavik at approximately 64°20'N and 97°52'W. The Sissons site consists of 22 mineral leases totalling 36,372 ac (14,730 ha). Five of the mineral leases, including those containing the Andrew Lake and End Grid deposits, are located on Inuit Owned Land (IOL), as such surface rights are administered by the Kivalliq Inuit Association (KIA) and subsurface rights are "grandfathered" – administered by AANDC.

Subject to the finalization of the Land Swap, the majority of the leases will be on IOL with the exception of 6 leases of the JANE prospect on the south-west portion of the Project. The KIA will administer the surface rights for the IOL, while the AANDC will continue to administer the sub-surface rights. AANDC will continue to administer both surface and subsurface rights for the remaining 6 leases on Crown land.

There is an existing temporary exploration camp at the Kiggavik site which can accommodate approximately 60 people. The Kiggavik camp is located at the following coordinates:

- UTM 14W 564530 E 7146879 N

- Latitude: 64° 26' 29'' N
- Longitude: 97° 39' 34'' W

2.2 Schedule

The Kiggavik Camp is seasonally occupied, and supplies are brought to site during the winter by a local contractor on a winter road. The project site is secured and prepared for each seasonal shutdown following completion of exploration field program activities. Final restoration will commence once the exploration/feasibility programs have ceased.

No buildings, equipment or waste will remain beyond the expiration date of permits or licences (i.e., KIA Land Use Licence; AANDC Land Use Permit; NWB Water Licence), unless approvals have been obtained permitting the camp to remain. If unforeseen delays in permitting renewals occur, ARC will consult with the agencies to arrange for an agreement regarding site infrastructure pending a permitting decision.

2.3 Infrastructure – Main Camp

In 2007, the temporary camp accommodated approximately 32 persons, was expanded to accommodate approximately 50 persons in 2008 and 60 in 2009. Further camp expansions and personnel requirements will be discussed in permit applications for the field season. The camp currently consists of the following:

- One storage shed/back-up generator/shop
- One generator building (housing the current generator)
- One helicopter storage/shop
- Two helicopter pads
- One kitchen with storage
- One washroom/dry building constructed with separate male/female facilities
- Two offices
- 17 sleeping units (one is a first aid shack)
- One fuel storage area (equipped with Arctic Berms)
- Grey water collection area
- Industrial incinerator
- Core storage
- Five core logging tents
- Radioactive materials storage compound

There is a fuel esker containing 1 shed and 8 bulk fuel tanks. Three bulk tanks are for Jet-B fuel and five are for diesel fuel, and additional fuel drums within secondary containment may also be stored at the esker.

Currently there is one shed and core storage located at the Andrew Lake drill site, as well as core storage at the Kiggavik site and Pointer Lake.

Additions may include the following:

- new sleeping units
- additional office space
- additional core storage racks, and small core logging sheds/tents located in the vicinity of where the drilling will take place (e.g., Kiggavik and Sissons).

3 SEASONAL SHUTDOWN

3.1 Buildings and Contents

Following the completion of each field program, equipment is either removed from site, or stored within buildings or sea containers to ensure they can withstand the winter season. Canvas tents are secured and braced internally so they can withstand snow and wind. All wooden buildings are secured with plywood over the windows and doors to prevent inadvertent opening.

3.2 Water System

Pumps and hoses are drained and dismantled. Pumps may be removed from site for servicing or put into storage along with the hoses.

3.3 Fuel Caches and Chemical Storage

An inventory is conducted prior to leaving at the end of the field season to track the items that are removed or remain at site. A thorough inspection of all fuel caches is completed and the remaining empty fuel drums are removed from site should they no longer be required. Chemicals, including cleaning products, are removed from site for storage and or disposal. If any chemical products ($CaCl_2$) remain on site they are stored in secure buildings or sea containers.

3.4 Waste

Combustible waste: Non-hazardous combustible waste is burnt in a Single Chamber Cyclonator Incinerator (Series CY1000) which remains on site for use each year. Incinerator ash is collected in drums and stored until shipped off-site to an approved handling facility.

The grey water from the kitchen and washroom facilities is diverted to the grey water collection sump area. The grey water sump consists of a barrel that was punctured with drainage holes and buried to allow drainage and filtration of the water. The grey water collection area is regularly inspected, marked and photographed.

The Waste Management Plan and Radiation Protection Plan details waste handling and are in effect from the time the exploration licence is issued to the time it expires.

3.5 Drill Sites

The drill is 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, be removed via the winter road or may be flown out by the drilling contractor.

Drill sites from the field program are inspected for fuel stained soil and undergo a radiation survey for radioactive contamination. Contaminated soil or drill cuttings are collected in appropriate containers and stored in the radioactive storage compound for future handling, which may include transfer to an operating mine site.

Drill sites must be cleaned to the extent that the gamma dose at a height of 1 m is less than 1 µSv/h above background. To the greatest extent possible, all residual radioactive materials accumulated during drilling are disposed of down the drill hole. Where this is not practicable, radioactive material is 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 µSv/h above background and in no instances exceed 2.5 µSv/h. Should the levels be exceeded, the AANDC Land Use Inspector must be contacted for review and approval of handling procedures. If necessary, residual radioactive material may be transported to the McClean Lake Operation for storage and disposal.

Drill holes are sealed by cementing/grouting the upper 30 m of bedrock or the entire depth of the hole, which ever is less or otherwise approved of by the Nunavut Water Board (NWB) in writing.

Any remaining waste is taken to camp to be burned or if required, flown off-site to an approved disposal location.

3.6 Contamination Clean Up

Any soil around camp that has become contaminated and had gone previously unnoticed is treated as per the Spill Contingency Plan. Before and after photos are taken to document the contamination and the clean-up. Clean-up will be conducted in accordance with Government of Nunavut's Department of Environment - Environmental Guideline for Site Remediation.

3.7 Progressive Reclamation

It is ARC's intention to reclaim disturbed sites in an adequate and acceptable manner. Proper reclamation techniques are currently being investigated and will be implemented under the direction and approval of experienced consultants, community members and regulatory agencies. Restoration work will be completed prior to the expiry of the land use licence. This will include but is not limited to reclaiming surface disturbance to promote the growth of vegetation.

3.8 Inspection and Documentation

A full inventory and complete inspection of all areas are conducted prior to seasonal closure. Photos are taken to document the conditions prior to leaving the site for the winter. These photos are included in the annual report submitted to the NWB, AANDC and KIA and included in any required spill reporting.

4 FINAL ABANDONMENT AND RESTORATION

The following activities will occur upon cessation of the current exploration/feasibility program, unless further activities or development are anticipated.

4.1 Buildings and Contents

All buildings will be dismantled and removed or burned (if acceptable). All wooden structures including floors will either be burned or shipped off-site, depending on the nature of the wood. As per the Waste Management Plan, wood products are sorted with non-treated wood products to be incinerated and treated wood to be shipped off-site for proper disposal.

4.2 Equipment

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

4.3 Fuel Caches and Chemical Storage

All fuel drums and EnviroTanks 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 for reuse or proper disposal, if it cannot be reused by ARC. 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.

4.4 Sumps

If sumps are used, they will all be properly closed out at the end of the project and will be inspected to ensure that there is no leaching, run-off, or radiological and hydrocarbon contamination. Any contaminated material found will be treated as per the Spill Contingency Plan. Sumps will be back-filled and levelled as required. Final photos will be taken.

4.5 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.

4.6 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 radioactive or hydrocarbon contamination. Any contaminated material will be treated as per the Spill Contingency Plan. Any remaining waste will be taken to camp to be burned if possible or to be flown out to an approved disposal location.

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

4.7 Drill Hole Abandonment

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

4.8 Helicopter Pads

The helicopter pads consist of wooden platforms. The wood will be burnt or taken off site to an approved disposal facility. The soil around the helicopter pads will be inspected for contamination. As the ground has not been altered, scarification will not be necessary.

4.9 Landing Eskers

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

4.10 Contamination Clean Up

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

4.11 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 report. Before and after photos will be taken to document any contamination and resulting clean up. These photos will make up part of the final report to be submitted to the Water Resource Inspector; the annual report submitted to the NWB, AANDC and KIA and will be included in any required spill reporting.

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

Agency contact information can be found in the Contact List.