Kiggavik Project

Environmental Impact Statement

Tier 3 Technical Appendix 2U

Hazardous Materials Management Plan

December 2011

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1 INTRODUCTION

The AREVA Resources Canada Inc. Hazardous Materials Management Plan (Plan) will be in effect for the duration of the Kiggavik located approximately 80km west of Baker Lake and all points located between the site and Baker Lake. In addition, the Plan will be made available at hazardous material storage and handling areas, the Site, AREVA's Baker Lake Office as well as AREVA's corporate office.

Many inputs are required for mining and milling operations. The majority consist of fuels and chemicals that are classified as dangerous goods. Examples include diesel fuel, blasting materials, flammable materials, corrosive materials, and oxidizing compounds. On-site storage and containment of these commodities is strictly regulated and must comply with all environmental regulations. AREVA has in house Emergency Response Teams that are trained to specifically deal with all manner of emergencies include fire fighting and spill response and recovery.

Hazardous materials (referred to as Dangerous Goods) transport, packaging, handling and personnel training are subject to specific regulatory requirements. Transport Canada develops and enforces safety regulations and standards; tests and promotes safety technologies; and is introducing safety management systems as a reliable and cost-effective way to prevent and manage safety risks in all modes of transportation. Transport Canada is responsible for ensuring air, marine, rail and road safety, as well as the safe transportation of dangerous goods.

All packages, containers, transport tanks and pressure vessels used in the transportation of dangerous goods must meet the Transport Canada Dangerous Goods Regulations. All persons that are required to handle, package, ship and transport require training specific to their role. Any and all explosives transport must comply with the *Canadian Explosives Act & Regulations.*

1.1 PURPOSE AND SCOPE

A variety of petroleum products, mill process reagents, and explosives will be used at the Kiggavik project, mainly during the operational period of the mine.

In conjunction with the Spill Contingency Plan (Technical Appendix 10B), Emergency Response Plan (Technical Appendix 10C) and Waste Management Plan (Technical Appendix 2S), this Plan outlines the information and protocols necessary for the safe transportation, storage, and handling of hazardous materials that may be stored and used at the Kiggavik Project. A hazardous material is defined as any material that, because of its quantity, concentration, or

physical or chemical characteristics, poses a hazard to human health or the environment when it is improperly transported, stored, used, or disposed of.

The primary objective of this plan is to help prevent or reduce the release of harmful pollutants and prevent, reduce, or eliminate any adverse effects that result or may result. As such, the Plan provides information and guidance on actions important for the prevention of hazardous material spills and procedures to detect and respond to spills when they occur.

This Plan is based on the following principles for best practice management of hazardous materials:

- Identify and prepare material and waste inventories
- Characterize potential environmental hazards posed by materials
- Identify responsibility for managing hazardous materials
- Describe methods for transport, storage, handling, and use
- Identify means of long term storage and disposal
- Prepare contingency and emergency response plans
- Ensure training for management, workers, and contractors who will be handling hazardous materials
- Maintain and review records of hazardous material consumption and incidents in order to anticipate and avoid impacts on human health and the environment

This Plan is to be reviewed and applied in conjunction with the Emergency Response Plan and the Spill Contingency and Landfarm Management Plan.

1.2 APPLICABLE LEGISLATION

AREVA's working definition of a spill is defined as any accidental discharge to the environment of a hazardous material. In addition, all employees are required to complete site orientation training which specifies that a spill of any kind must be reported immediately to their supervisor and the Safety Department.

Federal and territorial legislation regulates the management of hazardous materials in Nunavut. A list of the acts, regulations, and guidelines that govern the handling of hazardous materials that will be used at the Kiggavik Project is provided below.

Federal:

- Explosives Act (R.S.N.W.T., 1988)
- National Fire Code
- Canadian Council of Ministers for the Environment (CCME) Guidelines for Above-Ground Storage Tanks (CCME, 1994)

Territorial:

- Environmental Guideline for General Management of Hazardous Wastes (Gov. of Nunavut, 2010)
- Contingency Planning and Spill Reporting in Nunavut: A Guide to the New Regulations
- Guideline: Contaminated Site Remediation (Gov. of Nunavut, 2009)
- Transportation of Dangerous Goods Act (R.S.N.W.T., 1992) and Regulations
- Explosives Use Act (R.S.N.W.T., 1988) and Regulations
- Fire Prevention Act (R.S.N.W.T., 1988) and Regulations
- Mine Health and Safety Act (R.S.N.W.T., 1994) and Regulations
- Safety Act (R.S.N.W.T., 1988) which includes the Work Site Hazardous Materials Information System Regulations (WHMIS)

All hazardous materials to be used at the Kiggavik Project will be manufactured, delivered, stored, and handled in accordance with all applicable federal and territorial regulations and ISO 14001 environmental management standards. AREVA is committed to preventing the inadvertent release of these substances to the environment and strives to minimize accidents from mishandling through employee training, inspections, procedural reviews, accountability, and continuous improvement objectives.

2 HAZARDOUS MATERIALS

2.1 TYPES OF HAZARDOUS MATERIALS

The *Transportation of Dangerous Goods Act* (TC, 1992) classifies hazardous materials into nine main classes according to an internationally recognized system, as follows:

- Class 1 – Explosives
- Class 2 – Gases
- Class 3 – Flammable liquids
- Class 4 – Flammable solids
- Class 5 – Oxidizing substances and organic products
- Class 6 – Poisonous (toxic) and infectious substances
- Class 7 – Radioactive
- Class 8 – Corrosive
- Class 9 – Miscellaneous products or substances

Operation of the Kiggavik Project requires the use of certain hazardous materials including:

- Petroleum Products – diesel fuel, gasoline, oils, greases, antifreeze, and solvents used for maintaining operating equipment
- Mill Process Reagents – various corrosives, oxidizers, organic and inorganic solutions, and other chemicals used in the processing of ore
- Explosives – ammonium nitrate, fuel oils, and blasting materials used in the mining areas
- Laboratory Wastes – various hazardous wastes will be generated from chemicals used in the assay laboratory

- Radiologically contaminated waste – liquid effluent waste and solid waste contaminated with radionuclides from mine water, ore processing, and surface contaminated equipment and supplies.

The majority of liquid effluents, such as contaminated mine and process waters and some lab wastes will be treated onsite at the waste water treatment plant or reprocessed in the mill with contaminants removed ultimately becoming part of the tailings. As such, these types of waste are addressed together in this plan.

The sections below provide detail on the various types of hazardous materials anticipated to be stored, handled, and used at the Kiggavik Project.

2.2 MATERIALS OF SPECIAL INTEREST

Certain products will be used in large quantities throughout the life of the Kiggavik Project. These include diesel fuel, hydrogen peroxide, sulphuric acid, and ammonium nitrate.

2.3 KIGGAVIK OPERATION FACILITIES

The Kiggavik Project is located in the Kivalliq Region of Nunavut, approximately 80 km west of Baker Lake. The Project includes two sites: Kiggavik and Sissons (collectively called the Kiggavik Project). The Kiggavik site is located at approximately 64°26'36.14"N and 97°38'16.27"W. The Sissons site is located approximately 17 km southwest of Kiggavik at 64°20'17.61"N and 97°53'14.03"W.

There are four key areas where handling and/or storage of hazardous materials will take place. These include:

- Transport of hazardous materials to Baker Lake port and temporary storage at the marshalling yard;
- Truck transport of materials from Baker Lake port to the Kiggavik site over the all season road or ice road;
- Storage of hazardous materials onsite either in storage tanks within the mill or at designated storage areas; and,
- Storage of materials in designated depots (i.e. explosives magazine, fuel tank farm).

Additionally, the uranium concentrate (yellowcake) resulting from the Kiggavik Project will likely be flown out from the Kiggavik site to licensed facilities in southern Canada.

2.3.1 Baker Lake Port and Marshalling Yard

The Baker Lake dock location and layout has been selected based on natural topographic features and lake bathymetry. Infrastructure associated with the Baker Lake dock facility are summarized in Table 2.3-1 below.

Table 2.3-1 Baker Lake Dock Facility and Access Infrastructure

Facility	Containment		Potential Hazardous Materials
	Yes	No	
Temporary Dock		✓	• All hazardous materials will arrive by cargo ship at the marshalling area
Tank Farm	✓		• 6 -10 ML fuel tanks
Reagents Container Storage	✓		• All reagents used in the milling process • Sized for approximately 4200 containers stacked 4 high
Other Container Storage		✓	• Hazardous materials in varying amounts within appropriate shiping packaging stored inside sea containers • Sized for approximately 4200 containers stacked 4 high
Ammonium Nitrate Storage		✓	• Ammonium nitrate, 300 tonne capacity
Offices		✓	

2.3.2 Delivery from Baker Lake to the Kiggavik Project

There are currently no road connections to Nunavut communities. All goods are shipped by annual sealift (July/August to September/October) or as air cargo. For the Kiggavik Project, reagents, fuel and supplies will be containerized and shipped to Baker Lake via barge and then transported to site by truck over a winter road. An all-season road between Baker Lake and the Kiggavik Project has also been retained as a project option to account for uncertainty surrounding the potential effects of climate change over the life of the mine and in case the winter road cannot adequately support the Project through to decommissioning and closure.

Yellowcake will be shipped out to southern Canada by airlift from the proposed Kiggavik airstrip.

Proposed truck transportation routes from the Baker Lake marshalling yard to the Kiggavik mine site are summarized in Table 2.3-2.

Table 2.3-2 Summary of Proposed Transportation Routes

Facility	Containment		Transportation Route Description
	Yes	No	
Baker Lake – Kiggavik Winter Access Road		✓	• 3 month seasonal road • Includes emergency shelters • 105 km long
Baker Lake - Kiggavik All-Season Access Road		✓	• All-season road with cable ferry – ice bridge crossing Thelon River • 8 month service • Includes emergency shelters • 110 km long
Road to Baker Lake		✓	• connects into AEM Meadowbank dock road • 1.5 km long

2.3.3 Mill Facilities

The Kiggavik site location and layout has been selected to ensure containment of the mill terrace and to take advantage of predominant wind directions. The Kiggavik Project will include the construction, operation and decommissioning of a mill facility to extract uranium concentrate from ore. Most modern uranium mills are based on hydrometallurgical processing, and are comprised of a series of circuits that separate the uranium from the other materials in the rock and then produce the packaged uranium product commonly referred to as yellowcake. Yellowcake is an intermediate product that requires further processing before it is suitable for use as nuclear fuel. Yellowcake is the only product that will be produced at Kiggavik at a targeted production rate of 3,800 tonnes per year.

The mill complex consists of a central mill building, which houses the milling process equipment and services, and several ancillary buildings which support the mill. The chemical laboratory will be used to analyze mill samples collected for metallurgical accounting and control. Analysis of environmental samples and urinalysis may also be conducted. The Kiggavik chemical laboratory will be designated as a Basic Level Radioisotope Laboratory. It will comply with CNSC Regulatory Document R-52, *Design Guide for Basic and Intermediate Level Radioisotope Laboratories.* The metallurgical laboratory will be used to prepare slurry samples for analysis in the chemical laboratory and for metallurgical test programs and optimization.

The mill and support facilities and the hazardous materials utilized or stored are summarized in Table 2.3.3.

Table 2.3-3 Summary of Mill and Mill Support Facilities

Facility	Containment		Hazardous Materials Description
	Yes	No	
Milling			
Mill	✓		• 3,800 tonnes U produced per year • Various reagents will reside in appropriate storage tanks within contained sections of the mill
Acid Plant	✓		• 310 t/day 100% H_2SO_4
Oxygen Plant	✓		• 30 t/day
Peroxide Storage	✓		• 50% solution
Tailings Management	✓		• 3 in-pit TMFs : East Zone, Centre Zone, Main Zone
Laboratories			
Chemical Laboratory	✓		• Various chemicals in limited quantities including corrosives, gases, flammable substances, solvents and poisons • Radioactive sources
Metallurgical Laboratory	✓		• Various chemicals in limited quantities including corrosives, gases, flammable substances, solvents and poisons • Radioactive sources
Water Management			
Water Treatment Plant	✓		• 5,560 m3/day capacity • UF pre-treatment, RO, chemical treatment
Monitoring Ponds	✓		• 4 -12 h holding ponds
Fresh Water Pipe		✓	• To Siamese Lake • 8.7 km long
Treated Effluent Discharge Pipe	✓		• Discharge to Judge Sissons Lake • 14 km long
Purpose Built Pit	✓		• Storage of site drainage • Sized for 350,000 m3 water
Water Diversion Structures		✓	• Fresh water diversion
Power			
Power Plant	✓		• 20.95 MW installed
Tank Farm	✓		• 5 -10 ML fuel tanks
Warehousing			
Container Yard	✓		• Sized for approximately 4,200 containers stacked 4 high
Clean Storage		✓	

2.3.4 Mining Facilities

There are five individual mines proposed for the Project: East Zone, Center Zone and Main Zone at the Kiggavik site; End Grid and Andrew Lake at the Sissons site. The three Kiggavik deposits and the Andrew Lake deposit would be mined by truck-shovel open pit, while End Grid would be an underground mine. Tailings will be managed at in-pit tailings management facilities constructed using the mined-out East Zone, Centre Zone and Main Zone open pits at the Kiggavik site.

The Kiggavik site location and layout has been selected to ensure containment of the mill terrace and to take advantage of predominant wind directions. Infrastructure associated with the Kiggavik Site is summarized in Table 2.3-1. The mine support facilities at the Kiggavik site and the hazardous materials utilized or stored are summarized in Table 2.3-4.

Table 2.3-4 Summary of Mine and Mine Support Facilities – Kiggavik Site

Facility	Containment		Potential Hazardous Materials
	Yes	No	
Mining			
Mine Shop	✓		• Lubricants, oils, grease, fuel, antifreeze
Explosive Storage		✓	• 300,000 kg combined capacity
Tank Farm	✓		• 10 ML Fuel Tanks, 50 ML combined capacity

The mine support facilities at the Sissons site and the hazardous materials utilized or stored are summarized in Table 2.3-5.

Table 2.3-5 Summary of Mine and Mine Support Facilities – Sissons Site

Facility	Containment		Potential Hazardous Materials
	Yes	No	
Mining			
Mine Shop and Offices/dry	✓		• Lubricants, oils, grease, fuel, antifreeze • Services underground and surface fleets - light duty function
Explosive Magazine		✓	• Long term storage at Kiggavik
Cemented Rock Fill Plant		✓	• 60 tonnes CRF per hour
Water Management			
Water Treatment Plant	✓		• Chemical treatment, chlorine
Monitoring Ponds	✓		• Untreated effluent
Power			
Power Plant	✓		• 7.65 MW • Diesel fueled, lubricants
Tank Farm	✓		• 2 – 10 ML fuel tanks

3 FUELS AND PETROLEUM PRODUCTS

3.1 PETROLEUM PRODUCT DESCRIPTION

Products such as diesel fuel, anti-freeze, engine oil, and lubricants are vital components for power generation, heating and equipment operation. All equipment on site will be operated using common arctic grade diesel fuelled generators. A power generation unit will be required at both the Kiggavik and Sissons sites. The majority of large site equipment will operate on diesel fuel. As well, gasoline will also be required onsite.

The Kiggavik project total peak annual fuel consumption has been estimated to be 65 million liters with an average of 49 million liters over the production period. This total includes all fuel required for:

- Heat and power based on the internal combustion engine designs and
- Mobile equipment and miscellaneous loads.

The design basis for all petroleum storage on site is the CCME Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products (COP), 2003.

The operational and maintenance requirements for all petroleum storage and handling on site are based on the CCME Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products, 2003 and in compliance with the *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations*, under the *Canadian Environmental Protection Act, 1999* (CEPA 1999).

3.1.1 Pre-development Inventory

During the exploration phase of the Kiggavik Project, the majority of hazardous materials stored and handled at the mine site are fuels used for drill rigs, helicopters, heating, and general equipment operation. Table 3.1-1 lists products used, along with the maximum amount stored, at the Kiggavik exploration camp and the how they are stored at the Project site.

Table 3.1-1 Materials Stored at the Kiggavik Exploration Site

Chemical/Material	Amount	Storage Type
Diesel Fuel	250,000 L	Secondary Containment
Jet B Fuel	223,040 L	Secondary Containment
Gasoline	1,025 L	Secondary Containment
Generator Oil	20 x 20L (400 L)	Secondary Containment
Hydraulic Oil	20 x 20L (400 L)	Secondary Containment
Engine Oil	20 x 20L (400 L)	Secondary Containment
Propane	75 x 100 lb (7,500 lb)	Secondary Containment
Grease	5 cases x 12 tubes (60 tubes)	Secondary Containment
Salt	50,000 lbs	Secondary Containment
Cement	15,000 lbs	Secondary Containment

A specific inventory of all petroleum and chemical products used during the field operations is recorded upon receiving the products at site. This list is kept at site and maintained on a regular basis.

3.1.2 Operational Inventory

The Baker Lake facility will receive fuel from barges during the two summer months and be able to hold enough fuel for the Project. Fuel will be transported to the Kiggavik site on an ice road during the winter months. It is estimated that during the peak consumption year fuel storage of 70 million litres (ML) may be required at Baker Lake; 50 ML of fuel storage at Kiggavik site and 20 ML of fuel storage at Sissons site. There will need to be a maximum of seven 10 ML tanks at Baker Lake, five 10 ML tanks at Kiggavik site and two 10 ML tanks at Sissons site. The current design conservatively considers six tanks at Kiggavik and two tanks at Sissons.

Secondary Containment Areas

Secondary containment areas required to contain fuel volume are designed according to the National Fire Code: their volume is the sum of the size of the largest tank (10 ML) and of ten percent of the volume of the remaining tanks. For a tank farm of 6 tanks of 10 ML capacity, the containment volume is therefore 15 ML. A high density polyethylene liner will be installed within each tank farm to prevent release of any spilled substances. As well, fuel transfer areas will be designed so that any spilled fuel is directed to a containment area.

3.2 PRODUCT DESCRIPTION

Material categories, handling and storage requirements, and manufacturer recommended personal protective equipment are summarized in Tables 3.2-1 to 3.2-4.

Table 3.2-1 Fuel Products – Hazard Class and Potential Impacts

Material	Hazard Class	Potential Impact
Diesel	3	Water & Soil Contamination
Gasoline	3	Water & Soil Contamination
Aviation Fuel	3	Water & Soil Contamination
Motor Oil	Not Regulated	Soil Contamination
Hydraulic Fluid	Not Regulated	Soil Contamination
Varsol	3	Soil Contamination
Ethylene Glycol	Not Regulated	Soil Contamination
Automotive Grease	Not Regulated	Negligible Risk

Table 3.2-2 Fuel Products – Storage Locations

Material	Storage Location
Diesel	Kiggavik tank farm (50 ML in lined and bermed area) Sissons tank farm (20 ML in lined and bermed area) Dockyard tank farm (70 ML in lined and bermed area)
Gasoline	Kiggavik tank farm Sissons tank farm Dockyard tank farm Mechanical shop
Aviation Fuel	Air Strip
Motor Oil	Mechanical shop Powerhouse
Hydraulic Fluid	Mechanical shop Powerhouse
Varsol	Mechanical shop
Ethylene Glycol	Mechanical shop
Automotive Grease	Mechanical shop

Table 3.2-3 Fuel Products – Safe Handling Procedures

Material	Safe Handling Procedure
Diesel	Do not get in eyes, on skin, or on clothing. Avoid breathing vapors, mist, fume, or dust. Do not swallow. May be aspirated into lungs. Wear protective equipment and/or garments if exposure conditions warrant. Wash thoroughly after handling. Launder contaminated clothing before reuse. Use with adequate ventilation. Keep away from heat, sparks, and flames. Store in a well-ventilated area. Store in a closed container. Bond and ground during transfer.
Gasoline	See diesel procedure.
Aviation Fuel	See diesel procedure.
Motor Oil	Wear protective clothing and impervious gloves when working with used motor oils. Store in a closed container.
Hydraulic Fluid	Avoid skin contact. Prolonged exposure may result in minor irritation. If hydraulic oil comes in contact with your eye, flush it thoroughly with water and seek medical attention. Store closed in original container.
Varsol	Avoid eye contact. Use with adequate ventilation. Wash thoroughly after handling. Empty container retains residue. Follow label instructions. Avoid repeated skin contact. Store in cool, ventilated area, away from ignition sources and incompatibles. Keep container tightly closed.
Ethylene Glycol	Ensure adequate ventilation. Wear protective gloves and chemical safety goggles. Keep in tightly closed container, stored in a cool, dry, ventilated area. Separate from acids and oxidizing materials. Empty containers of this product retain product residues and may be hazardous.
Automotive Grease	Minimize breathing vapour, mist, or fumes. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry-clean before re-use. Remove contaminated shoes and thoroughly clean before re-use; discard if oil-soaked. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

Table 3.2-4 Fuel Products – Personal Protective Equipment

Material	Personal Protective Equipment		
	Eyes	Skin	Respiration
Diesel	Safety goggles	Nitrile gloves; protective clothing	None usually required
Gasoline	Safety goggles	Nitrile gloves; protective clothing	None usually required
Aviation Fuel	Safety goggles	Nitrile gloves; protective clothing	None usually required
Motor Oil	Safety goggles	Nitrile gloves; protective clothing	None usually required
Hydraulic Fluid	Safety goggles	None usually required	None usually required
Varsol	Safety goggles	Nitrile or rubber gloves	None usually required
Ethylene Glycol	Safety goggles	Nitrile gloves; protective clothing	None usually required
Automotive Grease	Safety goggles	Nitrile gloves; protective clothing	None usually required

3.3 FUEL TRANSPORT TO KIGGAVIK PROJECT

3.3.1 Fuel Transport to Baker Lake

Fuel will be loaded at terminals in Montreal, Rotterdam or New York then transported to Ellis Island anchorage at the east end of Chesterfield Inlet using oceangoing Ice Class double hull tankers. The ocean going tankers will anchor at Ellis Island and lighter their cargoes into double hull barges. Procedures for fuel transfer conforming to Transport Canada Guidelines TP10783E. The double hull barges will also deliver fuel direct to Baker Lake from southern ports. Double Hull tankers may also deliver fuel to the tank farm in Churchill.

A containment boom will be placed between the tanker and the bow and stern of the barge as a precautionary measure to contain any fuel should a spill occur. A work boat and a barge containing oil spill equipment barge will be stationed at Ellis Island during all fuel transfers. A containment boom which will encircle the entire length of the tanker and barge will be available onsite, ready to be deployed if necessary.

The oil handling facility (OHF) will be constructed and operated in accordance with Transport Canada Arctic waters Oil Transfer Guidelines TP 10783E and Oil Handling facility Guidelines TP 12402E. The OHF supervisors will be trained in accordance with Transport Canada Supervisor of Oil Transfer Operation course TP 12402 or equivalent.

Steel piping will lead down to the loading dock from the diesel fuel tank farm at Baker Lake. The discharge hose will be a marine grade bunker hose rated at 17 bar. The discharge hose(s) will be connected to the fuel receiving manifold on the dock using a dry break coupling(s). A powered hose reel and hose crane will be fitted on the barge. All connection points will be protected with save-alls. The dock area will be well lit as required for work being conducted under low light conditions. A ready use pollution kit will be stored on the dock. A containment boom will be deployed between the dock and the barge hull during fuel transfers as a precaution to contain any fuel that may accidentally spill.

A team of trained personnel will be in charge of the barge discharge equipment. Fire-fighting equipment will be fitted on the dock as well as on each barge as required by Transport Canada.

3.3.2 Fuel Delivery from Baker Lake to Kiggavik Site

Fuel will be transported to the Kiggavik site on an ice road during the winter months. There will also be an all weather road however, due to weight restrictions; the ice road is the preferred route for transporting fuels.

A truck loading and fuelling station will be built at the Baker Lake dock site. All fuel being loaded onto trucks will be done at a reduced pressure, by increasing the piping from 100 mm to 150 mm diameter pipes. All personnel conducting fuel transferring will be trained in fuel handling and spill response procedures. The bulk fuel transfer procedure is detailed in section 3.4 below.

Spill kits will be available at all tank farm locations in the event of a spill. Due to the volume of fuel being stored in the fuel tank storage system and the remote nature of the sites, at least one Bulk Storage Site Spill Kit will be present for each 100,000 L of fuel being stored.

3.3.3 Fuel Truck Transfer Procedures

Kiggavik's Environmental Code of Practice discusses how to conduct activities so as to minimize the risk of a spill. In addition, the following measures will further minimize the potential for spills during fuel handling, transfer and storage:

1) Fuel transfer hoses with cam lock mechanisms to be used when transferring bulk fuel deliveries into the bulk storage tanks.

2) Carefully monitor fuel content in the receiving vessel during transfer. Always have additional absorbent pads on hand while transferring fuel.

3) Clean up drips and minor spills immediately.

4) Regularly inspect drums, tanks and hoses for leaks or potential to leak and for proper storage.

5) Create fuel caches in natural depressions that are located at least 30m from the normal high-water mark of any water body.

6) Inventory and reconciliation procedures developed to ensure tanks are not overtopped and to ensure that tank leakage is not occurring.

7) Overfill protection on tanks include visual and audible alarms; catch basins around fill pipe; additional secondary containment at transfer locations; corrosion protection

8) Train personnel, especially those who will be operators, in proper fuel handling and spill response procedures. This training will include a “mock” spill, review of spill kit contents and their use and reporting.

Any accidents or spills must be reported immediately to the mine superintendant and safety department.

3.4 CONTAMINATED SOILS

Any soils contaminated as a result of a fuel spill will be excavated and transported to the designated landfarm area for remediation. Refer to the Spill Contingency and Landfarm Management Plan for further details.

3.5 PETROLEUM PRODUCT WASTE

Used oil is classified as a hazardous waste. Depending on permit approval, used oils will be incinerated in on site waste incinerators. All used petroleum products will be collected in clearly marked waste oil tanks. In the event that waste oils cannot be disposed of onsite, they will be collected and shipped in drums or tanks to an approved recycling facility.

3.6 MINE CLOSURE AND RECLAMATION

Upon closure of the mine and facilities, some diesel fuel storage will remain for the use of closure and reclamation activities. Small amounts of other petroleum products will also be available. Fuel transfer and spill prevention procedures will be continue to be utilized during this process. Further details are provided in Technical Appendix 2R (Preliminary Decommissioning Plan).

4 MILL REAGENTS

4.1 MILL PROCESS REAGENTS

A number of reagents will be required to operate the mill process; these reagents, their storage, handling, and the proposed methods of preparation are described. The mill will also provide some reagents to the Water Treatment Plants at Kiggavik and Sissons. The use and expected annual consumption of process reagents are shown in Table 4.1-1.

Table 4.1-1 Mill Process Reagents and Consumables

Reagent	Use	Estimated Consumption (tonnes/year)	Material Form	Storage Container
Lime (CaO)	pH modifier	47,200	Solid	Tote Bags
Sulphur	Sulphuric acid generation	26,700	Solid	Tote Bags
Hydrogen peroxide	Uranium precipitation	1,502	Liquid	ISO Containers
Sodium hydroxide	pH modifier	1,348	Solid	Drums
Ferric sulphate	Transition metal precipitation	130	Solid	Tote Bags
Barium chloride	Radium precipitation	194	Solid	Tote Bags
Sodium sulphate	Resin regeneration	553	Solid	Tote Bags
Resin	Uranium extraction	137	Solid	Tote Bags
Flocculants	Solid-liquid separation	95	Solid or Liquid	Tote Bags or Drums
Kerosene (SX option)	Uranium extraction	NA	Liquid	Drums
Isodecanol (SX option)	Uranium extraction	NA	Liquid	Drums
Tertiary amine (SX option)	Uranium extraction	NA	Liquid	Drums

Table 4.1-2 Mill Reagents – Hazard Class and Potential Impacts

Material	Hazard Class	Potential Impact
Lime (CaO)	Not regulated	Negligible with proper handling
Sulphur	9	Negligible with proper handling
Hydrogen peroxide	5.1	Negligible with proper handling
Sodium hydroxide	8	Negligible with proper handling
Ferric sulphate	8	Negligible with proper handling
Barium chloride	6	Negligible with proper handling
Sodium sulphate	Not regulated	Negligible with proper handling
Resin	Not regulated	Negligible with proper handling
Flocculants	Not regulated	Negligible with proper handling
Kerosene (SX option)	3	Water contamination
Isodecanol (SX option)	Not regulated	Negligible with proper handling
Tertiary amine (SX option)	Not regulated	Negligible with proper handling

Table 4.1-3 Mill Reagents – Safe Handling Procedures

Material	Safe Handling Procedure
Lime (CaO)	Store in closed container in a covered area with controlled drainage. Use in well-ventilated area. Empty containers retain product residues and may be hazardous.
Sulphur	Sulphur dust suspended in air ignites easily and can cause an explosion in confined areas. Store away from sources of ignition. Toxic gases form upon combustion. Store in cool, dry, well-ventilated area. Keep containers tightly closed. Separate from chlorates, nitrates, and other oxidizing agents.
Hydrogen peroxide	Keep container dry, well ventilated area away from heat and sources of ignition. Keep away from combustible material. Do not breathe fumes. Never add water and keep away from incompatible materials. Store in tightly closed container.
Sodium hydroxide	Can cause severe injury to eyes, skin, and respiratory tract. Use personal protective equipment at all times. Do not contact product directly. Wash thoroughly after handling. Store in dry, well-ventilated area. Keep in original container, tightly closed. Empty containers retain product residues and may be hazardous.
Ferric sulphate	Do not breathe dust. Avoid contact with skin and eyes. Store in cool, dry, well-ventilated area.
Barium chloride	Do not ingest or breathe dust. Avoid contact with skin and eyes. Keep container tightly closed. Store in a cool well-ventilated area. Wash thoroughly after handling. Use with adequate ventilation.
Sodium sulphate	Keep in tightly closed container. Store in a cool, dry, ventilated area. Isolate from incompatible substances. Empty containers retain product residues and may be hazardous.
Resin	Store in a cool, dry, well-ventilated area. Keep in tightly closed containers. Avoid exposure to dust.
Flocculants	Store in a dry area on concrete floor away from any sources of ignition. Produces slippery product when wet.
Kerosene (SX option)	Flammable. Store in a cool, dry well-ventilated area away from sources of ignition. Separate from incompatible materials. Bond and ground containers during transfer to avoid static sparks. Use non-sparking tools and equipment.
Isodecanol (SX option)	Protect against moisture. Shut containers immediately after transferring product as product takes up humidity. Take precautions against static discharge. Store in tightly closed container in a cool, dry area.
Tertiary amine (SX option)	Store in a cool, dry, well-ventilated area away from sources of ignition. Corrosive; may cause burns to exposed skin. Separate from incompatible acids and oxidizing agents.

Table 4.1-4 Mill Reagents – Personal Protective Equipment

Material	Personal Protective Equipment		
	Eyes	Skin	Respiration
Lime (CaO)	Safety goggles	Nitrile or rubber gloves; protective clothing	NIOSH/MSHA approved respirator
Sulphur	Safety goggles	Wash clothing after contact	NIOSH/MSHA approved respirator
Hydrogen peroxide	Face shield	Chemical gloves; protective chemical suit; rubber boots	NIOSH/MSHA approved respirator
Sodium hydroxide	Safety goggles	Neoprene or PVC gloves; protective clothing	NIOSH/MSHA approved respirator
Ferric sulphate	Safety goggles	Nitrile gloves; protective clothing	NIOSH/MSHA approved respirator
Barium chloride	Safety goggles	Nitrile gloves; protective clothing	NIOSH/MSHA approved respirator
Sodium sulphate	Safety goggles	Nitrile gloves; protective clothing	NIOSH/MSHA approved respirator
Resin	Safety goggles	Nitrile gloves; protective clothing	NIOSH/MSHA approved respirator
Flocculants	Safety goggles	Neoprene or rubber gloves; protective clothing	NIOSH/MSHA approved respirator
Kerosene (SX option)	Safety goggles	Nitrile gloves; protective clothing; impervious apron	Ensure adequate ventilation
Isodecanol (SX option)	Safety goggles	Chemical gloves; protective clothing	Ensure adequate ventilation
Tertiary amine (SX option)	Safety goggles or face shield	Chemical gloves; protective clothing; impervious apron	Ensure adequate ventilation

All reagents will be stored in a secure area within or immediately adjacent to the mill. Sodium hydroxide, ferric sulphate, barium chloride, sodium sulphate, and flocculants will be received in approved packaging such as drums or bags and stored in a covered building or in sea containers. These reagents will then be diluted with water and used in the milling process. Preparations of the remaining reagents, which require more complex storage and/or further processing, are described in the following sub-sections.

4.1.1 Sulphuric Acid

Sulphuric acid (93% H_2SO_4) will be produced in an on-site acid plant located near the mill. Acid will be supplied via pipelines to Leaching, Elution, and the Kiggavik and Sissons water

treatement plants (WTP). A tote filling station will be required to provide acid to the Sissons WTP.

The production of sulphuric acid involves the process of burning sulphur in the presence of dried ambient air, reaction of the products in a catalyst bed, and recovering the reacted components in an air absorption solution to produce sulphuric acid. Waste heat in the form of superheated steam is also produced as part of the reaction. A portion of this heat may be recovered and used in the mill process.

Sulphur will be received as solid prills or agglomerated high purity solid sulphur and stored in cold storage.

The plant will be designed to emit less than 75 g SO_2 per tonne of acid produced. Emissions will be controlled by two systems:

- Excess SO2 will be absorbed in the last pass by a cesium-promoted catalyst with a lower working temperature in one or several layers

- A scrubber installed on the exhaust stack will remove particulates, acid mist and excess SO_2

4.1.2 Lime

Lime will be used for pH adjustment in Tailings Neutralization, Gypsum Precipitation, the Kiggavik WTP and the Sissons WTP. The lime preparation circuit will be located in the mill.

Quicklime (CaO) will be received as a solid and thawed indoors if required. The quicklime will be blended with steam-heated water in a lime slaking ball mill in closed circuit with a set of cyclones.

The slaked lime will then be stored in lime slurry storage tanks for use in the process. A filling station will be installed to provide lime to the Sissons WTP.

4.1.3 Hydrogen Peroxide

Hydrogen peroxide will be used in the yellowcake precipitation circuit to precipitate uranium peroxide. The reagent will be delivered in ISO containers.

Hydrogen peroxide is a strong oxidant and therefore is a risk for fire and explosion if concentrated solution is mixed organics such as oil or grease. To reduce the potential for accidents, peroxide will be stored in a dedicated building and strictly managed.

Within the hydrogen peroxide storage building, the solution will be stored in covered and vented container constructed from compatible materials. The storage containers will be located within a containment berm that can accommodate 110% of the largest container. The containment area will have a deluge system for diluting any spillage and leak detection tied into the distributed control system (DCS) and local building alarms. Safety equipment in the building will include detectors for signs of oxidation. The area will be kept clean to minimize possible sources of combustion. Entry to the building will be limited to those trained in the safe handling of concentrated peroxide.

4.1.4 Residual Organic Reagents

Along with inorganic reagents used in the milling process, a number of organic reagents are employed. Flocculants are used in process clarifiers and thickeners to agglomerate and settle fine particles out of solution. Kerosene, amine, and isodecanol would be used in the Solvent Extraction (SX) option. Kerosene serves as an organic diluent. A tertiary amine that exhibits an affinity for uranium would be used to extract uranium from an aqueous into an organic matrix. Isodecanol would be added to the organic diluent to improve the phase separation between the organic and aqueous phases.

Residual amounts of organic reagents are processed in the Tailings Preparation circuit for dispensation to the Tailings Management Facility (TMF).

4.2 EFFLUENT STREAMS

The water treatment plants located at the Kiggavik and Sissons sites will receive all waste water from various sources. Contaminated effluents, either by chemical constituents, metals, or radonuclides, will be treated to regulatory standards prior to release. All water released to the environment will meet the discharge quality criteria, which have been selected to ensure no significant environmental effects associated with the release of water. The water treatment process will generate sludges which are sent to tailings neutralization and are ultimately deposited along with tailings in the TMF.

4.3 PROCESS CONTROL

The process control philosophy includes advanced process control capabilities to reduce the likelihood of incidents resulting from operator error, but allows rapid intervention from operators if needed. There will be a central mill control room with an operator who will oversee the operation of each unit process. Each unit process will in turn have a process control station where the area operator can independently monitor and operate their circuit. The area operators will have the responsibility of ensuring the circuit and associated equipment are functioning safely and efficiently. When required the central control room operator may directly control the unit process(s) with field support from the area operator. The system has incorporated operational redundancy in order to ensure smooth operation during early years when it is

expected that a large portion of the workforce will be inexperienced. This system resembles the current process control at AREVA's McClean Lake Operation in Northern Saskatchewan.

Automatic samplers will be installed at appropriate locations to monitor the performance of each unit process and overall metallurgical efficiency of the facility. The samplers are intended to supplement routine process composite and grab samples collected by operators.

5 EXPLOSIVES

Further detailed information on explosives can be found in Technical Appendix 2B (Drilling and Blasting Design and Related Regulatory Considerations) and Technical Appendix 2C (Explosives Management Plan).

5.1 PRODUCT DESCRIPTION

Explosives will be required at the Kiggavik Project for blasting of rock and ore at the various mine locations. Transportation, storage, use, and handling of blasting materials are strictly regulated by the Federal *Explosives Act* and the *Transportation of Dangerous Goods Act*. Territorial regulations include the *Explosives Use Act* and Regulations and the *Mine Health and Safety Act* and Regulations.

Material hazard class, potential impacts, site handling and storage requirements, and recommended personal protective equipment are summarized in Tables 5.1-1 to 5.1-3.

Table 5.1-1 Explosives – Hazard Class and Potential Impacts

Material	Hazard Class	Potential Impact
Ammonium Nitrate	5.1	Water & Soil Contamination
High Explosive Detonators	1	Negligible
Blasting Caps	1	Negligible

Table 5.1-2 Explosives – Safe Handling Procedures

Material	Safe Handling Procedures
Ammonium Nitrate	Keep away from heat and sources of ignition. Do not ingest or breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin and eyes. Store in a cool, well-ventilated area separate from acids, alkalies, reducing agents and combustibles.
High Explosive Detonators	Store under dry conditions in a cool, well ventilated magazine in closed containers. Keep away from heat, sparks, and flames.
Blasting Caps	Store under dry conditions in a cool, well ventilated magazine.

Table 5.1-3 Explosives – Personal Protective Equipment

Material	Personal Protective Equipment		
	Eyes	Skin	Respiration
Ammonium Nitrate	Safety goggles	Nitrile or rubber gloves; protective clothing	NIOSH/MSHA approved respirator
High Explosive Detonators	Safety goggles	Nitrile or rubber gloves; protective clothing made from cotton	None usually required
Blasting Caps	Safety goggles	Nitrile or rubber gloves; protective clothing made from cotton	None usually required

5.2 EXPLOSIVES STORAGE

The Kiggavik Project is estimated to require a maximum of 9,000 tonnes per year of blasting materials during peak mining operations. The majority of this represents ammonium nitrate, which is not an explosive until mixed with fuel oil. The bulk of explosives used for mining will be ammonium nitrate fuel oil (ANFO), which is a mixture of 70% ammonium nitrate (AN) and 30% diesel fuel. ANFO will be mixed in an on-site plant by qualified personnel on an as-needed basis.

All explosive materials will be stored in a designated explosives storage area away from other site facilities. AN will be stored in a warehouse in one tonne tote bags. High explosive detonators and blasting caps will be stored in a small enclosed magazine designed for this purpose.

The explosives mixing plant will also be located in the designated explosives area as stipulated by the pertinent *Acts* and Regulations mentioned above. Although ammonium nitrate may be stored at Baker Lake prior to transport to the Project, this is not explosive until mixed with diesel fuel, therefore no active explosives will be stored at the dock site.

5.3 EXPLOSIVES USE

Since the proposed open pits and underground deposits are some distance away from the explosives magazine, it will be necessary to transport prepared ANFO and blasting materials to the mine locations. Transport of ANFO and detonators will only be done by trained personnel on controlled roads under rigorous supervision.

Blasting will be carried out by a certified blasting contractor following blasting regulations and safety protocols and under the supervision of the mine supervisors.

The drilling of blast holes will be completed by mine personnel under the supervision of the mine supervisor and blasting contractor. Blastholes will either be 187 mm or 150 mm depending on final design considerations. Blasting operations will generally occur on a daily basis. Appropriate precautions will be taken to secure the area prior to blasting to ensure the safety of personnel. As well, precautions will be taken to minimize damage from flyrock and a blast clearance zone of 500 m from the pit crest has been set for the Kiggavik Project.

6 RADIOACTIVE MATERIALS

6.1 RADIOACTIVE SOURCES

Kiggavik will use a number of nuclear substances and radiation devices that are designated as Class 7 dangerous goods. The nuclear substances or radiation devices will be used for instrument calibration, material analysis, flow and density measurement, level indication and for exploration activities. Under an operating license issued by the CNSC pursuant to the Nuclear Substances and Radiation Devices Regulations AREVA Resources Canada Inc. would be authorized to import, possess, use, store, transfer and dispose of nuclear substances in quantities which would not exceed the possession limits identified in a controlled document, which would list the Authorized Nuclear Substances and Radiation Devices.

The amount of radioactivity for the nuclear substance, or nuclear substance within a radiation device, shall not exceed:

- the possession limit for unsealed sources, or
- the maximum activity per sealed source or device approved by the CNSC.

6.2 YELLOWCAKE SHIPMENT

Air Transport in Canada is strictly regulated by Transport Canada - Canadian Aviation Regulations. The Packaging and transport of radioactive materials is subject to the Transport Canada Dangerous Goods Regulations and the Canadian Nuclear Safety Commission (CNSC) Packaging and Transport of Nuclear Substances Regulations (PTNSR). All transporters of radioactive materials in Canada require their own Radiation Protection Program.

The use of Hercules Aircraft is envisioned to transport yellowcake by air. Uranium ore concentrate would be flown from the Kiggavik airstrip likely to Points North, Saskatchewan, a distance of 800 kilometres.

Approximately 3,800 tonnes of yellowcake will be produced each year at Kiggavik. The yellowcake will be packaged in steel 55-gallon (206-litre) steel drums and sealed meeting IP-1 industrial package requirements as specified in the *IAEA Regulations for the Safe Transport of Radioactive Material.* Each drum will hold approximately 434 kg of concentrate (eg., 454 kg gross/drum minus 19.6 kg steel) or 313 kg U (based on a concentrate at 72% U).

The site will produce between 11,000 and 12,000 drums of yellowcake annually, which will be securely stowed within 20-foot ISO containers. The containers will remain sealed during transportation from the mine site to the final point of delivery.

It is expected that between 310 and 350 containers will be shipped to the south annually. Air shipment of all product containers from Kiggavik would require 5 or 6 trips per week (one container per flight). On arrival in southern Canada, yellowcake will be transferred from aircraft to truck - trailer or rail and then transported to a North American refinery or to the Port of Montreal for shipment to a European destination.

Companies who ship yellowcake require an approved Emergency Response Assistance Plan (ERAP). These plans are reviewed and approved annually by Transport Canada. These plans specify emergency response responsibilities, procedures, personnel training, response team roles, and available resources. ERAP are exercised annually and can be limited or multi-agency in scope and include live exercises.

7 HAZARDOUS WASTE

7.1 WASTE MANAGEMENT

Waste materials such as recyclable and non-recyclable domestic wastes, sewage, industrial wastes, chemically/radiologically contaminated wastes, and hazardous wastes will be identified, handled and disposed of according to a waste management program. Each waste category will have its own waste management strategy that will be specifically designed for that particular waste product (see Technical Appendix 2S "Waste Management Plan"). The management of hazardous waste including chemically and/or radiologically contaminated wastes is included here.

The waste management facilities will be routinely inspected and scanned for radioactivity to ensure proper disposal and handling of waste.

7.1.1 Chemical or Radiological Waste Management

Conventional waste materials that originate from mining, milling and water treatment areas, may be chemically or radiologically contaminated. These materials will be collected in designated areas and ultimately transferred within the Kiggavik TMFs as part of decommissioning activities.

7.1.2 Hazardous Waste

In addition to the used oil burner at the incinerator it is proposed to use dedicated waste oil burners to handle waste oil originating from oil changes on the mining equipment and light vehicles. Hazardous substances and waste dangerous goods, consisting of waste oil/fuel filters, waste antifreeze, waste oil and waste batteries will be collected in designated containers and transported for recycling or disposal at an off site registered and licensed facility. Empty drums that typically contain product residue such as oil, antifreeze and grease will be returned to suppliers for recycling. A hazardous materials storage building and designated storage pad will be used to store the containers until there is sufficient quantity for shipment.

8 HAZARDOUS MATERIAL INVENTORY MANAGEMENT

There are currently no road connections to Nunavut communities. All goods are shipped by annual sealift (July/August to September/October) or as air cargo. For the Kiggavik Project, reagents, fuel and supplies will be containerized and shipped to Baker Lake via barge and then transported to site by truck over a winter road. An all-season road between Baker Lake and the Kiggavik Project has also been retained as a project option. Yellowcake will be shipped out to southern Canada by airlift from the proposed Kiggavik airstrip.

The mine superintendent and mill manager are responsible for supervising the receipt, inspection, and recording of all material inventories at site. Records of received materials will be crosschecked against order requisitions.

8.1 INVENTORY MANAGEMENT

Hazardous materials arriving at the Project will be received at the warehouse and manifests checked to ensure accuracy in goods received. Warehouse personnel maintain an inventory on all materials received including where they are stored on site. Fuel deliveries will be metered automatically during transfer to the tank farm. Metered volumes will be reconciled against tank levels measured manually.

Warehousing personnel are responsible for manifesting and tracking outgoing shipments of yellowcake by air and adhere to strict protocols and TDG regulations. The Management of Isotopes procedure and a suite of work instructions, together with the radiation protection program are prepared pursuant to Section 3, General Requirements of the Nuclear Substances and Radiation Devices Regulations and the Nunavut's Mines Regulations. The Management of Isotopes Procedure address: authorization; regulatory requirements; authorized radioisotopes; inventory of radioisotopes; supervisory responsibilities; qualifications and training; theft, loss, unauthorized use; emergency procedures; submissions and approvals.

Environment department personnel are responsible for maintaining an inventory of used hazardous waste products such as waste chemicals, used equipment fluids, and waste oil. Waste hazardous materials will be stored in a designated area that provides means of appropriate containment.

8.2 INSPECTION

Routine inspections are conducted to confirm conformance with requirements of the Waste Management Plan and the Environmental Management Plan. Inspections of hazardous material storage areas, fuel tanks and fuelling stations, power generation plant, mill process equipment, and explosives storage areas will be inspected on a regular basis. All inspections will be logged with the date and time of the inspection, facility inspected, and the name of the employee making the inspection.

The environment department will conduct routine daily inspections of hazardous material storage areas, fuel tank farms, bulk chemical storage areas, and effluent pipelines and ponds to ensure any hazards or leaks are identified, repaired, and spill response is initiated as soon as possible. The environment department is responsible for the management of the hazardous materials waste products storage area. Inspection will ensure materials are accurately labelled and stored in appropriate containers according to manufacturer specifications.

Mill operations and maintenance personnel are responsible for inspecting storage tanks, process circuit piping, valves, and sumps daily and are required to report any issues to the mill manager. A significant spill of a hazardous material will trigger Emergency Response Procedures and the Spill Contingency Plan will be initiated.

The explosives contractor will be responsible for the inspection of all explosives facilities and the safe operation of all explosives equipment. Weekly reports to the mine superintendent detailing total explosives consumption, ammonium nitrate remaining onsite, other explosives, and safety concerns or incidents will be required.

8.3 RECORDS

Inspection forms are used to document findings and actions required. These forms provide a record of leaks, spills, alarm tests, and non-compliance deficiencies. Regulations require that for certain hazardous materials, such as explosives, annual quantities present and used at the mine site are tracked. These forms will be compiled electronically and used internally as an operational management tool to promote continuous improvement in environmental performance and stewardship.

9 TRAINING

9.1 ORIENTATION

All personnel at camp, including AREVA employees, contractors, and visitors, will be given formal orientation upon arrival at site. The Spill Contingency Plan is reviewed during orientation by the EHS Group or designate including the location of the Material Safety Data Sheets, the location of spill kits, and additional supplies and tools. Training for spill contingency consists of alerting all personnel to be watchful for any leaks or spills and where these are most likely to occur, instruction in the use of equipment and materials, introduction to the protocol of chain of command, and the legal requirement to report certain spills as well as how to collect, store, and dispose of products safely and correctly.

9.2 ADDITIONAL TRAINING

All employees and contractors handling hazardous materials are to be familiar with this Plan, MSDS sheets, spill response resources at hand, the Spill Contingency Plan, and to be trained for initial spill response methods.

The following training will be administered by the EHS Group as it applies:

- WHMIS
- Emergency and spill response
- AREVA's fuel handling procedures (Spill Contingency Management Plan and Hazardous Materials Management Plan)
- Personal protective equipment (PPE)
- Transportation of dangerous goods (TDG)

Additional training will be provided to mill operations employees specific to their area of work and duties including safe operating practices, safe handling and storage of chemicals, and use of PPE. This training is the responsibility of AREVA. Employee training will be recorded, tracked, and kept up to date.

10 REFERENCES

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