# Kiggavik Project

# Environmental Impact Statement

## Tier 3 Technical Appendix 10C

# Emergency Response Plan

**December 2011**

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# 1 INTRODUCTION

## 1.1 OVERVIEW

AREVA Resources Canada Inc. (AREVA) is committed to establishing and maintaining a comprehensive Emergency Response Plan for the Kiggavik Project which focuses on responding to all emergencies in a timely and adequate manner. AREVA is committed to being prepared for all types of emergencies and providing adequate resources including qualified personnel and equipment to handle such situations.

The AREVA Emergency Response Plan (ERP) will be in effect for the operating phase of the Kiggavik Project. The Plan is intended to apply to the Kiggavik Project located approximately 80km west of Bake Lake, Nunavut.

## 1.2 PURPOSE AND SCOPE

The preliminary Emergency Response Plan (ERP) for the Project is intended to:

- Provide a guidance document for preparing for and responding to all emergencies related to the Project,
- Describe the responsibilities, tasks and reporting requirements involved in an emergency,
- Be used in conjunction with other supporting plans and documents,
- Describe various emergency response situations including necessities of life emergencies, personnel emergencies, natural environment-related emergencies and operational emergencies.

This Plan is written to conform to Section 9.4.1 of the NIRB “Guidelines for the Preparation of an Environmental Impact Statement for AREVA Resources Canada Inc’s Kiggavik Project (NIRB File No. 09MN003)” (NIRB 2011). Risk management is addressed in the Occupational Health and Safety Plan (Technical Appendix 2P). The location of information related to each individual guideline is noted in the Environmental Impact Statement (EIS) Conformity Table (Appendix 1). It is intended that this Emergency Response Plan will be refined and finalized prior to commencement of construction activities after consultation with interested local communities, regulatory agencies, and Inuit organizations.

### 1.2.1 Kiggavik & Sissons Site Emergencies

The Emergency Response Plan and its corresponding procedures and work instructions plans for the following:

- fire emergencies
- medical emergencies
- confined space and extrication emergencies
- hazardous materials incidents
- environmental spill response
- transportation emergencies

The Kiggavik Project Emergency Response Team and equipment may be required to assist in the event of an off-site emergency. This may involve emergencies arising from the transportation of a controlled substance destined for or shipped from the Kiggavik site, or may be requested as part of mutual aid agreements. Each such event and any request for assistance will be considered on its own merit. The Kiggavik Project Site Commander will make the decision concerning the level of response or assistance afforded the situation.

Details regarding emergency response for the transportation of uranium concentrate for the Kiggavik Project will be identified in the corporate Emergency Response Assistance Plan (ERAP). The ERAP describes the measures taken to prevent or mitigate the effects of accidental releases of radioactive materials that could occur off-site. The Emergency Response Assistance Plan for the Kiggavik Project will require approval by Transport Canada.

## 1.3 RELATED DOCUMENTS

EIS documents containing information relevant to this Emergency Response Plan include:

- Technical Appendix 2C – Explosives Management Plan
- Technical Appendix 2J – Marine Transportation
- Technical Appendix 2P - Occupational Health and Safety Plan
- Technical Appendix 2Q – Radiation Protection Plan

- Technical Appendix 2U - Hazardous Materials Plan

- Technical Appendix 10B - Spill Contingency and Landfarm Management Plan

The ERP is also supported by a number of AREVA management plans, including:

- AREVA Resources Canada Inc., Aircraft Charter Operator Specification & Standard, V. 10

- AREVA Resources Canada Inc, Emergency Response Assistance Plan, (ERAP 2-0088) For Transportation Incidents Involving Radioactive Materials (Includes Uranium Ore Concentrate and Uranium Ore Slurry)

## 1.4 APPLICABLE LEGISLATION

This Emergency Response Plan has been developed and implemented to ensure that AREVA respects all applicable laws, regulations, and requirements from federal and territorial authorities. AREVA complies with the permits, approvals, and authorizations required for the operations. The following regulatory and government documents constitute an integral part of the plan:

**General**

- National Fire Code
- Canadian Environmental Protection Act
- Fisheries Act
- Transportation of Dangerous Goods Act and Regulations Territorial Lands Act
    - Territorial Land Use Regulations
- Canada Oil and Gas Operations Act
- Nuclear Safety Control Act
    - Packaging and Transport of Nuclear Substance Regulations
- Nunavut Waters and Nunavut Surface Rights Tribunal Act

Relevant guidelines including:

- Environmental Code of Practice for Aboveground and Underground Storage Tanks Systems Containing Petroleum and Allied Petroleum Products, 2003, CCME
- CNSC RD-353: Testing the Implementation of Emergency Measures
- CNSC Guideline, G-225 Emergency Planning at Class I Nuclear Facilities and Uranium Mines and Mills

**Shipping**

- Canada Shipping Act Response Organizations and Oil Handling Facilities Regulations
- Arctic Waters Pollution Prevention Act
- Canadian Environmental Protection Act
- Mine Site Reclamation Policy for Nunavut

**Territorial Acts and Regulations**

- Environmental Protection Act
    - Spill Contingency Planning and Reporting Regulations
- Mine Health and Safety Act

**Site Specific**

- *Canada National Parks Act*
- *Canada Wildlife Act*
- *Migratory Birds Convention Act*

# 2 ORGANIZATIONAL STRUCTURE AND RESPONSIBILITY

## 2.1 GENERAL MANAGER

The General Manager is responsible for establishing and implementing the Emergency Response Team. He will ensure that there will be a qualified team and adequate resources to respond to all emergencies at the site. He will oversee all emergencies with the guidance of the incident commander. The General Manager designates a *Site Commander.* Typically the most senior person on site is designated as the Site Commander.

## 2.2 SITE COMMANDER

The Site Commander conducts the following, as appropriate to the emergency situation.

1. Establishes and remains at the Command Center located at an appropriate location, depending on the emergency.
2. Appoints a Communications Officer to collect information and maintain an event chronology.
3. Notifies appropriate on-site and off-site personnel that an emergency exists. Contacts are found on the *Emergency Contact List*
4. Obtains regular briefings from the Incident Commander/ supervisor of the area at risk, site Managers and other personnel.
5. Arranges for the Manager of Communications to handle all media inquiries.
6. Coordinates with the Incident Commander (1 IC) to evacuate if required.
7. Coordinates logistical support required by Incident Commander.
8. Coordinates activities and efforts of non-emergency response staff.
9. Obtains head count from Incident Commander.
10. Requests assistance from other off-site agencies.

## 2.3 EMERGENCY RESPONSE TEAM (ERT)

The Emergency Response Team is defined by a list of persons as maintained by the on site safety professionals based on personnel schedules. These designations are updated regularly and posted at prominent locations on the site. The team will comprise site employees who receive special training to assist in an emergency. The General Manager in consultation with the EHS Superintendent will select qualified candidates in sufficient numbers to facilitate the response programs required by the plan.

The Emergency Response Team will receive the special training required for adequate response to onsite emergencies. The team will be trained in appropriate procedures to:

- implement onsite safety and emergency response procedures
- respond to emergencies involving injuries and fatalities
- assist with evacuation procedures
- respond to emergencies involving fires or explosions
- control and mitigate spills or other accidental releases

There will be a separate Underground Mine Rescue team. The Underground Mine Rescue Team will likely consist of a combination of AREVA and contractor personnel. There will be two qualified underground rescue teams prepared to respond during every shift. The surface Emergency Response Team will also provide assistance as required. The training program of the emergency response members shall meet the requirements of the Nunavut Mine Health and Safety Regulations.

The titles and roles include but are not limited to those outlined below.

## 2.4 INCIDENT COMMANDER (1IC)

The **1IC** conducts the following, as appropriate to the emergency situation.

1. Acknowledge main switchboard that the call-out page has been received and the ERT is responding.
2. Identifies themself as the Incident Commander and identifies Second in Command (on radio).
3. Go directly to the scene and complete a hazard assessment of the emergency area.
4. Communicate the type of response situation and immediate hazards to ERT (on radio).
5. Issues instructions to the ERT if any additional protective or response equipment is required.
6. Don personal protective equipment, as soon as reasonably practicable.
7. Coordinate the activities at the scene, including the activities of the ERT and other supporting personnel.
8. Communicate with the Site Commander. Specify additional resources required and update Site Commander of progress.
9. Communicate with medical staff at Health Centre.
10. Conduct initial briefing on arrival of ERT to scene.
11. Notify Site Commander when emergency is over.
12. Arranges the presence of key personnel for briefing and debriefing of teams, and completes appropriate reporting.

13. Keeps all written material that is generated during an emergency, forwards it to the Communications Officer.
14. Completes Emergency Response Review report & files accordingly.

## 2.5 INCIDENT COMMANDER 2 (2IC)

1. Report directly to the fire hall and don personnel protective equipment.
2. Co-ordinate emergency response personnel to respond to emergency for debriefing by incident commander (1IC).
3. Communicate with Incident Commander – 1IC by radio
4. Supervise and coordinate the activities of the ERT in conjunction with *Incident Commander (1IC)*.
5. Assume 1IC role if designated 1IC is not available.

## 2.6 COMMUNICATIONS OFFICER

The Communications Officer manages the collection and recording of all written information, photographs, drawings and video recorded material that is generated during the emergency. This may involve the following, as appropriate to the emergency.

1. Records a chronology of events.
2. Maintains a log of all phone calls and time received or sent.
3. Monitors and records the time of all radio conversations during the emergency.
4. Creating logbooks and check lists.
5. Controls radio use and restricts it to emergency response only.
6. Obtain a list of all employees on site at the time of the emergency along with the names of their emergency contact person and telephone number in case it is needed (from personnel assistant).
7. Following an emergency, compiles the necessary information required to inform senior management and meet regulatory reporting requirements.

## 2.7 SAFETY, HEALTH, ENVIRONMENT, QUALITY AND RADIATION PROTECTION (SHEQ) DEPARTMENT

The Manager of Safety, Health, Environment, Quality and Radiation Protection (SHEQ) will ensure that emergency procedures and associated work instructions are reviewed periodically and revised as necessary. The SHEQ Department will be responsible for ensuring that emergency response procedures are established and maintained to adequately respond to:

- incidents of personal injury,
- fire or explosion,

- uncontrolled release of hazardous materials,
- confined space rescue, and
- environmental spills

The on site safety professionals will be responsible for ensuring that adequate training programs are in place to achieve and maintain competency of Emergency Response Team members in emergency response procedures. They will be responsible for designation of assignments during an emergency, conduct a debriefing session following an emergency and complete any reporting requirements.

Emergency Response Planning for the Kiggavik Project will be managed by the SHEQ Department. More specifically, safety, environment and radiation protection professionals will provide the technical knowledge and expertise in devising and implementing emergency response requirements specific to their areas of responsibility.

# 3 RESPONSE TIMES

Due to physical locality of the mine site and as the main Emergency Response Center will be based at the Kiggavik site, it is recognized that there may be significant response times between sites and from the mine sites to a hospital.

It is approximately 20 km between the Kiggavik and Sissons site. To ensure timely call-out of the emergency response team, all employees will have communication equipment such as a radio, telephone or satellite phone to call from Sissons. In addition, all personnel will be trained in basic first response to a medical or spill emergency. All supervisors will be trained to the standard first aid level and there will also be emergency response team members trained in advanced first aid at both Kiggavik and Sissons sites. It is estimated that complete response to an emergency at Sissons or along the Kiggavik-Sissons access road could take up to 30 minutes.

The road between Kiggavik and Baker Lake is approximately 110 km. All drivers will be required to be trained to respond to spills at a first response level. They will also have radios to call for assistance if required. It is estimated that complete response to an emergency along the Kiggavik-Baker Lake access road could take up to 90 minutes.

The Kiggavik site will have a nurse stationed at the Health Centre or at camp at all times and they will have access to equipment and supplies that can handle many medical emergencies. They will be available both day and night to handle major medical emergencies. In addition, there will be emergency response team members trained in advanced first aid skills to assist the nurse in the event of a medical emergency.

If further medical attention is required at a major hospital, the patient will be transferred by flight to a hospital. There are a number of airlines that AREVA may use for air ambulance services including Adlair Aviation, Kivalliq Air and Air Nunavut. Before commencement of the project, AREVA will consult with available airlines to determine who can best provide medivac services from the mine site to a major hospital.

# 4 UNDERGROUND MINE RESCUE

Although underground mine rescue will be discussed in some sections below, a dedicated and more detailed Underground Mine Rescue Plan will be developed prior to commencement of underground development. In addition, detailed emergency response procedures will be drafted to include situations that may be more hazardous due to underground conditions. It will be developed after consultation with interested local communities, regulatory agencies, and Inuit organizations and will follow all the requirements of the Nunavut Mine Health and Safety Regulations.

Unique underground emergency situations may include:

- Unexpected / Unintentional explosion
- Fire / Heat / Smoke
- Falls of ground
- An inrush of water
- Power Failure
- Loss of main ventilation
- Seismic activity
- Situation on surface requiring evacuation of underground

Hazard identification (HAZID) and Hazard and Operability Studies (HAZOPs) analyses will be performed for underground mining operations. Design and construction will adhere to all regulation requirements and best practice guidelines to ensure optimum safety of all personnel.

Emergency response, including equipment and trained certified rescuers, will likely consist of joint teams of AREVA and contractor personnel.

# 5 EMERGENCY RESPONSE EQUIPMENT

## 5.1 OVERVIEW

Emergency Response equipment will be maintained by the on site Health and Safety professionals and the Emergency Response Team. There will be adequate emergency response equipment to handle all types of anticipated emergencies. A sample list of types of equipment that will be available is provided below:

- Emergency Response Plan including relevant site drawings
- Procedures for specific emergency response scenarios
- Procedures for handling specific types of injuries and medical conditions
- Communication equipment (e.g. radios, pagers, telephones, PASS (personal alert safety system for fire fighting))
- Specialized Personal Protective Equipment for ERT (e.g. approved turnout gear, hazmat suits, respirators, SCBA apparatus)
- Injury response equipment
- Gas testing equipment
- Fire fighting equipment including fire prevention
- Radiation monitoring equipment
- Search and rescue equipment
- Winter Survival equipment
- Spill response equipment including hazardous material spill response equipment
- Vehicles will include a fire truck, ambulance, pick-up trucks, snowmobiles, boats, heavy equipment such as excavators, loaders, graders and bulldozers
- Emergency response equipment such as AEDs, fire extinguishers, first aid kits, emergency showers and eye wash stations will also be placed in strategic locations throughout site.

Emergency facilities will include:

- Command Center and alternate Command Center at the Kiggavik site,
- Emergency Response Centre for emergency vehicles and ERT equipment,
- A Health Centre at the Kiggavik site,
- An on-call centre at the camp accommodations for minor after-hour emergencies,

- Spill Response Kit/Supplies area at the Kiggavik site
- A smaller Emergency Treatment Room at the Sissons site
- Spill Response Kit/Supplies equipment at the Sissons site
- An Underground Mine Rescue Station and Emergency Response Centre at the Sissons site.

# 6 TRAINING

All training records and co-ordination of training activities will be managed by the Training Group. They will have comprehensive training procedures to ensure training is conducted in accordance with Systematic Approach to Training (SAT). Refer to the OH&S Safety Plan for more detail on SAT.

## 6.1 EMPLOYEES

Employees will undergo formal safety and emergency response training during Orientation. The training will identify site-specific hazards and hazards associated with the Project in general. The training will also review standard operating procedures, use of personal protective equipment, initial response to an emergency situation, evacuation routes and muster locations, location of MSDS, spill containment and response, reporting and notification protocol and other general safety procedures. Employees will be provided fire extinguisher training in their first year of employment and then every 3 years following initial training. Employees will receive specific emergency response training as required for their positions; for example this may include confined space entry, self rescue in freezing water or wilderness survival training. All supervisors will also receive standard first aid training.

## 6.2 EMERGENCY RESPONSE TEAM

AREVA will have an adequate number of emergency response personnel trained and take into consideration shift changes. The Incident Commander will be responsible for coordinating and/or delivering emergency response training onsite. The Emergency Response Team will participate in regular scheduled training and emergency response exercises to ensure that all members are trained in equipment use and emergency response methods.

The Emergency Response Team members will be trained in emergency identification and currently accepted response action techniques. Training will be related to specific emergency response roles, and will include:

- emergency chain-of-command,
- emergency response plan training,
- communication methods and signals,

- worker health and safety during emergency interventions,
- emergency equipment and use,
- emergency evacuation,
- offsite support and use,
- personal protective equipment and clothing,
- response to hazardous materials incidents,
- response to fire,
- wilderness survival training,
- ice and water rescue,
- search and rescue,
- fire response & fire fighting techniques,
- spill response procedures and techniques on land, water, snow, and ice, and during all four seasons including marine spill response,
- spill response equipment and materials,
- marine shoreline recovery operations,
- debriefing

Emergency Response Team members will also receive training as Medical First Responders, some of the skills attained include:

- Cardiopulmonary Response (CPR),
- Advanced Patient Assessment Skills,
- Automated External Defibrillation,
- Spinal Immobilization and
- Oxygen Administration

# 7 COMMUNICATION SYSTEM

The primary basis for communication will be the phone system; back-up communication will be available via satellite. For on-site communication, hand-held radios will be mandatory for all employees working or travelling in remote areas from the main camp. Satellite phones will be available for those working outside of radio contact. Back-up power sources and replacement batteries for communications equipment will be available to provide continuous, uninterrupted operation either at fixed facilities or at emergency sites.

Key site personnel will be accessible at all times by either portable radios, radios in vehicles, or office radios:

- The nurse will carry a hand-held radio and be available on-call by telephone in the evenings.
- The Central Control Room Operator will monitor the radio and be available to answer internal, external and satellite phone calls twenty-four hours per day.
- Security personnel will monitor for emergency calls on the radio twenty-four hours per day.
- Senior management personnel will rotate as “on-call managers” for after-hour emergencies.
- The on site safety professional will also be available for on call emergencies either by radio or telephone and will be notified by the security guard on duty or the control room operator.

An updated notice will be posted providing the name and room number of key personnel on call. A list of all people on site for the current date will also be available to the on site safety professionals and front office personnel. Lists of employees trained in first aid, mine rescue, and emergency response members will also be posted. AREVA will maintain an updated Emergency Contact List (example provided in Attachment A) with contact information for spill reporting, medical evacuations, Nunavut Worker’s Safety and Compensation, Baker Lake RCMP, Baker Lake Health Centre, external regulators, AREVA Saskatoon Head Office personnel and AREVA McClean Lake Operations key personnel.

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# 8 EMERGENCY SCENARIOS

## 8.1 NECESSITIES OF LIFE EMERGENCIES

### 8.1.1 Lack of Adequate Shelter

In the event of destruction or disruptions to the accommodation of the camp, attempts will be made to mobilize workers to another camp such as the emergency camp at Sissons or another safe location. When these attempts fail, evacuation action will be initiated and workers will be flown off site. If evacuation is not possible due to weather, refuge will be sought in vehicles and other heated buildings at site until workers can be safely evacuated.

### 8.1.2 Power Outages

If there any malfunctions to the generators, back-up generators or standby/emergency portable generators will also be available. During the use of back-up generators, only activities critical to the necessity of life and operations will be permitted.

A power system failure plan and procedure will be developed during detailed Project design. Specifically, the plan will address, but will not be limited to, back-up power systems, emergency responses to evacuate personnel from the mine if dewatering or ventilation systems fail, and emergency heating and lighting systems.

The plan and procedure will be reviewed on a regular basis and will be provided to the OHC for review.

*Underground Power Outages*

- In the event of a major power failure affecting any portion of the operating facilities at the mine, the employees within the working areas need to be aware of the hazards of unexpected loss of power and safely retreat to the refuge station to be accounted for by their supervisor.

- Electrical supervisor needs to be contacted as soon as reasonably possible to assess the reason for the outage, provide alternate power if able and to contact surface to report outage. The Control room will have a satellite phone available for power outages.

- Supervisors will attempt to locate and account for all workers under their control and be available to report the accountability check to the on site safety professionals when requested for it.

- The on site safety professionals will coordinate take a sweep through the affected operating area with a source of light to ensure no workers are trapped in a location they could not safely retreat from or are injured from the power failure event and that there is no sign of fire. ERT will be summoned if required.

- Once all people are accounted for and it has been confirmed that there is no risk to the people by the power outage, operating supervisors will be advised and work can continue or reassigned depending on the job and the location of power failure.

- Once the power has been restored safe start up procedures must be followed and all work must be directed by the supervisor in charge of the affected areas.

### 8.1.3 Interruption to Potable Water Supply

Water for potable use at the Kiggavik site will be supplied from Siamese Lake and from Mushroom Lake for the Sissons site. When such an interruption to the potable water system occurs, water use will be restricted to drinking and for cooking over other uses. Boiled and bottled water may be provided to personnel during these restrictions depending on the reason for interruption. Equipment will be repaired or replaced as needed. Water will be hauled by truck from alternate sources if necessary, while long-term alternative supply sources are identified, if required, in consultation with regulatory authorities.

In the event of a significant impact to the potable water at either Baker Lake or Chesterfield inlet, residents will be notified and advised to boil water or bottled water may be provided to personnel during these restrictions. AREVA will haul water from an alternate source if necessary and will consult with communities and regulatory authorities to determine a longer term alternative supply source if necessary.

### 8.1.4 Interruption to Food Supply

Food arrives from outside the site primarily by air for perishable goods, and by sealift for non-perishables. Therefore, prolonged poor weather could limit airlifts of perishable food items. Airstrip lighting will make it easier for pilots to land during some events such as extreme weather. Sufficient food supplies will be kept at each site to account for a prolonged delay in food deliveries.

### 8.1.5 Sewage System Failures

Troubleshooting and repairs will be undertaken immediately if a system fails to ensure ongoing treatment. If the problem is expected to persist for some time, back-up procedures will be implemented as follows:

- Restrict water use to necessities (drinking, cooking, etc.)
- Switch to latrine toilets and temporarily contain greywater
- Develop emergency or alternate disposal options in consultation with applicable government agencies

## 8.2 PERSONNEL EMERGENCIES

### 8.2.1 Medical Emergencies

*Minor Injuries& Medical Conditions*

For minor injuries requiring medical attention, employees will be required to notify their supervisor and then report directly to the Health Centre or on-call room after hours. All injuries at site are required to be reported, including occupational and non-occupational.

*Serious Injuries & Medical Conditions*

In the event of medical or related emergencies, any person who discovers someone injured or is injured themselves,

1. Get help.
    - Call the Central Control Room/Switchboard Operator using the radio or phone.
    - Send someone for help.
    - Do not use the injured person's name over the radio.
2. Assess the hazard(s) and eliminate, if safe to do so.
3. Attend to the injured person if it is safe to do so.
    - Begin first aid, if trained.
    - Do not move injured person unless they are in immediate danger.
    - Re-assure the injured person that help is on the way.
4. Wait for help to arrive.
5. Provide information to ERT.
6. Follow instructions of the Incident Commander.

The onsite ERT will secure the scene and ensure hazards are minimized prior to entering the scene. The ERT and nurse will implement their protocols to address medical emergencies, providing further care, coordinating uninjured personnel to assist in the response, and arrange transfer to other health care facilities elsewhere as necessary.

In the event of an injury, the nurse at the Health Centre will:

- Stabilize the injured person and administer treatment with the assistance of the medical emergency responders.

- If treatment is required off-site, they will be transported appropriately and any pertinent information including hazardous materials information will be provided to the health professionals at these Centers. The nurse will maintain contact with off site medical professionals to provide information regarding the injured person.

- If an individual cannot be treated on site or at the local Health Centers, the on site nurse will make arrangements to charter a flight to transfer the patient to a major hospital such as Winnipeg Health Sciences Centre.

In the event of a fatality at the Kiggavik site, AREVA will have specific procedures to provide as much privacy for the worker and their family as possible, and to maintain/ secure the scene for investigation as required by regulations. Counseling will be offered to family and/or community members and co-workers.

An internal investigation will be conducted in the event of a workplace injury.

### 8.2.2 Missing Persons

To reduce the potential for missing persons, personnel will check-in regularly and execute proper remote work practices. If a person does not check-in, ERT will be contacted and the Incident Commander will co-ordinate for a search and rescue operation. Resources such as personnel, equipment, land vehicles, and aircraft will be mobilized to aid search and rescue operations. Additional resources and services from local communities and other operations will be drawn upon as needed and if available.

### 8.2.3 Missing or Overdue Aircraft or Vehicle

Aircraft and trucks will remain in contact with dispatch while departing from and en route between sites. Aircraft carriers will be required to have their own Health and Safety Programs including Emergency Response plans which will be reviewed by AREVA.

In the event that a vehicle does not report, the EHS Superintendent will be notified and they will in turn initiate the Emergency Response action. Additional support for rescue

operations will be implemented with site personnel and appropriate regulatory authorities as needed.

In the event of an accident involving an aircraft or vehicle, injuries will be reported to the Kiggavik Health Center as soon as possible. Injured personnel will be transported to the Kiggavik Health Center and treatment provided by the nurse or arrangements made to medi-vac if required.

## 8.3 NATURAL ENVIRONMENT-RELATED EMERGENCIES

### 8.3.1 Severe Winter Conditions

Severe snow storms and winter wind storms can occur during much of the year. Depending on the severity of these storms, it may be necessary to modify or cease work activities. During whiteout conditions, individuals driving along the Kiggavik-Baker Lake access road or the site roads will be required to take refuge in emergency shelters situated along the roads. It is anticipated that these shelters will be situated approximately every 10km. Supplies will be adequate to maintain refuge for 10 days.

Vehicle operators will be trained in wilderness survival and will ensure they have adequate fuel supply to reach destination. Vehicles traveling the access roads will be equipped with a radio for communication and during the winter season, the vehicles will be required to travel in convoys to ensure there is immediate assistance if required. Vehicles will also be equipped with basic emergency survival kits. Vehicle operators will be responsible for carrying their own time sensitive medications such as insulin. An example of a typical emergency survival kit includes:

- Blanket/sleeping bag
- First aid kit
- Candles/matches
- Whistle
- Non-perishable food
- Tarp/reflective blanket for shelter
- Container for melting snow
- Flashlight
- Rope
- Reflective device such as a mirror
- Shovel

### 8.3.2 Wildlife Encounters and Incursions

The possibility exists that wildlife may be encountered at the Kiggavik site. Some examples of wildlife that may be encountered include wolves, caribou, grizzly bears, foxes, wolverines and muskoxen. Personnel should take all necessary preventative measures to minimize the chance of on encounter, as outlined in the Wildlife Mitigation Plan. In the event an encounter does occur, refer to the Health and Safety Plan for procedures on how to respond to specific animals.

Vehicle collision with wildlife is possible. To minimize collisions personnel will abide by the prescribed speed limits imposed on project-related traffic. Wildlife fatalities from traffic incidents or other events will be reported to the EHS Superintendent, who will in turn contact Government of Nunavut wildlife officer and local hunters and trapper organizations. Firearms will be prohibited at all sites, except for use by authorized personnel.

### 8.3.3 Floods

Flooding could potentially occur within local watersheds affecting access along roads or if a drainage crossing structure is dammed. Serious emergencies are not envisaged from surface flooding. Washed out road sections and crossing structures will be repaired using available equipment. The flooded area will be secured and only authorized repair personnel will be permitted to access the area until the road or crossing is safe to use.

Underground flooding is considered unlikely due to the low hydraulic conductivity in the surrounding bedrock and the diversion ditches on surface that will minimize any surface inflows into the mines. Adequate pumping capacity within the mines will be available to recover water that enters the pit or underground workings. If flooding were to occur, additional pumping capacity would be available on-site to supplement the dewatering rate. There will be adequate storage and treatment capacity to accommodate additional short-term flows. If conditions dictate, mine operation will be curtailed and employees evacuated if there is risk to health and safety of personnel.

### 8.3.4 Seismicity

The risk of any seismic activity causing damage in Nunavut is low. However, in the event of an earthquake, follow these procedures:

If INDOORS

- **DROP** to the ground; take **COVER** by getting under a sturdy table or other piece of furniture; and **HOLD ON** until the shaking stops. If there isn't a table or desk near you, cover your face and head with your arms and crouch in an inside corner of the building.

- Stay away from glass, windows, outside doors and walls, and anything that could fall, such as lighting fixtures or furniture.
- Stay in bed if you are there when the earthquake strikes. Hold on and protect your head with a pillow, unless you are under a heavy light fixture that could fall. In that case, move to the nearest safe place.
- Use a doorway for shelter only if it is in close proximity to you and if you know it is a strongly supported, loadbearing doorway.
- Stay inside until the shaking stops and it is safe to go outside. Research has shown that most injuries occur when people inside buildings attempt to move to a different location inside the building or try to leave.
- Be aware that the electricity may go out or the sprinkler systems or fire alarms may turn on.
- DO NOT use the elevators.

If OUTDOORS

- Stay there.
- Move away from buildings, streetlights, and utility wires.
- Once in the open, stay there until the shaking stops. The greatest danger exists directly outside buildings, at exits and alongside exterior walls. Ground movement during an earthquake is seldom the direct cause of death or injury. Most earthquake-related casualties result from collapsing walls, flying glass, and falling objects.

If in a MOVING VEHICLE

- Stop as quickly as safety permits and stay in the vehicle. Avoid stopping near or under buildings, trees, overpasses, and utility wires.
- Proceed cautiously once the earthquake has stopped. Avoid roads or bridges that might have been damaged by the earthquake.

If TRAPPED UNDER DEBRIS

- Do not light a match.
- Do not move about or kick up dust.
- Cover your mouth with a handkerchief or clothing.
- Tap on a pipe or wall so rescuers can locate you. Shout only as a last resort. Shouting can cause you to inhale dangerous amounts of dust.

If working UNDERGROUND:

- Follow instructions in Section 7.4.3
- Proceed to the refuge station.
- Keep in contact with ERT and follow their instructions.

Notify your Supervisor of your condition as a headcount will be performed to ensure the safety of all personnel. If you are injured, contact your Supervisor and proceed to the Health Center or call ERT. Follow the instructions of your Supervisor following an

earthquake for any special measures that may be required such as shutdowns or inspections.

## 8.4 OPERATIONAL EMERGENCIES

### 8.4.1 Slope Failures and Fall of Grounds

The slopes of the pit walls will be monitored on a regular basis. Slope stability will be monitored to ensure that a massive slope failure does not occur. Visual inspections will include: observing the walls for overhangs, loose, boulders, water inflows and potential changes in the face. The travelway will also inspected for adequate and competent berms and surface conditions such as being dusty or slippery or areas requiring repair.

Personnel will be evacuated from the pit if there are any signs of slope instability or sloughing noticed. The area will be stabilized before anyone is permitted to enter. For underground fall of grounds emergencies, follow instructions in Section 7.4.3.

### 8.4.2 Fires

There are a number of systems that will be in place to protect and prevent a fire from occurring. A set of planned, coordinated, controlled and integrated activities with regards to fire protection for the Kiggavik Project will comprise the fire protection program. Its purpose is:

- To minimize undue loss of life and fire related injuries for facility occupants and emergency responders,
- To protect and maintain radioactive material in a safe and stable condition in the event of a fire occurring,
- To minimize economic loss and business interruption resulting from fire damage,
- To minimize the risk of hazardous chemical releases including radiological release to the public, facility personnel or into the environment in the event of a fire,

The objectives the fire protection program will include:

- Prevent uncontrolled fires from starting
- Detect, extinguish and control fires that do occur
- Provide adequate protection to protect structures, systems and components to life safety so that safe shutdown can be achieved if a fire does occur
- Ensure all personnel, including emergency response personnel, are adequately trained with respect to fire safety and emergency response
- Comply with the National Fire Code and National Building Code of Canada
- Continual monitoring, auditing and reporting of conditions and programs

*Fire Prevention*

There will be specific elements designed to increase employee awareness of fire hazards in the workplace. The fire prevention activities will be performed to reduce the hazards where possible and limit the risk of uncontrolled fires.

Awareness of basic fire principles and practices will be provided to all personnel to ensure that they know which procedures to follow in the event they come upon an uncontrolled fire or hear the fire alarm. Employees are also made aware of how to report a fire in the event a fire does break out. This information is provided to all employees and contractors during the site orientation and reinforced during drills.

In addition, emergency equipment such as fire extinguisher locations and job specific tasks will be shown to all new personnel by their supervisor during the initial orientation. Fire extinguisher training will also provided to all personnel in their first year of employment and every third year thereafter**.**

The smoking policy will be reviewed with all employees during the initial orientation. Receptacles will be placed in the smoking areas to ensure cigarette butts are properly discarded.

Housekeeping is maintained by each department and is the responsibility of each individual to ensure that their workplace is orderly. Routine inspections will be conducted by all departments and the on site safety professionals to monitor the workplace. The Occupational Health Committee will also conduct monthly inspections of areas. Housekeeping responsibilities include identifying unacceptable fire hazards such as improper storage of materials, improper handling of materials, access and egress issues and inspection of fire protection equipment.

Those involved in hot work processes, involving open flames or the production of heat or spark, will perform a hazard assessment prior to the hot work being performed. This includes a permitting system that identifies the worker involved, requirements for a fire watch, inspection of the area for housekeeping, reviews of the equipment being used, identification of protective measures that need to be taken to minimize fire risk and identification of the fire protection equipment in the area. In addition, it includes work instructions for higher risk activities.

The storage, transportation and handling of flammable liquids, combustible liquids, compressed gases and radioactive materials will be managed by several groups. All will be knowledgeable in the handling of these materials; the people involved include the safety, environment, radiation protection, services and warehouse personnel. Waste Handling will be managed by the environment professionals. Transportation of transient combustible material and non-combustible material will be managed by specific departments. The on site safety professionals will have portable gas detection

equipment than can monitor combustible gases if necessary. There will be procedures to provide specific instructions on proper handling procedures to minimize the risk of a fire.

The maintenance, tests and inspections performed on the fire protection system at the Kiggavik site will be designed to meet the requirements of the National Fire Code, National Building Code of Canada, Provincial Regulations and OHSAS 18001 Standards. AREVA will also ensure that the Kiggavik Project is in compliance of any specific license requirements for fire protection.

Fire protection systems remain on stand-by for extended periods of time and are expected to perform as designed in the event there is a fire. The performance and reliability are verified through testing, inspecting and maintenance on a scheduled basis as recommended by the NFC. A systematic approach will be applied to managing the testing, inspection and maintenance of these systems.

*Maintenance and Repairs*

Routine maintenance activities and troubleshooting will, at times, require fire protection systems to be taken off-line. When any fire protection system is impaired, proper notifications and precautions must be taken to ensure that the safety of both people and property is not compromised.

Written notification is required when it is anticipated a fire protection system will be impaired or is known to be impaired. The on site safety professionals will issue notification, at a minimum to, all Managers, affected Supervisors and personnel, Emergency Response Team and Insurance Underwriters. Required impairments will be managed to be as short as possible. Appropriate post impairment testing will be performed and documented to ensure that the system is functioning as required. Personnel are notified by the on site safety professionals when the system is back online.

The notification includes:

- what is impaired,
- how long the system is expected to be off-line,
- compensatory measures and
- when it is expected to return to normal

*Fire Safety Plan*

There will be a Fire Safety Plan written for the Kiggavik Project providing specific information pertinent to a fire emergency response. It will be reviewed at a minimum of once per year. Hardcopies will be place in strategic locations. The Fire Safety Plan will include, at a minimum:

- information on specific responsibilities,
- list of emergency instructions in the event of a fire,
- list of site drawings and fire pre-plans for major buildings on site (see Attachment B for template) and will be developed by the ERT. They include information on the construction, fire detection and suppression systems, access points, emergency lighting, fire water, utility isolation points and information about dangerous goods storage,
- Amount and type of flammable substances on site,
- training provided to personnel during orientation on basic emergency response for a fire,
- fire protection inspections,
- execution of fire drills,
- description of how fire hazards are controlled at the site,
- descriptions of specific fire hazards at the site and quantities of flammable substance on site,
- list of emergency supplies available on site,
- reporting requirements and documentation process after a fire

*Underground Fires*

Underground mine fires are an extremely hazardous situation with the potential for catastrophic loss of life and damage to the mine operations. Particular care must be taken to ensure the rescuers do not become victims themselves when fighting an underground fire. Specific training will be provided for underground fire fighting which include:

- Understanding of the principles of mine ventilation,
- Using the instruments to measure mine ventilation,
- Underground fire fighting methods,
- Rescue procedures following an explosion.

*Reporting of Underground Fires*

Underground fires must be reported promptly. Follow these instructions if there is an underground fire:

1. Activate fire suppression system if fire is on equipment.

2. If safe to do so, use nearby fire extinguishers to extinguish the fire.

3. Warn all personnel in the immediate area (voice, radio, and phone) to evacuate to a safe location.

4. Initiate the alarm/warning system to all employees.

5. Do not expose yourself to unnecessary risk and keep a clear area of retreat behind you.

6. If the fire is too big, do not hesitate, leave the area immediately and evacuate.

7. Proceed to the nearest refuge station, fresh air base or out of the mine if safe to do so.

8. Utilize self-rescue device to protect from smoke exposure.

9. If unable to travel safely to refuge station, take refuge in heading and utilize compressed air header and any available material – vent tubing, clothing, etc. to construct a shield around yourself. Remain in the location until mine rescue team arrives.

10. Once you have reached the refuge station or fresh air base follow refuge station protocols and provide for accountability.

The detailed Underground Mine Rescue Plan will include considerations to:

- Primary escape routes,
- Secondary escape routes,
- Location of refuge stations.
- Location of self-rescuer caches.

- Ventilation
- Auxiliary fans in the event of a fire.
- Ventilation doors and regulators in the event of a fire.
- Location of fire doors.
- Refuge stations.

The Underground Emergency Plan will be regularly updated and reviewed with workers.

### 8.4.3 Underground Emergencies/Refuge Stations

Under certain disaster situations all workers in a mine may not be able to reach the surface safely. Upon hearing the warning from fellow workers, supervisors to evacuate, follow these directions:

***Underground Emergency – Other than Fire***

Any person discovering an emergency shall:

1. If safe to do so try to rectify the situation with the tools you have at the scene
2. Perform first aid if safe to do so
3. Rope off or barricade the area if possible
4. Escape to nearest refuge station following up cast ventilation or out of the mine and warn all others along the way.
5. Report the emergency by calling the appropriate numbers from the Emergency Contact Number sheet located in the refuge station

• When reporting the incident it is of extreme importance that you include the following information.
• Who is calling and who is involved?
• What happened and what have you done?
• When did this happen?
• Where are you and where is the emergency?
• Who and what do you need for a response? First aid, rescue stench gas, other assistance?
• Stand by the phone and wait for further instructions

If directed to evacuate, follow these instructions:

1. Stop work immediately,
2. Note the time you received the warning

3. Calmly proceed in an up cast direction to the nearest refuge station or out of the mine

4. Utilize self-rescue device at the first sign of smoke or fire.

5. Once safely at the refuge station or central muster location, follow the refuge station protocol and provide for accountability.

6. Review the refuge station emergency procedures posted inside the refuge chamber.

7. Check the mine phone for operation and call outside the mine. Report the following information:

• Your name and name of others in refuge.

• Refuge Chamber location.

• Outside conditions.

• That you are safe in refuge.

8. Remain in the refuge station, even if communication is cut off.

9. Stay calm, conserve energy and cap lamps, sit down on benches.

10. Have one person walk around room periodically to stir up the air.

11. Do not be tempted to wander about the mine seeking safe passage out.

12. Remain in the refuge until you are rescued by mine rescue personnel or contact is made declaring it safe to leave the refuge station by mine official in charge of the emergency.

Permanent refuge stations will be located at strategic places in the mine to provide a place of refuge in areas from which escape may not be possible. Permanent refuge stations will be built in such a way and in such locations that they will protect miners from dangerous gases, fire and gas explosions. Note a refuge station can serve other purposes as well; underground lunch rooms, tool cribs and repair shops can be constructed and equipped to serve as emergency refuge stations if required.

Properly sized refuge stations will be located underground in accordance with the requirements of the Nunavut Mine Health and Safety Regulations. The refuge stations will be clearly marked and constructed of non-combustible material.

The stations will be equipped with:

-a supply of potable water,

-a means of communicating with the mine rescue station in an emergency or other situation,

-general lighting,

-seating capacity for as many persons as the refuge station is designed to shelter,

-an adequate supply of door sealant to stop air from entering the refuge station,

-a sealable container that can be used as a toilet,

-a copy of the procedures for fire fighting underground and a plan showing the ventilation system and routes to the escape exits, both of which will be posted,

-at least one first aid kit,

-where required,

(A) a source of heat to maintain a minimum temperature of 10 C in the refuge station, or

(B) if the heat may cause ground instability, warm suits will be provided sufficient to prevent hypothermia for as many persons as the refuge station is designed to shelter, and

-an air supply independent of the mine ventilation system and designed to provide a minimum of 12 hours supply of air for as many persons as the refuge station is designed to shelter;

-weekly inspections to ensure that the refuge station is equipped as required and that the equipment is in good working order;

-suitable signs showing the direction of airflow and the routes to refuge stations,

and escape exits are posted at all junctions leading from worksites

## 8.4.4 Radiation Incidents

The radiation protection (RP) professionals will offer their expertise to the Emergency Response Team in the event of an incident involving radioactive material occurs. A most likely emergency scenario involving radioactive material would be the spill of ore. They will be in direct communication with and offer guidance to the Incident Commander.

There is no foreseeable circumstance involving uranium-bearing radioactive materials at the Kiggavik site which would result in an emergency situation as a result of their radioactive properties.

Similarly, environmental spill response plans consider treatment of radioactive materials in an integrated fashion. Environmental spill responders are trained in radiation protection. In the event of an environmental spill involving radioactive materials, there is no foreseeable circumstance involving uranium-bearing radioactive materials at the

Kiggavik site which would result in a situation where an environmental component is acutely endangered as a result of their radioactive properties.

However, all materials will be cleaned up in a systematic manner or contained using the following precautions.

*Personal Protective Equipment*

- All emergency response personnel will wear protective clothing (disposable coveralls, booties, head covers, gloves and respirator).

*Contamination Control*

- To minimize the spread of contamination, a contamination zone will be established with distinct egress and exit points to ensure proper decontamination is conducted;
- Emergency personnel will work from upwind of the spill, cover it with plastic sheeting to minimize spreading, using stakes or nails, where necessary, to hold it down;
- All personnel, including those injured, equipment and vehicles will be scanned for contamination prior to leaving the incident site

*Monitoring*

Gamma dose rate measurements will be taken and the assignment of direct reading dosimeters (DRDs) to selected emergency response personnel. Dose assessments will be completed by the radiation protection professionals as required.

*First Aid*

- Use first aid treatment according to the nature of the injury.
    - Treatment of personnel will be considered priority.

*Fire*

- Presence of radioactive material will not influence the fire control processes and should not influence selection of techniques.
- Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone if safe to do so.

*Spill or Leak*

- If possible use the shovel and plastic to dig or dike off a catch/containment basin and use non-combustible absorbent material if required.
- Barricade the spill area using rope and stakes and erect radioactive material
- signs. Keep traffic and bystanders away from the spill area;
- Do not attempt to clean up any of the spilled material;
- After completing this, make the necessary contacts as noted above; and
- Minimize the time spent in close proximity (within a few metres) from the material as well as any potential ingestion or inhalation of the material.

### 8.4.5 Vehicle Related Emergencies

For vehicle related emergencies, including that of rollovers and collisions the Incident Commander and ERT will secure the scene and ensure no additional hazards exist before entering the scene. Injuries, fire and spills as a result of vehicle incidents will be responded to according to procedures described above, though specialized equipment such as extrication equipment, may be required depending on the nature of the emergency.

The response will be similar light and heavy duty equipment, as well as any power mobile equipment, though specialized equipment may be required depending on the nature of the emergency.

### 8.4.6 Ice Emergencies

If someone has fallen into water or through ice:

- Stop all work in the area.
- Rescue the victim if it is safe to do so.
- Provide first aid and CPR as needed.
- Take steps to prevent hypothermia (dry clothing, sleeping bag /blankets, sweetened hot liquids).
- Call ERT for help by radio.

A detailed procedure will be in place for ice rescue. All ERT will be trained for ice emergencies. The following is a summary:

- Establish a hazard zone to ensure rescuers will not put themselves at risk.

- Although rescue is shore based, rescuers should be dressed in dry suits and PFDs in anticipation they be required to enter the water

- A second rescuer will be dressed for back-up and assist the rescue if required.

- The ice will tend to fracture quite  distance from the hole, a plank or ladder may be required to distribute the weight of the rescuers

- Determine location of victim before they submerge.

- Any person(s) attempting rescue of anyone fallen through ice will be secured with a rope onto a secured point well away from the hole

- Use tactics such as Talk, Reach, Throw, Row, Go to rescue person (rescue options not in sequential order, use best practice according to emergency).

- Immediately treat for hypothermia

### 8.4.7 Marine Transport Incidents

For marine transport incidents, refer to the Technical Appendix 2J – Marine Transportation. AREVA will ensure that the Marine shipping company has a Health, Safety and Environmental Protection Plan which includes an Emergency Response Plan. AREVA ERT will assist with the marine shipping company in the event of an emergency.

### 8.4.8 Spill Incidents

For spill incidents, the Environment professionals will work together with the Incident Commander and the ERT to ensure response is handled in an appropriate manner. For spill incident response, refer to the Technical Appendix 10B - Spill Contingency and Landfarm Management Plan.

### 8.4.9 Hazardous Materials Incident

For response and incidents related to hazardous materials refer to the Technical Appendix 2U - Hazardous Materials Plan and Technical Appendix 10B - Spill Contingency and Landfarm Management Plan.

## 8.4.10 Explosives Emergencies

For preventative handling and storage measures, refer to the Technical Appendix 2C – Explosives Management Plan. The ERT as directed by the IC1 with the assistance of the explosives professionals will assist with securing the area and evacuating personnel to safe locations.

# 9 RISK OF FINANCIAL LOSSES AND INSURANCE

Risk assessments are conducted periodically and as a new activity or process is being considered. The assessments are to identify potential and known risks and give consideration to whether potential losses might be insured against, or left uninsured. With the assistance of external insurance advisors, economically justified insurance will be put in place to provide for financial losses that can follow from:

- Physical property loss or business interruption;
- Land, air or marine transport incident;
- Environmental impairment incident; and
- Third party liability claim.

# 10 REFERENCES

AREVA Resources Canada (2001). Kiggavik Project Environmental Impact Statement. Technical Appendix 2C – Explosives Management Plan, December 2011

AREVA Resources Canada (2011). Kiggavik Project Environmental Impact Statement. Technical Appendix 2J – Marine Transportation, December 2011

AREVA Resources Canada (2011). Kiggavik Project Environmental Impact Statement. Technical Appendix 2P - Occupational Health and Safety Plan, December 2011

AREVA Resources Canada (2011). Kiggavik Project Environmental Impact Statement. Technical Appendix 2Q – Radiation Protection Plan, December 2011

AREVA Resources Canada (2011). Kiggavik Project Environmental Impact Statement. Technical Appendix 2U - Hazardous Materials Plan, December 2011

AREVA Resources Canada (2011). Kiggavik Project Environmental Impact Statement. Technical Appendix 10B - Spill Contingency and Landfarm Management Plan, December 2011

AREVA Resources Canada Inc., Aircraft Charter Operator Specification & Standard, V. 10.

AREVA Resources Canada Inc, Emergency Response Assistance Plan, (ERAP 2-0088) For Transportation Incidents Involving Radioactive Materials (Includes Uranium Ore Concentrate and Uranium Ore Slurry)

British Columbia Mine Rescue Manual, Mining and Minerals Division (2008)

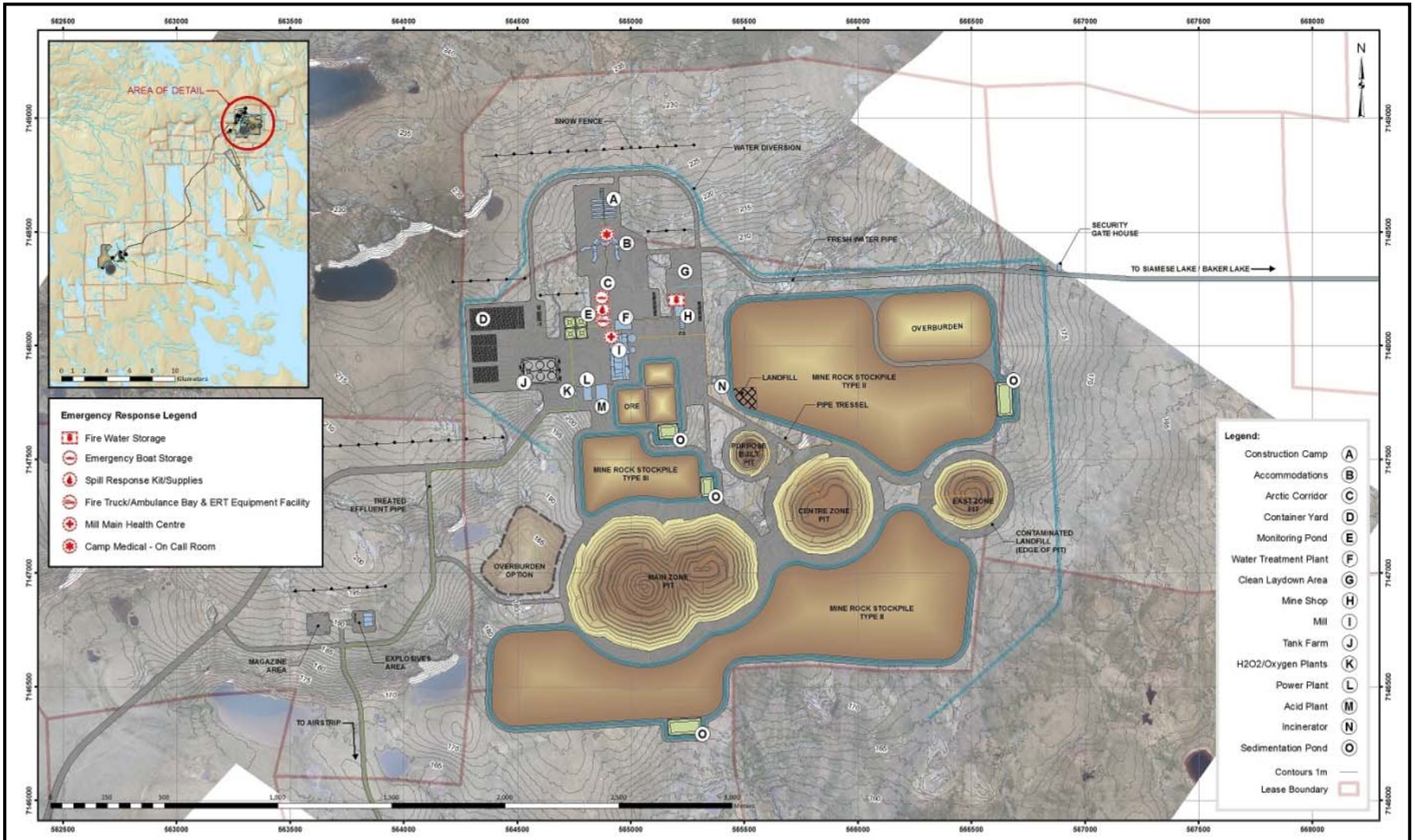
Earthquakes, US FEMA (2011)

Ice Rescue; First Responders, Montgomery County, Maryland

Minto Mine, Emergency Response Plan, September 2011

Saskatchewan Mine Emergency Manual

# Figures



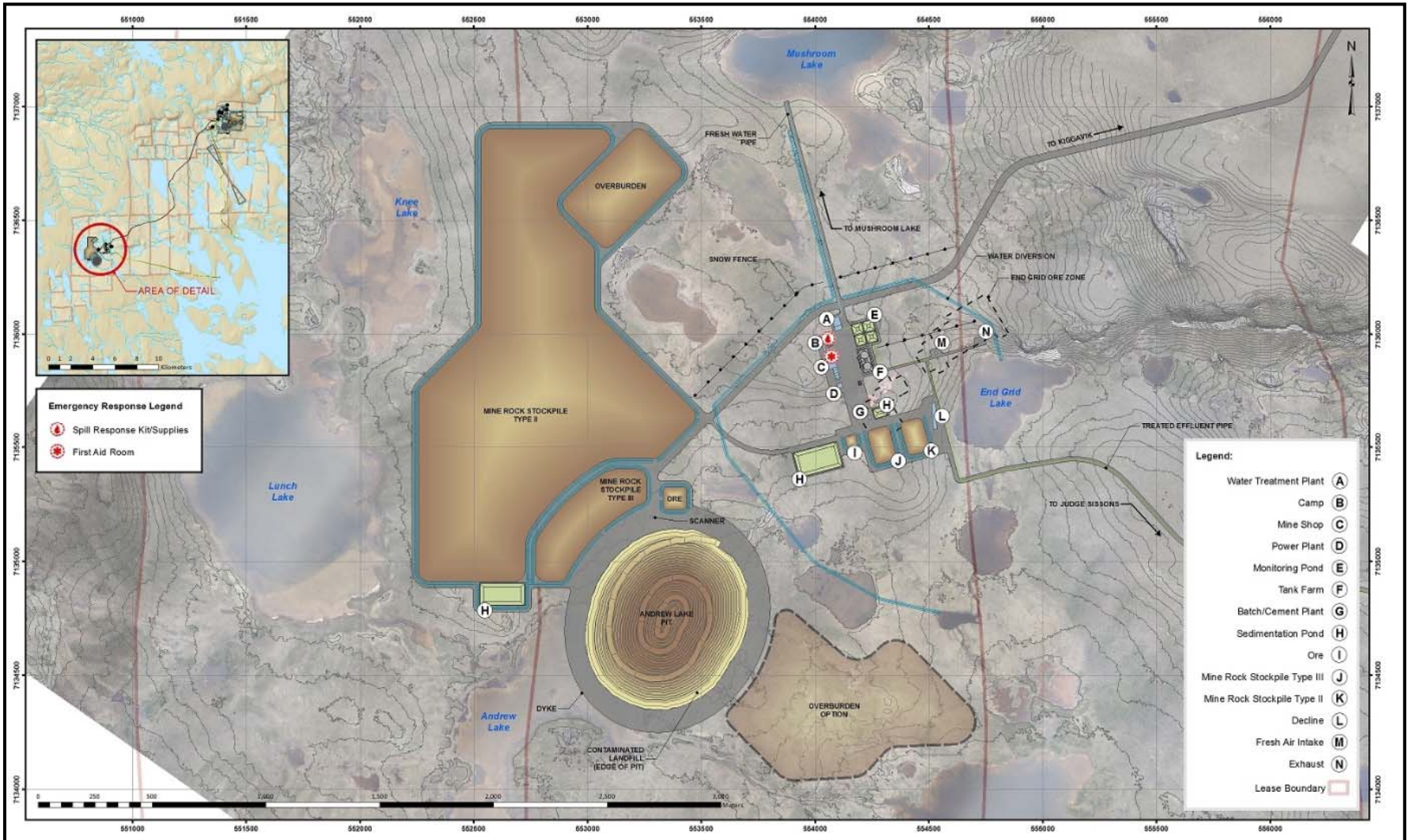

Technical Appendix 10C
Emergency Response Plan
December 2011

**Figure 1**
Kiggavik Site Emergency Response Locations

**Kiggavik Project**

AREVA

Areva Resources Canada Inc.- P.O Box 9204 – 817 – 45th Street W – Saskatoon – S7K 3X5



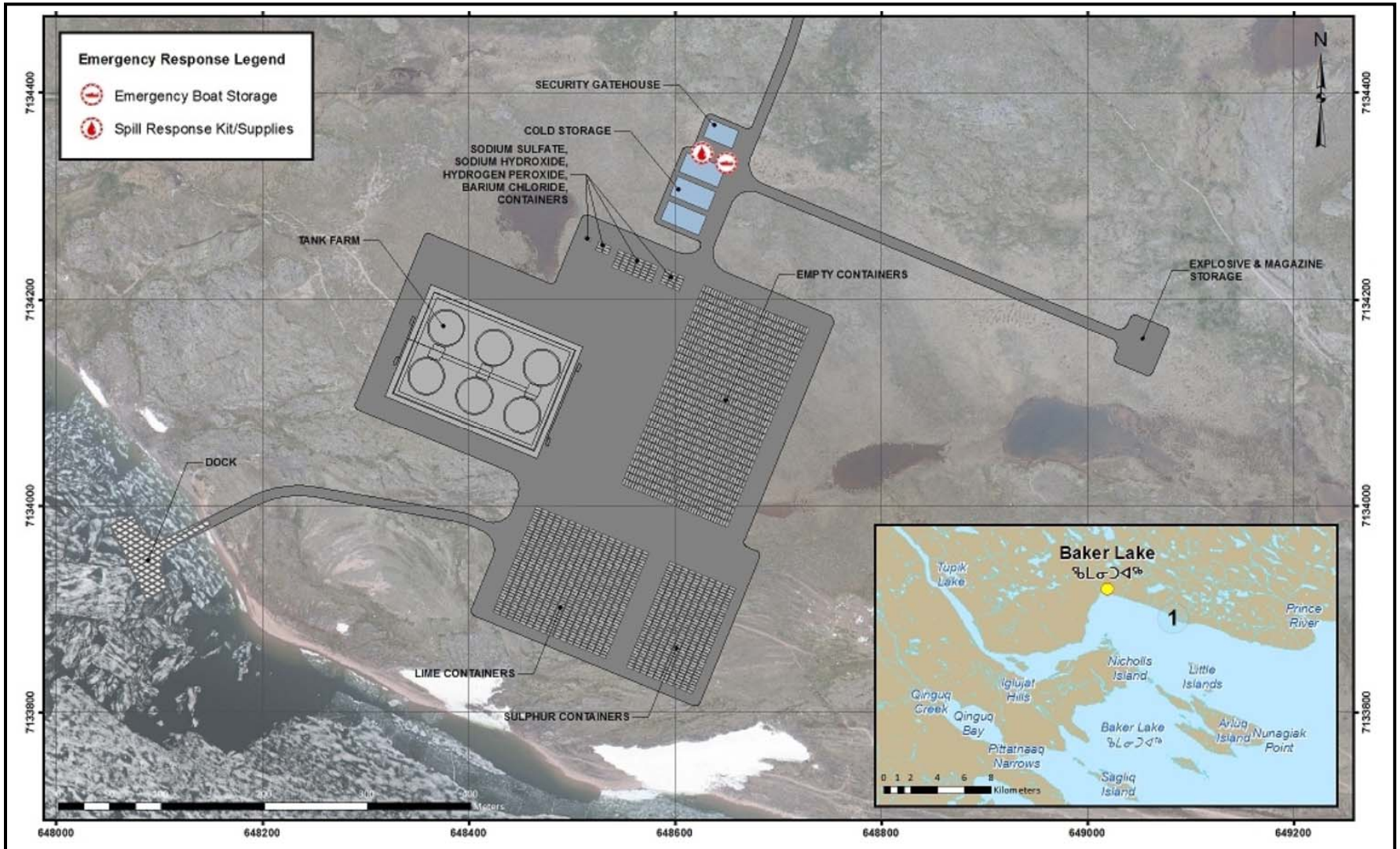

Technical Appendix 10C
Emergency Response Plan
December 2011

**Figure 2**
Sissons Site Emergency Response Locations

**Kiggavik Project**

AREVA

Areva Resources Canada Inc.- P.O Box 9204 – 817 – 45th Street W – Saskatoon – S7K 3X5




Technical Appendix 10C
Emergency Response Plan
December 2011

**Figure 3**
Baker Lake Site Emergency Response Locations

**Kiggavik Project**

AREVA

Areva Resources Canada Inc.- P.O Box 9204 – 817 – 45th Street W – Saskatoon – S7K 3X5

# ATTACHMENT A

# SAMPLE – EXISTING KIGGAVIK SITE

## *EMERGENCY CONTACT LIST*

## *– CURRENT AS OF MAY 2011-*

***KIGGAVIK PROJECT***

| | | | |
|---|---|---|---|
| Kiggavik Camp | Facility Supervisor, ERP Supervisor, ERP Summer Students | Camp Office | 306-683-9843 |
| | Project Geologist, Geologists | Exploration Office | 306-683-9862 |
| | | Kitchen Phone | 306-683-9825 |
| | | Site Sat Phone | 011-8816-314-67865 |
| General Manager, Kiggavik Project | Frederic Guerin | Office | 306-343-4631 |
| | | Cell | 306-270-2915 |
| | | Home | 306-978-7464 |
| Manager, Nunavut Affairs | Barry McCallum | Office | 867-793-2000 |
| | | Cell | 306-262-4636 |
| | | Home | 902-562-3314 |
| Facility Supervisor | Daniel Zunti | Office | 306-343-4524 |
| | | Cell | 306-717-0042 |
| Env.& Radiation Protection Supervisor | Kim Sarauer | Office | 306-343-4043 |
| | | Cell | 306-270-1197 |
| Sr. Project Engineer | Nicola Banton | Office | 306-343-4679 |
| | | Cell | 306-270-2828 |
| | | Home | 306-384-2277 |
| Baker Lake Areva Office | Jeff Hart | Office | 867-793-2000 |
| | | Cell | 867-793-1564 |
| | | Home | 867-793-2821 |

**NT-NU 24-HOUR SPILL REPORT LINE**

| | | | |
|---|---|---|---|
| Government of Nunavut 24 hour spill report line | | Phone | 867-920-8130 |
| | | Fax | 867-873-6924 |
| | | email | spills@gov.nt.ca |

**WORKERS' SAFETY & COMPENSATION COMMISSION**

| | | | |
|---|---|---|---|
| Iqaluit | Martin van Roy | Phone | 867-979—8527 |
| | | Fax | 867-979-8501 |
| | | 24-hour | 800-661-0792 |
| | | Toll Free Fax | 866-979-8501 |

**SAFETY**

| | | | |
|---|---|---|---|
| RCMP - Baker Lake | | Phone | 867-793-0123 |
| | | Fax | 867-793-2149 |

| | | | |
|---|---|---|---|
| RCMP - Central Emergency Number | | Phone | 867-793-1111 |
| Air Ambulance (Rankin Inlet) | | Phone | 867-645-4455 |
| Baker Lake Health Centre | | Phone | 867-793-2816 |
| Poison Control Centre 24 hour emergency | | Phone | 1-800-268-9017 |
| **REGULATORS** | | | |
| EC  Enforcement Officer | Curtis Didham | Phone | 867-975-4644 |
| | | Cell | 867-222-1925 |
| | | Fax | 867-873-8185 |
| INAC - Water Resources Officer | Andrew Keim | Phone | 867-975-4289 |
| | | Fax | 867-975-6445 |
| INAC - Manager, Field Operations | Peter Kusugak | Phone | 867-975-4295 |
| | | Fax | 867-975-6445 |
| Kivalliq Inuit Association | | Phone | 867-645-2800 |
| | | Fax | 867-645-2348 |
| Nunavut Water Board | | Phone | 867-360-6338 |
| DFO - Habitat Impact Assessment | Joanne Rose | Phone | 867-979-8005 |
| | | Fax | 867-979-8039 |
| **AREVA - SASKATOON OFFICE** | | | |
| Manager, Communications | Alun Richards | Office | 306-343-4637 |
| | | Cell | 306-227-3259 |
| | | Home | 306-343-7833 |
| VP, Operations | Jim Corman | Office | 306-343-4595 |
| **AREVA - MCCLEAN LAKE** | | | |
| Site Commander | | Cell | 306-633-7766 |
| Jack Richards | | Cell | 306-221-2627 |
| Emergency Response Team | | Sat Phone | 011-8816-314-65773 |

# Attachment B

# Fire Pre-Plan

| Building Name | | | Date (YYYY-MM-DD) |
|---|---|---|---|
| Location on Site | Building Phone # | Emergency Contact and Phone # | |
| **BUILDING INFORMATION** | | | |
| Below Grade Floors: | # of Storey's or Height in m: | Dimensions: | |
| Mechanical Room Location: | Type of Heat: | Electrical Isolation: | |
| Roof Construction<br>☐ Steel ☐ Composite roof | Stairway and Walkways: | Building Construction Type: | |
| Is there a roof access?<br>☐ Yes ☐ No | Major Occupancy(s): | Building Status: | Upper Floor Construction: |
| **EMERGENCY ACCESS** | | | |
| Location: | | | |
| **FIRE ALARM SYSTEM** | | | |
| Fire Alarm System and Panel<br>☐ Yes ☐ No | | Location: | |
| Enunciator Location: | | Signal Silence Location: | |
| Reset Switch Location: | Fire Alarm: | Manual Pull Station: | |
| **FIRE ALARM DETECTORS** | | | |
| Smoke Detection | Furnace Duct Smoke Detection | Sprinklers w/ Water – Flow | Manual Pull Stations |

| | | | |
|---|---|---|---|
| | | | |
| **FIRE SUPPRESSION** | | | |
| Sprinklers | Partial Where? | Sprinkler Main Valve and Zone Isolation Valve Location: | |
| Standpipes:<br>☐ No ☐ Yes | Location: | Standpipe Isolation Valve Location: | |
| Test Header<br>☐ Yes ☐ No | Location | Spare Sprinkler Heads in Cabinet | |
| Riser Isolation Valves<br>☐ Yes ☐ No | Each Zone Clearly Indicated on riser valve?<br>☐ Yes ☐ No | | |
| Fire Department Connection | Location(s) | GPM/LPM to Building<br>FP#1 FP#2 | |
| **SHUT OFFS** | | | |
| Sprinkler Location: | Gas Location | | |
| Water Location: (CLOSEST HYDRANT) | Electric Location: | | |
| **EXTINGUISHING SYSTEM** | | | |
| Building<br>☐ | Location if YES: | Type if YES: | |
| **EMERGENCY POWER / LIGHTING** | | | |
| Generator Location | Fuel | Capacity<br>K W | |
| Battery Powered Emergency Lights ☐ No | UPS Power<br>☐ Yes ☐ No | | |
| Will Operate ☐ Fire Alarm ☐ Lights ☐ Other | | | |
| **DANGEROUS GOODS / HAZARDOUS PROCESSES** | | | |
| What? (add additional sheets if necessary) | Where? (add drawing if necessary) | | |

| | | | |
|---|---|---|---|
| Location of M.S.D.S.<br>**Site MSDS documents are listed on the**<br>**AREVA Intranet by product.** | | | |
| **HAZARDOUS MATERIAL STORAGE** | | | |
| **Chemical Name** | **ID#** | **Quantity** | **Locations** |
| | | | |
| | | | |
| | | | |
| | | | |
| **Notes / Comments** | | | |
| | | | |
| | | | |
| | | | |

## BUILDING

## FIRE PREPLAN DIAGRAM