

SAFETY CODE OF PRACTICE AREVA Resources Canada Inc. - Kiggavik Project

1 HEALTH AND SAFETY POLICY

AREVA Resources Canada Inc. (ARC) is committed to providing a healthy and safe work environment for all of its workers and to ensuring that all work is performed in a safe and responsible manner that meets regulatory and company standards.

To meet this commitment, ARC Kiggavik Project shall:

- Comply with applicable laws and regulations;
- Ensure the highest levels of safety to preserve the health and well-being of our employees and members of the public;
- Develop internal objectives and targets to achieve continual improvement in health and safety performance;
- Measure performance against established goals;
- Ensure all employees and contractors fulfill their health and safety responsibilities;
- Develop, implement, maintain and test emergency procedures;
- Investigate reported incidents that result or could result in employee illness or injury;
- Identify and address workplace risks and hazards;
- Promote and maintain dialogue with stakeholders on health and safety issues.

The objective of this code of practice is to provide employees and contractors with a set of safety rules and guidelines to minimize the occurrence of safety-related incidents, and, in the event that an incident does occur, to minimize the impacts.

The code of practice presented herein applies equally to ARC Kiggavik Project employees and to contractors working at ARC Kiggavik Project facilities.



2 RESPONSIBILITIES

- 1. All employees and contractors are responsible for ensuring that work is performed in a safe manner.
- 2. The responsibility for day-to-day operation of safety related programs rests with supervisory personnel.
- 3. Standards are enforced by disciplinary action, as necessary.
- 4. The staff of the Environment, Health and Safety (EHS) Group:
 - a. Monitor, by field inspection and reporting, the effectiveness of safety and environmental related programs and compliance with Company standards and applicable legislation.
 - b. Provide training in the areas of radiation protection, health, safety and environmental protection and assists, as appropriate, with general training programs.
 - c. Administer the Radiation Protection Program with particular emphasis on personnel and work environment monitoring.
 - d. Administer the Environmental Protection Program including advising on remedial and preventative actions required of operating departments.
 - e. Provide First Aid and other emergency services.
 - f. Assist in the development of safe operating procedures and work instructions;
- 5. Under emergency conditions affected areas are under the control of the Environment, Health and Safety (EHS) Group.



3 TRAINING

All ARC Kiggavik Project personnel, contractors and long-term visitors will have the necessary training, competence and awareness to perform their duties in an environmentally responsible manner and to fully comply with regulatory authorizations.

At a minimum, the following training is required:

Kiggavik Project Site Orientation

Who? All ARC Kiggavik Project personnel, contractors and long-term visitors.

This training may take the form of a PowerPoint presentation, a general information pamphlet, or any other form deemed appropriate

Supervisor Certificate as required by Nunavut WCB

Who? Senior ARC Kiggavik Project personnel

Who? Senior site personnel of all ARC Kiggavik Project contractors.

- Transportation of Dangerous Goods
- First Aid (basic)
- WHMIS
- Fire Prevention / Response
- Spill Response

Who? All ARC Kiggavik Project personnel

Who? Senior site personnel of all ARC Kiggavik Project contractors.

ARC strongly encourages all contractors to obtain First Aid (basic), Fire Response, Spill Response and WHMIS for their junior employees.

4 GENERAL SAFETY RULES

- 1. Employees and contractors must wear and use all protective devices or safety equipment as directed by their supervisor. All such protective devices or safety equipment must be approved by the EHS Group.
- When a hazard exists and the safety devices required for an operation are not available, the work must not be performed unless an alternative method that does not require these devices is found. (This will not apply in the case of rescue from immediate hazard to life).
- 3. Employees must watch for and obey all warning signs.
- 4. Horseplay, practical jokes and other actions that may cause injury are strictly prohibited.
- 5. Employees are to report all unsafe conditions and unsafe practices to their supervisor, and the EHS Group.



- 6. Anyone aware of an unsafe condition in an area or of an unsafe practice during any operation must ensure that the supervisor responsible for the area or for the operation is aware of the situation.
- Misuse of safety equipment or disabling of safety devices is strictly prohibited.
- 8. A safety guard may only be removed if adequate alternative protection against injury is provided.
- 9. Any person walking, jogging outside of camp must use the sign out sheet to indicate time of departure and carry a two way radio, satellite phone and GPS.
- 10. Long hair and loose clothing must be well secured. Jewellery should not be worn.

5 RADIATION SAFETY

The Radiation Protection Program on site is administered by the EHS Group.

All personnel are required to follow radiation safety rules and procedures.

Individuals working with or near mineralized core may be required to wear personal dosimeters. When assigned a personal dosimeter, the individual is required to wear the device on their upper torso and inside their clothing during work activities. At the end of the work shift, the dosimeter is to be placed in a designated storage area. Individual dosimetry results are retained on employee records and provided to the employee on a regular basis or upon request.

6 PERSONAL PROTECTIVE EQUIPMENT

It is the responsibility of personnel and contractors to wear appropriate personal protective equipment when performing work activities. Following is a list of the personal protective equipment required when working at ARC Kiggavik Project facilities.

- 1. *Eyewear:* use safety glasses while performing all camp duties. Hazard categories common to eye injuries include:
 - Physical Hazards: flying particles, dust and sparks.
 - Chemical Hazards: fumes, burns and splashes.
 - Thermal and Radiation Hazards: heat, glare, ultraviolet, and infrared rays.
- 2. *Footwear:* steel-toed safety footwear must meet the requirements of the Canadian Standards Association.
 - Safety footwear must be maintained in good condition such that it will continue to be effective for its intended purpose.
 - Employees are responsible for providing their own safety footwear.



- 3. *Ear protectors:* hearing must be protected when sound levels in the workplace reach 85 decibels, if the sounds in the work area are irritating, or the voice has to be raised to makes ones' self heard from two feet/60cm, then hearing protection is required. Types of hearing protectors available include:
 - Disposable ear plugs.
 - Reusable ear plugs.
 - Ear muffs, normally mounted on a hard hat.
- 4. Hard Hats: the use of hard hats around sites where there is an overhead hazard.
 - Safety hats must be at least ANSI Z89.1 approved, class B.
 - A safety hat that show signs of damage or that has received a severe blow must be replaced.
 - Safety hats are provided by the company. A charge may be levied for replacement of a safety hat that is lost or damaged through negligence.
- 5. *Clothing:* field personnel must be aware of potential extremes of climate and to have the adequate clothing to deal with this.
 - Many types and styles of protective clothing are available to mining industry.
 The most popular are one piece coveralls. They are available in a single-layer cotton blend and also as well as insulated versions for winter.
 - Chainsaw pants or chaps that are worn over regular trousers, are lined with ballistic nylon. This provides a degree of protection against accidental contact with a running chain saw in a kickback situation. Chainsaw pants with padding that extend around the back of the leg provide the best protection.
 - Fire resistant coveralls are to be worn when working around the incinerator and performing refueling.
- 6. *Hand protection:* the hand generally speaking, is more exposed to danger than any other part of the body.
 - Hand protection must protect against the hazards of the particular job.
 - Hand protectors should not be worn around moving parts that could catch the glove/mitt and pull the hand into the danger area.

The type and quality of field clothing can make a difference in the quality and quantity of field work one is able to accomplish. It also has bearing on safety in that it can either shelter you or allow you to be harmed. Additionally, field clothing has to be highly versatile to make it economical.

The way to dress for the field is in a layered system (as outlined below) composed mostly of synthetic textiles designed for versatility, utility, comfort, protection and economy.



- Wicking Layer (Synthetic): This layer keeps you dry by pulling sweat away from your skin (important). It also keeps you a *little* warm. It should be skin-tight but not uncomfortable.
- Insulation Layer (Fleece): This layer keeps you warm. If you need extra warmth, wear two layers of fleece over the wicking layer.
- Protective Layer (Nylon): This layer protects the wicking layer and/or fleece layer, nylon is very tough and will provide the needed economy in this clothing system by helping the more delicate components last *much* longer. This is the same layer that will keep you cool when worn by itself on hot days.
- Wind & Rain Barrier (Gore-tex® or the like): This layer shields you from rain and wind. Though the three previous layers WILL keep you warm if you become wet, it's always better to be dry on cold days. Further, those inner layers can't stop the wind.

When properly chosen and utilized, the same clothes that help keep you warm at subzero temperatures will keep you cool on the hottest days.

7 FIELD SAFETY

7.1 Planning

To ensure the safety of employees and contractors, supervisors should plan work activities in consideration of the following:

- The time of day (how many hours of light are there?).
- The relative remoteness of your location.
- The type of terrain and topographic relief.
- The current weather and pending weather.
- The nature and amount of work left to complete.
- Threats to the well being of you and your crew.
- The location of your field crew and/or partner relative to you.
- The number of people in your crew (very important!).
- The location of your vehicle/atv/snow machine or camp relative to you.
- Equipment and consumables readily at hand (water, communication device, first-aid kit, signaling devices, etc.).
- Your (and your crew's) skill level and experience as they pertain to all of the above.



For crews working at remote locations, a survival kit must be maintained at the work location. The survival kit should include:

- Food and water rations for at least two days
- Spare clothing
- Sleeping bags
- Spare blankets
- Matches
- Lighter/fuel
- Flashlight
- Compass
- First aid kit
- Portable communication devices (two way radios, satellite telephone)
- Hatchet/small axe
- 30 m nylon rope
- Flagging tape
- Flares/whistles

Survival kits are to be checked prior to taking them into the field. Weekly inventory of contents should be performed.

All crews involved in field activities at remote locations must have a communication plan, to ensure prompt and effective communication with ARC management in the event of an incident. Field personnel shall have satellite phones and/or portable radios and a comprehensive list of numbers to call in case of an emergency (e.g. emergency contacts list). Field staff shall contact the main camp office daily to provide updates on safety, work results, environmental issues and any untoward occurrences.

7.2 Hot Conditions

High temperature and humidity may produce heat cramps, heat exhaustion or heat stroke:

- Heat Cramps: Heat cramps result from excessive sweating and loss of body salt.
 This may be prevented by an adequate intake of salt in the diet.
- Heat Exhaustion: Heat exhaustion is a state of collapse and shock, as a result of physical work in a hot environment. The risk can be reduced by following a proper/comfortable work-to-rest ratio and consuming water at regular intervals.
- Heat Stroke: Heat stroke is an extremely serious medical condition in which the ability to lose heat and control body heat is lost. As a result, very high body temperatures may develop, followed by collapse and death.



7.3 Cold Conditions

Working for extended periods in cold environments can cause the body to decrease blood flow to the skin. The result can be cold stress. The immediate health effects of cold stress are decreased alertness and lack of concentration. If exposure is prolonged or extreme, frostbite or hypothermia may result.

- Frostbite is the freezing of tissue. The fingers, toes, ears and nose are particularly susceptible. Frostbite may also be caused by contact with cold objects.
- Hypothermia results when the body's core mechanism can no longer maintain internal body temperature above 35°C Medical attention must be sought immediately.
- Special attention should be given to good hand and footwear, and face and head protection.

7.4 UV Radiation

Ultraviolet (UV) light poses a real threat to the field personnel in the form of serious long-term problems such as skin cancer, premature wrinkling, immune suppression, and cataracts.

- Particular attention to sun burn symptoms should be observed.
- Use sun block or sun screen with an SPF rating of at least 15, particularly on the nose, hands, ears and neck. This should be made available to employees exposed to this hazard.
- Use eye protection (either dark or clear) that block at least 99% of all UV rays.
- Wear a wide-brim hat to protect your head.

7.5 Dehydration

For "normal" activity, the recommended daily allowance of <u>water</u> is about 2 liters. When working strenuously or in a hot climate your body may require 4 liters or more in addition to what you drink at breakfast and dinner. Cold fluids are the most beneficial.

7.6 Insects

The common insects encountered include mosquitoes, flies, bees, wasps, ants.

- Limit your exposure through the use of insect repellent and netting, repellents that contain 30% DEET are the most effective.
- Protect yourself with a bug jacket



7.7 Wildlife Encounters

Working in remote areas involves certain risks, including the possibility of a bear or wolf attack. Although the actual danger from these animals may be small, it is real. The best defense is a good knowledge of their habitat and behavior. Consider bringing a can of bear spray or bear bangers. If you do, know how to use them.

If you see a bear:

- 1. Keep your distance and allow the bear every opportunity to avoid you.
- 2. If the bear continues to approach you, it is most likely trying to identify what you are. Remain calm. A standing bear is usually curious, not threatening.
- 3. Identify yourself by talking in a normal voice.
- 4. Try to back away slowly at a diagonal angle. If the bear follows, stop and stand your ground.
- 5. Don't run, running may cause the bear to chase you
- 6. If the bear gets too close, wave your arms, raise your voice, and be more aggressive.
- 7. If you're carrying bear spray, get it in your hand, point the nozzle away from you, and check the wind direction to make sure the spray doesn't blow back on you.

What to do if the bear makes contact:

- 1. If you are attacked by a grizzly bear, fall to the ground and play dead. Typically a grizzly bear will break off its attack once the threat is removed. Remain motionless as long as possible. There are two recommended positions:
 - a. Lie on your side, curled into a ball, legs drawn tightly to your chest, hands clasped behind your neck.
 - b. Lie flat on the ground, face down, fingers intertwined behind your neck.

Personnel must not feed or harass wildlife in any manner.

For more information Safety in Bear Country is available as a reference document.

7.8 Drill Rig Safety

Hazards around advanced exploration sites can include, diamond drill sites and heavy equipment. Employees and contractors working on drilling rigs using diamond drills, should have appropriate training and be proficient in their area of work. Safety measures for diamond drilling are provided in the *Consolidation of Mine Health and Safety Act*.



Following are general safety guidelines when working around diamond drill rigs.

- Do not handle any equipment for which you have not been trained.
- Avoid loose clothing which could get caught in the in the drill head or machinery.
- Wear hearing and eye protection and any other protective equipment as directed by the crew supervisor.
- Always wear a hard hat to prevent injury from falling objects.
- Be aware of slippery floors.
- Heavy Equipment, the operator of heavy equipment may have reduced visibility.
 Approach equipment in such a manner that the operator is aware and of your location and movements at all times.

8 VEHICLES AND MOBILE EQUIPMENT

All persons required to drive company vehicles (includes contractor vehicles and rented or leased vehicles) must have a valid drivers license and at all times drive defensively and safely and operate vehicles in compliance with all driving laws. A report on the status of the equipment is to be written up at the end of the field season, identifying any problems that may have surfaced during use. This equipment is then to be serviced by a licensed mechanic at a qualified shop.

Always inform your supervisor, co-worker or other responsible person of the estimated times of departure and arrival and the route to be taken.

8.1 Trucks and Probe Units

The operator must complete a pre-operation inspection checklist before equipment is placed into service and do a vehicle inspection daily. The defects on any equipment that affect safety should be corrected immediately as the vehicle could not be used until repaired.

- Drivers will make a particular effort to acquire an appropriate amount of rest before driving any long distance.
- Vehicles are to be properly maintained and equipped for the terrain in which they are to be operated.
- All vehicles used for work purposes must be fitted with fixed seat belts for the driver and all passengers. The driver and all passengers must wear seatbelts at all times.
- While parking along roadways, drivers should make every reasonable effort to park in a safe location off the road.
- Use sound judgment and exercise caution at all times. Adapt your driving to road and trail conditions.

Every vehicle is to be equipped with spare tire, fire extinguisher and emergency truck kit.



8.2 Watercraft

All watercraft must be in a safe and operable condition and all vessels must be large enough to do the job safely.

- No watercraft shall be used by more occupants than the approved rating.
- Where federal and/or provincial/territorial regulations require training for operation of watercraft, all field personnel must obtain the appropriate certification.
- Weather and water conditions must be such as to allow for safe travel.
- Remove portable fuel tanks from the watercraft when refueling. Clean up any spilt fuel.
- All equipment and watercraft must conform to Canadian Coast Guard Standards.

Each watercraft must be equipped with an approved flotation device for each occupant and must be worn while on water. An appropriate tool kit for small engine repairs must be kept in the watercraft. A kill switch for the engine in the event that the operator is thrown from the boat.

8.3 Snowmobiles and All-Terrain Vehicles (ATV's)

Personnel are to operate snowmobiles and ATV's safely and in accordance with the following rules.

- Pre-operational checks identify fuel and lubricant levels, damaged or inadequate parts and systems. This makes the equipment safer to operate and also saves time and prevents breakdowns on the trail.
- Always carry satellite phone and GPS.
- Where federal and/or provincial/territorial regulations require training for operation of snowmobiles and ATV's, all field personnel must obtain the appropriate certification.
- As a rule personnel are to travel in pairs (however in some instances due to operational requirements, this may not occur) when on snow machines and ATV'S, using previously defined trails or roadways. If new trail needs to be opened, proceed with one machine at a time. If stuck, do not over exert or strain one self.
- If lakes, rivers or streams must be forded, ensure the ice is thick enough to support the weight of the driver and machine (minimum 13 cm). Weak iced areas are usually identifiable by gray colored snow. In the spring, ice conditions may change very quickly. Check the ice condition often to monitor its integrity.
- Breaking through the ice, get help from co-worker. Use rope available in the survival kit and keep safe distance from the broken-up surface. Proceed to shore and start camp fire to dry clothes.



Helmets and proper clothing are to be used at all times when operating snow-mobiles and ATV's.

Survival kits must accompany all snowmobiles that are in use. An extra drive belt (for snowmobiles) and an appropriate tool kit for small engine repairs and equipment maintenance are to be carried with all snowmobiles and ATVs.

8.4 Aircraft (fixed wing and helicopters)

Air operators must hold a valid license issued by the National Transportation Agency of Canada (NTA) and an operating certificate issued by Transport Canada. All charter operators providing service for AREVA operate according to the rules and regulations specified in the Canadian Aviation Regulations, amendments to their Air Operator Certificate and by AREVA Resources Canada Inc. Charter Aircraft Operator Standards. Only aircraft (fixed-wing and helicopters) operated by <u>pre-approved companies</u> are acceptable for charter flights carrying AREVA Resources Canada Inc. passengers.

Chartered aircraft, fixed wing and helicopter, are to be used with caution, and personnel are to abide by the safety rules of the aircraft company and the pilot.

The following safety rules are to be followed during access and egress from aircraft.

- Always abide by safety orientation given by pilot.
- Approach or leave the helicopter walking in a crouch with head down.
- Never walk under the tail section of a helicopter.
- Never walk down hill towards a helicopter.
- Always stay in full view of the pilot when approaching or leaving a helicopter Never carry material on or over the shoulder or overhead when approaching a helicopter.
- When departing from the helicopter, move 10 meter away in a crouched position and stay there until the helicopter has departed.

Aircraft are <u>not</u> to be used to transport personnel or equipment to remote sites during inclement weather.



9 HAZARDOUS MATERIALS

All hazardous materials on site are to be used and stored appropriately and in accordance with safety procedures.

All provisions of the applicable Workplace Hazardous Materials Information System (WHMIS) legislation must be complied with. Copies of all relevant MSDS forms are to be kept on file at the site.

Hazardous materials shipped to and from the site must be transported in accordance with the Transport Canada Transport of Dangerous Goods Regulations.

The use, storage and transport of all hazardous materials must be coordinated with the EHS Group.



10 ACCIDENTS/INCIDENTS

10.1 Personal Injury

In the event of an accident resulting in personal injury, the following procedure is to be followed.

- 1. In the case of any accident resulting in personal injury, regardless of severity, the employee must:
 - a. Obtain the necessary First Aid.
 - b. Immediately notify the supervisor of the occurrence.
- 2. For all injuries, the supervisor must:
 - a. Ensure that the proper First Aid is provided.
 - b. If required, arrange for emergency transportation.
 - c. Immediately notify the EHS Group, the Facility Supervisor and the General Manager, Kiggavik Project.

Work activities take place in remote areas where evacuation of an injured person may be difficult. The evacuation plan must identify how an injured person would be evacuated and to where. This requires that field staff know the location and hours of service of emergency health care facilities in their area of work. It also requires field staff to recognize situations that may pose special challenges for evacuation. If certain field activities pose special challenges for evacuation, special precautions may be required.

An investigation is to be carried out for all accidents involving personal injury and submitted to the General Manager. Depending on the nature of the accident, more extensive investigations, including a TapRooT[®] Analysis, may be required.

10.2 Fatality

In the event of an accident resulting in a fatality, the following procedure is to be followed.

- 1. Cover the body with a blanket or similar material and secure the accident scene.
- 2. To the greatest extent possible, do not disturb the accident scene.
- 3. Immediately notify the Facility Supervisor and the General Manager, Kiggavik Project. The General Manager will notify the relevant government agencies.
- 4. Notify the RCMP or local police detachment.
- 5. Identify all people who witnessed the accident or may have knowledge of circumstances surrounding the occurrence.

An investigation is to be carried out for all accidents resulting in a fatality. Depending on the nature of the accident, more extensive investigations, including a TapRooT Analysis, may be required.



10.3 Property Damage

In the case of any accident resulting in property damage, regardless of the amount of damage, the employee involved (or discovering the damage) must notify his immediate supervisor of the occurrence

The supervisor must investigate the occurrence and complete a report regarding the accident, and where the property that is damaged does not belong to the Company ensure that the owner is notified. This investigation is to be completed in accordance with "Supervisor's Investigation Report" (Form 784-02-01). Where the damage is extensive, results in extended equipment down-time, the supervisor must ensure that the scene of the accident is not disturbed unnecessarily and contact the Facility Supervisor and the General Manager of the Kiggavik Project.

Reports are required for all incidents resulting in loss, including theft of company or personal property, equipment damage resulting from abuse, and fires.

All reports must be submitted within 48 hours to the General Manager, Kiggavik Project.

10.4 Near Misses

During work activities, incidents may occur which do not result in personal injury or property damage but may be potentially unsafe. Employees and contractors are encouraged report all near miss incidents to the EHS Group.

11 SPILL RESPONSE

11.1 Spill Control

Refer to the Spill Contingency Plan For detailed information regarding spills.

12 FIRE CONTROL

12.1 Fires

In the event of a fire, the following procedures are to be followed.

- Evacuate the area and control access.
- 2. Attempt to extinguish the fire only if you can do so safely.
- 3. Immediately contact the EHS Group and the Facility Supervisor.



12.2 Wild Fires

In the event of a wild fire, the following procedure is to be followed.

- 1. Leave the area as soon as possible even if the fire is at a distance. If it is a crown fire, a fire that moves across the treetops rather than on the ground, it can arrive very quickly if the winds are strong.
- 2. If the fire is close, travel downhill. Fire travels 4-5 times faster uphill than downhill. Also, lower slopes tend to have more moisture than middle slopes offering better protection.
- 3. If there is no straightforward escape route, seek protection in a depressed area, in an open area like a meadow, on rocks, or in a lake or pond. Clear the ground of all burnable materials within 10-20 feet of you. Lie face down, and bury your face; leaving yourself a means to breathe. If possible, cover yourself with dry sand or dirt, or a wool or cotton blanket. This is to avoid the searing heat of the fire as it passes around you.
- 4. Remove any synthetic clothing you might be wearing because it will melt in the heat and stick to your body.
- 5. Do not wet your clothes. The moisture will scald your skin when heated.
- 6. If the fire is large and there's no possibility of escape, make a secure area by starting a fire downwind then stepping into the burnt region.