Kiggavik Project

Environmental Impact Statement

Tier 3 Technical Appendix 2P

Occupational Health and Safety Plan

December 2011

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ATTACHMENTS

1 INTRODUCTION

1.1 OVERVIEW

AREVA Resources Canada Inc. is committed to establishing and maintaining a comprehensive occupational health and safety program for the Kiggavik Project which focuses on accident prevention and risk management. Personal injury accidents, untoward incidents, property damage and occupational illnesses are not the inevitable costs of doing business.

At ARC, the Occupational Health and Safety program is made up of several components that implement the AREVA Safety Policy and its objectives. To provide a healthy and safe workplace for employees and contractors, the program is designed to meet legislated requirements, internal AREVA Resources Canada Inc. standards and the Occupational Health and Safety Assessment Series (OHSAS) 18001 standard.

1.2 SCOPE OF KIGGAVIK PROJECT OH&S PLAN

This Occupational Health and Safety Plan provides a general overview of the OH&S management system used by AREVA at its operations in Canada, and identifies project-specific safety management activities which will be implemented for the Kiggavik Project. The plan addresses requirements of the *Nunavut Safety Act* and *General Safety Regulations* and *Nunavut Mine Safety Act and Mine Health & Safety Regulations* and the *Canada Labour Code* applicable to workplace health and safety at the Kiggavik Project. The overall management system for OH&S will continue to evolve as the Project develops with activity-specific safety management documentation developed as it is required.

This is plan is to be used in conjunction with the

- Spill Contingency and Landfarm Management Plan (Technical Appendix 10B),
- Emergency Response Plan (Technical Appendix 10C),
- Radiation Protection Plan (Technical Appendix 2Q),
- Noise Abatement Plan (Technical Appendix 4F) and
- other program specific procedures.

1.3 AREVA RESOURCES CANADA'S HEALTH & SAFETY POLICY

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

To meet this commitment, AREVA shall:

- comply with applicable legislation and other requirements to which AREVA subscribes;
- develop internal objectives and targets to achieve continual improvement in health and safety performance;
- measure performance against established goals;
- support all employees and contractors in fulfilling 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; and
- foster a common safety culture throughout the organization.

1.4 GUIDING PRINCIPLES

AREVA's commitment to providing a healthy and safe workplace is guided by the following five basic principles:

- We make safety a recognized value,
- We do not compromise standards, rules and procedures,

- We lead behaviours through observation, example and explanation,
- We maintain positive control over conditions and activities, and
- We recognize warning signs and don't live with problems.

1.5 OCCUPATIONAL HEALTH & SAFETY STANDARDS

1.5.1 Safety Management System Standards

The safety management system standard used by AREVA Resources Canada Inc. is the Occupational Health and Safety Assessment Standard 18001:2007. It is the expectation of AREVA that safety management systems are developed to meet the OHSAS 18001 standard.

1.5.2 AREVA Group Standards, Directives and Guidelines

There are some AREVA specific directives which AREVA Resources Canada Inc. follows. These directives are at least or more stringent than local and federal regulations.

- AREVA Group Occupational Safety Policy
- AREVA Asbestos Directive
- AREVA Guide to Safety Culture
- AREVA Directive for the Occupational Safety Control of Contractors

1.5.3 Federal, Provincial and Territorial Regulations

ARC must be compliant with the applicable regulations within the jurisdictions in which it conducts work. For the Kiggavik Project, the key acts and regulations governing occupational health and safety are as follows:

Federal

- Canada Labour Code Part II
- Canada Occupational Health and Safety Regulations
- Nuclear Safety and Control Act

- Uranium Mines and Mills Regulations
- General Nuclear Safety Regulations

Nunavut

- Safety Act and General Safety Regulations
- Mine Safety Act and Mine Health & Safety Regulations

1.5.4 Guidelines for Environmental Impact Statement

For the Kiggavik Project, section 9.5.1 of the "*Guidelines for the Preparation of an Environmental Impact Statement For AREVA Resources Canada Inc's Kiggavik Project", May 2011* provide specific requirements described by the Occupational Health &Safety Plan. Radiation Protection is described in a separate plan, the Radiation Protection Plan.

2 ORGANIZATIONAL STRUCTURE AND RESPONSIBILITY

2.1 INTEGRATED MANAGEMENT SYSTEM (IMS)

The IMS manual is the top tier document in ARC's Corporate IMS. It provides a structured framework of policies, guidance and expectations to operating sites, departments and major processes of the organization. The IMS is designed to meet three objectives which include:

- that activities are conducted in a safe and efficient manner that will meet applicable regulatory requirements;
- that the requirements of ISO 14001 and OHSAS 18001 standards are met as applicable; and
- that the principles of sustainable development are implemented throughout the organization.

The Corporate IMS Manual addresses the activities of the corporate senior management and sets requirements and expectations and provides guidance for the company. Each site will also have a site specific IMS, complete with specific procedures, work instructions and forms to ensure that corporate requirements are implemented.

2.2 INTERNAL RESPONSIBILITY SYSTEM

The Internal Responsibility System (IRS) exists in the commitment by all persons (workers and management) to provide a healthy and safe workplace by proactively identifying and solving occupational health and safety problems that occur. The commitment is internal with both workers and supervisory management sharing direct responsibility for the safe and efficient performance of work. The following descriptions of groups and individual positions describe specific safety roles within AREVA Resources Canada Inc.

2.3 SAFETY, HEALTH, ENVIRONMENT AND QUALITY (SHEQ) DEPARTMENT

The SHEQ Department is stationed in the Saskatoon corporate office and is responsible for providing leadership in safety, health, environment and quality affairs of ARC. The SHEQ Department is a group of highly skilled, knowledgeable individuals who contribute their expertise to the ARC team to make certain it is an efficiently managed, learning organization, which thoroughly contemplates the effects of its activities in order to protect human and ecosystem health.

Groups within the SHEQ Department include Health and Safety, Environmental Science, Geosciences, Quality, Radiation Protection and Administration.

2.4 TRAINING GROUP

The Training Group is responsible for providing some of the Safety training on site such as Orientation. In addition, they will organize safety training to be provided by the Safety Group or they may make arrangements for bringing external instructors to provide specialized safety training for employees and the Emergency Response Team.

The Training Group is also responsible for management of training records and ensuring training of employees is up to date.

2.5 EMERGENCY RESPONSE TEAM (ERT)

The Emergency Response 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. Some of the emergencies the team may respond to include:

- emergencies involving injuries and fatalities
- evacuations
- fires or explosions
- spills or other accidental releases

2.6 SENIOR MANAGEMENT

Corporate management has a contributive responsibility in workplace health and safety. It is the responsibility of corporate management to:

- define the standards, requirements, and expectations in health and safety,
- ensure there are adequate resources to fulfill the requirements,
- monitor to ensure the requirements are fulfilled, and
- take corrective actions as necessary

2.7 OPERATIONAL AND FUNCTIONAL MANAGERS

Operational and functional managers, who have the direct responsibility for the AREVA's work activities, must developing plans, processes and procedures for the fulfillment of health and safety requirements in their areas of responsibility. It is the responsibility of operational and functional managers to:

- develop a safety management system applicable to their area of responsibility following the corporate direction provided through the corporate IQMS,
- assign responsibilities for the execution, maintenance and monitoring of the safety management system, and
- take corrective actions as necessary.

2.8 SUPERVISION

Supervisors have a direct responsibility for enacting the plans, processes and procedures for safe accomplishment of AREVA's activities. It is the expectation of AREVA Resources Canada that all supervisors:

- are knowledgeable, trained and experienced in the areas they supervise,
- obtain applicable provincial or territorial supervision certificates, as required by legislation,
- promote workplace health and safety,

- contribute to health and safety objectives,
- investigate incidents in their areas,
- proactively identify and correct deficiencies,
- have daily contact with their employees in the workplace,
- conduct daily toolbox meetings, and
- conduct routine safety meetings.

2.9 WORKERS

Workers are responsible for conducting themselves in a manner that will not pose a risk to themselves or any other persons. All workers have the obligation to adhere to plans, processes and procedures designed to conduct work safely. Workers are expected to:

- understand the safe work practices and requirements which apply to their activities,
- only conduct activities which they believe they can do safely,
- reporting unsafe acts, workplace hazards, accidents, near accidents, injuries, or illnesses immediately
- contribute to the identification of hazards and the mitigation of risk, and
- contribute to the continuous improvement of safety performance.

2.10 SAFETY PROFESSIONALS

Safety professionals are employed by AREVA to facilitate the development, execution and continual improvement of safety management systems and safety performance.

Key positions and their responsibilities within the Safety Group will likely include:

Health and Safety Coordinator:

- responsible for the coordination of non-radiological health and safety programs

Safety Officer:

- responsible for the effective functioning of the safety program, fire prevention systems and emergency response program

- implementing health and safety program

- responsible for completing, reviewing and filing safety reports

Safety Technician:

- assist the Safety Officers with reviewing and filing of reports and assisting with safety programs

Industrial Hygienist:

- responsible for the operation of Industrial Hygiene programs and activities dealing with non-radiological workplace exposures

Occupational Health Nurse:

- responsible for operating the health centre and providing nursing services on-site

2.11 OCCUPATIONAL HEALTH COMMITTEE (OHC)

An Occupational Health Committee (OHC) will be formed. The OHC will be comprised of both employee and employer members from both shifts. The purpose of the committee is to assist workers and employers communicate and work together to identify and control hazards. Their role is to monitor the IRS to ensure it is functioning properly through contribution of recommendations and advice to management.

Some specific duties of the OHC will include reviewing significant changes to procedures and provides suggestions. They may also choose to participate in accident investigations. The OHC will meet on a monthly basis to inspect the workplace and discuss issues that may be brought forth to them.

3 RISK MANAGEMENT (PLAN)

3.1 HAZARD IDENTIFICATION AND RISK ASSESSMENT

A critical element in the planning of safe work is the identification of workplace hazards, their assessment, and the development of controls to mitigate risk. Health and safety programs at AREVA include processes for the identification of hazards and the evaluation and mitigation of risks. AREVA must take all precautions that a reasonable and prudent person would take in the circumstances. Processes are applied to work activities, designs and changes of facilities. The assessments are documented and the risks are catalogued. More information is provided in Attachment A.

3.2 SAFE WORK PLANNING AND PROCEDURES

As an outcome of the hazard identification and risk assessment process, procedures to conduct work safely will be developed in order to mitigate risk. They will be written in compliance with the regulations and requirements of the Nunavut Mine Health and Safety Act and Safety Act and General Safety Regulations. The Health and Safety Group will develop and maintain these written procedures to support safe work, some of which will include:

- Driving Regulations and Vehicle Operation
- Portable Ladders
- Confined Space Entry
- Ground Disturbance
- Hot Work
- Lockout
- Working in Hot Environments
- Working Alone or in an Isolated Environment
- Line Blowing / Clearing
- WHMIS
- Fall Protection
- Cranes and Rigging
- Powered Mobile Equipment Operation

- Respiratory Protection
- Electrical Safety
- Barricade Tape Usage
- Personal Protective Equipment

3.3 CHANGE CONTROL

The Change Control process ensures that physical changes to a process, system, structure or component are managed effectively and adequately documented. The multistep process involves many stages which include problem identification and justification for change, risk assessment performed by various groups such as Maintenance, SHEQ and Engineering, approval for implementation, and validation following implementation. It ensures that changes consider operational needs as well as safety, health, radiation protection, environmental protection and licensing requirements. The Health and Safety Group will be actively involved in reviewing changes to facilities, procedures and processes before implementation.

3.4 HUMAN-WILDLIFE ENCOUNTERS AND PROTOCOLS

Human-wildlife encounters are minimized through a number of preventative measures, as outlined in the Wildlife Mitigation and Monitoring Plan (Technical Appendix 6D).

Orientation will include specific training to avoid wildlife and how to handle them should an encounter occur. This will be provided to all employees

3.5 EMERGENCY PREPAREDNESS AND RESPONSE

AREVA develops plans to address predictable emergencies, such as fires, spills, system failures, interactions with hazardous substances, transportation accidents and personal injuries. To develop the emergency preparedness and response plan, the foreseeable potential emergencies are identified, the possible consequences of the emergency considered and a plan for the response prepared. Refer to the Emergency Response Plan (Technical Appendix 10C) and Spill Contingency Plan (Technical Appendix 10B).

3.6 PREPAREDNESS OF MINE SAFETY EQUIPMENT AND DEVICES

Emergency equipment will be maintained by the Health and Safety Group and the Emergency Response Team (ERT).

Monitoring systems such as fire detection and fire protection will be managed by the Safety Group with the assistance of various departments as required.

Some types of emergency equipment located in strategic locations throughout site such as fire extinguishers, eye wash stations, first aid kits and emergency showers will be checked on a regular basis by each respective department. In the event maintenance, repair or replacement of equipment is necessary, personnel will notify the Safety Group. Emergency used by the Emergency Response Team such as turnout gear, SCBA, respirators and hazmat suits will be maintained by the ERT and the Safety Group.

Ventilation monitoring underground and within the mill will be the responsibility of the Operations and Radiation Protection Group. The Maintenance Department will assist in the maintenance and repairs of the ventilation equipment.

3.7 SAFETY BY DESIGN

AREVA has a robust design control process in place for the development of new facilities and for changes to existing facilities. The process involves the identification development and implementation of safety standards in the design process. Design review requires the participation of technical leads in appropriate disciplines, including safety professionals, in assessing hazards associated with the design. Tools such as hazard and operability analysis, failure mode and effects analysis, and what if analysis, are used to identify and evaluate hazards introduced by the change or new facility. At the design stage, when hazards are identified the focus is first on elimination, then substitution, then implementation of engineering controls to mitigate risk.

3.8 SAFETY AWARENESS PROGRAMS

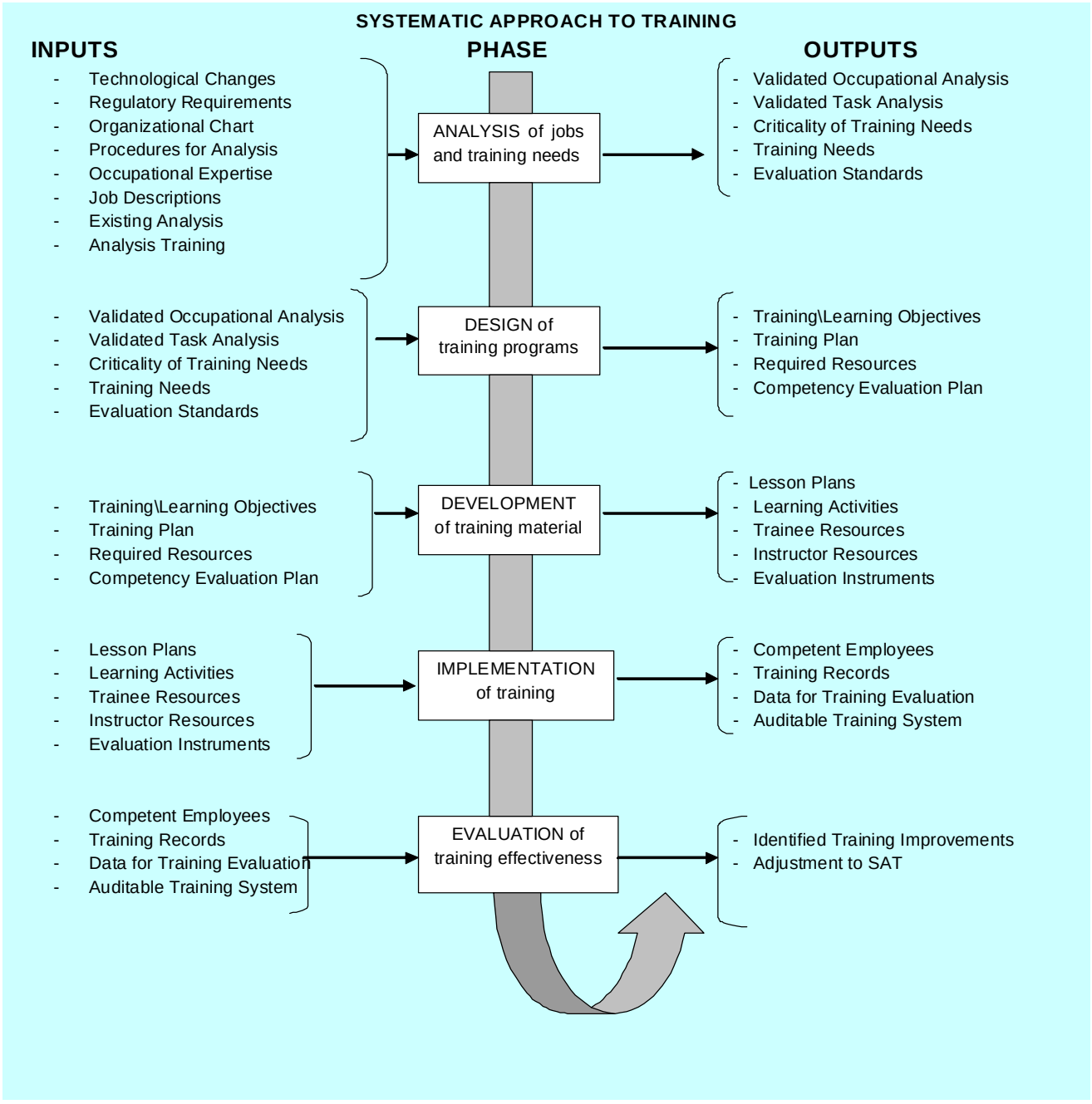
3.8.1 Systematic Approach to Training

The Kiggavik Project will use a systematic approach to training (SAT). This will involve analyzing tasks employees do for the employer, designing training for competent performance of the tasks, developing and delivering learner focused training, and testing for competent performance. The systematic approach will also include evaluating the effectiveness of the training and continuous improvement.

The Systematic Approach to Training has the following 5 objectives, with the inputs and outputs of the program diagrammed below:

- Occupations are effectively analyzed to determine training needs.
- Training programs are effectively designed to meet training needs.

- Trainings materials are developed that meet the requirements of the training design.
- Training is implemented that provides the knowledge skills and attitudes required for successful performance of the tasks.
- Training programs are evaluated and revised as required.



3.8.2 Orientation Training

All new employees including contractors are trained with an initial orientation upon arrival at site. New employees or employees who have been away for a specified period must take the orientation training again. Some of the topics that will be covered during orientation include:

- Administrative issues
- Mine Site & Camp Rules
- Site Orientation
- Health Centre Orientation
- Muster Point Locations and evacuation procedures,
- Haul Road Procedures
- Nunavut Mine Health and Safety Act and applicable regulations
- Use of emergency fire fighting equipment,
- Shift work
- Radiation Protection overview (additional training to be provided for designated Nuclear Energy Workers)
- Kiggavik Emergency Safety overview
- Waste Management
- Mine Orientation (if required)
- Mill Orientation (if required)

3.8.3 Prerequisite Training

Prerequisite safety training will be provided to all new employees prior to them being involved with site activities. For example, there will be specific safety training for employees handling chemicals; including WHMIS training and how to refer to a Material

Safety Data Sheet. Any employees working in areas where they may be exposed to noise levels that may affect their hearing will be provided Hearing Conservation and Hearing Protection training. Anyone who requires the use of specialized personal protective equipment will be provided the necessary information and training. All employees will be shown the emergency response equipment in their area and how to use them if required such as protective clothing, emergency showers, fire extinguishers and eye wash stations.

Ongoing and refresher training is provided to ensure employees achieve full competency in the performance of assigned tasks and duties. Training will also be given to ensure a working knowledge of regulatory requirements and license agreements.

3.8.4 Site Specific Training

Following orientation, area specific safety training will be provided by the supervisor, departmental training groups or the safety group.

Training for specific safety procedures will be provided for high-hazard work, such as work involving confined space entry, lockouts, fall protection, respiratory protection, scaffolding, working with powered mobile equipment, rigging and hoisting and electricity.

In addition, training required by legislation will be provided to employees, as required, for:

- WHMIS (Workplace Hazardous Materials System) – The Workplace Hazardous Materials Information System (WHMIS) is a three component system that was developed in conjunction with the government, labor and industry to protect workers against exposure to hazardous materials. Anyone working with or near chemicals will be provided training on using, handling, storage and disposal of these chemicals. Successful candidates who complete the course will be provided a certificate.

- TDG (Transportation of Dangerous Goods) - Anyone who handles dangerous goods, including the person who loads or unloads, is responsible for making sure the goods are transported safely to their final destination. Successful candidates who successfully complete the course will be provided a certificate.

Some of the information that will be covered include:

- An overview of the TDG requirements
- Responsibilities of shippers, handlers and drivers

- Classes of dangerous goods
- Shipping documents
- Safety marks
- Containers
- Special situations
- Emergency actions

3.9 PARTICIPATORY SAFETY MANAGEMENT: 5 POINT SAFETY SYSTEM

The 5 Point Safety System is a method of promoting safety awareness and risk assessment in the workplace. The system will require workers and their supervisor to focus on safety in their workplace and work practices. It will require daily interaction between the worker and the supervisor regarding safety. It will be used to enforce the requirement that doing the job correctly also means doing it safely. The system has been used in the mining industry for many years and implementation is credited with improved safety culture and a functional internal responsibility system. It will overtly place responsibility on the workers and the supervisors.

The 5 point safety system will address the causes of accidents, which are primarily substandard conditions, substandard methods and substandard attitudes. The 5 points are as follows:

1. Check Entrance and Travelway to Workplace.
2. Are Workplace and Equipment in Good Working Order?
3. Are Employees Working Properly?
4. Do an Act of Safety.
5. Can and Will Employees Continue to Work Properly?

Workers:

- record their answers to the above questions on a 5 Point Safety Card on a daily basis.

Supervisors:

- contact each worker in their workplace at least once per day,

- observe the person while working,
- check to see if the first 3 points have been completed for the work being conducted,
- do act of safety with the worker (e.g. safety discussion, demonstration or instruction involving interaction with the worker),
- check that workers can and will continue to work safely and properly,
- if they are not satisfied with the employee's information, they will take corrective action,
- collect and review the 5 point safety cards at the end of each day,
- follow up and resolve any safety concerns noted on safety cards recording the actions taken, communicate those actions to the worker, obtain the workers acknowledgement and sign off, and
- review and discuss issues that were identified on the 5-point cards at the next day's toolbox meeting.

Contractors will submit their 5-point cards on a daily basis to their AREVA site contact who are required to review the cards as discussed above.

Safety Group:

- Perform regular reviews of completed safety cards,
- Follow up on any unresolved safety concerns on cards.

3.10 SAFETY MEETINGS

Safety meetings will be conducted to:

- communicate and share safety issues,
- review any recent safety incidents and
- provide safety education.

Supervisors will conduct safety meetings with their employees on a weekly basis. Safety meeting minutes are documented.

Safety concerns will be identified and corrected as they arise, noted on 5 Point Safety Cards, and will be discussed at daily toolbox meetings. Issues can be reviewed at safety meetings to confirm actions are completed.

3.11 COMMUNICATION AND SAFETY AWARENESS PROGRAMS

Communication of safety principles and the performance of activities that promote and implement the principles of the safety program will be crucial to the success of the safety program. This will be accomplished in part through a series of elements and activities, as briefly described below:

- Toolbox meetings – Each department or group holds daily informal meetings to update employees on recent safety accidents or specific safety topics that may be pertinent to the day's tasks,

- Safety huddles – weekly group and departmental meetings will be held with supervisors and employees to discuss a specific safety topic,

- Posters, Pamphlets and Magazines – A collection of written and visual material will be posted to increase awareness and remind employees to work safely,

- Incident Notifications (Traffic Light Program) - These lights provide a highly visible and easily recognizable correlation with the daily events. A red light will signify an injury, major damage or reportable release. A yellow light will indicate a minor incident with no injury or a near miss incident. A green light will indicate no incident has occurred. At the crews' next morning tool box meeting, supervisors will disseminate any information that has been provided to them from the Safety Group,

- Safety Award Program – Safety awards are distributed to employees based on their achievement of goals set by leading indicators of safety performance,

- Safety Decal Program – A formal letter acknowledgement of personal achievement is given to employees who attain certain milestones in accident free years, and

- Performance Indicators – Graphs and charts will be created to keep employees informed about how the Kiggavik Project is performing based on safety statistics.

- AREVA Flash Reports for internal communication between sites.

3.12 CONTROL OF HIGH-HAZARD WORK

All high hazard work will involve a risk assessment and safe work plans be written prior to conducting the work. There will be specific requirements and comprehensive programs and procedures to ensure the work is carried out in a safe manner and all risks controlled. There will be site specific training to those conducting the work. These activities include, but are not limited to those listed below.

- Confined Space Entry
- Lockout and Stored Energy
- Explosives
- Hot Work (e.g. welding, grinding, cutting)
- Working at Heights
- Working Alone
- Hot and Cold Environments
- Working with High Voltages
- Ground Control
- Powered Mobile Equipment Operation
- Transportation and Vehicle Safety

3.13 HEARING CONSERVATION PROGRAM

A Hearing Conservation Program will be established for the Kiggavik Project to prevent employees from experiencing noise-induced hearing loss. The Hearing Conservation Program elements will address the assessment and control of noise exposures, as well as hearing protection and worker education requirements.

- Audiometric Testing and Education - Audiometric testing will be provided to all AREVA Kiggavik site employees upon commencement of work and annually

thereafter. All employees will also receive training on the effects of noise hazards and use of hearing protectors.

- Hearing Protection - Hearing protection will be used for the Kiggavik Project in conjunction with administrative and engineering controls. Hearing protectors are made available to employees who work in areas in excess of 80 dBA. Hearing protectors are provided and must be worn by employees whose daily average noise exposure is greater than 85 dBA. Hearing protective devices shall be used in accordance with the recommendations of Table A1 (Selection of Hearing Protectors) in the standard CAN/CSA Z.94.2-94, Hearing Protectors.

- Sound Level Monitoring - A routine schedule of sound level monitoring will be performed throughout the Kiggavik site.

- Program Review - The Hearing Conservation Program will be reviewed on a regular basis as required to ensure information is up to date and the OHC will be consulted upon this review.

3.14 CONTRACTOR SAFETY MANAGEMENT

Contractors will be expected to:

- be knowledgeable, trained, and experienced in the work they perform,

- comply with the requirements of this Plan, the safety manual, and regulations,

- demonstrate safe work practices,

- follow best practices for their industry,

- describe the hazards associated with their work and controls in place to conduct their work safely,

- contribute to the ongoing identification of hazards and mitigation of risk,

- correct deficiencies in their workplace, their behaviours, and their attitudes, and,

- report to AREVA on incidents in the workplace.

Depending on such factors a scope of project, length of duration on site, number of employees on site, contractors may be required to:

- provide a Health and Safety program for their workers,
- provide safe work plans or procedures for their work,
- have an on-site Occupational Health and Safety Committee or representative, and/or
- provide a site safety officer.

Safety Group will:

- Work with the contractor to identify workplace hazards and mitigate risk,
- Review contractor training records and coordinate any site safety training,
- Inspect contractor tools and equipment prior to the commencement of work,
- Conduct joint contractor workplace inspections with the contractor supervisor, and
- Review contractor work procedures and practices.

4 PERFORMANCE MONITORING (CHECK)

4.1 PERFORMANCE INDICATORS

The Kiggavik Project will use both trailing indicators and leading indicators of safety performance. Trailing indicators will include categorized measures of incident frequencies and severities; leading indicators will be developed based on annual objectives for improved performance resulting from reviews of program functionality and past performance.

Leading Indicators

Leading indicators of workplace health and safety are developed as part of the objective and target setting process conducted each year. Activities which will proactively contribute to improved health and safety performance and positive safety culture development are identified, described in terms of specific, measureable, achievable, and realistic and time-bound objectives. Progress towards these objectives is monitored and their achievement is rewarded.

The practice of developing targets and objectives as leading indicators of health and safety performance is an expected component of AREVA health and safety programs.

Trailing Indicators

Trailing indicators of workplace health and safety used by AREVA to monitor the performance of both AREVA and contractor personnel include measures of incident frequency and severity. Frequency measures may be applied to any category of incident, be they lost-time, medical aid, or first aid accidents, or incidents of equipment damage or near misses. Severity measures are applied where the impacts are measureable, as is the case for lost-time accidents or damages.

4.2 WORKPLACE MONITORING AND CONTROL

4.2.1 Workplace Inspections

AREVA strives to measure performance in quantifiable, objective terms. Some of the inspection and monitoring activities may include:

- physical conditions inspections
- critical parts and equipment inspections
- job observations
- 5 point safety cards
- planned maintenance inspections
- daily pre-use equipment checks
- safety audits
- external inspections by service providers, suppliers and regulatory bodies
- housekeeping inspections
- surveys of temperature extremes
- noise surveys
- monitoring of workplace contaminants
- management reviews

4.2.2 Industrial Hygiene Monitoring

The practice of industrial hygiene is devoted to recognizing, evaluating and controlling occupational health hazards. The Kiggavik Project health hazards may be classed as chemical, biological or physical stresses. There will be a process used for industrial hygiene monitoring of these occupational stresses and the objective will be to reduce or eliminate employee exposures.

Monitoring is accomplished using direct reading instruments and sample collection pumps may require external third party analysis. Chemical hazards take the form of dusts, mists, fumes, gases and vapours, while examples of physical hazards are noise, thermal extremes, and lighting. For a detailed risk assessment on specific chemicals, refer to Volume 8 of the draft Environmental Impact Statement.

4.2.3 Radiation Protection Monitoring

Refer to the Radiation Protection Plan (Technical Appendix 2Q) for radiation protection management.

4.3 INCIDENT INVESTIGATION AND REPORTING

By determining the causes of incidents and near misses, measures can be put into place to ensure they do not occur again.

DNV (Det Norske Veritas) is an independent foundation with the purpose of safeguarding life, property, and the environment. The foundation was established in 1864 in Norway to inspect and evaluate the technical condition of Norwegian merchant vessels. AREVA uses a modified form of the DNV method for the investigation of workplace incidents.

In addition to collecting data on the incident event, it will determine the root cause of incidents and will require that mitigative and preventative measures be put into place. It will also give line-management and the employee an opportunity to review and comment on the incident. More detail on how to conduct an investigation is provided in Attachment B.

4.4 ROUTINE REPORTING REQUIREMENTS

The Kiggavik Project will routinely report on aspects of safety performance to many stakeholders, both internal and external. Some of these stakeholders will include:

- Kiggavik site personnel
- AREVA Resources Canada Inc.
- AREVA North American Business Platform
- AREVA Mining Business Unit
- Workers' Compensation Board, Northwest Territories and Nunavut
- Canadian Nuclear Safety Commission
- Local communities

5 CONTINUOUS IMPROVEMENT AND CORRECTIVE ACTIONS (ACT)

5.1 PROGRAM REVIEW

The program elements will be reviewed at least every two years to determine if revisions are necessary. Changes to the program elements may be made prior to the two year period if they are identified before the review date. The review of the program elements will be conducted by the Safety Group and audits will be routinely performed by the Quality Group.

AREVA believes that if these procedures are followed, accidents & occupational illnesses will be prevented. Substandard health and safety performance at any level will not tolerated and is not acceptable. AREVA believes and is committed to continual improvement.

5.2 OBJECTIVES AND TARGETS

Annual Health and Safety targets will be developed upon the review of the hazard registry, investigation reports, inspection reports, 5-point card concerns and feedback from employees. Objectives may also stem from broader AREVA policy or development initiatives. Targets will be initially drafted by the Safety Group after reviewing the concerns from the aforementioned list. In turn, they will consult each pertinent department to assess the feasibility of the target. The targets will be reviewed with the OHC and presented to all employees. Information will include the target, accountability and targeted date for completion. The status of the targets will be updated on a regular basis and reviewed by management.

6 EMPLOYEE HEALTH AND WELLNESS

6.1 HEALTH MONITORING AND PROMOTION

Health monitoring and health programs will be provided on-site by the Health Centre. There will be an updated suite of procedures and work instructions that detail the treatment and assessment provided to patients as required.

In addition to providing treatment to and assessment of medical emergencies and illness, other programs the healthcare worker may manage include:

- conducting kitchen inspections
- maintaining WCB administration for injured employees
- filing confidential employee information
- provide a certificate of fitness for Emergency Response Team members
- assist with the Emergency Family Assistance Program
- be involved with Return to Work program
- providing the influenza, tetanus, and Hepatitis A&B vaccination as required
- assisting with the fitness and exercise programs
- conduct substance testing on employees as required
- education sessions on other healthy lifestyle programs such as smoking cessation, heart smart campaign, dental awareness, nutrition, breast cancer awareness.

6.2 OCCUPATIONAL MEDICAL SURVEILLANCE

There will be some medical surveillance monitoring provided by the Health Centre as a preventative measure and to ensure workers are fit for work. All information is kept confidential and some of the medical surveillance provided to employees include:

Annual medical examination – Employees working at the site are given a medical upon hiring and yearly thereafter to ensure they are fit for their duties at work. All information is kept confidential and results are provided to each employee. These examinations will be completed by the company physician.

Annual audiometry (hearing) testing – For employees exposed to 80dbA or greater, they will be given a baseline audiogram upon hiring and yearly thereafter. This test will determine if the employee's hearing is within a normal or abnormal range. Audiometric testing is important to the success of a noise management program since it is the only way to actually determine if occupational hearing loss is being prevented by the noise management control measures. By comparing tests from year to year, early changes can be detected and appropriate protective measure implemented to prevent further damage.

Annual spirometry (lung function) testing - Spirometry is a breathing test that measures lung function. It tests how much and how fast the lungs can move air into and out of the respiratory system. A computer program analyzes factors such as age, weight, sex, race and smoking status to determine whether or not an employee's lung capacity fall within a normal range. All employees working in a *dust exposure occupation* are given a baseline spirometry test upon hiring and yearly thereafter.

Uranium in Urine (U/U) samples – U/U samples will be provided by Nuclear Energy Workers on a specified schedule. Workers may be potentially exposed to uranium compounds of varying solubilities. Within the applicable Codes of Practice, triggering Administrative Levels have been set conservatively, commensurate with the potential hazard from the uranium compounds. Particular consideration is paid to the workers who may be exposed to calcined yellowcake which has a low solubility. As an ALARA practice these workers will be required to use powered, air-purifying respirators when conducting work within the packaging and calcining enclosures (i.e., the 2 locations of potential exposure to calcined yellowcake). Because of the potential chemical toxicity of uranium compounds, a test for albumin in urine is included for elevated urine results to quickly detect potential effects on the kidney.

7 EMERGENCY PREPAREDNESS

Emergency preparedness will include planning for incidents of a safety, environmental and/or radiation nature, for both on-site and off-site emergencies. On-site emergencies will be the responsibility of departments of the Kiggavik Project. Off-site emergencies will be the responsibility of the AREVA Resources Canada Inc. office in Saskatoon. This is described further in the Emergency Response Plan (Technical Appendix 10C). A set of detailed procedures will be developed to conduct planned, co-ordinated, controlled and integrated activities with respect to handling potential emergencies at the Kiggavik Project. A summary of responsibilities during an emergency is listed in the Emergency Response Plan.

7.1 INJURY MANAGEMENT AND INTERACTION WITH NUNAVUT'S MEDICAL SYSTEM

Personnel will be required to be fit to perform their work.

When a worker is injured on or off the job and an absence from work results, workers are expected to identify that they have been injured.

When an injury has occurred at work which may result in lost time beyond the day of the accident, it must be reported to the Worker's compensation board. If the accident disables or is likely to disable the worker for more than the day of the accident, then AREVA will give notice of the accident to the Workers' Compensation Board within 72 hours of knowledge of the accident. A notice will also be provided to the injured worker.

A Return to Work Program will describes the program in place for employees who are unable to resume normal work duties as a consequence of an injury or illness. When an injured worker is able to return to work, a *Medical Certificate* form completed by an attending healthcare provider must be submitted prior to arrival on site. If modified work is required, a *Functional Abilities Form* must be completed by the attending healthcare provider so that a Return to Work Plan can be created and agreed upon prior to arrival on site.

7.2 MEDICAL AND FIRST AID

There will be a Health Centre on site, situated in an appropriate location. The Centre will be managed by a site nurse. The Centre will conform with the requirements of the Nunavut Regulations.

First aid equipment and supplies will be monitored, maintained and be available for use if necessary. First aid kits will also be supplied at refuge stations and at various locations throughout the site; these will be regularly inspected and replenished as required.

First aid training will be provided to supervisors and employees as required by the regulations. Emergency responders will be trained in first aid and cardiopulmonary resuscitation (CPR) including use of the Automatic External Defibrillator (AED). A number of AEDs will be stored at strategic locations.

All employees will be trained on their first day on where the Health Centre and how to call for first aid assistance. There will be telephones and radios for maintaining contact between the health centre and the work sites. In additional, there will also be additional methods of communication available at the Health Centre for external communication if required such as a satellite phone.

8 WORKPLACE SPECIFIC SAFETY

The following are a sample list of procedures and work instructions that will be drafted upon commencement of the Kiggavik Project. There will be accompanying work instructions with procedures as required. All personnel will review and train in necessary procedures before commencement of the work. Additional procedures will be added upon as required.

Safe Work Procedures	Safety Management Procedures
General Safety Requirements	Training and Orientation Program
Barricade Tape Usage	Conducting Safety Huddles
Confined Space Entry Program	Medivac Procedures
Crane and Rigging	5 Point Safety System
Explosives	WHMIS Management
Electrical Safety	Safety Equipment
Fire Protection Program	Safety Reporting
Line Blowing and Clearing	Supervision and Safety
Lockout and Stored Energy	Industrial Hygiene Monitoring
Ground Disturbance Procedure	Safety Inspections
Hearing Conservation Program	Incident Investigation
Hot Work (welding, grinding, cutting)	Work Refusal
Materials Handling	Respiratory Protection
Personal Protective Equipment	Conducting an Emergency Equipment Check
Respiratory Protection Program	Workplace Inspections
Powered Mobile Equipment Operation	
Transportation and Vehicle Safety	
Vehicle Safety	

Working Alone or in an Isolated Environment

Working at Heights and Fall Protection

Working in Hot and Cold Environments

Working with High Voltages

Using Portable Ladders

Attachment A

Hazard Identification & Risk Assessment

A hazard assessment will be conducted for every job at the Kiggavik Project which includes identifying the hazards which exist for a particular task.

A variety of hazards will be considered including:

Physical - noise, temperature extremes, stored energy, hand/power tools, moving equipment/parts, ground fall, physical characteristics

Chemical - explosives, flammables, corrosives, toxics, oxidizers, hazardous waste

Biological - bodily fluids, viruses/bacteria, fungi/mould.

Ergonomic - workplace or equipment design resulting in stress, fatigue and discomfort to the human body, environment, psycho-social

Radiation - dust, slurry, surface contamination, enclosure, restricted area

The following factors will also be considered when identifying health and safety hazards:

- Routine and non-routine activities,
- Activities of all personnel having access to the workplace including contractors and visitors.
- Human behavior, capabilities and other human factors.
- Identified hazards originating outside the workplace capable of adversely affecting the health and safety of persons under the control of the organization within the workplace, e.g. weather.
- Hazards created in the vicinity of the workplace by work related activities under the control of the organization.
- Infrastructure, equipment and materials at the workplace, whether provided by the organization or others.
- Changes or proposed changes in the organization, its activities or materials that may affect health and safety.

- Modifications to the OH&S management system, including temporary changes, and their impacts on operations, processes and activities.

- The design of work areas, processes, installations, machinery/equipment, operating procedures and work organization including their adaptation to human capabilities.

- Emergency Response Situations.

Risk Assessment

After identifying the hazard, the risk of each hazard will be assessed through a series of analyses including reviewing the frequency of task, probability of injury and potential consequence of an incident. In addition, there will be a discussion on the controls that will be implemented to control the risk. This assessment will be facilitated by the Safety Group with participation by workers and supervisors involved with the tasks.

The tables below are a sample of what may be used to conduct the risk assessment. As the project commences, it may be necessary to modify according to the scope of the project.

Use the following tables to assign a value for frequency, probability and severity of an activity and incident occurring.

1. Frequency

This is the number of times a task or activity is carried out.

Value	Frequency
5	Once per hour or more
4	At least once per day
3	At least once per week
2	At least once per month
1	Quarterly or less often

2. Probability

Indicate what controls are in place and then estimate how likely it would be for an incident to occur taking into consideration the controls.

Safety:

Likelihood of loss occurring each time the activity is done (or the probable chance of a loss).

Health:
Likelihood of cumulative exposure to the health hazard each time the activity is performed. Note that due to the difficult nature of estimating health probability, the exposure time of activity is used.

Value	Safety Probability	Health Probability
5	Probable, (1 in 2 occasions)	Exposed more than 80% of shift
4	Possible (1 in 5 occasions)	Daily for longer than 4 hours
3	Unusual (1 in 50 occasions)	Daily for less than 4 hours
2	Rare (1 in 100 occasions)	Weekly for longer than 4 hours
1	Not likely (1 in 1000 occasions or less)	Weekly for less than 4 hours

3. Severity

Severity can include actual and/or probable losses. It is the consequence of the activity or improper facility and is influenced by how hazardous the activity is, the degree of difficulty and the complexity if the activity is improperly performed. These factors are evaluated as one. The key question to ask is **"If things go wrong, what is the probable degree of loss?"**

Value	Safety Severity	Health Severity
5	Fatality	Exposure to an IDLH (Immediately Dangerous to Life & Health) concentration.
4	LTA or long term modified work	Exposure resulting in immediate, permanent health effects.
3	Short term modified work	Exposure resulting in permanent health effects over time.
2	Medical Aid Injury	Exposure resulting in immediate, non-permanent heath effects.
1	First Aid Injury – able to resume work in the same shift.	Health effects unlikely to occur.

4. Risk Factor

Once the values have been assigned, multiply the values together to determine a risk factor. Decide if the risk factor is acceptable or if additional controls need to be implemented to ensure the work is performed in a safe manner.

When determining the threshold for the designation of significant risk the following factors are taken into consideration:

- Yearly safety statistics
- Legal and regulatory requirements
- Corporate and divisional initiatives
- Technical or process changes
- Procedural or design changes
- Experience of staff complement

Discuss risk assessments and controls with workers prior to completing the tasks.

5. Review & Ongoing Identification of Hazards

Risk assessments must be reviewed at a specified frequency or:

- Prior to changes to facilities *(including construction, demolition & non-routine maintenance)*, equipment, product, process or function.
- Following high potential accidents / incidents occurring
- Following legislation / regulation changes
- Following required actions being identified in incident investigations, by regulators or inspections.

6. Risk Elimination or Reduction

Reducing risks will be done with consideration to the following hierarchy:

a) Elimination;
b) Substitution;
c) Engineering controls;
d) Signage/warnings and /or administrative controls;
e) Personal protective equipment.

Attachment B

Incident Investigations

The following process provides an overview of how to conduct an incident investigation. There will be forms and training provides to supervisors to assist with investigations and ensure it is conducted in a thorough and consistent manner.

Employees are required to report all incidents to their supervisor.

The supervisor will investigate all accidents promptly with the Safety Group after an incident. If there has been a serious injury in which the individual cannot be moved, the Incident Commander & the Emergency Response Team (ERT) should be notified immediately.

The Occupational Health Committee (OHC) Co-chair will be notified of the incident if a serious potential for injury could have resulted. Unless there is an immediate hazard, the area will be not be allowed to be disturbed until it has been cleared by the Safety Group. The area supervisor will assist the OHC employee and employer representative with the investigation if they decide to conduct a separate or joint investigation.

All investigations are conducted systematically and objectively. Investigation elements will include:

Who

1. Identify who was involved in the incident.
2. Record their name, department, occupation and total length of experience.
3. Identify witnesses to the incident.
4. Record the change day of the employee(s) involved.
5. Indicate the shift of the employee(s) as Days, Nights or Other.

What

1. Identify the type of injury, property damage, loss or near miss which occurred.
2. Estimate the cost of the loss in dollars and/or person hours.
    - Hours should include the amount of person hours spent as a result of the accident to properly investigate and correct the problem.

When

1. Record the date and time of the incident.
2. Record the date and time that the incident was reported.

Where & How

1. Describe where and how the incident occurred

    - Be factual
    - Include a drawing or photos
    - Avoid speculation
    - Do not assign fault

2. Indicate whether the supervisor visited the work site before and/or after the accident.

Immediate Corrective Action

Identify what has been done immediately to mitigate the risk and prevent a re-occurrence.

Why - Immediate Cause

1. Review the list of potential substandard conditions and substandard actions
2. Indicate which of the items apply to the incident. There may be more than one immediate cause. The lists are not comprehensive. Indicate if there are other immediate causes which apply.

3. For each of the immediate causes identify how the immediate cause contributed to the incident. For example:

SUBSTANDARD CONDITIONS
-Inadequate guards or barriers
-Inadequate ground support
-Congested/restricted area, restricted view
-Inadequate or excessive lighting
-Inadequate ventilation device
-Noise
-High or low temperature extremes
-Inadequate warning system
-Poor housekeeping
-Defective equipment/tools
-Gas/dust/smoke/fumes/vapours
-Inadequate PPE

SUBSTANDARD ACTIONS

-Operating equipment without authority
-Failure to warn
-Failure to secure
-Operating at improper speed
-Removing or disabling safety device
-Improper use of equipment
-Improper or no use of PPE
-Improper lifting

-Improper position for task
-Horseplay
-Working on moving parts
-Failure to follow procedure

Root Cause

1. Review the list of potential root causes.

2. Identify the reasons why the immediate causes chosen above existed. Immediate cause substandard conditions and immediate cause substandard actions should correspond with the root cause substandard conditions and substandard actions.

3. Dig deep to find the underlying causes that allowed substandard conditions and actions to exist. There may be more than one root cause. The lists are not comprehensive. Indicate if there are other root causes which apply.

4. Identify why the root causes may exist:

SUBSTANDARD CONDITIONS

-Inadequate engineering
-Inadequate purchasing
-Inadequate maintenance
-Inadequate tools/equipment
-Inadequate standard/procedure
-Wear and tear

SUBSTANDARD ACTIONS

-Inadequate physical/mental capability

-Lack of knowledge

-Lack of skill

-Physical stress

-Mental stress

-Improper motivation

Loss Potential

Imagine the worst case scenario. Ask yourself "How bad could this incident have been?"

1. Indicate the loss potential as minor, serious or major.

2. Indicate the probable recurrence rate as rare, occasional or frequent.

Preventive Action

Review the root causes to determine actions to be taken to eliminate each root cause. Focus on root causes rather than immediate causes.

1. Indicate the action to be taken.

2. Indicate who has been assigned the responsibility for ensuring each action is completed and the target date for completion.

Follow-up

It is the responsibility of the supervisor or whoever is listed on the "Responsibility" section to complete follow-up assessment of actions. A final verification will be conducted by the management upon final circulation of the report to ensure satisfactory corrective actions.

Modified Work

In the event of an injury, consultation is conducted with the site Occupational Health Nurse and the supervisor to determine if modified work is available and whether the injured worker is able to perform these duties.

Circulation

The Employee(s) involved in the incident and their Supervisor will review the report. Then, it will circulate to all applicable personnel for additional comments and recommendations. All completed reports will be reviewed by the Managers

The General Manager determines whether the investigation has been conducted satisfactorily or whether further corrective or preventive action is required.

a. If satisfied with the actions taken the General Manager will sign circulate it at the next management meeting for closure.

b. If unsatisfied with the actions taken the General Manager will assign the follow-up to an appropriate person(s).

Closure

1. When the General Manager is satisfied with the corrective and preventive action taken, the information will be shared at a management meeting.

2. Incident files are filed indefinitely.

Attachment C

Existing Health and Safety Program Manual for Kiggavik Project Field Program

AREVA RESOURCES CANADA INC.
HEALTH AND SAFETY PROGRAM MANUAL
Kiggavik Project

Version 02 – May 2010

Original Copy of this Manual:

Approved and Signed by title: **Kim Sarauer**
Environment and Radiation Protection Supervisor

Approved by:
Signature and Date

Approved and Signed by title: **Frederic Guerin**
General Manager, Kiggavik Project

Approved by:
Signature and Date

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

TABLE OF CONTENTS

1 ADMINISTRATIVE ELEMENTS

1.1 Purpose

This Health and Safety Program Manual has been developed for the Kiggavik Project to provide a healthy and safe work environment at the Kiggavik Project site. It describes the administrative, planning, programmatic, monitoring, reporting and improving elements of the safety management system. Specific safety rules and guidance for work activities at the Kiggavik Project site are described by the Safety Code of Practice (SCOP).

1.2 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.

1.3 Scope

This document is intended to describe the activities of the safety program developed specifically for the Kiggavik Project and is a primary tool for the Safety Coordinator, EHS Personnel and Site Management.

The “Safety Code of Practice” is a companion document which provides specific safety requirements and guidance for work at Kiggavik. It is primarily intended for use by personnel conducting field activities and is meant to be kept in their pocket and referred to for advice.

1.4 Occupational Health Committee

Occupational Health Committee (OHC)

The OHC is comprised of both employee and employer members from both shifts. They may also participate in accident investigations as required by regulations. The OHC meets monthly to inspect the workplace and discuss issues that may have been brought forth to them. Minutes are forwarded to the Workers' Safety and Compensation Commission (WSCC).

At Kiggavik, the OHC is formed with members from both Areva and Contractor employees. The Safety Coordinator will be the Employer co-chair on the committee.

1.5 Record Keeping

Records generated by the execution of the Safety Program are kept in a common filing system at the field office, and subsequently transferred to the Saskatoon Office at the completion of the field season. Electronic files are also kept on a common folder on the network systems, accessible to all EHS staff.

2 PLANNING ELEMENTS

2.1 Internal Responsibility System

AREVA promotes the Internal Responsibility System (IRS) to ensure the safety of its workers. The IRS means everyone in the workplace has a role to play and a duty to actively ensure workers are safe. Every worker who sees a health and safety problem such as a hazard in the workplace has a duty to report the situation to management. Once a hazard has been identified, the employer and supervisor have a duty to look at the problem and eliminate any hazard that could injure workers. All personnel, including those of senior management, supervisors and workers, are to be familiar with the elements of the program, in particular those elements that are applicable to their own area of work.

ARC supports the concepts and principles of the Internal Responsibility System (IRS). The IRS is a commitment by all employees (workers and management) to provide a healthy and safe workplace by self-identifying and solving occupational health and safety problems that occur. The commitment is internal with both workers and supervisory management sharing direct responsibility for the safe and efficient performance of work.

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. The Environment, Health and Safety (EHS) Group reports to the Facility Supervisor.
4. Standards are enforced by disciplinary action, as necessary.
5. The staff of the 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.

Under emergency conditions, affected areas are under the control of the Facility Supervisor or delegate.

2.2 Identification, Assessment and Control of Hazards

Prior to the commencement of field work, a review meeting is held between key Areva staff and contractors to review hazards related to the planned work, assess them, and implement appropriate

controls. For each hazard, safe work procedures are developed which describe the requirements for working safely. These safe work procedures are assembled into a pocket-sized "Safety Code of Practice" and distributed to all workers and contractors when they arrive on site. The content of the Safety Code of Practice is reviewed during site orientation.

Where new activities are identified, a hazard identification and risk assessment is conducted in order to identify hazards, and develop controls and procedures for safe work. The output of the safety analysis is a safe work procedure for the activity. Safe work procedures are then used to update the "Safety Code of Practice."

Tools used in the assessment of hazards include:
Form SAFE-00-01, Hazard Identification Checklist
Form SAFE-00-02, Risk Assessment

2.3 Emergency Preparedness and Response

Preparation for an emergency involves:

- Identifying potential emergency situations and planning for them,
- training all persons in potential emergency response activities,
- having trained first aid providers on site,
- knowing who and how to call for help,
- obtaining and maintaining adequate emergency response equipment on site, such as first aid equipment, fire fighting equipment, and spill response equipment, and
- periodically testing the response capabilities.

Emergency response activities are described in the *Kiggavik Project Emergency Response Manual*. The manual is reviewed with all site personnel. It contains the list of emergency contact numbers.

Emergency equipment is kept on site. The Safety Coordinator conducts an inventory of emergency equipment weekly.

A test of the on-site emergency response capabilities is conducted annually. This may be in the form of a mock scenario or a table-top exercise. The test is organized by the Safety Coordinator.

Transportation emergencies are described by Areva's *Emergency Response Assistance Plan*.

2.4 Training

All ARC Kiggavik Project personnel, contractors and long-term visitors will have the necessary training, competence and awareness to perform their duties and to fully comply with regulatory authorizations. Safety training requirements can be placed into three categories, on-site training, pre-requisite training, and ongoing awareness.

2.4.1 On-Site Training

Site Orientation

- Kiggavik Project Site Orientation will be dependant on the length of stay of the visitor
  Who? All ARC Kiggavik Project personnel, contractors and long-term visitors. Orientation may take the form of a PowerPoint presentation, a general information pamphlet, or any other form deemed appropriate

- **WHMIS**
  Who? Everyone working on site.

- **Fire Prevention / Response**
  Who? Anyone at site who will not be escorted

- **Spill Response**
  Who? All ARC Kiggavik Project personnel working at the Kiggavik site
  Who? Senior site personnel of all ARC Kiggavik Project contractors.

2.4.2 Pre-Requisite Training

At a minimum, the following training is required before coming to site:

- Supervisor Level II Certificate as required by Nunavut Workers' Safety and Compensation Commission (WSCC)
  Who? Facility Supervisor and designate
  Who? Drilling Supervisor (Foreman)

- Supervisor Level I Certificate as required by Workers' Safety and Compensation Commission (WSCC)
  Who? Anyone responsible for supervising any number of workers

- Transportation of Dangerous Goods
  Who? All personnel responsible for or directly involved with the shipment of radioactive materials

- Advanced First Aid Level II
  Who? Facility Supervisor and designate

- First Aid (basic)
  Who? ARC Kiggavik employees
  Who? Drilling Supervisor (Foreman), also requires CPR training
  Who? Driller Helper

ARC strongly encourages all contractors to obtain more than the required training.

The WSCC permit requires the names of those who are responsible for the program and drillers.

2.4.3 Ongoing Awareness Training

Ongoing awareness training includes training on topical issues related to work on the site. Generally this training is provided at safety huddles or as issues arise which warrant training.

2.5 Safety Meetings

Safety huddles are conducted to communicate safety issues, to review any recent safety incidents and to provide safety education. Supervisors conduct safety meetings with their employees on a weekly basis. Safety meeting minutes are documented on form SAFE-00-09.

Safety meetings are NOT a place to solicit new safety concerns; safety concerns should be identified as they arise and noted on 5 Point Safety Cards. The safety issues identified by employees should be discussed at daily toolbox meetings. Issues can be reviewed at safety meetings to confirm actions are completed and that the experience is shared.

2.6 Identifying Legal and other Requirements

The Working Group on Regulatory Change and Compliance is a group established to ensure ARC's compliance with environment, health, safety and radiation protection related regulatory requirements. Members include functional managers within the Corporate Regulatory Affairs and Licensing for Environment, Science and Technology, the Quality Manager, and designates from each Operation. The Working Group on Regulatory Change and Compliance (The Working Group) establishes and maintains a system of monitoring:

a. Proposed new regulations,
b. Proposed changes to current regulations,
c. Regulatory guidance and support documents

3 PROGRAM ELEMENTS

3.1 Incident Investigation

By determining the causes of accidents and near misses, measures can be put into place to ensure they do not occur again. Areva uses a modified form of the DNV method for the investigation of workplace incidents. In addition to collecting data on the incident event, it supports finding the root cause of incidents and requires that mitigative and preventative measures be put into place. It also gives everyone in the line-management an opportunity to review and comment in the incident.

Employees must report all accidents to their supervisor.

The incident investigation and review process is described by the *Supervisor's Investigation Report* form SAFE-00-04. The investigation report can be applied to incidents of any nature.

Supervisors will conduct investigations of incidents in their areas, with the support of the Safety Coordinator.

The OHC will conduct investigations as required by regulations.

Near miss incidents are reported on the Near Miss Report form. The supervisor and Safety Coordinator review near misses and determine whether additional investigation is required.

3.2 Workplace Inspection

Workplace inspections are a joint effort between the Safety Coordinator, Supervisors, and workers in the area inspected.

Workers are expected to inspect their workplaces and work conditions on an ongoing basis and correct deficiencies. Deficiencies which require supervisory intervention are noted on their 5 Point Safety Card.

A joint workplace inspection of each work area is conducted each week. At Kiggavik, work areas include:

- drill site
- core logging and core storage area
- camp kitchen
- main camp residence
- fuel storage and utilities area
- geophysics field locations

Workplace inspections are documented on form SAFE-00-03. Corrective actions are identified and deadlines for follow-ups are set.

3.3 Supervision

It is the expectation of Areva Resources Canada that all supervisors:

- are knowledgeable, trained and experienced in the areas they supervise,
- obtain a Supervisor Certificate from WSCC,
- promote workplace health and safety,
- contribute to health and safety objectives,
- investigate incidents in their areas,
- proactively identify and correct deficiencies,
- have daily contact with their employees in the workplace,
- conduct daily toolbox meetings, and
- conduct weekly safety meetings.

3.4 Workplace Hazardous Material Information System

Knowledge of handling, usage and storage of hazardous materials is essential in the protection of workers. The Workplace Hazardous Materials Information System (WHMIS) is a three component system that was developed in conjunction with the government, labour and industry to protect workers against exposure to hazardous materials.

WHMIS training is provided to all site personnel prior to, or upon arrival, to the site.

A binder of Material Safety Data Sheets is kept in the site office. Pertinent MSDSs are reviewed with employees working with the materials. The Safety Coordinator conducts this activity.

3.5 5 Point Safety System

This work instruction describes the application of the 5 Point Safety System to daily activities at McClean Lake. Specifically, this instruction details how the *5 Point Safety Cards*, are completed by employees and supervisors, and checked by General Supervisors, Superintendents and Safety staff. The 5 Point Safety System is a simple method of promoting safety awareness and risk assessment in the workplace.
The system focuses the attention of the workers and their supervisor on safety, their workplace and work practices. It requires an interaction between the worker and the supervisor regarding safety. It is used to enforce the requirement that doing the job correctly also means doing it safely. The system has been used in the mining industry for many years and the implementation at other facilities is credited with improved safety culture and a functional internal responsibility system. It overtly places responsibility on the workers and the supervisors.

The 5 point safety system addresses the causes of accidents, which are primarily substandard conditions, substandard methods and substandard attitudes.

The 5 points are as follows:

1. Assess hazards in the workplace.
2. Is equipment in good working order?
3. Are employees working properly?
4. Do an act of safety.
5. CAN and WILL the employee continue to work properly?

Each worker is expected to complete a 5 Point Safety Card each day and have it available to their supervisor for review and discussion.

Cards will be collected at the end of the day and provided to the Safety Coordinator for review, tabulation and filing.

3.6 Employee Health and Wellness

3.7 Injury Management

Personnel must be fit to perform their work.

As part of regular First Aid Attendant duties, the Safety Coordinator will complete all applicable sections of the Employers Report of Injury which will subsequently be submitted by the senior Areva representative on-site.

When a worker is injured off the job and an absence from work results, workers are expected to identify that they have been injured.

When an injured worker is able to return to work, a *Medical Certificate* form completed by an attending healthcare provider must be submitted prior to arrival on site. If modified work is required, a *Functional Abilities Form* must be completed by the attending healthcare provider so that a Return to Work Plan can be created and agreed upon prior to arrival on site.

3.8 Contractor Safety Management

Contractors are expected to:

- Be knowledgeable, trained, and experienced in the work they perform,
- comply with the requirements of this program manual, the safety manual, and regulations,
- follow best practices for their industry,
- describe the hazards associated with their work and controls in place to conduct their work safely,
- contribute to the ongoing identification of hazards and mitigation of risk, and
- correct deficiencies in their workplace, their behaviours, and their attitudes.

Contractors may be required to:

- provide a Health and Safety program for their workers,

- provide safe work plans or procedures for their work,
- demonstrate safe work practices,
- provide OHC representatives,
- provide a site Safety Coordinator.

The Safety Coordinator is expected to:

- Obtain a letter of good standing from WSCC for all contractors,
- Review contractor training records and will recommend, coordinate and facilitate Areva approved training initiatives.
- Inspect contractors tools and equipment prior to the commencement of work,
- Conduct contractor workplace inspections jointly with the contractor supervisor, and
- Review contractor work procedures and practices and the Safety Coordinator will make recommendations for training.

4 MONITORING ELEMENTS

4.1 Reporting Requirements

4.1.1 Workers Safety and Compensation Commission Mines Division

Areva Resources Canada is required to provide an Exploration Safety Plan Application to the WSCC Mines Division prior to the commencement of work.

Companies working in Nunavut are required to register with the WSCC.

The Mine Safety Act requires a mining inspector be notified immediately of any fatalities and reportable incidents. An oral report must also be given to the inspector within 24 hours. A written report must follow within 3 days.

The Industrial Safety Act requires all serious accidents to be reported to the Chief Safety Officer within 24 hours, even if there wasn't an injury. An Employer's Report of Accident needs to be sent to the WSCC within three working days of the time you became aware of the incident.

A Monthly Accident Report is prepared by the Safety Coordinator and will be submitted by the Areva designee to the WSCC monthly.

In all reports to government agencies, it shall be the senior Areva Resources site person who signs and submits the report.

4.1.2 Areva Internal Reporting

Monthly Report – The Safety Coordinator is required to submit a summary report each month to the Kiggavik General Manager and the Director, Health and Safety, which summarizes the activities of the month. It is anticipated that the report should be no more than 1 page in length and describe the accomplishments and challenges of the month. The report should accompany the Statistical Summary Report.

Incident Report – When an incident has occurred, a copy of the first page of the Supervisors Incident Report shall be submitted to the Kiggavik General Manager and the Director, Health and Safety within 24 hours of the incident. The completed report shall be provided once it is completed.

5 CONTINOUS IMPROVEMENT AND CORRECTIVE ACTIONS

5.1 Program review

The Health and Safety Program is reviewed annually by H&S personnel to identify deficiencies and areas for improvement.

5.2 Project Review

Upon completion of the field season, a project debriefing meeting is held to discuss lessons learned during the field season and develop improvement objectives for subsequent activities.

5.3 Objectives and Targets

Safety improvement objectives and targets are developed/reviewed annually and approved by the General Manager. Each objective and target will, at minimum, meet relevant legal requirements, be consistent with the Policy, be simple yet specific, measureable and meaningful, achievable, and economic.

APPENDIX A: INCIDENT INVESTIGATION PROCEDURE

Follow these steps for details on completing the accident investigation report:

1. i. Notify OHC Co-chair if required.
ii. When notified, the OHC co-chair may choose not to participate in the investigation if they feel it is being sufficiently investigated.

Who

1. Identify who was involved in the accident.
2. Record their name, department, occupation, and total years of experience.
3. Identify witnesses to the accident.
4. Record the change day of the employee(s) involved.
5. Indicate the shift of the employee(s) as Days, Nights, or other.

What

1. Identify the type of injury, property damage or loss, or near miss which has occurred.
2. Estimate the cost of the loss in dollars and/or person hours. A best guess is acceptable.
   - Hours should include the amount of person hours spent as a result of the accident to properly investigate and correct the problem.

When

1. Record the date/time of the occurrence.
2. Record the date/time of reporting of the occurrence.

Where & How

1. Describe where and how the accident occurred
   - Be factual.
   - Include a drawing or photos.
   - Avoid speculation.
   - Do not assign fault.
2. Indicate whether the supervisor visited the work site before and/or after the accident.

Now

1. Identify what has been done immediately to mitigate the risk and prevent a re-occurrence.

WHY

Immediate Cause

1. Review the list of potential substandard conditions and substandard actions provided in Section 7 of the *Supervisor's Investigation Report.*

2. Indicate which of the items apply to the accident.
    - There may be more than one immediate cause.
    - The lists on the *Supervisor's Investigation Report* are not comprehensive. If there are other immediate causes which apply, indicate in the space provided.

3. For each of the immediate causes, identify how the immediate cause contributed to the accident in the space provided.

Why – Root Cause

1. Review the list of potential root causes.
2. Identify the reasons why the immediate causes (substandard conditions and actions) chosen above existed.

    - Dig deep to find the underlying causes that allowed substandard conditions and actions to occur.
    - There may be more than one root cause.
    - The lists on the *Supervisor's Investigation Report* are not comprehensive. If there are other root causes which apply, indicate in the space provided.

3. Identify why the *Root Causes* may exist in the space provided.
    - The Root Cause List is intended to help the investigator determine the reasons why the *Root Cause* exists.

Loss Potential

1. Imagine the worst case scenario. Ask yourself "How bad could this accident have been?".
2. Indicate the loss potential as either minor, serious, major.
3. If the loss potential is considered "Major", contact the OHC to conduct an investigation.
4. Indicate the probable recurrence rate as rare, occasional, or frequent.

Improvement Required

The root causes indicate a systemic problem with the program (training related issues), the standard (procedure) or complying with the standards.

Inadequate programs includes issues such as training (lack of or expired), experience, misunderstanding of instructions

Inadequate standards result when it has been identified that the policy, procedure or engineering controls need to be modified. Some examples include modifications to work instructions, procedures, or equipment.

Inadequate compliance to standards results when the individual has received the proper training, but is not following the standard for reasons such as mental or physical stress, lack of motivation.

APPENDIX B: LINES IN THE SAND

Kiggavik Project personnel shall NEVER:

1. Work while intoxicated.
2. Disable a safety device.
3. Ride an ATV or Skidoo without a helmet.
4. Work for more than 14 hours in a day.
5. Overload an aircraft or watercraft.
6. Forget to wear a seatbelt.
7. Leave a fire unattended.
8. Dispose of hazardous materials in the wilderness.
9. Use a broken tool.
10. Ignore a warning sign of distress.

APPENDIX C: GENERAL SAFETY RULES

1. Employees and contractors must wear and use all protective devices or safety equipment as directed by the Facility Supervisor or designate, and be properly trained as applicable.
2. 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.
7. 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 leaving camp for any reason must use the sign out sheet to indicate time of departure, wear clothing appropriate for spending a night and getting wet, and carry a two way radio and satellite phone.
10. Long hair and loose clothing must be well secured. Jewellery should not be worn.
11. ARC has a strictly enforced zero tolerance policy with regards to drugs on site. Anyone found to be in possession of drugs will removed from site at the earliest possible opportunity. Further details can be found in the Drugs in the Workplace Policy found in ARC's General Standard Practices (GSP) Manual.

Any approvals and/or exceptions to the above are the responsibility of the Facility Supervisor.

APPENDIX D: LIST OF SAFETY FORMS AND REPORTS

Areva Forms
Hazard Identification Checklist
Risk Assessment
Incident Investigation
Workplace Inspections
5 Point Safety
Near Miss Report
Lock-Out Tags
Safety Meeting Minutes
Emergency Equipment Checklist
Functional Abilities Form
Return to Work Plan
Medical Certificate

Areva Reports
Monthly Safety Summary Report
Monthly Safety Statistics Report

Worker Safety and Compensation Forms
Exploration Safety Plan Application
Employer Report of Injury
Monthly Accident Report
Application for Supervisors Certification
Clearance Requests

APPENDIX E: Summary Of Safety Coordinator Activities And Responsibilities

The Safety Coordinator conducts the following activities:

- Provides safety advice to workers and management,
- Conducts joint workplace inspections,
- Leads hazard identification and risk assessment activities,
- supports supervisor incident investigations and manages process and reporting,
- prepares the First Aid sections of the WSCC Employers Report of Injury,
- conducts safety orientation,
- reviews MSDSs with persons using materials,
- contributes to the improvement of the safety program,
- participates in delivery of safety meeting topics,
- reviews 5 Point Safety Cards for completeness,
- follows-up on action items stemming from 5 Point Safety, Safety Meetings, Incident Investigations, and workplace inspections,
- Prepares monthly safety summary report and statistics,
- Participate as management co-chair on OHC,