



## **Job Safety Plan**

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## EXECUTIVE SUMMARY

Advanced Explorations Inc.'s (AEI) Job Safety Plan has been designed for the exploration programs being planned and undertaken at AEI's projects on the Melville Peninsula. The plan details as much as possible the steps involved in the various aspects of the operation along with the associated hazards and barriers. The purpose of the plan is to ensure that the safety related needs and expectations of all stakeholders in this project are addressed early, resulting in a thorough and coordinated approach towards the overriding concern for safety on the job.

It is the intent that all personnel for the project will utilize the information contained in the plan, while allowing operations personnel the freedom to develop safety control methods specific to individual work groups and tasks. The standards for safety must be established in the planning stage so that all workers clearly understand what is expected of them; thus the plan will be distributed to all employees and personnel directly involved in the project. In order for the plan to be successful, all employees and contractors are expected to participate in the program, offer feedback and suggestions, and abide by the guidelines.

The Job Safety Plan as presented in this document deals with the topics of Planning, Safety Responsibilities, Personal Protective Equipment, Emergency Plans, General Hazards and Environmental Policy, and is reviewed on an annual basis by corporate management.

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<b>Appendix C</b>	<b>Evacuation Procedures in the Event of an Emergency</b>
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	Job Safety Analysis (JSA) Form
	Behavior Based Safety (BBS) Observation Form
	Accident Statistics Report
	Modified Work Recommendation from Physician
	Vaccination Request
	Behavior Based Safety First Report of Employee Injury
	Weekly Meeting Minutes
	Behavior Based Safety Risk Rating Matrix
	Hazard Report Form
	Wildlife Incidents form

## **1.0 Introduction**

This Job Safety Plan has been designed for the specific purposes of the exploration programs being undertaken at AEI's projects on the Melville Peninsula. It will address the planning, information and training requirements of the undertaking.

Through the production of this plan, the safety related needs and expectations of all stakeholders in this project are addressed early, resulting in a thorough and coordinated approach towards the overriding concern for safety on the job.

It is the intent that all people in camp will utilize the information contained in this Job Safety Plan to produce a more detailed, job specific "Job Safety Analysis" prior to the commencement of each work activity (refer to Appendix E). This affords the operations personnel the freedom to develop safety control methods specific to the individual work groups.

This plan will be distributed to all employees and personnel directly involved in the project via e-mail and hard copies will be kept on site.

Additional copies and updates of this plan may be obtained via e-mail at [nadine@advanced-exploration.com](mailto:nadine@advanced-exploration.com) or [jennifer@advanced-exploration.com](mailto:jennifer@advanced-exploration.com).

## **2.0 Planning**

### **2.1 General**

The organization of each work place must be well defined prior to the commencement of work and the specific responsibilities of all individuals with respect to the safety program must be clear to all.

The specific job activities must be pre-planned by the responsible individuals to ensure all foreseeable obstacles are addressed in advance. The standards for safety must also be established in the planning stage so that all workers clearly understand what is expected of them.

Consideration must be given to each facet of the work such that adequate personnel, equipment and resources are available to safely handle the planned activities.

## **2.2 Safety Supervisor**

The Safety Supervisor assigned to the project to coordinate safety systems is the AEI official on site who at that time is designated as the Responsible Person. The Safety Supervisor will also periodically conduct safety audits to ensure compliance to the Job Safety Plan, implement safety systems and facilitate the process of learning.

## **2.3 Training**

The following training is to be provided to the appropriate personnel, if qualifications do not already exist or require renewal:

### **2.3.1 Generic**

- First Aid course and CPR (ex. St. John Ambulance, Canadian Red Cross or similar)
- Workplace Hazardous Materials Information System (WHMIS) course

### **2.3.2 New Employees**

- The Responsible Person is required to orientate new and transferred employees to their work place. This task can be delegated to any suitable official on site and is specifically aimed at ensuring that any new employee on site is made aware of dangerous equipment and tasks, and further to make the new employee familiar with certain areas and/or tasks that they are not permitted to interact with until specific training has been provided and documented.

### **2.3.3 Information Requirements**

The Safety Supervisor will ensure the following information is available to all appropriate personnel:

- Job Safety Plan
- Oil and Hazardous Materials Spill Contingency Plan
- Standard Job Procedures and Hazard Alerts
- Safety Act and Regulations
- Mine Health and Safety Act and Regulations
- Material Safety Data Sheet (MSDS) Inventory
- Training Records



(A digital copy and a hard copy of all these documents can be obtained from the camp office, nadine@advanced-exploration.com or jennifer@advanced-exploration.com).

#### **2.3.4 Safety Meetings**

Weekly safety meetings will be held to review general safety related issues and Site Managers will retain a record of the meetings for audit purposes. In addition, daily pre-shift contacts will include a review of specific hazards and barriers related to employee activities.

#### **2.3.5 Occupational Health and Safety Committee**

As per the Nunavut Mine Health and Safety Act- *"11. (1) Where more than 15 persons are employed at a mine, the manager shall ensure that an Occupational Health and Safety Committee is established for the mine in accordance with the regulations."*

The committee shall consist of at least:

- a) Four members, where the number of employees at the workplace is 15 or greater but less than 100;
- (b) Eight members, where the number of employees at the workplace is 100 or greater but less than 250; and
- (c) 12 members, where the number of employees at the workplace is 250 or more.

The committee shall be made up of:

- (a) Management members appointed by the manager
- (b) An equal or greater number of workers selected by the workers.

The committee shall meet at least once a month after its establishment.

The names of the persons forming the committee shall be forwarded to the Operations Manager and made available in the camp.

The co-chairpersons of the committee shall ensure that minutes (Meeting Minutes, refer to Appendix E) of each meeting are kept and sent to the Operations Manager following each meeting. The minutes will also be kept and made available for viewing in camp.

Every month the committee shall inspect as many of the worksites as is considered appropriate. At least one worker committee member and one management committee

member must be involved in the inspections. Appropriate forms and any recommendations shall be prepared and a copy sent to the co-chairs of the committee and the Operations Manager (refer to Appendix E).

#### **2.3.6 Orientations**

All personnel involved in this project will be provided with a specific orientation session when they first arrive on site. This specific orientation for field employees will be arranged by the Site Manager.

The Responsible Person shall ensure that:

- The company's orientation for "new and transferred" employees is conducted;
- The Job Safety Plan is reviewed;
- Hazard Alerts, Safety Standards and Safe Work Practices specific to the project are reviewed.

A copy of the company's orientation checklist will be retained by the Responsible Person on site for audit purposes and forwarded to the Operations Manager (refer to Appendix A).

#### **2.4 Safety Audits and Inspections**

As part of the safety program, audits will be conducted periodically by the Safety Personnel or Operations Personnel to ensure that the requirements of the Job Safety Plan are being followed. The Responsible Person will retain a copy of all inspections for auditing purposes.

During safety audits and inspections, employees and supervisors will be contacted to address any safety, health, and environmental concerns.

#### **2.5 Reportable Incidents and Dangerous Occurrences**

Where a reportable incident occurs the Site Manager shall, without delay, notify an inspector, the Committee co-chairpersons and the Operations Manager.

Within 24 hours after a dangerous occurrence, the Site Manager shall give an oral report to an inspector and to the Committee co-chairpersons.

Within 72 hours after a dangerous occurrence or a reportable incident, the Site Manager shall send a written report to the chief inspector and to the Committee co-chairpersons.

Within 72 hours after a death or injury the Site Manager shall send a completed Workers' Safety and Compensation Commission (WSCC) Claim: Employer's Report of Injury Form to WSCC at [www.wsc.nt.ca](http://www.wsc.nt.ca). See Appendix B for WSCC forms and Reporting Responsibilities.

A standard form will be used for workplace accidents (refer to Appendix E).

Accidents resulting in death or serious injury, as defined in this policy, require a thorough investigation by supervisors, management, Occupational Health and Safety Committee representatives, safety personnel and appropriate government inspectors (refer to Appendix E). No person shall, except for the purpose of preventing injury or relieving suffering, move or otherwise interfere with any wreckage or equipment at the scene of or connected with a reportable incident until an inspector has conducted an investigation of the incident and has given permission to do so. Designated senior supervisors will deal with any press or public announcements. No electronic medium may be used by anyone in camp to relate any details whatsoever to anyone outside their own company for any purpose.

Active and prompt management involvement will ensure that the effects of accidents are controlled, that investigations are promptly undertaken and that secondary losses are minimized.

### ***2.5.1 Dangerous Occurrence***

As defined in the Nunavut Mine Health and Safety Regulations, a dangerous occurrence means

- (a) an incident involving the hoist, sheaves, hoisting rope, conveyance or shaft timbering or structure,
- (b) an inrush of water,
- (c) a cracking, seeping or failure of a dam or bulkhead,
- (d) an outbreak of fire,
- (e) a premature or unexpected explosion or ignition,
- (f) the occurrence of flammable, noxious or toxic gas in mine workings or at an exploration site,

- (g) unexpected and non-controlled extensive subsidence or caving of mine workings,
- (h) an explosion or outbreak of fire in any way related to the operation of an air compressor, air receiver, compressed air line or steam boiler,
- (i) a breakdown in the main ventilation system,
- (j) loss of control or major damage to any mobile equipment,
- (k) an uncontrolled fall of ground causing physical damage or the displacement of more than 50 t of material, and
- (l) any unusual occurrence not listed in paragraphs (a) to (k);

### ***2.5.2 Procedures – Dangerous Occurrence***

- All accidents, property damage, or incidents with high loss potential must be reported to the supervisor immediately.
- The Responsible Person must then retain all parties involved for the investigation of the accident.
- The Responsible Person is to ensure all necessary forms are completed (refer to Appendix B) and forwarded to the Workers' Safety and Compensation Board within the designated timelines.
- The Responsible Person is to follow-up with a telephone call to the Workers' Safety and Compensation Commission. The Responsible Person should have the name and number of the attending physician prior to the telephone call.

### ***2.5.3 Procedures – Reportable Incident (Serious Injury or Death)***

As defined in the Nunavut Mine Health and Safety Regulations, Serious Injury or Death means

- (a) a fracture of the skull, spine, pelvis, femur, humerus, fibula, tibia, radius or ulna,
- (b) an amputation of a major part of a hand or foot,
- (c) the permanent loss of the sight of an eye,
- (d) any serious internal haemorrhage,
- (e) any burn that is caused by electricity and requires medical attention,
- (f) any third degree burn,
- (g) any injury caused directly or indirectly by explosives,
- (h) any asphyxiation or poisoning that causes a partial or total loss of physical

control, and

(i) any other injury likely to endanger life or cause permanent impairment.

#### ***2.5.4 Procedures – Reportable Incident (Serious Injury or Death)***

- Accidents resulting in death or serious injury are to be reported to management immediately following the assurance of prompt medical aid.
- The Responsible Person is to arrange for the transportation or evacuation of the injured party to receive medical attention.
- Accidents resulting in serious injury or death as outlined in this policy warrant a thorough investigation with management, supervisor, employee representative, Occupational Health and Safety Committee members, and appropriate governmental representative or policing agency. The Responsible Person is to ensure that the accident scene is secured and not altered or disturbed unless instructed by an inspector to prevent further injury. Designated senior managers will deal with any press or public announcements.
- The Responsible Person must then retain all parties involved in the accident for the investigation of the accident.
- The Responsible Person is to complete all necessary forms (refer to Appendix B & E), complete with photographs and measurements.
- All reports, photographs, etc. should be forwarded to the Workers' Safety and Compensation Commission.
- The Responsible Person is to follow-up all evacuation routes, or new developments by notifying management immediately.
- All incidents resulting in Serious Injury or Death are considered reportable incidents as per the Mine Health and Safety Regulations and must be reported to the WSCC
  - A WSCC Employers Report of Injury form within 3 days
  - A written or oral report must be submitted within 24 hours to the WSCC Chief Safety Officer
  - An oral report must be immediately submitted to the WSCC Inspector of Mines
  - Within 72 hours a written report must be submitted to the WSCC Chief Inspector of Mines

## 2.6 Emergency Transportation

The Responsible Person is responsible for ensuring that employees requiring transportation to a medical facility or home in the event of an injury, illness or other event which would render the employee unsuitable to perform assigned work activities, are provided a suitable means of transportation and are escorted by another competent person.

In the event of any type of emergency, the Responsible Person is authorized and expected to utilize whatever method of transportation is necessary to ensure the employee receives proper attention and transportation. This may include the summoning of an air or ground ambulance or other form of transportation. **No preauthorization is necessary for the supervisor or person in charge to make these decisions!**

If an employee refuses transportation, the matter must be communicated to the Responsible Person immediately. In the event that an employee insists on transporting themselves, but in the mind of the supervisor or Responsible Person to do so would pose a threat to their safety or the safety of others, the supervisor or Responsible Person is required to immediately report the event to local security or law enforcement authorities.

## 2.7 Medical Surveillance

A medical surveillance program, including medical examinations and clinical tests, will be provided if necessary to detect health effects from exposure to hazardous materials, physical agents or designated substances (as per Federal, Territorial or Provincial Health and Safety Regulations) known to be present in the workplace (ex: Uranium).

## 2.8 Drug and Alcohol Testing

The use of any drugs or alcohol is strictly prohibited at the site. In the event that any person suspects the use of drugs and/or alcohol on the part of any employee, the employee shall submit to a test for drugs or alcohol, and if found positive, the employee may be dismissed with immediate effect. The Responsible Person on site is responsible for arranging these measures.

The use of drugs or alcohol endangers not only the life of the user, but also the lives of co-workers through the possibility of accidents caused by an impaired person, therefore immediate dismissal is imposed.

Blood sampling will be performed by the Medical Clinic in the nearest Community, the samples will be dispatched to *CanAm Drug and Alcohol Testing for the Workplace* or similar, and the results will be viewed as final.

## 2.9 Work Refusal

An employee may refuse to carry out any work or operate any equipment, tool or appliance if he/she has reasonable cause to believe that to do so would endanger the health or safety of themselves or any other person. A shift boss or supervisor shall not knowingly perform or permit a worker to perform work which could endanger the health or safety of any employee.

An employee who refuses to carry out work or to operate any equipment, tool or appliance in compliance with these provisions shall immediately report the circumstances to his/her shift boss or supervisor.

The shift boss or supervisor receiving a report of refusal of work shall immediately investigate the matter and ensure that any dangerous condition is remedied without delay, or if, in his/her opinion, the work refusal is not valid, the shift boss or supervisor shall so inform the employee who made the report.

## 2.10 Discipline

Unsatisfactory work performance and the failure to respect applicable rules must be dealt with by managers and supervisors promptly and fairly, in accordance with set guidelines and procedures. To enforce discipline, the following steps shall be taken:

1. Verbal Warning – The supervisor must document the discussion and retain a copy in a working file.
2. First Written Warning – The supervisor issues a warning slip to the employee.
3. Second Written Warning – The employee is issued a copy of the suspension or warning slip in triplicate.
4. Discharge notice to employee in triplicate - Note: Serious infractions may be dealt with more severely at anytime, up to and including discharge; however, Senior Supervisors must be consulted. Disciplinary slips will remain on file for a period of two calendar years from the date of issue.

### 2.11 **Qualified Personnel**

Careful consideration will be given to the screening and selection of competent, skilled and accredited workers for the project. An employee's technical knowledge, training needs and attitude towards the overriding concern for safety will be reviewed continuously by the Responsible Person, Operations Supervisor and Safety Representative (refer to Appendix E).

### 2.12 **Hazard Assessments**

Hazard assessment is the process of determining possible adverse consequences in advance of their occurrence. Effective hazard assessment helps prevent emergencies by creating an awareness of what to plan for and the impact a hazard is likely to pose if it occurs. The assessment of hazards typically includes:

- Recognition, evaluation and prioritization of the probable hazards and identification of which hazards pose the greatest risk; and
- Implementing controls and/or procedures to prevent the hazards identified.

#### **2.12.1 Procedure – Hazard Assessment**

- Identify and list all the tasks or main activities involved with each occupation or job where hazards exist.
- Identify health hazards and/or safety hazards for the tasks or main activities.
- Develop and implement controls to prevent health hazards and/or safety hazards identified.
- Develop safe operating procedures for each task.
- Inform and instruct all workers performing the tasks of the safe operating procedures.
- The Responsible Person is to complete all necessary forms (refer to Appendix E).

#### **2.12.2 Procedure – Hazard Reporting**

If an employee encounters a hazard in the workplace, he/she is expected to correct the hazard if it is safe to do so. The employee shall immediately notify the shift boss or supervisor of the hazard, when it is safe to do so.

#### **2.12.3 Hazard Recognition Program**

A Hazard Recognition Program will be established to educate employees on how to proactively identify, assess, and control hazardous conditions or practices. The program will be implemented to assist employees in breaking things down into smaller pieces



and to identify hazards and controls in their areas of responsibility. This program will be implemented by the worker's direct supervisor.

The program will be implemented by the Safety Supervisor and coordinated by the Occupational Health and Safety Committee and the Responsible Person.

### 2.13 **Crew Rotating – Local Personnel**

Standard rotation – as per set schedule.

### 2.14 **Modified Work**

The company is committed to the welfare of each employee and, whenever possible, will assist in the rehabilitation of employees who are injured on the job. Suitable and meaningful work will be provided at the project or company offices for employees who cannot perform their regular job immediately following an injury. However, the following criteria must be met:

- The treating physician agrees that the injured employee is physically able to perform modified work;
- The employee is willing to participate in the modified work program;
- The work provided does not aggravate the employee's disability; and
- The worker's disability does not constitute an additional hazard to the employee or others in the performance of the duties assigned.

Where possible, a company representative shall accompany the injured employee to the treating physician or nurse and report back on the injured employee's restrictions and ability to participate in modified work. The Responsible Person will ensure all necessary forms are completed.

## 3.0 **Safety and Responsibilities**

Because of the scope of the work involved in this project, there will inevitably be occasions where activities of one work group will intersect with another work group. It will be the responsibility of the Site Manager and the Safety Supervisor to ensure that safety related issues are coordinated between them.

When it is necessary to interface coordinate with AEI staff on safety related issues, this will be done through the AEI Supervisor.

In addition to the above, it should be noted that under the Mine Health and Safety Act and Regulations are certain duties assigned to the employers, contractors, supervisors and workers. To ensure that all participants in the project are familiar with these, they are listed below:

### 3.1 **Employer's Responsibilities**

The Operations Manager or his delegate has the responsibility to conduct Pre-Contract overviews with the Site Manager to discuss:

- Drilling program;
- Conditions of employment; and
- Job Safety Plan.

He must also ensure that:

- Regular review of conformance to requirements and achievement of objectives at AEI level;
- Co-operate with all health and safety agencies;
- Conformity to all relevant legislation, thus ensuring that our operations are in compliance;
- A safety culture by focusing on how employees behave in the workplace;
- The measures and procedures in the Act are complied with;
- The health and safety of the workers at the facility are protected; and
- Competent supervisors are appointed.

### 3.2 **Responsible Person's Responsibilities**

The Responsible Person has a responsibility to:

- Understand contract terms;
- Understand compliance with contractor, company, and government safety rules;
- Ensure that contractors comply with the Act and regulations;
- Ensure that a worker complies with the Act and regulations;
- Ensure the safe and orderly conduct of the contractor's and the company's crew to the company's satisfaction;
- Ensure that any equipment, protective devices or clothing required by the employer is used or worn by a worker;
- Advise a worker of any potential or actual health and safety dangers known to the Responsible Person;
- Take every reasonable precaution to ensure the protection of a worker;

- Ensure that new or transferred employee orientations are conducted;
- Review Job Safety System and ensure active use of the system;
- Complete, forward and/or retain all necessary forms.

### 3.3 Worker's Responsibilities

The worker has the responsibility to:

- Work in compliance with the Act and regulations;
- Use or wear any equipment, protective devices or clothing required by the employer;
- Report to the employer or supervisor of any known missing or defective equipment or protective devices that may be dangerous;
- Report to the employer or supervisor of any known violation of the Act or regulations;
- Not remove or make ineffective any protective device required by the employer or regulations;
- Not use or operate any equipment or work in a way that may endanger any worker;
- Not engage in any prank, contest, feat of strength, unnecessary running or rough and boisterous conduct;
- Report any and all hazards, accidents or incidents;
- Follow Standard Job Procedures in daily work routine;
- Be conscientious to specific safety concerns;
- Operate vehicles and equipment safely;
- Respect AEI's attitudes and values; and
- Complete all necessary forms when and where applicable.

### 3.4 Health and Safety Representative and Committee Responsibilities

- Ensure attendance at meetings;
- Contribute ideas and experiences to discussions;
- Obtain information if assigned to do so;
- Listen to concerns and suggestions made by all employees and ensure they are referred to the appropriate supervisor or committee;
- Learn about Health and Safety in the workplace and share this knowledge with all employees when appropriate; and
- Carry out workplace inspections at least once monthly, during which employees and supervisors will be contacted to address any safety, health, and

environmental concerns; as per Mine Health and Safety Regulations (MHSR) sec. 3.21, within 48 hours after the work site inspection a meeting to review the inspection must be held and a copy of the minutes of that meeting sent to the chief inspector.

## **4.0 Personal Protective Equipment**

To minimize the risks to personnel while on site, the following rules will apply:

### **4.1 Field**

- a) Hard hats will be worn at all times where required;
- b) Safety boots with the Canada Safety Act (CSA) approval (toe, metatarsal and sole protection) are to be worn at all times where required;
- c) Hearing protection will be worn as required;
- d) Eye protection will be worn at all times where required;
- e) Hand protection will be worn at all times where required;
- f) Breathing protection will be worn as required; and
- g) Protective clothing will be worn as required.

## **5.0 Emergency Plan**

An emergency plan for this project will be identified and reviewed by the property owner when the workers first arrive on site (refer to Appendix C).

### **5.1 Accidents**

Serious accidents, as outlined in Section 2.9 warrant a thorough investigation in the presence of, or in correspondence with, higher supervisors, an Occupational Health and Safety Committee representative, client's safety personnel and appropriate government agencies (refer to Appendices). In the event of a serious injury, the field supervisor must immediately contact the appropriate senior supervisor as well as the chief inspector as listed below:

#### **Senior Supervisor**

John Gingerich  
Chief Executive Officer  
Advanced Explorations Inc.

Phone: 416-203-0057

[John@advanced-exploration.com](mailto:John@advanced-exploration.com)

**Inspectors (during regular business hours)**

Martin van Rooy (867) 979-8527, (867) 979-8500 or (877) 404-4407 (toll free)

All accidents must be reported to a member of AEI's Safety Representatives, as well as the Operations Manager. They should also be reported to the WSCC 24 hour emergency line at 1-800-661-0792. All necessary forms must be submitted to the WSCC within the appropriate timelines.

## 5.2 **Evacuations**

In medical emergencies requiring evacuation, it is the Responsible Person's responsibility to ensure that the injured person receives prompt medical attention.

Timely and well-executed responses depend on careful advance planning.

It is the responsibility of the Responsible Person to identify Medical Emergency Contacts in the area (refer to Appendix D).

Each project shall have a directory of names, addresses and phone/fax numbers. This directory must be available in the site office at all times.

Since the first step in obtaining approval for a medical evacuation or the repatriation of a body is to contact the evacuation/assistance company, a complete list of the companies serving personnel on the project shall also be compiled and posted with the Medical Emergency Contacts.

## 6.0 **General Hazards**

Hazardous report forms must be completed for any type of hazard (refer to Appendix E).

### 6.1 **Hazard**

- a) Lack of awareness of general and specific hazards;
- b) Untidy work sites;
- c) Moving materials and/or lifting heavy objects can result in back injuries;
- d) Lack of emergency preparedness;

- e) Untrained personnel; and
- f) Workers not equipped with complete information.

## 6.2 Controls

- a) Regular safety meetings;
- b) 5-Point Safety System;
- c) Daily pre-shift contacts;
- d) Pre-contract orientation with Management;
- e) Housekeeping requirements or corporate safety rules and the Occupational Health and Safety Act (O.H.S.A.);
- f) Site Managers shall ensure that employees who are required to perform lifting operations are trained in the proper manual lifting method;
- g) Emergency plan to be available and known to all crew members;
- h) Phone communication and fire extinguishers available at each drill site and workplace;
- i) Ensure non-trade related training as outlined in item 2.2;
- j) Ensure personnel are trained and qualified in the use of equipment;
- k) Ensure all workers are provided with complete job instructions;
- l) Site Managers to review Job Safety Plan with each new worker;
- m) On a daily basis, a pre-shift contact will be held detailing specific safety concerns/reviewing problems from the past days;
- n) Assess noise levels and take measurements as necessary; and
- o) Determine extent of hearing protection needed.

## 6.3 Environmental Hazards

### 6.3.1 Hypothermia

Hypothermia occurs when the body loses more “core” heat than it can produce and retain. Hypothermia can occur at any time of year and is not restricted to cold weather.

Symptoms of hypothermia include:

- Shivering;
- Confusion;
- Hallucinations;
- Behavioral changes;
- Numbness of hands and feet; and

- Unconsciousness.

It is a potentially deadly condition if not recognized and treated promptly.

Hypothermia can be prevented by avoiding potentially hazardous areas on or nearby water bodies during periods where water temperatures are potentially dangerous.

Hypothermia can be treated by first stopping the exposure such as moving the victim to a warm, dry area. The Safety Supervisor shall be contacted immediately when safe to do so. Wet clothing, equipment, etc. shall be removed immediately. The victim shall be wrapped in dry blankets or insulation equipment/materials and given warm liquids when able to sit upright. Hypothermia victims must be watched closely; they may suffer sudden cardiac arrest and require CPR.

If the victim's symptoms continue, refer to section 2.9.2 Procedures – Serious Injury or Death and section 2.9.3 Emergency Transportation.

### **6.3.2 Snow Blindness**

Snow blindness is a painful eye condition that is caused by eye exposure to ultraviolet (UV) light. Symptoms include increased tears and pain in the eyes. The potential for snow blindness will increase during the spring and summer months when the sun remains high above the horizon. Snow blindness can be prevented by wearing appropriate eye protection that blocks UV light. Treatment of snow blindness can include removing oneself from the source of UV light, covering the eyes and administering pain relief.

### **6.3.3 Climate**

Weather conditions can be fast changing in the Arctic. Appropriate clothing must be worn at all times to accommodate for cold, hot, windy, etc. climates.

During extreme cold weather, frostbite can occur as a localized damaged area on the skin. Skin shall be sufficiently covered at all times to avoid potential frostbite. If necessary, frostbite can be treated by avoiding further contact with hot or cold on the affected area, keeping the area warm with blankets or moving to warmer environments, wrapping area, rubbing, shaking and/or massaging area.

During extreme sunny weather (hot or cold); skin may be at risk of sun burning. Skin shall be sufficiently covered at all times or have continual use of sunscreen to avoid



potential damage and burning from sun exposure. If necessary, sun burn can be treated by getting out of the sun and applying aloe or another cooling agent.

#### **6.3.4 Sea/Lake Ice**

AEI activities in the Arctic overlap with the spring melt, a time where it is imperative that workers are aware of the dangers of working on ice. As the climate warms, the extent of snow cover and sea/lake ice decrease. During this time, sea/lake ice shall be avoided or tested before use to ensure that the thickness of the sea/lake ice is sufficient for any activities. Workers will never be permitted to work on unsafe ice. The North West Territories Field Guide to Ice Construction Safety was a source for this material, and can be consulted for further information.

##### **6.3.4.1 Procedures**

Snow and ice melts extremely quickly once the winter ends. Ice conditions must be checked on a daily basis to ensure safety.

- Gold's Formula must be used to determine if ice conditions are safe for work.
  - $\text{Ice Capacity} = 4 \times H^2$
  - Ice Capacity in kilograms
  - H = ice thickness in cm
- Workers operating on ice must never work alone
- When loud machinery prevents workers from clearly hearing other workers, they must make regular visual contact with one another
- Any hazardous conditions must be reported to management or a supervisor as soon as possible
- Weather conditions will be monitored throughout the day to watch for sudden or extreme temperature changes which could produce dangerous changes in ice load capacity

##### **6.3.4.2 Drilling on Ice**

- AEI has a responsibility to ensure contracted drilling companies are experienced in on-ice drilling operations and have effective safety procedures for this activity.

##### **6.3.4.3 Vehicle operators**

- All vehicles must be inspected and maintained daily to ensure safe operation. No vehicles will be used on ice if not in working order



- All vehicle operators must be aware of the required ice thickness for his or her vehicle.
  - Ice must be a minimum of 15 centimeters thick before snowmobiles are permitted
  - Ice must be a minimum of 20 centimeters thick before a car or a light truck are permitted on the ice
- When multiple vehicles are traveling on ice, workers will not travel in a close packed group, but will spread out to avoid overloading the ice with their combined weight
- Vehicle operators will not leave their vehicles on ice over night

#### **6.3.4.4 Worker Training**

All workers will be educated in the risks of operating on ice and be made aware of proper operating procedures.

If you fall through the ice:

- Do NOT attempt to climb out where you fell in; the ice is weak;
- Float on your stomach in the water and bring yourself to a new area of thicker ice. Kick your legs to push yourself forwards and onto the ice;
- Once you are on the ice; crawl on your stomach, and roll away from the open area with your arms and legs spread as far out as possible to distribute your weight over a larger area. Do NOT stand;
- Look for shore and head in that direction. Do not stand until you are sure the ice can support your weight;
- If you cannot climb out of the ice, float on the water and call for help; and
- Seek medical attention immediately.

If someone else falls through the ice:

- Only walk on the ice as a last resort. Perform the rescue from shore if possible;
- Call for help;
- Try to reach the person using rope or a branch from shore; weight the rope with a heavy object to toss it, or lie down and extend the branch towards the person in the water;
- If the person is too far from shore, wear a PFD (if possible) and carry a branch to test the ice in front of you as you move towards the trapped person. Bring something to reach, or throw to the person;

- When near the break, lie down with your arms and legs spread wide to distribute your weight and move carefully toward the hole;
- Have the person kick while you pull them out of the water;
- Move carefully to a safe location on shore or where you are absolutely sure the ice is thick;
- Seek medical attention immediately; and
- Watch for symptoms of hypothermia.

### 6.3.5 Water Activities

When working in the Arctic during the warm summer months of open water, surface water temperatures remain only a few degrees above freezing. It is important to remain aware of risks associated with cold open water and refrain from reckless behaviours. Falling into, or entering water even during the summer puts workers at risk of drowning and hypothermia. All workers are required to wear Personal Flotation Devices (PFD's) if working on water. Workers should never work on or around water on their own.

## 6.4 Fire Hazards

Some common fire hazards include:

- Electrical systems that are overloaded or poorly wired;
- Combustible storage areas with insufficient protection;
- Combustibles near equipment generating heat, flames, etc.;
- Smoking;
- Matches, lighters, etc.;
- Flammable liquids;
- Cooking appliances (stoves, ovens, etc.); and
- Batteries.

Prevention of fire hazards at camp may include:

- Not exceeding the maximum occupancy within any part of the building;
- Maintaining proper fire exits and proper exit signage;
- Placing and maintaining fire extinguishers in easily accessible places;
- Properly storing/using hazardous materials;
- Prohibiting flammable materials in certain areas;
- Periodically inspecting buildings, facilities, etc. for potential violations; and
- Maintaining a high level of training and awareness of all employees on site.

In the event of fire emergencies, fire prevention personnel must be contacted immediately to mitigate the fire. All proper procedures must be followed by all personnel involved.

#### 6.5 **Transportation Hazards (land, water, air)**

Transport by vehicles, boats or aircrafts must be maintained in a safe condition by competent persons. In general, lights, indicators, brakes, tires, etc. must be checked as appropriate. Drivers, pilots, etc. must be in a fit physical state and possess appropriate licenses. Transport must not be used in a reckless, careless or dangerous manner. Navigational rules and conventions must be observed and an adequate lookout must be maintained. Loads must not be excessive, dangerously distributed or improperly secured. Local regulations must be observed and seat belts must be used if available.

#### 6.6 **Fuel Hazards**

Fuel can be hazardous if spilled or released into the environment. Types of fuel may include:

- Gasoline;
- Aircraft fuels;
- Diesel fuels;
- Lubricating oils;
- Crude oil; and
- Antifreeze.

All personnel handling, using, storing and/or disposing of fuel must be appropriately trained and do so in a safe manner. If a spill occurs, the procedures outlined in the Oil and Hazardous Material Spill Contingency Plan must be followed.

#### 6.7 **Equipment Hazards**

All equipment must meet the appropriate standards and have been properly maintained. All equipment must be checked and tested before use and inspections carried out as necessary during use by competent inspectors. Any damaged equipment shall be repaired immediately or taken out of service, at the discretion of the personnel in charge of the equipment operations. All equipment must be handled and operated safely by competent trained persons.

## 6.8 Wildlife Hazards

### 6.8.1 Food Handling

All food shall be handled with care to not attract wildlife. When not in use, food shall be kept in sealed containers at all times. Waste from food products shall not be left lying around and shall be disposed of in sealed containers at all times.

### 6.8.2 Bears

Bears are attracted to human food and waste. An armed bear monitor is designated to watch for signs of wildlife including bears on site. They shall be notified immediately should any wildlife be observed. If a bear is encountered retreat slowly, if possible, keeping a close eye on the bear and give the bear time to leave the area. Do not run.

### 6.8.3 Insects

Insects can become pests during the warmer months of the year. Insect repellent shall be used on exposed skin during these times to avoid insect bites and discomfort. Proper pain relief shall be applied to affected areas as needed.

## 7.0 Environmental Policy

AEI recognizes that its activities could have an impact on the environment.

AEI will conduct its operations responsibly and with due regard to the impact upon the environment.

It is AEI's policy to strive to eliminate any adverse environmental effects of all its activities, and to take an active role in raising the environmental awareness and responsibility of employees, suppliers, contractors and customers.

For the policy to be implemented AEI shall:

- Comply with all relevant legislation and regulations and any other requirements to which AEI subscribes;
- Ensure that all its establishments have appropriate procedures and facilities to ensure that such standards can be met;
- Implement effective environmental management and reporting systems; and

- Apply the principles of continuous improvement to environmental performance and prevention of pollution in line with the Company's environmental objectives and targets.

All employees of AEI and all employees of any contractors to AEI are expected to abide by this Environmental Policy and to actively participate in its implementation.

## 7.1 Environmental Management System Overview

### 7.1.1 Introduction

Environmental considerations are integral to our business and must be woven into the daily life of every AEI employee and Contractor. We recognize our responsibility to protect the communities in which we operate, to conserve natural resources and to comply with applicable laws and regulations so that people today and generations to come will have a sustainable future. AEI is committed to upholding these principles.

AEI employees and contractors at all levels must work to ensure that we comply with applicable environmental laws, regulations and internal policies and procedures to continuously improve our environmental performance wherever we do business.

## 7.2 Roles and Responsibilities

### 7.2.1 Management

It is recognized that management's top priorities are to supply the materials, provide the opportunities, and promote a favorable environment for business. Promoting quality and minimizing loss are key concerns that enhance the profitability of any business.

Management is accountable for the overall Environmental Policy.

### 7.2.2 Division Management

All Managers and Supervisors are responsible for the implementation of AEI's Environmental Program and how it relates to their respective areas.

- To accomplish this, they will familiarize themselves with the Environmental Management System (EMS), offer positive feedback regarding the EMS and ensure its effective implementation as applicable within each respective division;

- Ensure that employees are properly trained in their job assignments, and maintain records to substantiate all training;
- Review all environmental incident reports personally to satisfy themselves that incident causes are being investigated and proper corrective action is being taken to prevent recurrence of incidents; and
- Require that all employees meet established Federal, Territorial, Provincial, departmental and local licensing and training requirements.

### **7.2.3 Employee Responsibilities**

AEI expects the individual employee to cooperate in every respect with AEI's Environmental Program. This will ensure that operations are carried on in such a manner as to ensure the protection of the environment.

Employees must:

- Comply with instructions of supervisors;
- Report all incidents immediately;
- Submit recommendations for environmental improvements;
- Request job instructions on any task they are requested to do, but for which they do not fully understand all the environmental concerns; and
- Adhere to all procedures and requirements as outlined in the Environmental Policy.

## **7.3 Environmental Impacts**

AEI recognizes that the following aspects of our operations can impact the environment.

### **7.3.1 Noise**

All employees must wear proper hearing protection as required and show concern for surrounding environment. Noise dampening materials or techniques shall be used to reduce the impacts on the environment when needed.

### **7.3.2 Waste**

The generation of waste will be minimized. When generating waste, ensure proper handling and disposal, or recycling. All garbage must be contained and disposed of in an approved waste disposal site. All chemical and hydrocarbon waste must be disposed of according to regulations.

**7.3.3 *Recyclable materials***

Where practical, recycling programs shall be implemented to reduce the amount of waste (ie. paper, cardboard, metals).

**7.3.4 *Emission***

Ensure that all vehicles, equipment, or machines are operating efficiently. Proper maintenance is imperative for ensuring low emission levels.

**7.3.5 *Spills or leaks***

All employees must pay close attention to the proper storage, transfer, and handling of any product that may contaminate the environment. Use drip pans when required. Spill kits must be available for any transferring and handling of products.

**7.3.6 *Land disturbance***

Use existing roads and trails where possible. Avoid erosion by controlling run-off and using erosion control structures. Minimize vegetation removal if some removal is required. When abandoning a site, leave it as close to its original state as possible, or better.

**7.3.7 *Energy consumption***

Conserve electricity when it is not required. When practical, shut off engines to reduce fuel consumption. Proper maintenance will further improve efficient energy consumption.

All employees and contractors are expected to participate in the Environmental Policy to minimize the impact on the environment.

**7.3.8 *Continuous Improvement***

As part of the AEI effort to apply the principles of continuous improvement to environmental performance and prevention of pollution, AEI will identify environmental objectives that must be achieved. Specific targets will be established for achieving our objectives. All AEI employees and contractors must participate in the realization of these targets.



### **7.3.9 Compliance Requirements**

All countries, territories, provinces, departments, and local governments have specific regulations and guidelines for environmental compliance. AEI and its employees and contractors are expected to know and adhere to these regulations and guidelines. Also, AEI's environmental management system has policies and procedures that must be adhered to. Any employee or contractor refusing to comply with these regulations, guidelines, policies and procedures, will be subject to disciplinary action.

## **7.4 Emergency Preparedness and Response**

The best emergency preparedness possible is to avoid the incident before it happens through preventative measures. However, no matter how successful AEI employees and contractors become at reducing or eliminating incidents, we always need to be prepared for incidents in case they occur.

All AEI operations are required to have an emergency plan. This plan must outline the necessary actions to be taken to mitigate the effects of any environmental incident such as fire, spill, etc. Emergency contact numbers must be included in the plan, and posted. All employees must be trained in emergency preparedness and response. The required tools must be available in the case of an environmental emergency. Such tools may include fire extinguishers, axes, shovels, spill kits, first aid kits, etc. (refer to Appendix C and D).

## **8.0 Conclusion**

In order for the AEI safety program to be successful, all employees and contractors must participate in the program, offer feedback and suggestions, and abide by the guidelines.


Departure from these guidelines can not only have an effect on the reputation of the company and good standing with our clients, but worse could pose a negative impact on the environment.

If you have any questions, concerns or you wish to report an incident, please contact your supervisor or local manager.



  
\_\_\_\_\_  
John Gingerich  
Chief Executive Officer  
Advanced Explorations Inc.

Feb 17, 2014  
Date

  
\_\_\_\_\_  
Eric Guo  
Director  
Advanced Explorations Inc.

Feb 17/14  
Date

[Appendices available on included CD only]

## 9.0 Glossary

<b>Dangerous Occurrence</b>	<p>means</p> <ul style="list-style-type: none"><li>(a) An incident involving the hoist, sheaves, hoisting, rope, conveyance or shaft timbering or structure</li><li>(b) An inrush of water,</li><li>(c) A cracking, seeping or failure of a dam or bulkhead,</li><li>(d) An outbreak of fire,</li><li>(e) A premature or unexpected explosion or ignition,</li><li>(f) The occurrence of flammable, noxious or toxic gas in mine workings or at an exploration site,</li><li>(g) Unexpected and non-controlled extensive subsidence or caving of mine workings,</li><li>(h) An explosion or outbreak of fire in any way related to the operation of an air compressor, air receiver, compressed air line or steam boiler,</li><li>(i) A breakdown in the main ventilation system,</li><li>(j) Loss of control or major damage to any mobile equipment,</li><li>(k) An uncontrolled fall of ground causing physical damage or the displacement of more than 50 tons of material, and</li><li>(l) Any unusual occurrence not listed in paragraphs (a) to (k).</li></ul>
<b>Employee</b>	<p>means persons with authorization to be on site, hired by the employer.</p>
<b>Hazard</b>	<p>means the absence of or defect in any equipment or protective device which may endanger a worker; or any contravention of the Nunavut Mine Health and Safety Act and Regulations, or of Health and Safety policies and procedures; or any condition or act that may endanger a worker.</p>
<b>Inspector</b>	<p>means a person who acts as a regulatory or environmental official representing a governing body.</p>
<b>Occupational Health &amp; Safety Committee</b>	<p>means the committee established as per the requirements of the Mine Health and Safety Regulations to monitor and maintain health and safety on site of the project for the duration of the project.</p>

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<b>Operations Manager</b>	means an official delegated by AEI to oversee the project/mine.
<b>Responsible Person</b>	means the individuals designated by AEI to supervise each camp department.
<b>Serious Injury</b>	<p>means</p> <ul style="list-style-type: none"><li>(a) A fracture of the skull, spine, pelvis, femur, humerus, fibula, tibia, radius or ulna,</li><li>(b) An amputation of a major part of a hand or foot,</li><li>(c) The permanent loss of the sight of an eye,</li><li>(d) Any serious internal haemorrhage,</li><li>(e) Any burn that is caused by electricity and requires medical attention,</li><li>(f) Any third degree burn,</li><li>(g) Any injury caused directly or indirectly by explosives,</li><li>(h) Any asphyxiation or poisoning that causes a partial or total loss of physical control, and</li><li>(i) Any other injury likely to endanger life or cause permanent impairment.</li></ul>
<b>Safety Supervisor</b>	means the Responsible Person delegated by AEI to oversee health and safety issues on site.
<b>Site Manager</b>	means the individual delegated by AEI to be in charge of the field location.