APPENDIX B.11
HEALTH AND SAFETY MANAGEMENT PLAN - PRE-DEVELOPMENT WORK

Rev. No.	Revision	Date	Approved
0	Document issued for approval	December 2010	DEC. 2010
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FOREWORD

Baffinland's Health and Safety Management Plan complies with the company's EHS Management Framework SD-STD-001 (see Appendix 10A1 of the DEIS) and applies to all phases of the project. This Health and Safety Management Plan is a living document and continues to evolve with advancement of the Mary River Project. It is adapted to the scope of activities at every phase of Project development. The elements of the Health and Safety Management Plan apply equally to the engineering, procurement, and construction management (EPCM) contractor, who will assume responsibility for all activities during the construction phase of the project.

Appendix B.11 – Health and Safety Management Plan

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ABBREVIATIONS

AED ..... automated external defibrillator
Baffinland ..... Baffinland Iron Mines Corporation
CPR ..... cardiopulmonary resuscitation
DEIS ..... Draft Environmental Impact Statement
EHS ..... environmental, health, and safety
EHS Policy ..... Environmental, Health, and Safety Policy
EIS ..... environmental impact statement
EPCM ..... engineering, procurement, and construction management
ESIA ..... environmental and social impact assessment
Mary River Project ..... the Project
OH&S ..... Occupational Health and Safety
OHSAS ..... Occupational Health and Safety Management System
the Code ..... Code of Business Conduct and Ethics
PDW ..... Predevelopment Work

SECTION 1.0 - CONTEXT, PURPOSE, AND ORGANIZATION

Baffinland is committed to protecting the safety and health of our employees and contractors, and the communities in which we operate.

To implement the Sustainable Development Policy, Baffinland will conform to company environmental, health, and safety (EHS) management systems, standards, codes of practice, and guidelines. Baffinland values include specific expectations surrounding safety and health, and social and environmental responsibility. Baffinland has an EHS Corporate Committee, EHS Charter, and Code of Business Conduct and Ethics to support these values. These documents are posted on the company's website. Baffinland`s Health and Safety Management Plan is based on the principle of continuous improvement and is consistent with the Occupational Health and Safety Management System (OHSAS) 18001, dated 2007.

Baffinland` s Health and Safety Management Plan is in place to control health and safety risks of company activities. This plan contains the following elements:

- Policy
- Legal Requirements
- Hazard identification and Risk Assessment
- Health and Safety Targets and Objectives
- Roles and Responsibilities
- Training and Awareness
- Reporting and Documentation
- EHS Communication
- Operational Control
- Emergency Preparedness and Response
- Performance Measurement and Monitoring
- Accidents, Incidents, Non-Conformance, and Corrective/Preventive Actions
- Records and Records Management
- Audits and Assurance
- Management Review

SECTION 2.0 - POLICY

For Baffinland's Sustainable Development Policy, see Figure 2.1. Baffinland is committed to leadership and continuous improvement in environmental, health, and safety practices for the benefit of employees, contractors, and communities. This will be accomplished by:

- providing a safe and healthy workplace
- integrating environmentally sound practices in all processes
- complying with applicable laws, regulations, policies, and standards
- conserving natural resources and energy
- providing necessary resources to support environment, health, and safety goals and objectives
- integrating environmental, health, and safety goals and objectives with overall business strategy

2.1 BAFFINLAND EHS VISION

Baffinland's vision is to achieve:

- an accident/incident free-culture
- a sustainable and competitive business advantage through leadership and excellence in environmental, health, and safety

Baffinland is focused on everyone's safety, each and every day. Business success will not be possible without safe workplaces and safe workers. Baffinland's objective is to implement processes and systems for safety excellence and integrate them in everyday activities to develop safe behaviour and ensure a safe place for employees.

Environmental, health, and safety excellence requires a daily commitment by all employees.

2.2 BAFFINLAND'S COMMITMENTS

Baffinland provides adequate resources to implement and maintain the EHS Management System, including the necessary human, material, and financial resources. For Baffinland's Sustainable Development Policy, see Figure 2.1.

2.3 UPDATE OF THIS MANAGEMENT PLAN

The Health and Safety Management Plan is a "living document." It will be regularly updated based on management reviews (see Section 8), incident investigations, regulatory changes, or other Project-related changes.

The Pre-Development Work (PDW) phase will be a major milestone for the Project. During this period, the engineering, procurement and construction management (EPCM) contractor will assume leadership of the Health and Safety Management Plan for all construction-related activities.

The EPCM contractor will also be expected to have their own Health and Safety Management Plan, which will comply with the Baffinland Health and Safety Management Plan. The Hatch Health & Safety Plan-Pre-development is attached as Annex B.11.1

Baffinland will perform regular audits of the EPCM contractor's Health and Safety Management Plan to ensure that it complies with Baffinland's Sustainability Policy and health and safety goals and objectives.

Figure 2.1 Baffinland Sustainable Development Policy

At Baffinland Iron Mines Corporation, we are committed to conducting all aspects of our business in accordance with the principles of sustainable corporate responsibility and always with the needs of future generations in mind. Everything we do is underpinned by our responsibility to protect the environment, to operate safely and fiscally responsibly and to create authentic relationships. We expect each and every employee, contractor, and visitor to demonstrate a personal commitment to this policy through their actions. We will communicate the Sustainable Corporate Policy to the public, all employees and contractors and it will be reviewed and revised as necessary on an annual basis.
These four pillars form the foundation of our corporate responsibility strategy:

1. Health and Safety
2. Environment
3. Investing in our Communities and People
4. Transparent Governance

1.0 HEALTH AND SAFETY

- We strive to achieve the safest workplace for our employees and contractors; free from occupational injury and illness from the very earliest of planning stages. Why? Because our people are our greatest asset. Nothing is as important as their health and safety.
- We report, manage and learn from injuries, illnesses and high potential incidents to foster a workplace culture focused on safety and the prevention of incidents.
- We foster and maintain a positive culture of shared responsibility based on participation, behaviour and awareness. We allow our workers and contractors the right to stop any work if and when they see something that is not safe.

2.0 ENVIRONMENT

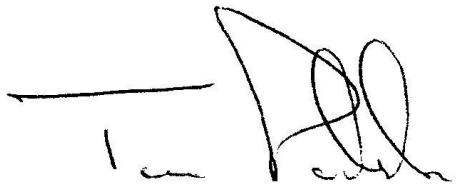
- We employ a balance of the best scientific and traditional Inuit knowledge to safeguard the environment.
- We apply the principles of pollution prevention and continuous improvement to minimize ecosystem impacts, and facilitate biodiversity conservation.
- We continuously seek to use energy, raw materials and natural resources more efficiently and effectively. We strive to develop pioneering new processes and more sustainable practices.
- We understand the importance of closure planning. We ensure that an effective closure strategy is in place at all stages of project development and that progressive reclamation is undertaken as early as possible to reduce potential long-term environmental and community impacts.

3.0 INVESTING IN OUR COMMUNITIES AND PEOPLE

- We respect human rights and the dignity of others. We honour and respect the unique culture, values and traditions of the Inuit people.
- We contribute to the social, cultural and economic development of sustainable communities adjacent to our operations.
- We honour our commitments by being sensitive to local needs and priorities through engagement with local communities, governments, employees and the public. We work in active partnership to create a shared understanding of relevant social, economic and environmental issues, and take their views into consideration when making decisions.

4.0 TRANSPARENT GOVERNANCE

- We will take steps to understand, evaluate and manage risks on a continuing basis, including those that impact the environment, employees, contractors, local communities, customers and shareholders.
- We ensure that adequate resources are available and that systems are in place to implement risk-based management systems, including defined standards and objectives for continuous improvement.
- We measure and review performance with respect to our environmental, safety, health, socio-economic commitments and set annual targets and objectives.
- We conduct all activities in compliance with the highest applicable legal requirements and internal standards
- We strive to employ our shareholder's capital effectively and efficiently. We demonstrate honesty and integrity by applying the highest standards of ethical conduct.



Tom Paddon
President and Chief Executive Officer
September 2011

2.4 INTERACTION WITH NUNAVUT'S MEDICAL SYSTEM

The current intervention procedure for injuries will be as follows:

1. Stabilize the injured person and administer medical treatment within the capabilities of the medical professionals at site.
2. Depending on the nature of the injuries, the patient might be flown to Pond Inlet for stabilization and then flown by medi-vac aircraft to Iqaluit.
3. If the patient is stabilized and is low risk to transfer to the Iqaluit Regional Hospital, they will be taken by aircraft chartered by Baffinland.

4. Depending on the severity of the injury, the patient will be flown to a major hospital (Montreal/Ottawa) as soon as possible.

Key responders and medical professionals will be trained in current first aid and cardiopulmonary resuscitation (CPR) techniques.

In addition and automated external defibrillator (AED) will be located in strategic locations and all responders and medical professionals will be properly trained in its use.

Once PDW is underway, Baffinland will establish a first aid room on the floating camp at Steensby Bay. The existing firsta aid facilities at Mary River and Milne Inlet will continue in operation where qualified medical staff will attend to medical emergencies. These facilities will remain functional for the duration of the PDW. The existing medi-vac procedure will continue to be used or Baffinland will establish a remote link with an existing hospital facility and medical team.

Baffinland recognizes and will adhere to the Government of Nunavut's policy on medical evacuation of non-Nunavutmiat.

SECTION 3.0 - LEGAL REQUIREMENTS

Specific knowledge of legal and other requirements and associated tasks are necessary to establish objectives and targets as well as to develop adequate management plans and operational controls to achieve the objectives and targets.

The significant current legislation governing occupational health and safety is as follows:

- *Mine Health and Safety Act* and Regulations; S.N.W.T. (Nu.) 1994, c. 25
  - Environmental Tobacco Smoke Worksite Regulations, Nu. Reg. 029-2003
  - Mine Health And Safety Regulations, N.W.T. Reg. (Nu.) 125-95
  - Mine Health And Safety Regulations, Amendment, Nu. Reg. 016-2003
- *Safety Act* and Regulations, R.S.N.W.T. (Nu.) 1988, c. S-1
  - Asbestos Safety Regulations, N.W.T. Reg. (Nu.) 016-92
  - Environmental Tobacco Smoke Work Site Regulations, Nu. Reg. 027-2003
  - General Safety Regulations, R.R.N.W.T. (Nu.) 1990 c. S-1
  - General Safety Regulations, Amendment, Nu. Reg. 021-2000
  - Safety Forms Regulations, N.W.T. Reg. (Nu.) 102-91
  - Silica Sandblasting Safety Regulations, N.W.T. Reg. (Nu.) 015-92
  - Work Site Hazardous Materials Information System Regulations, R.R.N.W.T. (Nu.) 1990 c. S-2
- *Workers' Compensation Act*, R.S.N.W.T. (Nu) 1988 c. W-6
  - Assignment of Statutes Administration Order, N.W.T. Reg. (Nu.) 040-96
  - Workers' Compensation General Regulations, R.R.N.W.T. (Nu.) 1990 c. W-21
- *Workers' Compensation Act* (Consolidation) S.Nu. 2007,c.15, 2007
  - Workers' Compensation General Regulations, R-022-2008
  - Assignment Of Statutes Administration Order, N.W.T. Reg. (Nu.) 040-96
- *Transportation Of Dangerous Goods Act*, 1990, R.S.N.W.T. (Nu.) 1988, c. 81 (Supp.)

Bafffinland EHS staff will continually monitor legislation for any amendments and implement compliance programs and employee communication, with these changes, as required.

Baffinland has a written operational control to identify changes in activities, occupations, operations, and facilities that might affect the application of legal and regulatory requirements as well as health and safety risks. The operational control indicates who in management receives results of the report on changes and includes a regular review of the control. Operational controls for identifying such changes include workplace inspections and regular interviews with area supervision on changes in their areas.

SECTION 4.0 - HAZARDS IDENTIFICATION

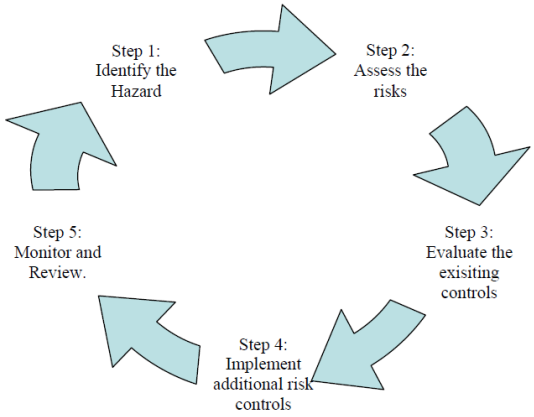
Knowledge of hazards and evaluation of associated risks are necessary requirements for establishing health and safety objectives and targets, and for setting priorities to control the identified risks to employees and others on an ongoing basis. All contractors and subcontractors involved in the exploration, construction, and operation of the Project are required to carry out hazard identification.

For all phases of the Project, Baffinland will have knowledge of potential hazards through such sources as:

- legal and regulatory requirements
- company Sustainable Development Policy and supporting policies
- records of incidents, accidents and non-conformances
- EHS Management System audits
- company EHS audits
- communications from employees and others
- information from health and safety consultations
- information on best practices, typical hazards for the industry, and incidents and accidents in other organizations
- details of changes in occupations, facilities and activities
- inventory of hazardous materials and the toxicology of the hazardous materials
- monitoring data
- existing administrative, engineering and personal protective equipment controls
- workplace knowledge and other data
- professional judgment
- Process Hazard Analysis
- Management of Change Process

Baffinland uses its Hazard Identification, Risk Assessment, and Controls Methodology (see EHS Management Framework SD- STD-002 in Appendix 10A-2) to document ongoing identification of hazards and classification of risks for routine and non-routine events associated with activities, occupations, and facilities for all phases of the project. This procedure includes five distinctive steps (see Figure 4.1).

Figure 4.1 Hazard Identification, Risk Assessment, and Controls Methodology



Based on the Hazard Identification, Risk Assessment, and Controls Methodology, Baffinland creates a list of activities, occupations, and facilities and associated hazards with established priorities for risk control and action.

The result of the hazard identification and risk assessment is a basis for establishing and documenting health and safety objectives and targets, and subsequent action to achieve established objectives and targets. Each hazard classified as representing a priority risk requires an action plan with recommendations to control the risk. Recommendations include consideration for operational controls, training and awareness, and performance measurement and monitoring.

The action plan and recommendations are forwarded to the area management responsible for follow-up. In all cases, the action plan and recommendations are communicated to the interested and affected employees (and others as required). Typically, the recommendations are implemented in consultation with interested and affected employees (and others as required).

4.1 OCCUPATIONAL HEALTH AND SAFETY COMMITTEE

Involvement of everyone in EHS activities is the most powerful way to develop personal EHS values and build awareness and commitment. Baffinland encourages employee participation by providing mechanisms that:

- support participation (by identifying and removing barriers to participation)
- establish a workplace EHS Committee(s) and employee representatives
- ensure that employees and employee representatives are trained in, and consulted on, all aspects of EHS associated with their work

An EHS Committee(s) is established at the operation/facility that will at minimum meet the requirements of the *Nunavut Mines Act*. Baffinland will ensure that:

- meetings are held regularly, at least quarterly
- employees are represented in EHS committees through all levels of the organization and criteria for

minimum participation (i.e., attendance) of committee members are established and enforced

- EHS Committees have goals and objectives that support the operation's EHS goals and objectives, that progress is tracked, and results are reported and followed-up
- minutes of committee meetings and follow-up action plans are documented and available to all employees. Minutes include attendance and follow-up action plans to identify outstanding issues, recommendations to management, planned action, assigned responsibility, and timeframes for completion. Action plans are reviewed at subsequent EHS meetings. Action plan items are completed within a reasonable timeframe.

4.2 HAZARD AND RISK IDENTIFICATION REVIEWS

Baffinland determines and communicates appropriately a timeframe to complete written initial hazard identification and risk assessment of identified occupations, activities, and facilities that might present health hazards.

Baffinland has written operational controls to review hazard identification, risk assessment, and risk control. Reviews will be conducted annually and the review documented and made available for all employees.

Baffinland has a written operational control to necessitate a review of any occupation, facility, and activity when there has been a change in the occupation, facility, or activity, or any other change that could affect the initial hazard identification and risk assessment.

SECTION 5.0 - HEALTH AND SAFETY TARGETS AND OBJECTIVES

Objectives and targets are necessary and are established at all levels of the company and for all contractors. Objectives and targets are documented and monitored to improve EHS performance.

5.1 HEALTH AND SAFETY STRATEGIES

- Senior Management:
  - Senior management must provide leadership for health, safety, and environment activities and assumes overall responsibility for success of the EHS Management System.
- Line Management Driven:
  - Line supervisors play a pivotal role in the success of the EHS programs.
  - EHS policies, programs, and procedures are consistently applied throughout the Project by Baffinland's supervisors as they direct the workforce in their daily duties.
- Visibly demonstrated commitment:
  - EHS excellence only occurs when supervisors, managers, and executives demonstrate their values through actions and their crediblity by engaging employees to actively participate in the program.
- Annual target reductions:

- By establishing annual leading and lagging indicators for EHS improvements, Baffinland will strive for continuous improvement by meeting these reductions in maintaining "world-class EHS performance."

- High level of accountability:
- Every employee is held accountable for exercising sound judgement and skills in a reasonable, practical, and timely way to prevent accidents and injuries.

5.2 HEALTH AND SAFETY PRINCIPLES

All incidents can be prevented. Baffinland believes that:

- all injuries and environmental incidents are preventable
- injuries and incidents are not mere chance occurrences, but represent a system failure

Employee involvement is essential. Employees are required to practice good housekeeping, participate in training, report hazards and injuries, use personal protective equipment, and practice safe work habits.

Management is responsible and accountable for preventing injuries. Leadership is all about people, and safety, at its essence, is respect through action for the well-being of people.

Working safely is a condition of employment. Baffindland's approach is "Safe from the Start." Each employee is held accountable for using sound judgement to prevent injuries.

All operating exposures can be controlled. Baffinland will continually analyze its process and procedures to maximize efficiency and reduce safety risks.

A "world-class" EHS program is achieved when incidents and injuries are intolerable, responsibilities and expectations are clearly defined, communication is open, and the organization is employee-centred.

5.3 CHALLENGING GOALS AND OBJECTIVES

Objectives and targets are necessary and can be established at all levels of the company. They are documented and measurable objectives and targets to monitor and improve EHS performance regarding health and safety risks, and environmental aspects and impacts.

Objectives and Targets

Each operating department will establish and document specific objectives and targets and are to be aligned with Baffinland objective and targets, demonstrate continuous improvement in EHS performance and achieve the goal of "zero harm."

Each operating department will establish EHS targets and objectives annually. Each target and objective is to have an associated action plan. The plan for achieving objectives and targets includes:

- identifying the planned action
- designating responsibility for achieving objectives and targets
- determining timeframe within which the objectives and targets are to be achieved
- verifying completion

Review of Objectives and Targets

Targets and objectives are reviewed regularly (at least annually) and progress toward meeting established objectives is measured and tracked (e.g., key performance indicators for EHS).

Communication of Targets and Objectives

Objectives and targets for the operating department are communicated to employees throughout the organization, and facility or department objectives and targets are communicated throughout the respective areas.

5.4 EHS BEST PRACTICES

A "world-class" EHS workplace incident rate is considered 2 or less, with a severity rate of 1 or less. Incident rate is usually calculated by multiplying the number of total recordable injuries by 200,000 and divide by the hours worked. Severity rate is usually calculated by multiplying the number of lost-time workdays by 200,000 and dividing by the hours worked.

Baffinland will strive to reduce these rates to the lowest possible level.

Baffinland strives to continuously improve to achieve world-class performance. The Mary River Project experienced a lost-time (LT) injury in June 2010 after working 668 days since the last LT. The company intends to be the leader in Nunavut Mining by ensuring strict adherence to the following strategies:

- EHS is line management-driven
- annual target reduction for EHS
- performance accountability (covered in annual performance review)
- high visibility for EHS (site inspection and job observations)
- compliance auditing (planned inspections)
- practical risk assessment
- team communication and consultation (EHS meetings, OHSC meetings)
- training and awareness (all employees)
- recognition for individual and team EHS performance
- document and data control
- emergency preparedness and response
- audits and assurance
- management reviews

SECTION 6.0 - ROLES AND RESPONSIBILITIES

Employee involvement is essential. Involvement of employees at all levels is needed for effective performance of EHS-related tasks. All employees are required to practice good housekeeping, participate in training, report hazards and injuries, use personal protective equipment, and practice safe work habits. It is necessary that roles, responsibilities, and accountabilities be defined, documented, and communicated.

Each employee is expected to actively participate in, and take ownership of Environmental, Health, and Safety Policy, goals, and objectives. Line management will be accountable for implementing this policy. Senior management will be visibly committed and actively supportive of this policy.

Baffinland`s Vice President Sustainability is responsible for implementing the EHS Management System. The VP Sustainability ensures that EHS management system requirements are established, implemented, and maintained. The VP Sustainability also ensures that reports on performance of the EHS Management System are presented to senior management.

For all phases of the project, Baffinland and the EPCM contractor (during the PDW phase) will work closely together. They will define, document, and maintain a list of the roles, responsibilities, and accountabilities of the employees (management) responsible for EHS performance in their areas. They will also review the implementation of their respective EHS Management System, and the EHS personnel advising and assisting management to meet their EHS Management System responsibilities.

Baffinland will regularly review and update any changes in roles, responsibilities, and accountabilities.

SECTION 7.0 - TRAINING AND AWARENESS

All employees need some level of training depending on whether they manage, perform, or verify activities affecting health and safety risks or environmental aspects. A key factor is to match training provided with training needed. Training and awareness needs are determined by:

- results of the environmental aspects evaluation
- results of hazard identification, risk assessment, and risk control
- company Sustainable Development Policy and supporting policies
- legal and regulatory requirements
- established objectives and targets
- management plans

Baffinland identifies and documents training needs and delivers appropriate training to all employees whose work might affect risks to health and safety in the workplace and whose work might create a significant environmental impact. All Baffinland contractors are required to abide by this requirement. Employees and others are made aware of:

- importance of conformance to requirements of the EHS Management System and EHS policies
- risk associated with work in a remote environment
- risk associated with work in extreme climatic conditions

- risk to the environment and to health and safety of their work activities
- risk to the environment and to health and safety of deviations from specified operational controls
- benefits of a healthy and safe workplace
- their specific roles and responsibilities in achieving compliance

Baffinland's training and awareness plan considers:

- the differing levels of risk
- the remoteness of the site and the climate
- the different responsibilities, abilities, and literacy of employees
- the culture
- trainers
- training methods and settings
- training frequency
- contractors
- documentation of training
- evaluation of training

Baffinland regularly reviews and updates the training and awareness plan based on changes in training needs related to EHS Management System awareness, occupation-specific training, and regulatory-required training.

Emergency personnel will receive training in first aid and CPR and will practice hands-on rescue techniques. Employees will undergo formal safety and emergency response training. The training will identify site-specific hazards and hazards associated with the project in general. The training will also review standard operating procedures, use of personal protective equipment, signalling an emergency, evacuation routes and muster locations, reporting and notification protocol, and other general safety procedures.

As part of site orientation and ongoing awareness training, all site personnel are informed that any spill of fuel or other hazardous liquids or solids, whatever the extent, has to be reported immediately to the site HSE Manager.

An appropriate number of site personnel are selected and appropriately trained to form the Emergency Response Team (ERT). Crew members are trained in emergency spill response procedures and operations. Training includes knowledge in the:

- properties of hazardous materials used on site
- common causes of spills
- environmental effects of spills
- worker health and safety during emergency interventions
- personal protective equipment and clothing
- spill response procedures and techniques on land, water, snow, and ice, and during all four seasons
- spill response equipment and materials

Training also includes analysis of potential spill events that are more likely to occur during PDW operations. Fuel spills are more likely to be caused by:

- human error during fuel transfer operations (e.g., tank farm to tanker-trucks, tanker trucks to mobile equipment and drums to helicopters
- rupture of tanks, supply lines, or valves from accidental damage, deterioration, or equipment failure
- road accidents involving tanker-trucks

For emergency response crews, training includes spill response field drills and classroom training.

SECTION 8.0 - REPORTING AND DOCUMENTATION

Reporting and documentation requirements are outlined in Section 10 and Section 11 of Baffinland's EHS Standard (see Appendix 10A of the DEIS). During the PDW phase, the EPCM contractor will be required to implement a reporting and documentation system that satisfies Baffinland's EHS documentation and reporting standards.

SECTION 9.0 - COMMUNICATION

Communication requirements are outlined in Section 10 and Section 11 of Baffinland's EHS Standard (see Appendix 10A). During the PDW phase, the EPCM contractor will be required to implement an EHS communication plan that satisfies Baffinland's EHS communication standards.

SECTION 10.0 - OPERATIONAL CONTROL

Operational controls include administrative, engineering, and personal protective equipment controls and other protective measures (e.g., machine guarding, railing). Administrative controls include programs, standard operating procedures, practices, guidelines, and instructions. Operational controls are the significant means and actions to control health and safety hazards and risks, and environmental aspects and significant impacts. They help achieve the requirements of the company Sustainable Development Policy and supporting policies, established objectives and targets, and compliance with legal and other requirements.

Baffinland will regularly review:

- legal and regulatory requirements
- occupations, facilities, and activities where the level of risk is such that further control measures are needed
- environmental aspect evaluations where the significance is such that further control measures are needed

When considering the outcome of such reviews, Baffinland develops operational controls:

- to control identified health and safety risks (including those that could be introduced by others such as contractors and visitors) and the significant environmental impacts
- that stipulate operating criteria
- for the design of workplace, process, installations, machinery, operational controls, and the work organization (e.g., 8-hour and 12-hour shifts), including their adaptation to human capabilities to eliminate or control adverse environmental impacts, and health and safety risks at their source
- to cover situations where their absence could lead to non-conformance with legal and other requirements, the company Sustainable Development Policy and supporting policies, and established objectives and targets

Baffinland regularly reviews and updates the operational controls for suitability and effectiveness in controlling health and safety risks, and adverse environmental impacts.

SECTION 11.0 - EMERGENCY PREPAREDNESS AND RESPONSE

Emergencies that could result in an accident or incident causing injuries, illnesses, or environmental impacts, or that could cause health and safety risks or environmental impacts need to be considered in the EHS Management System.

Baffinland establishes and maintains operational controls to identify the potential for and responses to accidents, incidents, and emergency situations, and to prevent and mitigate the likely associated injury, illness, and adverse environmental impacts (see Appendix B.1 for the current Emergency Response Plan).

Baffinland regularly reviews its emergency preparedness and response plans and operational controls. In addition, a timely review will be undertaken after accidents, incidents, or emergency situations.

SECTION 12.0 - PERFORMANCE MEASUREMENT AND MONITORING

It is important to identify key parameters to measure and communicate performance internally and externally, including compliance with relevant legal and other requirements, incident trends and progress toward objectives and targets.

The ultimate indicators of the effectiveness of the EHS Management Plan are:

Indicator (as defined by OSHA)	Baffinland Performance Target
Recordable incident rate	Less than 2
Lost-time injury rate	Less than 1

NOTE: OSHA (United States Occupational Safety and Health Administration)

Baffinland recognizes that there is no single reliable measure of health and safety performance. What is required is a “basket” of measures or a “balanced scorecard” that provides information on a range of health and safety activities. A number of leading indicators, or positive performance measures (PPM), provide information on how the system operates in practice, identifies areas where remedial action is required, provides a basis for continuous improvement, and provides a mechanism for feedback and consequential motivation (see Table 12.1). Monitoring these leading indicators (PPM) will ensure the effectiveness of the EHS Management Plan and that Baffinland’s targets and objectives are met.

Table 12.1 Positive Performance Measures for Safety

Objective	Indicator	Measure/Monitor	Results	Improvement
All activities to be subject to hazard analysis and risk assessment	Risk Assessment	% Risk assessment complete % Control measures implemented	Track reported % monthly by area/department	Review progress at monthly senior management meetings, target areas for improvement
Written work procedures in place for critical activities	Work procedures	% Written procedures complete	Track reported % monthly by area/department	Review progress at monthly senior management meetings, target areas for improvement
Provision of safe workplace	Work place inspection target for each frontline supervisor across whole site on a monthly basis each with specific area Workplace visibility tour by middle and senior managers in their work area once per month	% Scheduled inspections complete by name and work area/department % Actions arising complete by name and work area/dept % Visibility/inspection tours complete	Track reported % monthly by area/department	Review progress at monthly senior management meetings, target areas for improvement
Employees working safely	Performance based observations	% Employees working safely % Protective protection equipment (PPE) compliance	Track reported % monthly by area/department	Review progress at monthly senior management meetings, target areas for improvement
Incident reporting and implementation of remediation measures	Timeliness of reporting Incident investigation effectiveness Log of corrective actions	% Incidents reported within 24 hours % Near-miss incidents % Incident investigation complete on time % Corrective actions implemented *All by area/dept.*	Track reported % monthly by area/department	Review progress at monthly senior management meetings, target areas for improvement
Safe and competent employees	Performance assessment including training needs identification Training records	% Performance assessments complete % Scheduled training complete *All by area/dept.*	Track reported % monthly by area/department	Review progress at monthly senior management meetings, target areas for improvement

Table 12.1 Examples of the Application of Positive Performance Measures for Safety (cont'd)

Objective	Indicator	Measure/monitor	Results	Improve
Improve safety awareness	Toolbox talks on targeted topics monthly by all Supervisors	% Toolbox talks complete by department % Employees attending % Actions arising complete *All by Area/Dept.* % Safety Representatives Trained	Track reported % monthly by area/department	Review progress at monthly senior management meetings, target areas for improvement
Improve safety culture	Annual climate survey	Overall findings based on selected criteria *All by Area/Dept.*	Track trends annually by area/department	Review progress at annual senior management meetings, target areas for improvement

SECTION 13.0 - ACCIDENTS, INCIDENTS, NON-CONFORMANCES AND CORRECTIVE AND PREVENTIVE ACTION

Root or basic cause analysis is important for evaluating and investigating accidents, incidents and non-conformance in establishing objectives and targets for a successful corrective action program. Through this process, the actions taken to address non-conformance can result in permanent and positive changes in the EHS Management System and continuous improvement. It is important that employees with health, safety, and environmental responsibility be part of this process to assist in identifying actual and potential health and safety risks, and adverse environmental impacts.

Baffinland has written operational controls for handling and investigating potential accidents, incidents, and non-conformance that includes:

- tracking and recording details of accidents, incidents, and other non-conformance
- root or basic cause analysis
- mitigating any health and safety risks and adverse environmental impacts that arise from accidents, incidents, or other non-conformance, including corrective and preventive action
- where mitigation is necessary, conducting a health and safety risk assessment and significance evaluation of the environmental aspects of the proposed corrective and preventive action(s) to determine appropriateness and effectiveness
- implementing, recording, and communicating changes arising from the corrective and preventive action, e.g., changes in operational controls

SECTION 14.0 - RECORDS AND RECORDS MANAGEMENT

Baffinland maintains and preserves internal and external records that are critical to design and performance of the EHS Management System. These records include:

- employee training records
- inspection reports
- Management of Change checklists and outcomes
- consultation reports
- accident, incident, and non-conformance reports and follow-up corrective and preventive action reports
- medical test reports (medical test reports and health surveillance reports might be considered confidential)
- health surveillance reports
- cases of occupational disease and compensation claims
- audits and assurances
- management reviews
- other reviews
- environmental aspect evaluations
- emissions measurements
- exposure measurement records
- hazard identification, risk assessment and risk control records
- government reports

SECTION 15.0 - AUDITING, REVIEW, AND UPDATE

Baffinland conducts internal audits to determine the degree of implementation and to verify performance of the EHS Management System. Management and labour representatives may undertake audits. The results of audit(s) and management review(s) form the basis for the annual written statement of assurance by management on effectiveness of the EHS Management System.

Annually, management submits to the Chief Operating Officer a written statement of assurance as to effectiveness of the EHS Management System.

SECTION 16.0 - MANAGEMENT REVIEW

Senior management reviews the EHS Management System to determine its continued suitability, adequacy, and effectiveness. Outcomes of a management review include recommendations to revise Baffinland's Sustainability Policy and supporting policies, to revise established objectives and targets, and to specify corrective actions for individual management with target dates for completion.

Baffinland Iron Mines Corporation

Mary River Project

Project Pre-development Works- Safety Management Plan

Appendix B.11 Annex 1

Mary River Project – Project Pre-development Works - Safety Management Plan		Project Number: H337697
1. Project Definition	**Project name**	Mary River Project – Predevelopment Work
	Project description	This phase of the project involves the quarrying of aggregate for preparation of laydown areas and staging of camps, equipment and material at Milne Inlet, Mary River, Steensby Bay and the four rail camps. It includes the installation of containment areas for fuel tanks
	Project location(s) and project work site location(s)	Mary River project site, Baffin Island, Nunavut
	What are the safety targets for this project? (Consider LTIs, MTIs, audits, etc.)	Safety targets for the project will include both leading and lagging indicators. In support of the overall safety objective of «No Harm», all lagging indicator targets shall be zero. Leading indicator targets will be established prior to site development and shall include VFL observations, inspections, audits and hazard analyses.
	How will safety statistics be measured and reported?	Safety statistics will be measured as per the Hatch incident definition and based on 200,000 hours for frequency rate.
2. Project Roles and Responsibilities	**Who is the Project Manager?**	The Project Manager (PM) for this project is Harry Charalambu.
	Who is the Principal Contractor for the project?	General Contractor - with Hatch providing field quality assessment & control. The following contractors are involved for specialist work: Orica-Explosives supply and management
	Who is the person on the project team responsible for ensuring compliance with the obligations of the Principal Contractor under the OHS Regulations?	The Hatch Site Construction Director will have the ongoing responsibility for safety during PDW activities and will be assisted by the HSE Director

Mary River Project – Project Pre-development Works - Safety Management Plan			Project Number: H337697	
	Who is responsible for:	**Responsible:**	**Who is responsible for:**	**Responsible:**
	• **Identifying, controlling (through elimination or mitigation) and documenting the risks during the design phase of the project.**	Hatch	• Managing compliance of all contractors and persons on site with Safe Work Method Statements and the Site Safety Rules.	Hatch CM
	• **Reporting safety aspects of the design of the Project to the Client and Project Manager.**	Hatch	• Ensuring that all personnel attend the required safety inductions, have been appropriately trained and keeping records of attendance at inductions and other safety training.	Hatch and contractors
	• **Identifying hazards and assessing the risks associated with all other aspects of the work, and determining and documenting the risk control measures necessary.**	Hatch and contractors	• Providing contractors and any person involved in the work with the Site-specific Safety Management Plan and any updates.	Hatch and contractors
	• **Regularly reviewing and updating hazard identification, risk assessment and measures to control risks.**	Hatch	• Managing OHS communication and consultation provisions in accordance with the regulatory and other requirements.	Hatch and contractors Superintendent / Hatch CM

Mary River Project – Project Pre-development Works - Safety Management Plan			Project Number: H337697	
	Who is responsible for:	**Responsible:**	**Who is responsible for:**	**Responsible:**
	• **Managing compliance on the project with OHS, workplace injury management and workers compensation legislation, regulations, standards and codes.**	Hatch and contractors	• Preparing, maintaining and making available the register of hazardous substances.	Hatch maintains list. Contractors provide MSDS.
	• **Assessing and monitoring the safety management capability of contractors and other service providers.**	Hatch	• Ensuring first aid is always available and maintaining first aid stocks.	Contractors
3. Risk Assessment and Management	• **How will project hazards be identified?**	Risk assessments for the various operations will be completed by Hatch and contractors. A high level risk assessment is included in this section. Additional risk assessments will be required prior to commencing work each day.		
	• **Where will the results of the risk assessment documented? Is the level of documentation commensurate with the risks involved?**	Hatch and contractors will maintain a full listing of all JHA's and other risk assessment documents related to the project.		
	• **What is the plan for managing and regularly reviewing the risks and documenting any additionally identified risks?**	Job Hazard Analysis (JHA) will be reviewed with each site worker prior to project start in addition to the daily pre-start safety meetings. Each contractor will be provided with a copy of the Safety Management Plan, the Job Hazard Analysis included in this document and the applicable Safe Work Procedures.		

Mary River Project – Project Pre-development Works - Safety Management Plan		Project Number: H337697
	• **Is any other risk assessment required on this project? (e.g. HAZOP, CHAZOP, HAZAN?)**	• Daily weather forecasts will be reviewed • Daily activities will be coordinated based of anticipated conditions. • Bear observation reports will be communicated daily
	• **How will changes in the PDW affect the health and safety of any person on the construction site be identified and communicated?**	Through daily pre-start safety meetings and stepback meetings if necessary.
	• **How will an emergency on site be handled? How will people be trained in these procedures?**	A reliable means of communication will be made available at all times in case of an emergency. Emergency contact list will be provided to each work crew. Helicopter Sub-Contractor will provide flight emergency procedures, instruction on same and emergency transport.
	• **Any other risk management issues?** **e.g. do any national or state standards apply to any of the hazards identified?**	• Weather forecasts will be reviewed daily and all flight decisions will be reviewed and communicated to the work team. • General aviation and helicopter flight planning, flight plan submissions and flight rules as required by Transport Canada. • Helicopter pilots will have complete control for all matters of flight safety.

Mary River Project – Project Pre-development Works - Safety Management Plan				Project Number: H337697
Consider the other following commonly encountered hazards, indicate whether they are an issue on this project and what measures will be taken or put in place to control the hazard:				
	Hazard Will project be exposed to hazard?	**Yes / No**	**Details**	**Control Measure(s) to be implemented**
	Existing services (including electrical, gas or fluid)	Yes	Above ground electrical utilities excavation and lifting equipment potential contact	Maintain safe approach distance and sign areas with overhead power.
	Flammable or toxic gases	Yes	Gasoline / Diesel Fuel for construction equipment. Paints and coatings.	Proper handling techniques used. Fuelling operations only in a designated area. Onsite MSDS sheets available. Spill kits, fire extinguisher.
	Hazardous materials and dangerous goods (including presence of asbestos)	Yes	Welding fumes and UV radiation.	Follow good welding practices, use appropriate ventilation and PPE.
	Confined Space Entry	No	N / A	N / A.
	Electrical	Yes	Portable welders	Equipment inspection prior to use. Follow manufacturer's instructions
	Fire safety	Yes	Potential for fire with welding activities.	Follow hot work permit requirements and ensure that a fire extinguisher are available at all times

Mary River Project – Project Pre-development Works - Safety Management Plan				Project Number: H337697
	Hazard Will project be exposed to hazard?	**Yes / No**	**Details**	**Control Measure(s) to be implemented**
	Internal road safety / traffic control / access and egress	Yes	Travelling on site. Working adjacent to vehicle travel paths.	Follow posted traffics signs. Ensure operator competence through licensing and observation. Establish safe zones for workers and vehicles.
	Mobile equipment	Yes	Specialized equipment – Earth Moving Equipment, JLG Boom Lifts, Scissors lift and Bobcat Skid Steer	Daily mobile equipment inspections. Competent operators – license, observe and deem competent. Maintain safe zone near equipment.
	Rail interactions	No	N / A	N / A
	Overhead cranes	No	N / A	N / A
	Isolations and stored energy	Yes	Rigging practices for placing & supporting Materials and equipment	Inspect rigging and lift equipment each shift. Segregate lift area from other activities with barricades.
	Access to or working around continuous plant	No	N / A	N / A
	Manual handling	Yes	Lifting materials and equipment	See Hatch Safe Work Procedure (HS-SWP-095: Manual Handling). Appropriate use mechanical lift equipment.

Mary River Project – Project Pre-development Works - Safety Management Plan				Project Number: H337697
	Hazard Will project be exposed to hazard?	**Yes / No**	**Details**	**Control Measure(s) to be implemented**
	Work at heights	Yes	Working from scissor lifts.	Fall protection harness and short lanyard to prevent exit from lift basket.
	Falling in (Excavations, etc.) or falling on (overhead work / loads)	No	All site excavations	All site excavation to be barricaded as per Barricading Safe Work Procedure (HS-SWP-009).
	Management of safety by contractors	Yes	Contractor will not take part in activities without first implementing and reviewing JHA.	All contractors to follow good and safe work practices in accordance with the site specific safety plan.
	Other interfaces with operations	No	N / A	N / A
	Other conditions on the construction site e.g. lighting, security, disposal of waste	Yes	Adverse weather conditions.	Weather forecasts will be reviewed daily and work decisions will be reviewed and communicated to the work team
	Commissioning	No	N / A	N / A

Mary River Project – Project Pre-development Works - Safety Management Plan				Project Number: H337697
	Hazard Will project be exposed to hazard?	**Yes / No**	**Details**	**Control Measure(s) to be implemented**
	Wildlife Interaction	Yes	Polar bears may be present. All operators and site personnel must be aware of bear safety procedures	Communicate any observed bear activities to all personnel. Carry bear bangers / spray. All site personnel must be trained in bear safety procedures. Designated Baffinland employees to carry firearms. Suitable first aid kits to be carried by all remote crews.
	Working on / near water	yes	Unloading of vessels. Potential for falling into cold water	As appropriate all personnel will wear PFDs and when necessary, cold water suits. PFDs will be available on all vessels.
	Clearing / Grubbing	No	N / A	N / A
	Weather	Yes	Adverse weather will be a major hazard. Weather can change rapidly and result in whiteout conditions hampering the ability of remote crews to be extracted. Arctic weather conditions are to be expected, extreme cold temperatures and high wind conditions.	All remote crews to carry suitable devices, radio, handheld sat phone etc.) to facilitate constant communicated with weather observation and monitoring team.

Mary River Project – Project Pre-development Works - Safety Management Plan	**Project Number: H337697**

Of the hazards identified above and in the project risk studies, the top 10 safety-related risks associated with the project are listed as follows. The list includes the control measures and the person responsible for ensuring that the measures are implemented. The list should consider all phases of the project.
(L = likelihood C = Consequence RR = Risk Rating Resp. = Responsible for control of the risk)

Risk No.	Description	C	L	Raw RR	Controls	Resp.	C	L	Controlled RR
1	Travel by Helicopter	5	1	6	Pilot to conduct safety briefing before each flight. Pilot and passengers to wear immersion suits if travelling over open water. Review Hatch Safe Work Procedure HS-SWP-049, Section 4: Aircraft Safety	All Contractors / Helicopter Contractor	5	1	6
2	Working at heights	4	3	7	Fall protection harness and lanyard for scissors lifts. Scaffolding to be equipped with top rail, mid rail and toe board.	Contractor	4	1	5

Mary River Project – Project Pre-development Works - Safety Management Plan						Project Number: H337697			
Risk No.	**Description**	**C**	**L**	**Raw RR**	**Controls**	**Resp.**	**C**	**L**	**Controlled RR**
4	Working in Remote Areas	4	2	6	Satellite phone (and emergency contact numbers) and First Aid kit to be on hand at all times. First Aid attendant on site.	Hatch and contractor	4	1	5
6	Working in Cold Climate	3	3	6	Personnel to wear high quality, breathable insulated clothing. Maintain constant contact with weather observation team. Maintain suitable first aid kit HS-SWP-021: Cold Environments	Hatch and contractor	3	1	4

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Risk No.	**Description**	**C**	**L**	**Raw RR**	**Controls**	**Resp.**	**C**	**L**	**Controlled RR**
7	Working around mobile equipment.	4	3	7	Certified operators to follow all operating instructions. Conduct daily inspection checks. Maintain equipment in good working order. Maintain a safe zone near mobile equipment. Maintain suitable first aid kit	Hatch and contractor	4	1	4
8	Working around hazardous wildlife	4	2	6	Maintain constant awareness of possible bear presence. Be aware of polar bear behaviour (stalking), Carry bear bangers. Designated employees within camp to have access to firearm. Develop bear safety program.	Hatch and contractor	4	1	5

Mary River Project – Project Pre-development Works - Safety Management Plan						Project Number: H337697			
Risk No.	**Description**	**C**	**L**	**Raw RR**	**Controls**	**Resp.**	**C**	**L**	**Controlled RR**
9	Fire hazards due to welding activities	3	3	6	Maintain good housekeeping, segregate combustible materials from welding activities. Follow MSDS precautions for all coating materials	Hatch and contractor	3	1	4
See Below Legend for Explanation of Consequence and Likelihood Ranking **See attached spreadsheet (Job Hazard Analysis) for detailed outlined of hazards**									

Mary River Project – Project Pre-development Works - Safety Management Plan

Project Number: H337697

Score	TABLE OF CONSEQUENCE		
	People	Plant	Environment
5 – Very High/ Catastrophic	Multiple Fatalities	Greater than $10Million Loss	Catastrophe, destruction of sensitive environment, worldwide attention. Likely EPA prosecution. More than 30 days delay.
4 – High/ Major	Fatality or Permanent Disabilities	$1Million to $10Million Loss	Disaster, high levels of media attention, high cost of clean up. Offsite environmental harm, more than 10 days delay.
3 – Moderate	Major Injuries – Incapacitations or requiring time of work	$100Thousand to $1Million Loss	Major spills, onsite release, substantial environmental nuisance, more than 1day delay. (Leads to an additional resources call out i.e. SES)
2 – Low/ Minor	Significant Injuries – Medical Treatments, non-permanent injury	$10Thousand to $100Thousand Loss	Significant spills (Leads to a call out of Site Emergency Response Group)
1 – Very Low/ Insignificant	Minor Injuries – First Aid Treatments (cuts/bruises)	Less than $10Thousand Loss	Low environmental impact. Minor Spills less than 80 Litres.

Score	LIKELIHOOD
5 – Almost certain	The event is expected to occur in most circumstances. Likely to occur frequently - More than 1 per year
4 – Likely/ probable	The event will probably occur in most circumstances. Likely to occur several tines. 1 per year
3 –Moderate/ occasional	The event should occur at some time. Likely to occur some time. 1 per 5 years
2 – Remote/ unlikely	The event could occur at some time. Unlikely but possible. 1 per 10 years
1 – Rare/ very unlikely	The event may occur only in exceptional circumstances. Assumed it may not be experienced. 1 per 100 years

Risk Rating = Consequence + Likelihood

Consequence	Risk Rating				
5	6	7	8	9	10
4	5	6	7	8	9
3	4	5	6	7	8
2	3	4	5	6	7
1	2	3	4	5	6
	1	2	3	4	5
	Likelihood				

Risk Rating – Definitions

Risk Rating	Definitions	*Action Required*
8 - 10	Intolerable	Task not to start till the risk is eliminated or reduced. Bring to the immediate attention of management. Formal assessment required. MUST reduce the risk as a matter of priority.
7	High	Bring to the immediate attention of management. Task not to start till the risk is eliminated or reduced. Further Assessment required. MUST reduce the risk as a matter of priority.
6	Significant Risk	Bring to the attention of supervision. Review risks and ensure that they are reduced to as low as reasonably practicable. To be dealt with as soon as possible, preferably before the task commences. Introduce some form of hardware to control risk.
5	Moderate Risk	Needs to be controlled but not necessarily immediately, an action plan to control the risk should be drawn up. Review effectiveness of controls. Ensure responsibilities for control are specified.
2-4	Low Risk	If practical reduce the risk. Ensure personnel are competent to do the task. Manage by routing procedure. Monitor for change

A JHA considers a variety of activities/tasks involved in a job scope and analyses the key hazards (sources of harm) and their consequences (types of harm) eg. Sources of harm – lifting a heavy pipe - manual handling. Types of harm – Back strain.

Main Points – On how to write a JHA.

1. Define the task – what is to be done.
2. Review previous JHA if any – have we done it before?
3. Identify the steps – what is to be done.
4. Identify the hazards of each step.
5. Identify who or what could be harmed.
6. Give the task a risk rating – Consequence + Frequency
7. Develop solutions to eliminate or control hazards in each step.
8. Review the risk rating after the control system has been implemented.
9. If risk rating unacceptable review the solutions till risk rating acceptable.
10. Agree who will implement the control system.
11. Document the JHA and discuss with the relevant personnel.

Hierarchy of Hazard Management – Control Measures

These steps outline what should be planned for when deciding what control measures are to be put in place. Whenever possible the highest step should be used first and then progress down the list.

1. Eliminate the hazard.
2. Substitution.
3. Reducing the frequency of a hazardous task.
4. Enclosing the hazard.
5. Additional procedures.
6. Additional supervision.
7. Additional training.
8. Instructions / information.
9. Some personal protective equipment.

Mary River Project – Project Pre-development Works - Safety Management Plan		Project Number: H337697
4. Design	• **How will you ensure that the safety hazards and risks (including those associated with the construction phase) will be communicated to the designers and considered through the design process?**	N / A
	• **What process will be used to review and verify the design to ensure that the plant / equipment is safe, eliminates, minimizes or controls any OHS risks (including those during construction) and complies with appropriate legislation and standards?**	N / A
	• **Does the project include items of plant for which the design or actual item of plant requires registration with government institutions?**	N / A
	• **Any other safety related design issues? E.g. process for approving design changes; obtaining appropriate OHS information from suppliers of plant, equipment and materials; designers providing risks identified during design etc**	N / A
5. Occupational Health and Safety Training	• **What are the minimum induction requirements for access to project site to ensure that work can be undertaken safely? (Tick box if required)**	**X** Legislative requirement **X** Client Specific - Baffinland/AM **X** Dept./Hatch Induction (specify): Hatch Safety Management Plan **X** Project Specific Induction **X** Other (specify): Nunavut General Safety Regulations, R.R.N.W.T. 1990

Mary River Project – Project Pre-development Works - Safety Management Plan		Project Number: H337697
	• **How will records of attendance at inductions be kept?**	A record of attendance will be maintained at the project location. Electronic records of attendance will be maintained by the Hatch Site Safety Lead.
	• **How will records of the type of induction training (including a description of the content of the training) be kept?**	Hard copies of the job hazard analysis (JHA) and safe work procedures will be provided to all personnel. A sign off form will be completed upon receipt of information.
	• **How will you ensure that all personnel have been appropriately inducted before starting work?**	Workers will be issued a sticker or some other identifiable tag, which will indicate that they have received project orientation. As this will be a small project crew, new project workers will be easily identified. Workers will have to sign-off that they have completed the induction.
	• **How will you ensure that visitors to the site are kept safe and made aware of any safety hazards?**	No visitors will be permitted on site without attending a project specific site induction. Given that these operations are occurring in a remote location, it is unlikely that unauthorized visitors will present any issues.
	• **How will you ensure that any additional training (required for safe performance of the work) necessitated by a change in the work site is identified and implemented?**	This will be achieved through JHAs and daily safety meetings.
	• **Any other training or induction issues?**	Specialized training will be required for all crew members. This would primarily include emergency response and shelter in place training as well as bear avoidance and safety plan training.
6. Incident Management	• **Who will be available to respond to any injury or illness?**	A minimum of one site person per shift will have current training in first aid and CPR. Helicopter will be available in the event of an emergency. Medics positioned at all camps.
	• **What first aid facilities are available for the project site(s)?**	An appropriately stocked first aid kit will be on site at all times.

Mary River Project – Project Pre-development Works - Safety Management Plan		Project Number: H337697
	• **How will incidents be reported?**	All incidents will be reported as per the Hatch and Baffinland notification matrix.
	• **Who will be responsible for investigating incidents and ensuring any corrective actions are followed up and completed?**	The Hatch Construction Manager at a minimum will investigate all incidents with the assistance of the Site Safety Manager.
	• **How will any serious incidents be reported to Hatch management (or Legislative instances if required)?**	All incidents will be reported as per the Hatch and Baffinland notification matrix.
	• **How will records of incidents be kept?**	A record of any incidents will be maintained by the project manager and also entered into the Hatch safety management database system (iPas SM).
7. Communication	• **Where will the signs containing the name and contact telephone numbers of the principal contractor be located?**	This will be discussed in the site specific induction. Appropriate information will be provided to all workers regarding how to communicate with supervision in the event of a weather or other emergency.
	• **Where will this safety management plan be kept to ensure that it is available to all people involved in working on the project (including those working on the work site(s))?**	All contractors will be given a copy of this safety management plan prior to site mobilization. A copy of the plan and work procedures will be available to all workers on site.
	• **How will the project safety targets be communicated to all personnel involved with the project?**	The project safety targets will be communicated during the site induction.

Mary River Project – Project Pre-development Works - Safety Management Plan		Project Number: H337697
	• **How will the project safety rules be communicated so that all personnel involved with the project, including personnel on, and visitors to, the work site are made aware of them?**	The project safety rules will be provided prior to visit to site.
	• **How will you ensure that sub-contractors or other service providers are provided with the relevant parts of the safety management plan before commencement of work?**	The identified contractors will receive a copy of this safety management prior to commencing work activities.
	• **How will you ensure that any change to the safety management plan is communicated to project stakeholders including subcontractors and other service providers?**	Any changes to this safety management plan will be communicated to the contractors prior to commencement of work. Stop work may be issued to communicate changes if necessary.
	• **How will you ensure that any changes to the work site likely to affect health and safety are quickly communicated to all affected personnel? (e.g. daily pre-start / toolbox meetings)**	Any changes to this safety management plan will be communicated to the contractors at the daily pre-start safety meetings.
	• **Other means to communicate safety matters among the project participants? E.g. safety committees, safety meetings, keeping records of all safety communication etc.**	Daily pre-start safety meetings.
8. Access Control and Work Clearance	• **How will you restrict access to the work site(s) to people authorized to do so? (including members of the public)**	Work site is remote and accessible by fixed wing / helicopter only

Mary River Project – Project Pre-development Works - Safety Management Plan		Project Number: H337697
	• **How will you ensure that other people in the area of the work site (e.g. adjacent operations facilities), or effected by activities on the site, are kept up to date with activities on the site?**	N / A
	• **How will interactions with adjacent or effected sites and stakeholders be managed?**	N / A
	• **What equipment (PPE or otherwise) will be required to be taken on the work site(s)?**	Insulated clothing, appropriate cold weather footwear, fall protection harness and lanyard, welding PPE and PPE as required by MSDS for coating materials. Hardhat and high visibility safety vest, Radio Equipment (for ground personnel to maintain contact with Milne, Mary River and Steensby Camps). Helicopter agency to provide survival kit sufficient for total party.
	• **Any other access or work clearance issues?**	All contractors
9. Audits	• **What systems will be used to ensure that project team members, subcontractors, other service providers will comply with this safety management plan and other site safety rules?**	Gem Steel, Nuna and any other Sub-Contractors on site will be required to sign-off daily toolbox forms.
	• **What types of audits will be conducted?**	Daily equipment inspections by personnel.
	• **Who will be involved in audits?**	Hatch Construction Manager, Hatch Site Safety Manager, contractor site managers and any other project leadership personnel.
	• **How often will they be done?**	Equipment Inspection will be completed and documented daily.

Mary River Project – Project Pre-development Works - Safety Management Plan		Project Number: H337697
	• **Any other auditing issues?**	It is critical that all requirements of the Nunavut General Safety Regulations, R.R.N.W.T. 1990 be adhered to. A gap analysis will be undertaken to ensure all requirements are met re: emergency response, competent supervisor etc.
10. Safe Work Method Statements (for Job Hazard Analysis)	• **How will you ensure that subcontractors provide job safety and environmental analysis (JHA), for all work activities assessed as having safety risks, before commencement of work?**	Risk Assessment Reports, including JHA's will be required of all contractors and will be reviewed by Hatch Safety and Project Management prior to authorizing on-site work.
	• **How will you ensure that the subcontractors comply with the JHA they have provided?**	Through sign-off sheets and frequency contact. A formal Behavioural Observation Program such as the Hatch Visible Felt Leadership (VFL) program will be implemented.
	• **What action will be taken if the subcontractor does not comply with the JHA?**	Work will be stopped and the JHA will be reviewed again and the deficiencies will be discussed.
	• **How will you ensure that the JHA is promptly updated to reflect any changes in the way the work is planned to be carried out?**	This would be communicated at daily pre-start safety meetings.
	• **Workers not adhering to site rules.**	Individuals work not complying with work / site rules will be stopped and corrected. Violation of rules may result in dismissal from the worksite.
11. Hazardous Materials Register	• **How will you keep and maintain a record of the hazardous substances used during the course of the work? This register should include hazardous substances contained in pipes or vessels which are considered a hazard to the project.**	Material Safety Data Sheets (MSDS) will be collected from all contractors and Hatch will maintain a register of all the MSDSs on site.
	• **How will you ensure the register is made accessible to all persons working at the work site?**	All contractors will be notified how to receive a copy of the register. Anyone who will be exposed to hazardous materials will be briefed on proper use and handling and what to do if improper contact / emergency occurs.

Mary River Project – Project Pre-development Works - Safety Management Plan		Project Number: H337697
	• **Any other hazardous materials issues?**	None.
12. Review and Update of SMP	• **How will this plan be monitored, maintained and kept up to date during the course of the project? Who will be responsible for this?**	The plan will be maintained by the Project Manager with input from the Hatch Site Safety Manager.
13. Other Issues	**Applicable Procedures:** • **Aircraft Safety (HS-SGN-049, Section 4)** • **Communications (HS-SGN-049, Section 8)** • **Survival (HS-SGN-049, Section 12)** • **Cold Environments (HS-SWP-021)** • **Manual Handling (HS-SWP-095)** • **Baffinland Iron Mines Corporation Mary River Safety Program - Confined Space Entry Program** • **Mary River Project Incident / Injury Notification & Management Requirements** • **Confined Space (HS-SWP-026)** • **Barriers and Barricades (HS-SWP-009)** • **Nunavut General Safety Regulations, R.R.N.W.T. 1990**	

Mary River Project – Project Pre-development Works - Safety Management Plan					Project Number: H337697
Safety Management Plan Prepared by: Vic Tatone Signed		Date Prepared: June 19, 2011	Reviewed by Principal Contractor: _____Date: _____ _____ _____ Principal Contractors Representative Position Signature		
Review Record	**Date Reviewed:**	**Reviewed by:**	**Changes required:**	**Revision No.**	**Date of next review**
	July 19, 2011	**Vic Tatone**	**Inclusion of site preparation by Nuna Logistics Ltd.**	**2**	**T.B.D.**