



NEWFOUNDLAND AND LABRADOR REGULATION 39/07

Mineral Exploration Standards Regulations
under the
Labrador Inuit Land Claims Agreement Act
(O.C. 2007-153)

(Filed March 30, 2007)

Under the authority of section 11 of the *Labrador Inuit Land Claims Agreement Act*, the Lieutenant-Governor in Council makes the following regulations.

Dated at St. John's, March 30, 2007.

Robert C. Thompson
Clerk of the Executive Council

REGULATIONS

Analysis

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Short title

1. These regulations may be cited as the *Mineral Exploration Standards Regulations*.

Exploration and quarrying standards

2. The standards for mineral exploration in Labrador Inuit Lands agreed to by the province and the Nunatsiavut Government under section 4.11.6 of the Labrador Inuit Land Claims Agreement and set out in

the Schedule shall apply to mineral exploration in Labrador Inuit Lands.

Schedule

Standards for Exploration in Labrador Inuit Lands

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Section 1: General:

1.1 These Standards are the standards for Exploration in Labrador Inuit Lands referred to in chapter 4 of the *Labrador Inuit Land Claims Agreement* and have been established pursuant to section 4.11.6 of the *Labrador Inuit Land Claims Agreement*.

1.2 In addition to complying with these Standards, Applicants must obtain all other approval, licenses and permits required by law, and comply with all applicable environmental protection laws.

1.3 Where these Standards refer to Federal or Provincial Legislation or to Inuit Law the Legislation is incorporated into the Standards by

reference but any subsequent amendment to the Legislation shall not be incorporated in these Standards unless specifically adopted for purposes of these Standards by the Governments.

1.4 In these Standards:

- (a) "Applicant" means a Person who intends to search for Sub-surface Resources in, on or under Labrador Inuit Lands, including Labrador Inuit Lands under water, or who is engaged in pre-feasibility studies in relation to a Subsurface Resource and who has submitted a Work Plan for approval under section 2.1;
- (b) "Approved Work Plan" means a Work Plan that has been approved under section 2.1(a) and includes any term or condition on which such approval is given;
- (c) "body of water" and "water" have the meanings assigned to them in the *Water Resources Act*, SNL2002 cW-4.01;
- (d) "critical habitat" and "habitat" have the meanings assigned to them in the *Species at Risk Act*, S.C. 2002, c. 29;
- (e) "endangered species" has the meaning assigned to it in the *Species at Risk Act*, S.C. 2002, c. 29;
- (f) "Environmental Protection Plan" and "EPP" means a detailed statement of the activities, systems and methods to be undertaken by the Applicant to protect the Environment in relation to an Exploration Program and must include:
 - (i) education, information and orientation for all personnel in relation to protection of the Environment and protection of Historic Resources and the activities, systems, equipment and methods to be used for their protection,
 - (ii) monitoring and auditing for purposes of determining compliance with Environmental Laws and Laws for the protection of Historic Resources, determining compliance with the Approved Work Plan and determining whether any adjustments to the Environmental Protection Plan, Work Plan or Exploration Program may be necessary, and

- (iii) protocols to be followed in the event of a discovery of a Historic Resource and in the event of an emergency, accident or incident that may negatively impact the Environment;
- (g) "Exploration Program" includes Exploration and an activity or action, or course of activities or actions, that are associated with, planned, or carried out in connection with, or subsidiary to, Exploration, the delineation or definition of a Subsurface Resource or the completion of pre-feasibility studies in order to establish the value or extent of a Subsurface Resource for purposes of developing, working or producing the Subsurface Resource;
- (h) "Governments" means the Government of Newfoundland and Labrador and the Nunatsiavut Government and "Government" means either of them;
- (i) "Historic Resource" refers to an Archaeological Site, Archaeological Material, burial site and human remains;
- (j) "Plan Holder" means a Person authorized to carry out Exploration in Labrador Inuit Lands under an Approved Work Plan and includes:
 - (i) the officers, agents and employees of the Plan Holder,
 - (ii) each and every partner, subsidiary or affiliate of the Plan Holder,
 - (iii) each and every contractor and subcontractor of the Plan Holder, and
 - (iv) the successors and assigns of the Plan Holder;
- (k) "Reclamation and Closure Plan" means a detailed description of the process of reclamation (as defined in section 11.1), including progressive reclamation, in relation to a Site and at each stage of an Exploration Program up to and including temporary closures and final termination of Exploration activities at the Site;

- (l) "Sensitive Area" means a Protected Area, critical habitat, or an area of Labrador Inuit Lands declared by the Nunatsiavut Government to be an environmentally or ecologically sensitive area;
- (m) "Site" means a location in Labrador Inuit Lands, including Labrador Inuit Lands covered by water, where an activity is planned or carried out for purposes of an Exploration Program;
- (n) "Standards" means these Standards for Exploration in Labrador Inuit Lands;
- (t) "threatened species" has the meaning assigned to it in the *Species at Risk Act*, S.C. 2002, c. 29;
- (u) "Vessel" includes boat, speed boat, canoe, zodiac, longliner, and barge.
- (v) "Work Plan" means a plan for Exploration in Labrador Inuit Lands submitted to the Governments under section 2.1 and includes an Environmental Protection Plan and a Reclamation and Closure Plan in relation to the planned Exploration.

1.5 In these Standards:

- (a) "should" indicates a guideline or a discretionary standard,
- (b) "must" and "shall" indicate a mandatory rule,
- (c) unless otherwise clear from the context, "includes" means "includes but is not limited to" and "including" means "including but not limited to", and
- (d) unless some other document or law is specifically referred to, a reference to a "section" is a reference to a part, section, subsection, paragraph or subparagraph of these Standards.

1.6 Words that begin with a capital letter and phrases in which each word begins with a capital letter that are not defined in these Standards are defined in the Labrador Inuit Land Claims Agreement (brought into effect by *An Act to give effect to the Labrador Inuit Land Claims Agreement and the Labrador Inuit Tax Treatment Agreement*, SC 2005,

c. 27 and the *Labrador Inuit Land Claims Agreement Act*, SNL2004 cL-3.1).

1.7 If there is an inconsistency between these Standards and the *Labrador Inuit Land Claims Agreement*, the agreement prevails to the extent of the inconsistency. If there is an inconsistency between these Standards and a Provincial Law or an Inuit Law, these Standards prevail to the extent of the inconsistency.

Section 2: Application for Exploration Approval:

2.1 Any Person who wishes to carry out an Exploration Program in Labrador Inuit Lands must submit a Work Plan to the Governments detailing the proposed Exploration Program. The Exploration Program may proceed only upon:

- (a) Approval of the Work Plan by the Minister of Lands and Resources of the Nunatsiavut Government and the Minister of Natural Resources of the Government of Newfoundland and Labrador;
- (b) Consent for access to and use of Labrador Inuit Lands granted by the Nunatsiavut Government by issuance of a Land Use Permit under the *Labrador Inuit Lands Act*, IL 2005-14; and
- (c) issuance of an exploration approval under the *Mineral Act*, RSNL1990 cM-12.

2.2 The Governments will decide whether to approve or reject a Work Plan within 15 clear days from the date on which it is received.

2.3 A Work Plan must demonstrate compliance with these Standards and must include the following:

- (a) full and detailed information about the Applicant including contact information;
- (b) indication of the Subsurface Resource(s) being explored;
- (c) detailed sketch map or maps, survey plan or aerial photographs/satellite imagery of the Site and its environs, prepared as per Sections 7 to 10 of the Government of New-

foundland and Labrador "Guidelines for the Form of Reports and Illustrations as Prescribed by the Minister as per Section 55(2) of the Consolidated Newfoundland and Labrador Regulations 1143/96", with maps in vector format provided as ArcView Shape Files (.shp), showing:

- (i) the location of the Site being applied for and identifying the parcel of Labrador Inuit Lands where the Site is located;
 - (ii) the Site boundaries;
 - (iii) the location of any existing infrastructure, previous Exploration activity or known debris within the Site;
 - (iv) all significant natural features within the Site, including any body of water;
 - (v) the location and distance of all significant natural features within a 500 meter radius of the boundaries of the Site, including any permanent or seasonal body of water;
 - (vi) the proposed location within the Site of the principal features of the Exploration Program, including airborne surveys, ground surveys, diamond drilling, trenching, pitting and stripping and any underground workings;
 - (vii) the locations of all dwellings, buildings, and boundaries of Labrador Inuit Lands located within a 500 meter radius of the boundaries of the Site;
 - (viii) the proposed access to the Site and its location in relation to trails, wharves, airstrips, power lines or roads in the vicinity;
- (d) location of the Site in relation to the nearest Inuit Community, dwellings, roads and other existing infrastructure and a description of the visibility of the Site from the Community and dwellings, roads and other features and facilities such as look-offs and parks;

- (e) detailed information about the Site including a description of the nature and extent of topsoil and other overburden, and the type of vegetation cover over the land to be affected by Exploration activity;
- (f) detailed information about the means of accessing the Site;
- (g) identification and summary of any prior Exploration activity carried out by the Applicant at the Site including prior permits and leases;
- (h) identification and composition of all consumable materials to be stockpiled or stored on Site;
- (i) detailed description of Exploration activity to be carried out, and all infrastructure and facilities to be constructed for purposes of accessing the Site and carrying out the Exploration Program;
- (j) the source of all water to be used in the Exploration Program and their geographic locations;
- (k) a full description of all water withdrawal and transmission facilities including the total capability of the water withdrawal facilities, the total withdrawal capability per day and the amount to be withdrawn from each water source, the uses to be made of the water, the place or places of use, discharge treatment and discharge facilities, and the place or places of discharge;
- (l) measures to be used at the Site to delineate and mark the Site on the ground, identify the Plan Holder and protect the safety of individuals entering the Site;
- (m) the size of the workforce to be employed at the Site;
- (n) an Environmental Protection Plan;
- (o) a Reclamation and Closure Plan including, where appropriate, a plan for progressive reclamation of the Site; and
- (p) any other information that is required by these Standards or that the Applicant deems relevant and wishes to provide,

such as plans referred to in section 41 of the *Mineral Regulations*.

2.4 Descriptions required under section 2.3 must be supplied using UTM coordinates. Datum must be specified as NAD 27.

2.5 A Work Plan must identify with precision, and provide detailed information about, all ancillary land uses that will take place under the Work Plan and the location or locations in Labrador Inuit Lands where those land uses will take place. If this requirement is met and the Work Plan has been approved, and all necessary fees have been paid, the Minister of Lands and Resources of the Nunatsiavut Government will, upon approval of the Work Plan, issue to the Plan Holder a land use permit in accordance with and subject to the *Labrador Inuit Lands Act*, IL 2005-14, for purposes of carrying out work and activities authorized under the Work Plan for a maximum term of one year.

2.6 The Plan Holder must sign a written acknowledgement that the Nunatsiavut Government incurs no obligation to extend or renew any land use permit referred to in section 2.5 or to grant any other subsequent tenure or permit or any other authorization to access Labrador Inuit Lands whether in relation to continuing Exploration or otherwise, and that the Plan Holder enjoys no right to renew or extend a land use permit issued pursuant to section 2.5 or to receive any subsequent tenure, permit or other authorization to access Labrador Inuit Lands whether in relation to continuing Exploration or otherwise. Nothing in this acknowledgement under this section derogates from any right the *Plan Holder may have under section 4.11.19 of the Labrador Inuit Land Claims Agreement*.

2.7 A Work Plan must be certified to be true, accurate and complete by the Applicant or, if the Applicant is not a natural person, the exploration manager of the Applicant who must provide full details as to his or her office, address, phone number and other addresses and coordinates for purposes of ordinary and emergency communications.

2.8 A Work Plan must include an agreement on the part of the Plan Holder to assume all liability arising out of the Exploration Program and to indemnify and save harmless the Nunatsiavut Government from any and all damages, costs, losses, or liabilities that the Nunatsiavut Government may suffer or incur in connection with or as a result of any suits, actions, causes of action, claims, proceedings, or demands initiated or made against the Nunatsiavut Government relating to or arising

from any activity carried out at an Exploration Site or under an Approved Work Plan.

2.9 A Work Plan must comply with all applicable requirements of these standards.

2.10 A Work Plan that does not contain all required information shall not be considered for approval.

2.11 A Work Plan shall be considered to be incomplete until it has been received by both Governments.

2.12 An approval of a Work Plan shall not be issued until all fees have been paid and all financial securities that may be required have been received by the Government of Newfoundland and Labrador.

2.13 A Work Plan that does not comply with all applicable requirements of these standards shall be rejected.

2.14 A Work Plan is not approved until it has been approved by both Governments.

2.15 The approval of a Work Plan does not relieve the Applicant of the obligation to obtain all other permits that may be required by law with respect to the Exploration Program.

2.16 Fees payable for access to Labrador Inuit Lands in connection with Exploration Programs that may be established by the Nunatsiavut Government from time to time shall be appended to these Standards for purposes of information pursuant to subsection 4.11.11(d) of the *Labrador Inuit Land Claims Agreement*.

2.17 An Applicant whose application for approval of a Work Plan is rejected may submit a new application for approval of a Work Plan under section 2.1.

2.18 A Plan Holder who wishes to amend an Approved Work Plan or who is required to amend an Approved Work Plan under section 4.3 shall submit a new application for approval of the Work Plan under section 2.1.

2.19 No Person, other than a Person described in section 4.11.5(a) of the *Labrador Inuit Land Claims Agreement*, may search for Subsurface

Resources in, on or under Labrador Inuit Lands or carry out an Exploration Program in Labrador Inuit Lands unless that Person is a Plan Holder.

Section 3: Implementation/Enforcement

3.1 The Plan Holder is to bear the cost of compliance monitoring for the Exploration Program.

3.2 The Plan Holder must provide authorized representatives of the Nunatsiavut Government with full access to the Exploration Site at all reasonable times. The Plan Holder shall pay the costs of Site visits by a representative of the Nunatsiavut Government. The number of Site visits to be paid for by the Plan Holder will be set out in the Approved Work Plan but shall be no less than one during the exploration season and one post-closure Site inspection, necessary in order to confirm satisfactory completion of the work detailed in the Reclamation and Closure Plan (as contained in the Approved Work Plan) and authorize release of the financial security for the Exploration Program as required under section 12. What constitutes an exploration season shall be set out in an Approved Work Plan but shall not exceed a calendar year.

Section 4: Notification and Reporting

4.1 The Plan Holder must notify the Nunatsiavut Government no less than 24 hours before mobilizing equipment to the area and no more than 1 week before doing so.

4.2 If a Plan Holder proposes any change or addition to the Exploration activities carried out under the Work Plan, the Plan Holder shall provide written notice of the proposed change or addition to the Governments.

4.3 A Plan Holder must submit an application for a new Work Plan in the event of a change or addition to the Exploration Program where a variance between the approved location and the actual location of a drill hole, pit or trench or any other feature or element of the Exploration Program, including a camp, fuel cache or fuel storage site, exceeds 100m meters.

4.4 Despite subsections 4.3, if an approved Work Plan permits an Exploration activity in a Sensitive Area, no variance is permitted except

after compliance with section 4.2 and, if the Governments so require, section 2.18.

4.5 For greater certainty:

- (a) the permitted variances under subsection 4.3 does not authorize or permit the location of any Exploration activity or facility within a buffer around a body of water or within close proximity of a known Historic Resource.
- (b) if a variance exceeds the permissible amount set out in subsection 4.3, the Plan Holder must provide the notice required under section 4.2 and, if a Government so requires, comply with section 2.18.

4.6 Within 60 days of the end of each Exploration season or final termination of an Exploration Program the Plan Holder must provide to the Nunatsiavut Government a written report consisting of a summary of all Exploration activities carried out under the Work Plan which must include:

- (a) a summary of all activities and matters referred to in section 4.7;
- (b) reports on activities related to environmental protection;
- (c) reports on health and safety performance;
- (d) reports on employment numbers;
- (e) reports respecting campsites;
- (f) reports respecting fuel caches and storage sites and facilities and fuel consumption;
- (g) an account and summary of community information sessions;
- (h) environmental baseline data;
- (i) a summary, by category, of expenditures;

- (j) a summary statement of planned future exploration activities and expenditures;
- (k) a statement by a qualified person as to the significance of the Exploration results. For purposes of this section "qualified person" has the same meaning as in National Instrument 43-101 of the Canadian Securities Administrators as amended from time to time; and
- (l) reports respecting implementation of the Closure and Reclamation Plan and, as applicable, progressive reclamation activities and closure.

4.7 If the Nunatsiavut Government so requires by written directive or as a term or condition of approval of a Work Plan, a report under section 4.6 must include a detailed account of the following Exploration activities and the raw data, interpretations, conclusions and recommendations resulting from those activities:

- (a) prospecting;
- (b) trenching and the digging of pits;
- (c) line cutting and flagging;
- (d) drilling;
- (e) geological surveys;
- (f) airborne, surface and underground geochemical and geophysical surveys;
- (g) land and topographic surveys;
- (h) shaft sinking and other underground development work; and
- (i) engineering evaluation reports.

4.8 Information included in a report under section 4.6 by virtue of section 4.7 shall be confidential and shall not be released by the Nunatsiavut Government to any other Person without the consent of the Plan Holder or until the expiration of 3 years from the date on which the report was due.

Section 5: Community Liaison

5.1 Inuit shall have access to the Exploration Site at all times unless the Nunatsiavut Government has consented to restrictions on Inuit access in its approval of the Work Plan and the Plan Holder has implemented the required notification requirements advising Inuit of any approved restrictions on their access to the Exploration Site.

5.2 If requested by the Nunatsiavut Government, the Plan Holder must conduct public sessions in one or more Inuit communities before the commencement of the Exploration Program, during and/or following the completion of the Exploration Program. The purpose of these sessions will be to provide information to Inuit regarding the Exploration Program and to hear out any comments or concerns with a view to accommodating concerns where it is reasonable to do so.

Section 6: Employment and Business Opportunities for Labrador Inuit

6.1 Exploration on Labrador Inuit Lands should maximize employment opportunities for Labrador Inuit and whenever possible goods and services should be purchased from Labrador Inuit businesses.

6.2 The Work Plan should state how section 6.1 will be implemented during the Exploration Program.

Section 7: Environmental Protection Plan

7.1 The Applicant must develop an Environmental Protection Plan that integrates these Standards and must include the Environmental Protection Plan in its Work Plan. Environmental Protection Plans will range in detail from prospecting work to larger more invasive programs and must consider the cumulative impact of all activities and works associated with the Exploration Program. No Exploration activity may commence under a Work Plan unless the Environmental Protection Plan has been approved, with or without terms or conditions, by the Nunatsiavut Government. All members of the exploration work crew must undergo orientation and training in relation to the Environmental Protection Plan prior to the commencement of the Exploration Program. All orientation and training activities must be documented and reported to the Nunatsiavut Government within 2 weeks of the completion of each orientation or training session.

7.2 In addition to complying with these Standards, the Plan Holder must also comply with all other applicable Environmental Laws of the Nunatsiavut, Provincial and Federal governments.

Section 8: Historic Resources

8.1 A Work Plan will be evaluated for any potential impact on known Historic Resources by Torngasok Cultural Centre.

8.2 Upon request of the Nunatsiavut Government, a Plan Holder may be required to undertake a Stage I Archaeological Assessment (Historic Resources Overview Assessment) as per Section 13 of the *Historic Resources Act*.

8.3 Proposed work boundaries must be moved to avoid an Historic Resource if required by the Nunatsiavut Government.

8.4 In the event of the discovery of an Historic Resource or suspected Historic Resource, the Plan Holder must immediately stop work, cordon off the area, photograph the site and contact the Torngasok Cultural Centre for direction.

8.5 The location of a discovery referred to in Section 8.4 must remain cordoned off for the duration of the Exploration Program or until determined not to be of significance by the Nunatsiavut Government, and under no circumstances:

- (a) is Exploration work to be carried out at the location of the discovery or so as to disturb the discovery.
- (b) is any individual, other than a Person authorized to carry out an Archaeological Activity under a written permit issued by the Nunatsiavut Government to cause any disturbance or remove any material from the location of the discovery.

8.6 In addition to compliance with these Standards respecting historic resources the Plan Holder must comply with all applicable laws respecting the protection of Historic Resources that may be enacted by the Nunatsiavut Government under section 15.3.1 of the *Labrador Inuit Land Claims Agreement*.

8.7 Exploration crews must be briefed on the recognition of Historic Resources prior to the commencement of the Exploration Program as

part of personnel orientation and training under the Environmental Protection Plan.

Section 9: Environmental Baseline Data Collection

9.1 Upon request of the Nunatsiavut Government, the Plan Holder must undertake Environmental baseline work to an appropriate level of detail given the operation proposed, which may include:

- Water quality sampling
- Surface hydrological testing
- Lake sediment sampling
- Wildlife observation
- Vegetation mapping

Section 10: Wildlife and Habitat Protection

10.1 Any endangered or threatened species in the vicinity of the Site and any known sensitive areas or sensitive time periods for fish, wildlife or their habitat must be identified by the Applicant in the Work Plan.

10.2 Exploration activity must be scheduled to avoid any sensitive areas of fish and wildlife habitat and critical periods in fish and wildlife cycles. Annual timing of migration, spawning and calving in the vicinity of an Exploration Program must be considered at all times.

10.3 There shall be no Exploration activity permitted in areas where critical habitat is known to exist.

10.4 In the event that trap lines, camps, cabins or other evidence of recent use and occupancy exists in any area in which Exploration activity may be carried out their locations must be identified in the application for approval of the Work Plan and in the event that any such use or occupancy is discovered during Exploration Program, its location must be documented and reported by the Plan Holder to the Nunatsiavut Government. The Plan Holder must not interfere with any such use and occupancy.

10.5 Personal pets must not be brought to the Exploration Site except in the case of trained dogs used for the purpose of bear control.

10.6 There must be no fishing or hunting at or near the Site by any employees or contractors, including Nunatsiavut residents and beneficiaries, involved directly or indirectly in Exploration or when traveling to or from the site during the entire period of the Exploration Program. Employees or contractors must immediately leave the Exploration Site on completion of an employment period at the Site.

10.7 Under no circumstances are wildlife to be fed directly and all measures must be taken to avoid inadvertent feeding.

10.8 Wildlife must not be chased, caught, diverted, followed or otherwise harassed by all-terrain-vehicle, aircraft, watercraft, or on foot.

10.9 Equipment and vehicles must yield the right-of-way to wildlife.

10.10 Exploration work crews must be made aware of the potential for encounters with black bears and polar bears and instructed to report all sightings. The Plan Holder must record all reported sightings.

10.11 Black bear deterrent measures such as bear bangers may be used, and translocation of bears can be undertaken and must be undertaken before any lethal means are considered.

10.12 If the presence of a black bear is posing a risk to workers on the Exploration Site, responsive actions such as trapping and displacement or destruction of the animal may be undertaken only under the supervision of the Wildlife Division of the Government of Newfoundland and Labrador and the Nunatsiavut Government.

10.13 All wildlife encounters are to be recorded and submitted by the Plan Holder in a report to the Nunatsiavut Government. A sample Wildlife Incident Report is appended as Appendix 1.

10.14 The Plan Holder must minimize noise by ensuring that all exhaust systems are properly muffled.

10.15 All water extraction activity must follow the Department of Fisheries and Oceans Freshwater Intake End-of-Pipe Fish Screen Guidelines. [*Department of Fisheries and Oceans, 1995. Freshwater*

Intake End-of-Pipe Fish Screen Guideline. Communications Directorate, Department of Fisheries and Oceans.]

10.16 Where an Exploration Program takes place in an area that is frequented by Polar Bears the Plan Holder must have bear monitors authorized or approved by the Nunatsiavut Government on duty at all times and take all reasonable steps as directed by the polar bear monitor to protect both human life and the lives of polar bears.

10.17 If the presence of a polar bear is posing a risk to workers on the Exploration Site the Nunatsiavut Government and the Wildlife Division of the Government of Newfoundland and Labrador must be advised immediately and destruction or displacement of the bear may only be done by them or under their direct supervision.

10.18 If, in an emergency, the Plan Holder or the polar bear monitor kills a polar bear, the Plan Holder must immediately notify the Wildlife Division of the Government of Newfoundland and Labrador and the Nunatsiavut Government and pay seven thousand dollars to the Nunatsiavut Government for the loss of that polar bear.

10.19 Should the emergency kill of a polar bear referred to in section 10.18 result in the subsequent reduction of the Total Allowable Harvest for polar bears under sections 12.3.6 and 12.3.7 of the *Labrador Inuit Land Claims Agreement* beyond the one polar bear that was killed, the Plan Holder shall pay to the Nunatsiavut Government an additional seven thousand dollars for the loss of each polar bear from the previous annual Total Allowable Harvest that is directly attributable to the emergency kill of the polar bear.

10.20 The Plan Holder must develop an education awareness program for potential encounters with polar bears by its employees and include the program in its EPP. This program must incorporate measures to reduce the possibility of emergency kills of polar bears. All activities carried out to implement the education awareness program must be documented and reported to the Nunatsiavut Government within 2 weeks of the completion of each session.

10.21 The Plan Holder must arrange for and cover the costs of the delivery of the meat and hide of any polar bear killed at an Exploration Site to the Nunatsiavut Government where it is practicable to do so.

Section 11: Reclamation and Closure of Exploration Site

11.1 Reclamation means that the environmental disturbance to an area is remediated to the point where the area:

- Is safe and stable.
- Is restored as near as reasonable to its pre-disturbance condition.
- Has its environmental values safeguarded.
- Has an appropriate sustainable ecosystem.

11.2 The Applicant must submit a Reclamation and Closure Plan to the Nunatsiavut Government for approval as part of the Work Plan. If the Exploration Program to which the Work Plan relates is a multi year program the Reclamation and Closure Plan must provide an estimate of the number of seasons during which Exploration will be carried out and an initial estimate of date of final termination of Exploration and closure of the Site. Where applicable, the Reclamation and Closure Plan must include details of progressive reclamation.

11.3 The Applicant must make efforts to minimize disturbance throughout the Exploration Program in order to reduce the amount of Reclamation effort to be taken upon completion of the Program.

11.4 Reclamation and Closure of an Exploration Program must include the following:

- Removal of all equipment and materials, garbage, broken equipment and other waste material.
- Removal of all pickets used for Exploration surveys when no longer required for ground control, except for wooden pickets with small pieces of flagging tape or metal attached.
- Removal of all wire or other extraneous materials such as non-biodegradable flagging tape on completion of fieldwork.
- Reclamation of all drill sites, trenches, camp sites, fuel storage sites and all other workings in relation to Exploration.
- Backfill and/or re-sloping of all disturbed areas with topsoil and organic material placed on top

- Stabilization of all disturbed areas including trench locations, sections of trails, drill sites and camp sites that could cause siltation into nearby bodies of water
- Inspection and maintenance programs for structures that are required for more than one year after temporary closure or final termination of the Exploration Program.
- Reclamation and stabilization of all water management (run-off control) structures
- Measures to provide for the continued security and integrity of diamond drill core that is to remain at the Exploration Site during the period of mineral tenure.
- Measures to test for and remove any core samples that are potentially acid generating, or to reclaim or permanently control any core samples that are potentially acid generating and that are permitted to remain at the Site.
- Measures to test for and to remove any core samples that exceed normal background radiation levels.
- Reclamation of core sample boxes.
- Permanent measures to control potential erosion and siltation along abandoned Exploration access roads such as culverts and retaining banks
- Stockpiling of any topsoil and overburden removed for Exploration work in mounds of 1-2 metres maximum height in an area where they will not be disturbed.
- Replacement of any overburden or topsoil that was removed for Exploration purposes. Whenever possible, the replacement of overburden and topsoil must be undertaken progressively during the Exploration Program, as soon as the Site is no longer needed for the Program.

11.5 If revegetation of disturbed areas is required for reclamation purposes, only local plant species may be used.

11.6 The Plan Holder must monitor the reclamation process based on the following criteria:

- Soil/slope stability and resistance to erosion
- re-establishment of drainage.
- plant density
- water quality standards for drainage water
- other regulatory requirements
- public safety issues
- aesthetic value.

11.7 Before final approval of the completed Reclamation and Closure Plan and release of the financial security, the Plan Holder may be required to return to a Site to undertake any incomplete reclamation work.

Section 12: Financial Security

12.1 The Plan Holder shall provide financial security as part of an Approved Work Plan and the Work Plan must specify the amount of the financial security to be provided. The amount must be sufficient for the purposes set out in Section 12.2.

12.2 The financial security shall be provided for the following purposes:

- (a) to rehabilitate the environmental effects of an accident or other unplanned event;
- (b) to rehabilitate the environmental effects of a failure to comply with the approved Work Plan or these Standards;
- (c) to guarantee completion of a Reclamation and Closure Plan; and
- (d) to reimburse the Governments for the costs of a minimum of one mid-season compliance monitoring visit and one post-

closure Site inspection, including the costs of hiring independent consultants to carry out such monitoring.

12.3 Approval of the Work Plan is contingent on Governments' approval of the amount of financial security proposed by the Applicant and Governments reserve the right to determine the amount of the financial security that will be required.

12.4 The financial security shall be in a form acceptable to the Governments and may be in the form of cash or certified cheque.

12.5 No interest on the financial security will be earned by or be payable to the Plan Holder.

12.6 Where a Government has reasonable grounds to believe that:

- (a) an accident or other unplanned event has occurred and may cause or is causing an Environmental effect;
- (b) a failure to comply with the Approved Work Plan or these Standards may cause or is causing an Environmental effect; or
- (c) the Reclamation and Closure Plan or a measure required by the Reclamation and Closure Plan is not being carried out as required,

the Government may order the Plan Holder to undertake the actions and perform the work necessary to remedy the non-compliance, accident or default.

12.7 Where a Government issues an order under Section 12.6, the Plan Holder has:

- (a) in the case of an order under section 12.6 a), 24 hours to comply with the order;
- (b) in the case of an order under section 12.6 b), 72 hours to comply with the order; and
- (c) in the case of an order under section 12.6 c), 15 days to comply with the order,

12.8 If a Government has reasonable grounds to believe that an order under Section 12.6 has not been or is not being complied with in the time provided for in Section 12.7, it may issue a stop work order and may realize upon the financial security for a purpose or purposes set out in Section 12.2.

12.9 Where a Government realizes upon the financial security and the amount of the security exceeds the amount required, it must refund the amount of the excess to the person that provided the security within 30 days of completion of all reclamation.

12.10 The Governments must refund the financial security within 30 days of satisfactory completion of the Reclamation and Closure Plan. Nothing in this section obligates the Governments to refund any part of the financial security until final termination of the Exploration Program and closure of the Site in respect of which the security is held.

12.11 Any dispute under or in relation to Section 12.8 or 12.9 shall be settled by binding arbitration.

12.12 Subject to these Standards the financial security will be administered by the Government of Newfoundland and Labrador.

Section 13: Airborne Survey Work

13.1 There must be no disturbance, harassment or harm of any wildlife during airborne survey work.

13.2 Except as provided in section 13.4 airborne geophysical surveys may only be carried out during the period from October 15 to May 15 of the following year.

13.3 Under no circumstance are nesting raptors to be approached. Aircraft must maintain a minimum horizontal and vertical distance of 300m from nesting raptors during the period of May 15 to July 31.

13.4 Airborne radiometric surveys for purposes of exploration for uranium may be carried out during the period from July 1 to October 15 subject to such terms and conditions as Governments may establish.

Section 14: Exploration Camps

14.1 Camps must be planned in such a way that ground and vegetation disturbance is minimized. If a disturbed area from an old campsite exists, that area should be used for the camp unless it can be clearly demonstrated why this is not reasonable. If there is a nearby existing access route or trail, the camp should be located close to that route or trail.

14.2 The following buffers from the high water mark of any body of water must be maintained when establishing camps:

Salmon or Char bearing river, stream, brook or creek: 75m

Other Fish-Bearing body of water: 50m

Non-fish bearing body of water: 50m

14.3 A camp may be established within the buffers indicated in 14.2 if there is an area disturbed by a previously existing camp within the buffer and it can be demonstrated that using this site will result in minimal impact on the body of water.

14.4 Camps must have the necessary sanitation facilities as per the guidelines of the Newfoundland and Labrador Department of Government Services.

14.5 Food must be stored in airtight and wildlife-proof containers.

14.6 A pit privy must be located at least 25 metres from the camp in a direction away from bodies of water and must be backfilled upon abandonment of the camp.

14.7 Dishwater and wash water and all other grey water must be disposed of in a pit large enough to contain the volume of water to be discarded, located at least 100 metres away from all bodies of water. The pit must be backfilled upon abandonment of the camp.

14.8 Plan Holders are encouraged to use biodegradable detergents, cleaning agents and drilling additives whenever possible.

14.9 Upon closure of the camp, all equipment and building materials must be removed from the Site and all waste must be transported to an established waste disposal area. Upon seasonal closure, solid waste

must be removed to an established waste disposal area and all sanitation facilities temporarily sealed.

14.10 All trees used as tent frames or foundations must be neatly stacked in a pile or piles for salvage or reuse at a future date.

Section 15: Water Use and Water Quality Protection

15.1 Removal of water from any body of water for the purposes of an Exploration Program must be done in a way that protects the integrity of the body of water. The Applicant must provide details of the water requirements of the Exploration Program in the Work Plan and illustrate how the capacity of the water sources to be used will meet the requirements.

15.2 Pesticides must not be used in the Exploration Program except for the purpose of protecting occupational health.

15.3 Water pumped from work areas (drill sites, road/bridge construction, trenching) or other runoff must have sediment removed through the use of settling ponds or filtration before discharging to a body of water.

15.4 Upon request of the Nunatsiavut Government, the Plan Holder must undertake sampling and analysis of discharge waters.

15.5 The Plan Holder must prevent silting and erosion by controlling water such as through the use of:

- appropriate grading of slopes (to be defined)
- ditches
- berms
- sumps
- sediment barriers such as rip-rap, brush barriers, straw or peat bales, sandbags and geo-textile filter cloth.

Section 16: Water Crossings

Until the Nunatsiavut Government establishes regulations to govern water crossings in Labrador Inuit Lands, no water crossings will be permitted.

Section 17: Vehicle Use

17.1 Established Trails and Roads

Only established trails and roads may be used.

17.2 Vessel Use

17.2.1 If a boat launch, dock, float or other type of mooring is proposed as part of the Exploration Program, the Applicant must specify the following in the Work Plan:

- Specific location of launch, dock, float or mooring
- detailed design drawing of the structure in plan and profile view, including the anchoring system
- extent of any shoreline alterations required
- description of the construction materials to be used, and methods and timing of construction
- number of boats to be moored and length of time to be used
- A description of the type of aquatic vegetation, shellfish, fish and mammals which may be affected by the structure.
- A general description of the substrate materials within the area of the proposed structure
- detailed description of mitigation measures used to protect banks and fish habitat
- colour photographs of the work site at low and high tide

17.2.2 If Vessels will be used to support the Exploration Program, the Environmental Protection Plan must describe:

- how the refueling of vessels and fuel transfers from and to vessels will occur so as to prevent leaks and spills,
- in detail the procedure for leak and spill response and clean-up
- how environmental impact and contamination of the body of water will be reduced in the case where vessels will be used but no boat launch, dock, float or mooring will be constructed.

17.2.3 Boat launches, docks, floats or other types of mooring must be located such that the least amount of impact will be caused to fish habitat. For example, in areas with hard surfaces (rocks and cobbles) as opposed to soft surfaces (mud) with aquatic vegetation.

17.2.4 Boat launches, docks, floats or other types of mooring must be located such that the least amount of impact will be caused to the shoreline and riparian zone.

17.2.5 The minimum clearance below a float at low tide must be 1.5m to avoid disturbance to the seabed caused by wash from propellers.

17.2.6 Treated wood must not be used in the construction of a launch, dock, float or any other type of mooring.

17.2.7 Subject to section 17.2.10, natural materials found at the Site may be used in the construction of crib work or a launch, dock, float or mooring.

17.2.8 If cement or concrete will be used in the construction of a launch, float, dock or mooring, pre-cast structures must be used, and if cement is poured at the site, wet cement must be isolated from the surrounding water.

17.2.9 There must be no dredging, filling, blasting or use of heavy equipment below the high water mark.

17.2.10 Existing rocks and logs in the marine environment must not be used as building materials.

17.2.11 Docks and floats must be built so as to reduce the amount of shade created by these structures, through the use of the following practices, as applicable;

- building docks at least 2m above the high water mark. (This standard does not apply to floats.)
- keeping ramps and docks to a width of 1-1.5m
- using grates or space boards on ramps, floats and docks to let light reach plants and animals below
- where feasible, aligning ramps, floats and docks to lie north to south to allow better light penetration under the structure
- limiting floats to 3m in width and 8m in length

17.2.12 Boat launches must only be used during high tide. This standard does not apply to boat launching ramps that are designed for use by small craft such as canoes and zodiacs.

17.2.13 Floats, ramps and floating docks should be removed to above the high water mark during any closure in the winter.

Section 18: Fuel Storage, Handling and Transport

18.1 Fuel Storage

18.1.1 Fuel must be stored at least 100m from:

- The high water mark of bodies of water and existing intermittent wet areas present at the time of storage.
- Power lines.
- Public roads.
- The recharge area of a water well currently used or likely to be used for potable purposes or other human consumption.

18.1.2 If fuel is transported by barge or float plane, or is intended to supply boats or float planes it must be stored above the high water mark and must be fully contained as per Section 18.1.8.

18.1.3 Fuel to be stored for a term longer than one Exploration Program must be placed above the high water mark and fully contained as per sections 18.1.4 to 18.1.14.

18.1.4 The fuel storage site should have:

- Low activity and a buffer zone from existing or proposed activity.
- A slope of not more than 5%.
- No combustible material within a 15m radius that could present a fire hazard, such as vegetation or garbage.

18.1.5 Fuel storage tanks must be:

- Double walled
- Vented
- Protected from corrosion with paint and sealant.
- Marked with lettering of sufficient size to show contents and capacity clearly from a distance of 5 metres.
- Clearly marked or physically protected to prevent inadvertent damage by moving vehicles.

18.1.6 Smoking is not permitted within 10m of fuel storage areas.

18.1.7 All fuel storage areas must be contained.

18.1.8 The containment area around a fuel storage site must:

- Be on ground of not more than 1% slope.
- Have walls that are located the greater of 3 metres or half the tank height from the outer wall of the nearest tank.
- Have dykes, berms, or walls with interior heights of at least 15cm and with capacity to hold 110% of the maximum amount of fuel or oil that could be stored within one container in the containment area.

- Have a containment wall that is at least 60cm thick at its top with a wall slope of 2 horizontal to 1 vertical.
- Have an impermeable base made of one of:
 - 30mil plus High Density Polyethylene (HDPE) liner.
 - Solid masonry.
 - Other solid material which is impermeable.
- Have a simple method for removing water from inside the containment area.
- Be inspected daily for leaks and spills for the duration of the Exploration Program.
- Be inspected daily for gathering of water for the duration of the Exploration Program.

18.1.9 Leaks discovered in the containment area around a fuel storage site must be repaired immediately.

18.1.10 Fuel storage containment areas must be kept clear of water. Water must not be removed from the containment area unless it is free from oily sheen, or is being treated for hydrocarbon removal.

18.1.11 Spill kits, fire extinguishers, and first aid kits must be available at all fuel storage areas.

18.1.12 Smaller amounts of fuel or oil (a container smaller than a 200 litre barrel) to be stored should be placed on a drip tray or on oil absorbent material sufficient to immediately capture spills and leakage.

18.1.13 Waste oil, lubricants and other used oil must be reused, recycled or disposed of at an approved, licensed waste management facility.

18.1.14 All empty fuel containers that are not intended for reuse are to be removed from the Site as soon as possible. Empty containers intended for reuse must be sealed and properly stored in a sealed and upright condition, in accordance with these Standards. Upon closure, all fuel containers are to be removed.

18.2 Refueling Operations

18.2.1 The Plan Holder must undertake fuelling and lubrication of equipment in a manner so as to prevent the possibility of water or soil contamination.

18.2.2 Fueling or servicing of mobile equipment is not permitted within 100m from a body of water or Sensitive Area. This does not apply to the fueling or servicing of boats.

18.2.3 Leak-free containers and reinforced rip and puncture proof hoses and nozzles must be used for refueling operations.

18.2.4 The operator must be in close attendance and within visual range for the entire duration of the refueling operation.

18.2.5 All fuel storage containers must remain sealed except for the outlet in use for the refueling operation.

18.2.6 A fuel spill contingency plan must be in place on Site and all members of the work crew must be familiar with this plan prior to the commencement of work.

18.3 Transporting Fuel and Petroleum Products

18.3.1 When moving small amounts of fuel or oil only CSA-approved containers in good condition must be used. The containers must have tight closures with screw or spring covers, and must be equipped with spouts or other means to allow pouring without spilling.

18.3.2 Leaking tanks or containers must not be used to transport or store fuel or oil.

18.3.3 Fuel tanks must be secured during transport to prevent their being jarred loose, slipping or rotating.

18.3.4 Fuel tanks and cans must be placed on vehicles so as to minimize the chance that an impact would cause them to rupture (for example, gas cans should not be mounted on the rear of a vehicle).

18.3.5 Tanks and cans with fuel must be placed in locations on the vehicle where there is minimum exposure to heat.

18.4 Laydown areas

18.4.1 Laydown areas for equipment storage must be located at a site that is flat and at least 100m from any body of water, marshes or boggy areas. Where present, existing disturbed areas that meet these criteria must be used.

18.4.2 Equipment and materials brought in by boat or float plane may be stored within 100m from a body of water.

18.4.3 Equipment at the laydown area must be inspected on a regular basis for fuel and oil leaks.

18.4.4 Laydown areas must be fully reclaimed as per the requirements in section 11.

Section 19: Waste Management

19.1 For small Exploration Programs with no camps, all solid waste including food waste must be stored in an appropriate manner and transported off Site as soon as reasonable.

19.2 For Exploration Programs of a larger scope, including those with camps, some on-site disposal of waste may be permitted; for example the incineration of food waste. The Plan Holder must develop a waste management plan for the Exploration Program for approval as part of the EPP.

Section 20: Emergency Response

Emergency response procedures, including fuel spill response procedures should be in place and all individuals working on the Exploration Site must undergo orientation to the emergency procedures prior to commencement of the Exploration Program. Emergency Response procedures should be described in the Environmental Protection Plan for the Exploration Program.

20.1 Forest Fire

20.1.1 Camps must be properly equipped to fight fires. Fire fighting equipment in camps must meet Provincial regulations and all workers must be made aware of the location of extinguishers and fire fighting equipment.

20.1.2 Other than in an emergency situation, there must be no use of open fires at Exploration camps and work sites.

20.2 Spill Response

20.2.1 In the event of a leak or spill of fuel or hazardous material the individual who discovers the leak or spill must take all steps necessary to immediately stop the leak or spill and contain the release of contaminant into the surrounding area, most particularly any body of water. The only exception to the requirement for immediate response is where the individual would be placed in an unsafe situation.

20.2.2 Any leak or spill in water or on land must be reported to the Nunatsiavut Government Department of Lands and Resources within 24 hours, fax # (709) 896-2610. The following information is required for the spill report:

- name of reporter and phone number
- means and details to contact reporter for additional information
- date and time of spill/leak
- date and time of detection of spill/leak
- type of product spilled/leaked
- amount of product spilled/leaked
- location of spill/leak
- source of spill/leak
- type of accident (collision, rupture, overflow)
- owner of product and phone number
- if the spill/leak is still occurring
- if the spill/leak product is contained, and if not, where it is flowing

- wind velocity and direction
- temperature
- proximity and nature of bodies of water or water intakes and other facilities
- tidal action where applicable
- snow/ice cover and depth, terrain and soil conditions

20.2.3 All spills in the marine or freshwater environments and spills of 70 litres or more on land must be reported immediately to the Canadian Coast Guard at (709) 772-2083 or 1-800-563-9089.

20.2.4 All spills or leaks should be cleaned up regardless of size as part of regular maintenance.

20.2.5 If a spill or leak of fuel or hazardous material occurs:

- Stop source.
- Eliminate ignition sources

20.2.6 If a spill or leak of fuel or hazardous material occurs on land:

- Do not flush leak nor attempt to dilute.
- Block leak from entry into waterways and bodies of water and contain with earth or other barrier(s).
- Remove small spills with absorbent pads or other absorbent material.
- Contain contaminated material until it can be appropriately treated or removed from Site to a licensed facility.

20.2.7 If a spill or leak of fuel or hazardous material occurs on snow and/or ice:

- Block entry into waterways and bodies of water and contain with snow or other barrier.

- Remove minor spills with absorbent pads or snow.
- Use ice augers and pump when feasible to recover diesel under ice.
- Slots in ice can be cut over slow-moving water to contain oil.
- Contain contaminated snow and/or ice for later treatment or shipment off Site to a licensed facility.

20.2.8 If a spill or leak of fuel or hazardous material occurs on a body of water:

- Contain spill as close to release point as possible.
- Use spill containment boom or equivalent materials to concentrate slicks for recovery.
- On small spills, use absorbent pads to pick up contained oil.
- On larger spills, obtain and use skimmer on contained slicks.
- Contain contaminated material until it can be appropriately treated or removed from Site to a licensed facility.

20.2.9 If a spill or leak of fuel or hazardous material occurs in or near a body of water:

- Prevent entry into water, if possible, by building a berm (soil or snow) or trench.
- Intercept moving slicks using (absorbent) booms.

20.2.10 The Plan Holder must make spill kits available at Exploration Sites where fuels or other potentially hazardous materials are being used or stored. The following spill kits, as a minimum must be made available:

Standard Spill Kit for locations with greater than 1000 litres stored

- A 45 gallon (205 L) 16 gauge drum.

- Two closing rings - one for ease of entry into the drum and the other to ensure absolute containment of products for transport and temporary storage.
- One pair of neoprene oil and chemical resistant gloves.
- One protective disposable suit.
- One pair of protective goggles.
- 12 m of 12 cm containment boom.
- 25 absorbent pads - approximately 46 x 46 cm x 8 mm thick.
- 23 m of absorbent blanket - approximately 70 cm x 8 mm thick.
- 2 polyethylene bags approximately 71 x 46 x 165 cm - 3 mm thick.
- Shovel.

Spill Kit for locations with less than 1,000 litres stored

- One pair of neoprene oil and chemical resistant gloves.
- One pair of protective goggles.
- 10 absorbent pads - approximately 46 x 46 cm x 8 mm thick.
- 1 polyethylene bag approximately 71 x 46 x 165 cm - 3 mm thick.
- Shovel.

Spill Kit for locations proximal to Water

- 1 Rope (min. 15 m length).
- 1 Container of Gap Seal Drum Sealant.
- 6 Absorbent "socks" (1 m length).

- 2 Mini Booms.
- 1 Drum Roll Kit.
- 1 Bag of Peat Moss.
- 5 Hazardous Waste Bags.
- 3 pairs Chemical Resistant Safety Gloves.
- 3 175l Drum Response Kits with lids

20.2.11 Contaminated soil or absorbent pads resulting from a fuel spill must be removed to an off-site disposal facility.

Section 21: Line cutting and survey work

21.1 Cut lines, including the removal of limbs and branches, or walking tracks must be limited to what is necessary for line of sight and unobstructed passage, to a maximum width of 1.5m except within 10 metres of a body of water in which case the cut line, including the removal of limbs and branches, must be strictly limited to what is essential for line of sight.

21.2 Cut lines must be established using hand tools such as machete, fern hook, axe and chainsaw only.

21.3 Biodegradable tape must be used. Only small lengths of tape must be used.

21.4 Grids in Sensitive Areas must be only pegged and flagged with biodegradable tape.

21.5 Non-biodegradable markers such as pegs and tape must be removed upon completion of the Exploration Program.

Section 22: Clearing of Vegetation

22.1 When clearing vegetation for campsites, fuel storage areas, lay-down areas and in preparing a trench or a drill site:

- Trees shall be cut as close to the ground as possible to minimize ground disturbance caused by the uprooting of

trees or tree stumps by movement of the equipment along the trail. Stumps must not exceed 15cm in height.

- Portions of the tree trunk larger than 9 cm in diameter shall be limbed and stacked neatly at intervals along the trail for salvage or for use to corduroy sections of the trail where ground conditions warrant;
- Trees and tops with trunk diameter less than 9 cm shall be piled to the side of the trail neatly or lopped and scattered if conducive to reducing ground disturbance.
- All merchantable or forest product timber is and remains the property of the Inuit and shall be salvaged by the Plan Holder. It must be cut into standard harvesting lengths (2.4m to 3.6m), trimmed and stored neatly so that it may be easily located and accessed during the winter by Inuit.
- Trees and slash which are cleared shall not be felled or discarded into a body of water.

22.2 Where a site is to be trenched, sufficient area shall be cleared to allow excavated material to be piled and placed back into the trench without uprooting trees or having the excavated material mixed with the trees cleared from the trench site.

22.3 Land must not be cleared of vegetation more than 6 months in advance of when it is required.

22.4 Where possible, operators must drive over flattened vegetation in order to preserve rootstock and prevent soil erosion.

22.5 The organic mat must be preserved wherever possible to reduce the potential for erosion in the short and long term.

22.6 The following buffer zones must be maintained from the high water mark of bodies of water when clearing vegetation:

Salmon or Char bearing river, stream, brook or creek: 75m

Other Fish-Bearing body of water: 50m

Non-fish bearing body of water: 50m

unless where needed for water crossings, in which case clearing is to be minimized and conducted only by hand.

22.7 Where possible trees must be felled inward toward the work area to avoid damaging any standing trees adjacent to the immediate work area.

22.8 No clearing activity may occur within 800m of a known bald eagle, osprey or other raptor nest during the nesting season (May 15 to July 31) and 200m outside the nesting season. If a nest is encountered during clearing activities during the nesting season clearing must immediately stop.

Section 23: Clearing of Work Areas (stripping and stockpiling)

23.1 In preparation of work areas where removal of overburden and topsoil is necessary, the stripping must be done in two stages:

Stage 1: removal of top soil

Stage 2: removal of overburden

23.2 Topsoil must be stockpiled separately from the overburden for reclamation purposes in shallow piles (3 m height) with as limited compaction as possible to maximize re-use potential

23.3 Stockpiles must be easily accessible, on well-drained ground, away from bodies of water (100m) and standing timber. A working area of 5m around stockpiles must be maintained. If topsoil is to be stockpiled for extended time periods, they must be vegetated to minimize nutrient loss and erosion using a local native plant species.

Section 24: Blasting

24.1 Blasting must be undertaken only by an individual who holds a valid blasters safety certificate issued by the Department of Education.

24.2 Handling, transportation, storage and use of explosives must be conducted in compliance with all applicable Federal and Provincial laws and regulations.

24.3 Explosives must be used in a manner that minimizes damage of landscape, trees, wetlands, bodies of water and other Sensitive Areas by

controlling the scatter of blasted material beyond the location of the blast.

24.4 The scatter of blasted material must be controlled through the use of blasting mats.

24.5 Shock and noise levels must be minimized through the use of blasting patterns and procedures such as time delay detonators.

24.6 Blasting must not occur in the vicinity of fuel or chemical storage areas.

24.7 The area surrounding a blast must be surveyed within one hour prior to a blast and operations must be postponed if polar bear, black bear, caribou, Harlequin duck and/or any rare, endangered or threatened species are observed within 500m of the blasting site. Wildlife observations in the vicinity of the blast must be documented prior to, during and after the blast.

24.8 All debris such as explosives boxes and used blasting wire must be collected for proper disposal following blasting activity.

24.9 All trenches and pits excavated by blasting methods must be backfilled with blasting material so as to make them safe and similar to the surrounding topography.

24.10 Blasting close to bodies of water: NOTE: These Standards have yet to be developed but will reflect, with variation, the *"Guidelines for the Use of Explosives in or near Canadian Fisheries Waters"* (Wright and Hopky, 1998) and *DFO Fact sheet – "Blasting and Fish Habitat Protection"*.

Section 25: Trenching

25.1 Where possible trenching must be done by hand in order to minimize disturbance in the area surrounding the trench.

25.2 Topsoil, overburden and excavated bedrock must be removed and stockpiled separately for use in reclamation of the trenches.

25.3 When dewatering trenches, the release of sediment laden water into the environment must be controlled through the use of filtration,

erosion control devices, settling ponds, straw bales, geotextiles or other devices.

25.4 All trenches must be backfilled, compacted and stabilized as soon as possible and in any event following the completion of the Exploration Program.

25.5 If the Exploration Program requires that trenches remain open for a period of time, the piles of excavated material must be contoured and stabilized. Trenches must be fenced off and clearly marked so as to prevent people or animals from falling into them.

25.6 The following buffers of undisturbed vegetation must be maintained between trenches and the high water mark of these bodies of water:

Salmon or Char Bearing river, stream, brook or creek: 75m

Other Fish-Bearing body of water: 50m

Non-fish bearing body of water: 50m

Section 26: Drilling

26.1 General

26.1.1 All fuel and hazardous materials present at a drill site must be handled with care so as to minimize the possibility of spills. The area cleared for storage should be the minimum size required and must be placed and contained to prevent release into bodies of water. All drill sites are to be identified with UTM NAD 27 coordinates. An inventory is to be maintained of the fuel and hazardous materials used and removed from each drill site. The EPP is to specify the procedures to be followed and the methods to be used for avoiding spills of fuels and hazardous materials at drill sites. The EPP is to specify the reporting, containment and clean up procedures that must be followed in the event of a spill of fuel or hazardous material at a drill site.

26.1.2 At the termination of Exploration, all fuels and hazardous materials are to be removed from the area, and all waste shall be collected, transported and disposed of at a site approved by the Governments.

26.1.3 Upon completion all drill holes producing artesian water shall be plugged with a high-swelling clay such as bentonite. Plan Holders must report all artesian drill holes to the Nunatsiavut Government within 30 days of discovery, reporting detail on how the hole was sealed.

26.1.4 Drill core should be stored at one central location, at least 100m from a body of water and must be protected to the extent necessary to preserve the core's technical value. Drill core moved to a base camp by boat or float plane may be stored within the 100m buffer but above the high water mark from all bodies of water.

26.1.5 Unless otherwise approved, exposed drill casings must be removed or cut off at or below ground surface upon abandonment of the drill site.

26.2 Drilling on land

26.2.1 Drill sites and water lines should be located, as much as possible, in areas where access to them and their operation will create the least amount of disturbance. The smallest area necessary for safe working practices must be cleared. The length and number of access trails should be kept to a minimum.

26.2.2 Drill waste shall be prevented from entering bodies of water and shall not be left to run off from the drill site. Drill cuttings and water must be controlled by a series of settling tanks, settling ponds or a sump located down slope from the drill.

26.2.1 Maintenance of drill equipment shall take place at least 100m from the nearest body of water.

26.2.2 Drilling shall not take place within the following distances from the high water mark of:

Salmon or Char Bearing river, stream, brook or creek: 75m

Other fish bearing body of water: 50m

Non fish-bearing body of water: 50m

26.2.5 A Plan Holder may be granted permission to carry out drilling within a buffer around a body of water set out in these Standards if the Plan Holder satisfies the Governments that:

- (a) drilling within the buffer is necessary in order to:
 - (i) delimit or measure an ore body; or
 - (ii) complete feasibility studies related to project engineering, project economics or the decision on whether to proceed with production of the ore body.
- (b) drilling cannot be completed for the purposes set out in (a) without drilling within a buffer around a body of water set out in these Standards,
- (c) the drilling will be conducted without emissions within the buffer,
- (d) the applicant has a record of drilling without accident and without breach of law or applicable terms and conditions, and
- (e) all foreseeable environmental risks related to the drilling have been identified and are acceptable.

26.2.6 All materials (slash, soil and overburden) removed for clearing of the drill site must be stockpiled for use in reclamation of the site. The stockpiling should be done so as to prevent erosion by wind, water or run-off and the rehabilitation/reclamation of the drill site should take place as soon as possible after termination of the drilling.

26.3 Drilling on Ice

26.3.1 A Permit from the Water Resources Division of the Department of Environment and Conservation is required before drilling can take place on any body of water.

26.3.2 Ice must be of sufficient thickness to support a drill and associated equipment both during transport and drill set-up.

26.3.3 Drilling shall occur in water depth greater than 2m, including the ice thickness, unless otherwise approved. Additional mitigation

measures, such as the even distribution of weight, must be applied if approved.

26.3.4 If timber is required to support the drill, it must be local and untreated. All timber is to be removed from the area on completion of drilling.

26.3.5 Any ice screws or anchors frozen into the ice must be removed upon completion of drilling.

26.3.6 Drill additives may be used only if required and in minimal amounts, and must be biodegradable.

26.3.7 All pump units, mixing tanks or filter system tanks used on the ice must have secondary containment.

26.3.8 There must be no discharge of drill water, mud or cuttings to water or ice. All drilling operations must use a "closed loop" recycling system.

26.3.9 Drill water, mud or cuttings must be collected through a filter system and disposed of in a land-based sump at a minimum 100m distance from the high water mark of any body of water.

26.3.10 The drill area must be kept clean and free of debris and garbage at all times. All material is to be removed from the ice upon completion of drilling.

26.3.11 Upon completion of drilling, clean water must be circulated through the drill hole to remove any remaining drill fluids and cuttings.

26.3.12 All rods and casings must be removed from drill holes prior to abandonment.

26.3.13 All drill holes under bodies of water or muskeg must be sealed by grouting the upper 30m of bedrock or the entire depth of the hole, whichever is less.

26.3.14 Fuel must be stored on shore at a minimum distance of 100m from the high water mark of any body of water. Sufficient fuel for one refueling shall be brought on the ice at one time, and stored in a secondary containment system such as a tray or liner. A drip tray or other containment must be used during refueling operations.

26.3.15 Except in an emergency all maintenance and repairs to a drill being used on ice must be done on land at a minimum distance of 100m from the high water mark of any body of water.

26.3.16 A spill response kit must be kept at the drill site at all times.

26.3.17 All pickets are to be removed from ice and water bodies prior to breakup.

26.4 Drilling in the marine environment

26.4.1 A Letter of Advice from the Department of Fisheries and Oceans and a Navigable Waters Permit is required before drilling can take place on any body of water.

26.4.2 All other conditions which apply to Section 25.3, where applicable, shall apply to drilling in the marine environment.

Section 27: Equipment Maintenance

27.1 When maintenance of equipment is required, it must be performed:

- In well ventilated areas,
- With a drop cloth or drip tray underneath the work area,
- At a safe distance from ignition sources, and
- At least 100m from any body of water.

Section 28: Air Quality Protection

28.1 A Plan Holder must take measures to prevent dust from becoming a problem at an Exploration Site. If dust control becomes a problem at the exploration site, the Plan Holder must:

- Keep roads, helicopter pads and landing strips sprayed with water or a dust suppressant, such as calcium chloride, wherever practical.
- Reduce vehicle speed on dusty roads and trails.

Section 29: Noise Suppression

29.1 All equipment used in the Exploration Program shall have muffled exhaust to minimize generated noise.

Section 30: Roads and Trails

Until the Nunatsiavut Government establishes regulations to govern the establishment of roads and trails in Labrador Inuit Lands, establishment of roads and trails are not permitted.

Section 31: Uranium Exploration

In the case of uranium Exploration, the following standards apply in addition to all other sections of these Standards:

31.1 A Health and Safety Plan must be submitted with the Work Plan, including details of a radiation protection program for employees and a protocol for the transport and handling of radioactive samples.

31.2 Following the backfill of trenches, gamma levels must not exceed $1.0\mu\text{Sv}$ at 1m above ground surface.

31.3 When drilling, drill mud and cuttings with a uranium concentration greater than 0.05 per cent must be collected and disposed of down the drill hole. The drill hole must then be sealed.

31.4 If the drill cuttings are of a uranium concentration lower than the background radiation of the drill site, drill cuttings may be disposed of on the surface.

31.5 Drill holes that encounter mineralization with a uranium concentration greater than 1.0% over a length greater than 1 meter, and with a meter-percent concentration greater than 5.0% must be sealed by grouting over the entire length of the mineralized zone and not less than 10 meters above and below each mineralized zone.

31.6 When storing core at the Exploration Site, gamma levels at 1 meter above the surface should be kept below $1.0\mu\text{Sv}$, and under no circumstances will they be allowed to exceed $2.5\mu\text{Sv}$.

APPENDIX 1
Exploration Site Wildlife Incident Report

DATE: _____

LOCATION: _____

TIME: _____

PERSON REPORTING: _____

ANIMAL: _____

UNUSUAL BEHAVIOUR: YES ____ NO ____

UNUSUAL MARKINGS (ie. Bear with ear tags) _____

DAMAGE OR THREAT CAUSED: NO ____ YES ____ (explain)

REPORTED TO: _____

DETERRANT USED ON ANIMAL:

NO ACTION ____ DETERRANT ____ TRAPPED ____ OTHER ____

AREA OF WILDLIFE SIGHTING CLEAN (ie no visible signs of food or waste)

YES ____ NO (explain below) _____

OTHER DESCRIPTIVE INFORMATION ABOUT THE INCIDENT/AREA:

SIGNATURE (person involved) _____ DATE: _____

REVIEWED BY (supervisor) _____ DATE: _____

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