

SCREENING DECISION REPORT NIRB FILE NO.: 06EN066

INAC File No: N2006C0027 NWB File No.: 2BE-IZO0606

March 22, 2010

Honourable Chuck Strahl Minister of Indian and Northern Affairs Canada Indian and Northern Affairs Canada Gatineau, QC

Via email: Strahl.C@parl.gc.ca

Re: Screening Decision for MMG's Amendment request with Indian and Northern Affairs Canada for the "Izok and Hood" project, Additional Application Terms and Conditions (NIRB 06EN066)

Dear Honourable Chuck Strahl:

The primary objectives of the Nunavut Impact Review Board (NIRB) are set out in section 12.2.5 of the Nunavut Land Claims Agreement (NLCA) as follows:

In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of the residents of Canada outside the Nunavut Settlement Area.

Section 12.4.3 of the NLCA states that:

Any application for a component or activity of a project proposal that has been permitted to proceed in accordance with these provisions shall be exempt from the requirement for screening by NIRB unless:

- (a) such component or activity was not part of the original project proposal; or
- (b) its inclusion would significantly modify the project.

The NIRB has completed a review of MMG Mineral Resources' (formerly OZ Minerals) request with Indian and Northern Affairs Canada (INAC) for an amendment to their land use permit for their "Izok and Hood" project.

After a thorough assessment of the project proposal, the amendment application information and the comments received (please see *Procedural History* and *Project Activities* in **Appendix A**), in accordance with Section 12.4.3 of the NLCA, the Board has determined that this request will result in a change to the original scope of the project. Therefore, the NIRB is re-issuing the recommended project-specific terms and conditions contained in the September 19, 2006 Screening Decision, NIRB file No.: 06EN066 in addition to new terms and conditions which are designed to mitigate any potential impacts to the environment as per Section 12.4.4(a) of the NLCA.

PREVIOUSLY APPROVED PROJECT-SPECIFIC TERMS AND CONDITIONS

The following terms and conditions were previously approved by the NIRB for file 06EN066 in a Screening Decision Report dated September 19, 2006, available from the NIRB's ftp site using the following link http://ftp.nirb.ca/SCREENINGS/COMPLETED%20SCREENINGS/:

General

- 1. Wolfden Resources Inc. (Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
- 2. The Proponent shall forward copies of all permits to the NIRB obtained and required for this project prior to the commencement of the project.
- 3. The NIRB shall be notified of any changes in operating plans or conditions associated with this project prior to any such change. Prior to the 2007 and 2008 drilling seasons, work plans must be submitted no later than January 31 of that year detailing the amount of drilling estimated to take place during season, along with any maps detailing these drilling locations.
- 4. The Proponent shall adhere to conditions stated in attached Appendix B "Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders", to ensure preservation and protection of archaeological sites encountered as a result of this project. Known archaeological sites are attached as Appendix C.
- 5. The Proponent shall operate the project in a manner consistent with all commitments and mitigation measures outlined in all correspondence and documents provided to the NIRB from the period commencing June 26, 2006 thru to August 31, 2006.
- 6. The Proponent shall immediately contact Transport Canada Navigable Waters Protection regarding the project activities. Additionally, the Proponent is advised the airstrip must be in compliance with *Canadian Aviation Regulations (CARS) regarding Part III Aerodromes and Airports*.
- 7. The Proponent shall submit a copy of its Wildlife Management Plan for these project activities (referenced on pg 40 of the *Project Specific Information Izok/Hood Exploration*) by October 15, 2006. Furthermore, this Wildlife Management Plan must include the following:

- a. A **100m** buffer around all active raptor nests from May 1 to September 15 of each year;
- b. The requirement to maintain an elevation of 610m for all air travel. Flights below 610m are restricted to landings and takeoffs, and movement of drill rigs, equipment and personnel;
- c. The requirement to maintain a vertical distance of 1000m and 1500m horizontal distance from any observed concentrations of birds;
- d. The management plans regarding on-site Grizzly bears;
- e. The management plans regarding any Species at Risk as defined under the Species at Risk Act;
- f. The management plans regarding caribou encounters; and,
- g. The proposed monitoring plans for all wildlife.
- 8. The Proponent shall submit an annual report with copies provided to the NIRB, Indian and Northern Affairs Canada (INAC), and the Kitikmeot Inuit Association (KIA) by January 31 each year that the project is in operation commencing January 31, 2007. The report must contain, but not be limited to, the following information,
 - a. A summary of activities undertaken for the year, including the amount of drilling;
 - b. A work plan for the following year;
 - c. The results of environmental studies undertaken and plans for future studies;
 - d. Wildlife encounters and actions/mitigation taken;
 - e. A summary of local hires and initiatives;
 - f. A summary of community consultations undertaken and the results;
 - g. A summary of site-visits by inspectors with results and follow-up actions (copies to be submitted to the NIRB)
 - h. The number of take-offs & landings from an airstrip with approved flight path with date and location;
 - i. The number of helicopter touch-downs on the land with date and location (provide unless confidential);
 - j. Site photos;
 - k. Revisions to the Abandonment and Restoration Plan;
 - 1. Progressive reclamation work undertaken;
 - m. A summary of how the proponent has complied with all project terms and conditions and how the terms and conditions are achieving their purpose; and,
 - n. Amount of waste removed from the site and location of disposal site.

Drill Sites

- 9. The Proponent shall follow all conditions outlined in the Nunavut Water Board water license regarding drilling operations.
- 10. The Proponent shall ensure that if "on-ice drilling", the return water released must be non-toxic, and not result in an increase in total suspended solids in the immediate receiving waters above the Canadian Council of Ministers for the Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).
- 11. The Proponent shall ensure that disturbance of vegetation from deposit of drill fluids/cuttings is restricted to the area of the sump and the ground prepared for re-vegetation upon abandonment.
- 12. The Proponent shall inspect each drill sites for contamination before moving to the next drill site and immediately clean up any contamination.

Water

13. The Proponent shall follow all conditions set out under the Nunavut Water Board water license, pertaining to the use of water associated with the project activities.

Fuel and Chemical Storage

- 14. All fuel shall be stored in double-walled tanks and/ or in accordance with Regulations made under the Canadian Environmental Protection Act.
- 15. The Proponent shall examine all fuel and chemical storage containers immediately upon delivery and daily for leaks. All leaks should be repaired immediately.
- 16. The Proponent shall ensure that all on site personnel are properly trained in fuel and hazardous waste handling procedures as well as spill response procedures.
- 17. The Proponent shall maintain a supply of spill kits, shovels, barrels, sorbents, and pumps on-site at the camp, the main fuel cache, the drill sites, and at the camp.
- 18. Chemicals containing salts, which may attract wildlife to the site, must be stored so that they are inaccessible to wildlife.
- 19. The Proponent shall ensure the *Spill Contingency Plan Exploration Operations: Izok, Hood and Gondor Projects* is approved by the Nunavut Water Board within thirty days of the issuance of the NWB License. The Proponent shall include in its Spill Contingency Plan updated information regarding the requirement to register hazardous waste into a waste manifest.
- 20. The Proponent shall otherwise follow all fuel storage and spill protection measures and commitments as outlined in its *Spill Contingency Plan Exploration Operations: Izok, Hood and Gondor Projects*.

Wildlife

21. The Proponent shall ensure that all field personnel are made aware of the measures outlined in Wolfden's Wildlife Management Plan, and are provided with training and/or advice on how to implement these measures.

- 22. The Proponent shall ensure that there is minimal disturbance to any nesting birds and wildlife in the area. Harassment of wildlife is prohibited. This includes persistently worrying or chasing animals, or disturbing large groups of animals.
- 23. Should caribou or their calves be present within the vicinity of the Ham camp or any of the drilling sites, the Proponent shall cease all drilling activities, movement of equipment, movement of vehicles, and any other activities which may disturb the animals.
- 24. The Proponent shall not feed wildlife.
- 25. The Proponent shall not conduct any activity associated with the land use operation if critical periods of wildlife cycles are observed (e.g. caribou migration, calving, fish spawning or raptor nesting).
- 26. That the Proponent shall ensure that there is no hunting by employees of the company or any contractors hired unless proper Nunavut authorizations have been obtained.
- 27. The Proponent shall contact in advance, the Regional Biologist to identify areas which should be avoided.

Birds

- 28. Pursuant to the Migratory Bird Convention Act Regulations the Proponent shall not disturb or destroy the nests or eggs of migratory birds. The period from May 15 to July 31 is the general migratory bird breeding season, it is recommended that activities be conducted outside of these dates, particularly in the vicinity of known migratory bird colonies.
- 29. The Proponent shall confirm there are no active nests (i.e. nests containing eggs or young) in the vicinity before activities commence. If active nests of migratory birds are encountered, the Proponent shall avoid these areas until nesting is complete and the young have left the nest.
- 30. The period from mid June to mid August is the general molting period when geese are temporarily flightless while they lose their flight feathers and grow new ones. During this time they are particularly sensitive to disturbance. All molting flocks shall be avoided.
- 31. The Proponent shall ensure compliance with Section 35 the *Migratory Birds Convention Act* and *Migratory Birds Regulations* which states that no person shall deposit or permit to be deposited, oil, oil wastes, or any other substance harmful to migratory birds in any waters or any areas frequented by migratory birds. The Proponent shall ensure compliance the *Migratory Birds Convention Act* and *Migratory Birds Regulations* during all phases and in all undertakings related to the project.

Bears

32. The Proponent shall follow procedures outlined in the "Safety in Bear Country Manual", and should contact the Regional Biologist or the Wildlife manager for information and advice on measures which should be taken to minimize the possibility of conflicts/interactions with bears.

Caribou

33. The Proponent shall not locate any operation so as to block or cause substantial diversion to migration of caribou.

- 34. From **May 15 to July 15**, the Proponent shall cease activities that interfere with caribou migration or calving, such as the movement of equipment, drilling activities and ATV or snowmobile use until the caribou and their calves have vacated the area.
- 35. From **May 15 to July 15**, the Proponent shall not conduct flights below 610m if caribou are present in the area.

Fish

- 36. The Proponent shall ensure compliance with Section 36 of the *Fisheries Act* which requires that no person shall deposit or permit the deposit of a deleterious substance on any type in water frequented by fish or in any place under any conditions where the deleterious substance may enter such a water body.
- 37. The Proponent shall ensure that there is no fishing by employees of the company or any contractors hired unless proper permits are obtained.

Waste Disposal

- 38. The Proponent shall follow all requirements set out under the Nunavut Water Board water license, pertaining to the deposition of waste associated with the project activities, as well as with any waste regulations applicable within the Nunavut Territory.
- 39. The Proponent shall not incinerate PVC-type plastic. PVC-type plastic must be removed off-site and disposed of in an approved landfill.
- 40. The Proponent shall keep all ash in a covered metal container until it is disposed of at an approved facility off site.

Physical Environmental

- 41. The Proponent shall ensure that the land use area is kept clean at all times.
- 42. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. The Proponent shall suspend overland travel of equipment or vehicles if rutting occurs.

Archaeological and Palaeontological

43. The Proponent will avoid all known archaeological sites attached in Appendix C, unless the appropriate permits are obtained. Furthermore, the Proponent shall abide by all terms and conditions regarding the protection of archaeological and palaeontological sites in Nunavut in Appendix B.

Reclamation

44. The Proponent shall ensure that any soil contaminated with hydrocarbons over 2500 parts per million must be taken off-site and appropriately remediated, prior to disposal within a landfill.

Other

45. Installation of an incineration device capable of meeting the emission limits established under the Canada-wide Standards (CWS) for Dioxins and Furans and the CWS for Mercury Emissions is required. The proponent must install an incinerator which meets the above-Standards.

- 46. The Permittee must consider the establishment of electric fencing around the non-permanent weatherhaven structures (particularly sleeping quarters).
- 47. The Proponent is encouraged to consult the 2003 CCME Guidance document PN 1326 "Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products" and ensure that the tank farm is designed and operated in accordance with it.
- 48. NIRB would like to encourage the proponent to hire local people and services, to the greatest extent possible.
- 49. Any activity outside the original scope of the project application as described will be considered a new project and will need to be submitted to NIRB for screening.

NEW RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS (pursuant to Section 12.4.4(a) of the NLCA)

The Board is recommending that the following or similar *additional* project-specific terms and conditions be imposed upon the Proponent through all relevant legislation:

Winter Road

- 50. The Proponent shall select a winter route that maximizes the amount of frozen water bodies used.
- 51. The Proponent shall not erect camps or store materials on the surface ice of lakes or streams, except that which is for immediate use.
- 52. The Proponent shall ensure that no disturbance of the stream bed or banks of any definable watercourse be permitted, and no mechanized clearing carried out immediately adjacent to any watercourses.
- 53. The Proponent shall not move any equipment or vehicles without prior testing the thickness of the ice to ensure the lake is in a state capable of fully supporting the equipment or vehicles.
- 54. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging.
- 55. The Proponent shall suspend overland travel of equipment or vehicles if rutting occurs. Likewise, upon spring break up; or at such a time as the shorelines of frozen water bodies begin to thaw, the Proponent shall suspend all travel over water bodies if disturbance to the banks or shorelines of any definable water body occurs.
- 56. The Proponent shall ensure that winter lake/stream crossings are located to minimize approach grades and constructed entirely of ice and snow materials. Ice or snow free of sediment should be the only materials used to construct temporary crossings over any ice-covered watercourse. Cutting or filling of crossing approaches below the high water mark will require prior review and approval by Fisheries and Oceans Canada Fish Habitat Management Branch (DFO-FHM).
- 57. The Proponent shall avoid disturbance on slopes prone to natural erosion, and alternative locations shall be utilized.

- 58. The Proponent shall ensure that temporary crossings constructed from ice and snow, which may cause jams, flooding or impede fish passage and or water flow, are removed prior to spring break-up.
- 59. The Proponent shall implement sediment and erosion control measures prior to, and during operations to prevent sediment entry into the water during the spring thaw. This includes ensuring that a sufficient thickness of snow and ice is present on the winter road to prevent unnecessary erosion of the underlying ground surface and impact on underneath vegetation.
- 60. The Proponent shall re-vegetate exposed soil to assist in road-bed stabilization and sediment control.
- 61. The Proponent shall ensure that all disturbed areas are stabilized as required, upon completion of work, and restored to a pre-disturbed state.

MONITORING AND REPORTING REQUIREMENTS

The Board is currently recommending the following:

- 1. The Proponent shall update its Spill Contingency Plan to include the following, and submit the revised Plan to GN-DoE and EC within 45 days of issuance of this Screening Decision Report for review:
 - a. Up to date emergency contact numbers for the Government of Nunavut-Department of Environment (867-975-4644) and the Manager of Pollution Control and Air Quality (867-975-7748).
 - b. Updated plans to include the winter access trail and ice road.
- 2. The Proponent should also submit a copy of its annual report to the Government of Nunavut, Department of Environment (GN-DoE). In addition to the items listed in term and condition 8, the annual report should include the following information:
 - a. Record of wildlife observations while operating within the project area. The record should include locations (i.e., latitude and longitude), species, number of animals, a description of the animal activity, and a description of the gender and age of animals if possible.
 - b. Map of the location of any sensitive wildlife sites such as denning sites, calving areas, caribou crossing sites, and raptor nests in the project area, prior to conducting the project activities.
 - c. The timing of critical life history events (i.e., calving, mating, denning and nesting) within the project area.
 - d. Potential impacts from the project, and ensure that operational activities are managed and modified to avoid impacts on wildlife and sensitive sites.

The GN-DoE contacts that should receive a copy of the annual report include:

- a. Allen Niptanatiak, (867) 982-7451, <u>aniptanatiak1@gov.nu.ca</u> (Conservation Officer, Kitikmeot Region)
- b. Mathieu Dumond, (867) 982-7444, mdumond@gov.nu.ca (Regional Biologist)

OTHER NIRB CONCERNS AND RECOMMENDATIONS

In addition to the project-specific terms and conditions, the Board has previously recommended the following:

Recommendation to the Kitikmeot Inuit Association pursuant to Section 12.4.4(a) of the NLCA

As a result of comments received and a review of the information by the Board, NIRB strongly recommends the Kitikmeot Inuit Association conduct regular inspections of all project activities occurring on the Inuit-Owned Lands.

The Board is currently also recommending the following:

Proponent

- 1. If ice bridges are constructed, the Proponent follow the mitigation measures outlined in Fisheries and Oceans Canada's (DFO) Operational Statement for Ice Bridges, available at the following internet address: http://www.dfo-mpo.gc.ca/regions/central/habitat/os-eo/provinces-territories-territories-nu/index-eng.htm.
- 2. If bulldozers are used during the construction of the winter route over discontinuous permafrost, the Proponent fit them with "mushroom shoes". These will limit scalping and gouging of the ground surface, minimizing the potential for permafrost degradation and soil erosion during the summer.
- 3. The Proponent have an archaeological inventory or assessment conducted of the land portions of the winter route prior to the winter road construction or use of the winter route. The archaeological inventory or assessment would have to be conducted by a professional archaeologist with a valid Nunavut Archaeology Permit and conducted under snow free conditions. A list of archaeological consultants has been provided by Government of Nunavut Culture, Language, Elders and Youth (see Appendix D).
- 4. Any problem wildlife or any interaction with carnivores should be reported immediately to the local Wildlife Conservation Office of Government of Nunavut, Department of Environment (Conservation Officer of the Kitikmeot Region, Allen Niptanatiak, (867) 982-7451, aniptanatiak1@gov.nu.ca).

General

All Authorizing Agencies shall notify the NIRB of any changes in operating plans or conditions associated with this project prior to any such change.

Nunavut Water Board

The Nunavut Water Board (NWB) impose mitigation measures, conditions and monitoring requirements pursuant to the Water Licence, which require the Proponent to respect the

sensitivities and importance of water in the area. These mitigation measures, conditions and monitoring requirements should be in regard to use of water, snow and ice; waste disposal; access infrastructure and operation for camps; drilling operations; spill contingency planning; abandonment and restoration planning; and monitoring programs. In particular, mitigation measures, conditions and monitoring requirements should be considered for the use of water, snow and ice for the development and maintenance of the winter road for this project.

INAC Water Resources

INAC Water Resources should consider the importance of conducting regular inspections, pursuant to the authority of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, while the project is in operation. The inspectors should focus on ensuring the Proponent is in compliance with the conditions imposed through the Water Licence.

REGULATORY REQUIREMENTS

The Proponent is also advised that the following legislation may apply to the project:

- 1. The *Fisheries Act* (http://laws.justice.gc.ca/en/showtdm/cs/F-14///en).
- 2. The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (http://www.canlii.org/ca/sta/n-28.8/whole.html).
- 3. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (http://laws.justice.gc.ca/en/showtdm/cs/M-7.01).
- 4. The *Species at Risk Act* (http://laws.justice.gc.ca/en/showtdm/cs/S-15.3). Attached in Appendix E is a list of Species at Risk in Nunavut.
- 5. The *Nunavut Wildlife Act* which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat and species at risk.
- 6. The *Transportation of Dangerous Goods Regulations*, *Transportation of Dangerous Goods Act* (http://www.tc.gc.ca/tdg/menu.htm), and the *Environmental Protection Act* (http://laws.justice.gc.ca/en/C-15.31/text.html) The Proponent must ensure that proper shipping documents accompany all movements of dangerous goods. The Proponent must register with the GN-DOE Manager of Pollution Control and Air Quality at 867-975-7748.
- 7. The *Navigable Waters Protection Act* (*NWPA*) (http://laws.justice.gc.ca/en/N-22/index.html).

Validity of Land Claims Agreement

Section 2.12.2

Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated _____ at Sanikiluaq, NU.

March 22, 2010

Lucassie Arragutainaq, Chairperson

Attachments: Appendix A: Procedural History and Project Activities

Appendix B: Archaeological and Palaeontological Resources Terms and Conditions for Land Use

Permit Holders

Appendix C: <u>Confidential</u> Archaeological Sites Appendix D: Professional Archaeological Consultants

Appendix E: Species at Risk in Nunavut

Appendix A Procedural History and Project Activities

Procedural History

On February 18, 2010 the Nunavut Impact Review Board (NIRB or Board) received an application from Indian and Northern Affairs Canada (INAC) for an amendment to MMG Minerals and Metals Group's (MMG, formerly OZ Minerals, formerly Zinifex Canada Inc.) "Izok and Hood" project. This project is located in the Kitikmeot region, which currently has no approved land use plan in place.

Past File History

The original application for the project (NIRB File No.: 06EN066) was received from the Kitikmeot Inuit Association (KIA) on June 23, 2006. The project proposal was screened in accordance with Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA) and on September 19, 2006 the NIRB issued a 12.4.4 (a) screening decision allowing the proposed exploration activities to proceed subject to project-specific recommended terms and conditions (September 19, 2006 Screening Decision Report).

On June 6, 2008 the NIRB received an application from INAC requesting screening of MMG's Surface Lease renewals and an amendment (increase in surface lease for the airstrip at Ham Lake) for their Hood and Izok properties (INAC File No.'s 086H10001, 086H10002, 086I02001). After review of the information contained in the request and the comments received from parties, the NIRB determined that the renewals and the amendment to the Surface Leases did not significantly change the general scope of the original project activities, and the NIRB reissued the recommended project-specific terms and conditions contained in the September 19, 2006 Screening Decision Report.

On November 3, 2009 the NIRB received an application from INAC for an extension to MMG's land use permit (N2008C0020) for its "Izok and Hood" project. After review of the proposed project, the NIRB determined that the extension request did not significantly change the general scope of the original project activities and the NIRB re-issued the recommended project-specific terms and conditions contained in the September 19, 2006 Screening Decision Report.

Current File History

The current project proposal is for an amendment to MMG's existing INAC land use permit (INAC File No.: N2006C0027) to include the construction of a temporary winter road to provide transportation between Ham Lake camp to Izok Lake.

The NIRB determined that this request may result in a change to the original scope of the project and distributed the project proposal to community organizations in Bathurst Inlet, Cambridge Bay and Kugluktuk, as well as to relevant federal and territorial government agencies, and Inuit organizations. The NIRB requested that interested parties review the amendment proposal and

the NIRB's previously recommended terms and conditions, and provide the Board with any comments or concerns by March 11, 2010 regarding:

- Whether the project proposal is likely to arouse significant public concern; and if so, why;
- Whether the project proposal is likely to cause significant adverse eco-systemic and socio-economic effects; and if so, why;
- Whether the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (providing any additional recommended mitigation measures); and,
- Any matter of importance to the Party related to the project proposal.

On or before March 11, 2010, the NIRB received comments from the following interested parties:

- Kitikmeot Inuit Association (KIA)
- Fisheries and Oceans Canada (DFO)
- Environment Canada (EC)
- Government of Nunavut Department of Environment (GN-DoE)
- Government of Nunavut Culture Language Elders and Youth (GN-CLEY)

All comments provided to the NIRB regarding this project proposal can be viewed on the NIRB's ftp-site, at the following location:

http://ftp.nirb.ca/SCREENINGS/COMPLETED%20SCREENINGS/

Project Activities

This project is located within the Kitikmeot region, approximately 260 kilometres (km) from Kugluktuk. The Proponent intends to explore for base metals on both the Izok and Hood properties.

The original application, that was screened in accordance with Part 4, Article 12 of the NLCA, included the following project components/activities:

- On-land and on-ice drilling up to 30,000 metres (m) between the Izok property and Hood property
- Use of existing Ham Lake camp, which had an existing 2,500 m gravel airstrip.
- Establishment of a non-permanent weatherhaven camp (20-40 persons).
- Fuel and chemical storage at camp consisting of:
 - o 385,000 litres of diesel fuel stored in 7 fuel tanks
 - o 2,050 litres of gasoline stored in 205 litre drums
 - o 5000 pounds (lbs) of propane stored in one hundred lb containers
 - o 20,500 litres of aviation fuel (Jet B) stored at airstrip
 - o Petroleum lubricants
 - o Drill additives
- Temporary fuel storage at drill-site locations

- Research in the areas of wildlife/fish/birds/marine and archaeology
- Use of water for camp and drilling purposes

The Proponent is currently applying for an amendment to their INAC land use permit which includes the following additional components or activities:

- Winter access trail from Ham Lake camp to Izok Lake;
 - Winter access to include one access trail from the airstrip to Isnogouhd Lake (775 m), ice road over Isnogouhd Lake (5 km) and a second access from Isnogouhd to Izok Lake (450 m)
 - o Winter access to be prepared with a Bobcat, a front end loader and a grader
- Winter access to be used for crew changes twice daily and drill resupply once daily between March and May; and
- Movement of drummed fuel over trail.

P.O. Box 1360 Cambridge Bay, NU X0B 0C0 Phone: (867) 983-4600 Fax: (867) 983-2594

Appendix B

Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders



BACKGROUND: Archaeology

As stated in Article 33 of the Nunavut Land Claims Agreement:

The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence, which shall be expressed in terms of special rights and responsibilities. [33.2.1]

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary. [33.2.2]

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claims Agreement. [33.2.5]

BACKGROUND: Palaeontology

Under the Nunavut Act1, the federal Government can make regulations for the protection, care and preservation of palaeontological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*2, it is illegal to alter or disturb any palaeontological site in Nunavut unless permission is first granted through the permitting process.

	Definitions	
1 s. 51(1) 2 P.C. 2001-1111 14 June, 2001		

P.O. Box 1360 Cambridge Bay, NU X0B 0C0 Phone: (867) 983-4600 Fax: (867) 983-2594

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

"archaeological site" means a place where an archaeological artifact is found.

"archaeological artifact" means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.

"palaeontological site" means a site where a fossil is found.

"fossil" includes:

- (a) natural casts
- (b) preserved tracks, coprolites and plant remains; and
- (c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.

Terms and Conditions

- 1) The permittee shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 2) The permittee shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 3) The permittee shall immediately contact the Department of Culture, Language, Elders and Youth (867) 934-2046 or (867) 975-5500 or 1 (866) 934-2035 should an archaeological site or specimen, or a palaeontological site or fossil be encountered or disturbed by any land use activity.
- 4) The permittee shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation, until permitted to proceed with the authorization of the Department of Culture, Language, Elders and Youth, Government of Nunavut.
- 5) The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological or palaeontological sites to an acceptable condition.
- 6) The permittee shall provide all information requested by the Department of Culture, Language, Elders and Youth concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.

- 7) The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.
- 8) The permittee shall avoid the known archaeological and/or palaeontological sites listed in Attachment 1.
- 9) The permittee shall have an archaeologist or palaeontologist perform the following functions, as required by the Department of Culture, Language, Elders and Youth:
 - a. survey
 - b. inventory and documentation of the archaeological or palaeontological resources of the land use area
 - c. assessment of potential for damage to archaeological or palaeontological sites
 - d. mitigation
 - e. marking boundaries of archaeological or palaeontological sites
 - f. site restoration

The Department of Culture, Language, Elders and Youth shall authorize by way of a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit, all procedures subsumed under the above operations.

Appendix C CONFIDENTIAL Archaeological Sites

 $\begin{array}{ccc} \text{P.O. Box 1360 Cambridge Bay, NU} & \text{X0B 0C0} \\ & \text{Page 18 of 22} \end{array}$ Phone: (867) 983-4600 Fax: (867) 983-2594

Appendix D

Professional Archaeological Consultants

Arctic Archaeology

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Appendix E Species at Risk in Nunavut

This list includes species listed on one of the Schedules of SARA (*Species at Risk Act*) and under consideration for listing on Schedule 1 of SARA. These species have been designated as at risk by COSEWIC (Committee on the Status of Endangered Wildlife in Canada). This list may not include all species identified as at risk by the Territorial Government.

- Schedule 1 is the official legal list of Species at Risk for SARA. SARA applies to all species on Schedule 1. The term "listed" species refers to species on Schedule 1.
- Schedule 2 and 3 of SARA identify species that were designated at risk by the COSEWIC prior to October 1999 and must be reassessed using revised criteria before they can be considered for addition to Schedule 1.
- Some species identified at risk by COSEWIC are "pending" addition to Schedule 1 of SARA. These species are under consideration for addition to Schedule 1, subject to further consultation or assessment.

Schedules of SARA are amended on a regular basis so it is important to periodically check the SARA registry (www.sararegistry.gc.ca) to get the current status of a species.

Updated: August 4, 2009

Species at Risk	COSEWIC Designation	Schedule of SARA	Government Organization with Lead Management Responsibility ¹
Eskimo Curlew	Endangered	Schedule 1	EC
Ivory Gull	Endangered	Schedule 1	EC
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Rusty Blackbird	Special Concern	Schedule 1	Government of Nunavut
Felt-leaf Willow	Special Concern	Schedule 1	Government of Nunavut
Peregrine Falcon (anatum- tundrius complex)	Special Concern	Schedule 1 (anatum) Schedule 3 (tundrius)	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Peary Caribou	Endangered	Pending	Government of Nunavut
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO
Red Knot (rufa subspecies)	Endangered	Pending	EC

Beluga Whale	Threatened	Pending	DFO
(Cumberland Sound population)			
Atlantic Cod (Arctic population)	Special Concern	Pending	DFO
Beluga Whale	Special Concern	Pending	DFO
(Western Hudson Bay			
population)			
Beluga Whale	Special Concern	Pending	DFO
(Eastern High Arctic – Baffin			
Bay population)			
Bowhead Whale	Special Concern	Pending	DFO
(Eastern Canada – West			
Greenland population)			
Killer Whale (Northwest Atlantic	Special Concern	Pending	DFO
/ Eastern Arctic populations)			
Porsild's Bryum	Threatened	Pending	Government of
			Nunavut
Atlantic Walrus	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO
Red Knot (islandica subspecies)	Special Concern	Pending	EC
Horned Grebe (Western population)	Special Concern	Pending	EC
Barren-ground Caribou (Dolphin	Special Concern	Pending	Government of
and Union population)	_		Nunavut
Grizzly Bear	Special Concern	Pending	Government of
	_		Nunavut
Polar Bear	Special Concern	Pending	Government of
			Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of
			Nunavut

¹ Environment Canada (EC) has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency. The Department of Fisheries and Oceans (DFO) has responsibility for management of aquatic species.