COMMENT FORM FOR NIRB SCREENINGS

The Nunavut Impact Review Board has a mandate to protect the integrity of the ecosystem for the existing and future residents of Nunavut. In order to assess the environmental and socio-economic impacts of the project proposals, NIRB would like to hear your concerns, comments and suggestions about the following project application:

Project Title:		Churchill Diamond Property, Nunavut. Mineral Exploration						
Proponent:		4579 Nunavut Ltd.						
Location:		Rankin Inlet Area						
Comments Due By:		February 13, 2004		NIRB#		04EN002		
							INAC File	# <mark>9545-2-2-CHU-G</mark>
Indicate your concerns about the project proposal below:								
G no concerns G water quality G terrain G air quality G wildlife and their habitat G marine life and their habitat G marine mammals and their habitat G fish and their habitat G heritage resources in area			G G G G <mark>G</mark>	traditional uses of land Inuit harvesting activities community involvement and consultation local development in the area tourism in the area human health issues other				
Please describe concerns indicated above:								
 Drilling additives or muds shall not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water, or are demonstrated to be non-toxic. The proponent has indicated that they are in the process of developing a method by which they can manage accidental spills of drilling fluids while drilling on ice. <u>Approval of this amendment should be contingent upon receipt and review of said plan</u>. 								
Do you have any suggestions or recommendation for this application? Refer to attached INAC standard recommendations for exploration camps.								
Do you support the project proposal? Yes \check{Z} No \check{Z} Any additional comments?								
Yes.								
Additional comments re: the proponent's spill plan are attached.								
							Igaluit	
Position				Organization		С	Indian and Northern Affairs Canada - Water Resources Branch	
Signature		Rolli	& Eno		Date		February 3,	2004

Indian and Northern Affairs Standard Recommendations:

Legislative Authority

Indian and Northern Affairs Canada (INAC), Water Resources Division, derives its regulatory mandate from the *DIAND Act*, and the *Nunavut Waters and Nunavut Surface Rights Tribunals Act*. The latter Act essentially forbids the deposition of a waste into Nunavut waters, except under certain regulated terms and conditions dictated (as in a Water Licence) by the Nunavut Water Board. A waste is defined as any substance which, when deposited into the water, will alter its quality to the detriment of fish, animals, humans or plants.

In reviewing land use and other permit applications, INAC Water Resources Division observes, in addition to our own legislation, other pertinent Federal Acts and Regulations such as the *Fisheries Act*, the attendant *Metal Mining Effluent Regulations* and the *Canadian Environmental Protection Act* ("CEPA").

In addition to Federal Acts and Regulations, the Government of the Northwest Territories has developed a number of very useful regulations and guidelines under its *Environmental Protection Act (s)* and which was subsequently adopted by the Government of Nunavut in 199. INAC believes that these guidelines are quite helpful in assisting a proponent to remain in compliance with the overall spirit and intent of the various pieces of environmental legislation that govern development activities in Nunavut. These include but are not restricted to: Spill Planning and Reporting Regulations; Environmental Guideline for the General Management of Hazardous Waste; Environmental Guideline for Industrial Projects on Commissioner's Lands; Environmental Guideline for Industrial Waste Discharges and the Environmental Guideline for Site Remediation. INAC advises the proponent to contact the Government of Nunavut, Department of Sustainable Development directly for further details.

Spill Contingency Plan

The applicant should have a contingency plan for responding to chemical, petroleum and other spills which might occur during the proposed activity. The plan should include a list of available spill response equipment and the names of trained personnel who will be on-site and available in the case of a spill.

Fuel Storage

To prevent spreading in the event of a spill, fuel stored in drums should be located, whenever practical, in a natural depression a minimum distance of 30 metres from all streams, preferably in an area of low permeability. All fuel storage containers should be situated in a manner that allows easy access and removal of containers in the event of leaks or spills. Large fuel caches in excess of 20 drums, should be inspected daily. Drums should preferably and if practical, be stored on pallets to prevent the bottoms from rusting out.

Chemical Storage

All chemicals should be stored in a safe and chemically-compatible manner a minimum of 90 feet from all bodies of water. The applicant should be required to remove unused chemicals for reuse or disposal to an approved site using methods approved by the Land Use Inspector. Material safety data sheets (MSDS) should be provided for each chemical and be posted in a central location; accessible by all camp personnel. Camp personnel should be conversant in the handling of these chemicals as well as able to deal with any accidents or spills.

Location of Hazardous Materials

Hazardous materials stored on-site should be marked so they will be visible under all conditions, in all seasons. This recommendation is intended to help prevent possible injuries to camp personnel and/or damage to the containers. Unless otherwise specified by the land use inspector or licence -issuing agency, all hazardous materials should be removed from the site upon completion of the activity.

Waste Oil/Waste Fuel Disposal

Waste oil and waste fuel should be removed and returned for recycling when the land use activity is completed. Alternative methods of disposal that provide an equivalent level of environmental protection will be considered on a case-by-case basis.

Used Drums

Used fuel and oil drums should be removed from the site, returned for deposit, or reused.

Contaminated Soil

Soil contaminated by fuel (e.g., soils under an old storage tank) should be treated on site or removed to an approved disposal site and replaced with new soil.

Winter Roads

Existing winter road routes and trails should be used whenever possible, to avoid unnecessary land clearing and disruption of site hydrology.

Drill Sumps

The sumps should only be used for inert drilling fluids, not any other materials or substances. All sumps should be constructed of materials that normally exhibit low permeability and in a manner that prevents intrusion of runoff water.

All drilling waste should be contained in the drill waste sump at a minimum of one (1) metre below the active layer of permafrost. In the event the initial sumps do not consist of low permeability materials, the proponent should construct an offsite sump which fulfills the aforementioned requirements.

Drilling fluids from the sumps should not be permitted to enter into any waters or onto any land surface where the drilling fluids may enter any waters.

If during the drilling, an artesian aquifer is encountered producing water flowing at the surface, the proponent should immediately notify the licencing/permitting agency. Samples of the water may be required for analysis.

Garbage Disposal

Garbage should be removed from the camp periodically; alternatively, INAC is willing to review any proposal which provides acceptable levels of environmental protection and meets current best practices.

The aforementioned comments are a brief outline of what INAC suggests that a proponent should be implementing to mitigate any damage or alterations to the environment during the course of their proposed activities. In terms of legal compliance, the proponent is referred to the various Federal and Territorial Acts mentioned earlier in this document and which directly or indirectly govern land and water use activities in Nunavut.

Indian and Northern Affairs Canada Spill Contingency Plan Review

Churchill Diamond Property, Nunavut. 4579 Nunavut Ltd.

Comments:

Overall, the proponent appears to have put a good effort into developing their spill plan, however, the reviewer has the following comments and suggestions to offer:

- 1. The plan does not indicate the name and in particular, the 24 hour contact number of the individual preferably someone in the immediate area such as a site supervisor in charge and/or someone who has the authority to activate and execute a comprehensive spill plan. This information needs to be provided for the benefit of environmental inspectors who may be required to oversee a cleanup operation.
- 2. The proponent has not provided a detailed inventory of the contaminants (fuel, chemicals) in their control and that are associated with this project.
- 3. It should be noted that DIAND does not have a spill line. The NWT spill line is a joint cooperative operation underwritten by all of the regulatory agencies in the NWT/Nunavut.
- 4. The proponent should update their list of government contacts for the Territorial and Federal government agencies that are listed in their plan; all of whom have offices in Nunavut.
 - The Government of the Northwest Territories Environmental Protection Service no longer has regulatory authority in Nunavut. The Department of Sustainable Development (DSD), Government of Nunavut assumed this role as of April 1st 1999. DSD is headquartered in Iqaluit.
 - Environment Canada, Fisheries and Oceans (DFO) and DIAND have regional offices in Igaluit, Nunavut.
- 5. Further to # 2, above, it should be understood that regulatory agencies such as INAC, Environment Canada, DFO and the Department of Sustainable Development do not provide spill response services, however, they can review the final spill plan to assess its adequacy and provide advice at that time. Regulatory agencies do not generally provide prescriptive advice with respect to spill cleanup operations, however, they can, and have in the past, provided information and advice in emergency situations. Nevertheless these agencies should not be included in a spill plan as routine advisors. It is the proponent's responsibility to develop a complete spill plan which addresses the steps to be taken from the start of the spill, up to and including the final clean up and disposal of recovered and contaminated materials. The role of regulatory agencies is to approve or disprove the proponent's intended plan of action.
- 6. If possible, the proponent should provide the geographic coordinates in both UTM and Latitude/Longitude format of the proposed drill sites and temporary campsites.
- 7. The proponent has indicated that the drilling operations will be conducted using Rankin Inlet as the base station, however, if the proponent intends to set up a seasonal base camp outside of Rankin Inlet, then the proponent should provide a detailed site map of the area, identifying the location of structures, contaminants storage areas, likely pathways of contaminant flow (in the event of a spill) potentially sensitive areas, such as water bodies, and general topography. The site map should be included with the spill plan.
- 8. The proponent has indicated that their personnel have received spill response training, however, the scope and nature of that training should be included with the spill plan. It is strongly recommended that personnel be provided with basic spill response training; preferably the type of training which includes practical, hands-on exercises.

- 9. The proponent should provide a complete inventory of spill clean up equipment that will be available for use at each site. This has not been provided in the spill plan.
- 10. While the reviewer appreciates the details provided in the plan, it is suggested that the proponent obtain a copy of the *Guide to the Spill Contingency Planning and Reporting Regulations*. This guide was originally developed by Environmental Protection Service of the Government of the Northwest Territories to complement their *Spill Contingency Planning and Reporting Regulations*; both of which have also been adopted by the Government of Nunavut. The proponent is also directed to a document developed by Environment Canada's Yellowknife office in 1990 entitled: "*Guidelines for the Preparation of Hazardous Material Spill Contingency Plans*". The proponent may find these guidelines to be helpful in fine tuning their spill plan.
- 11. The reviewer is willing to address any questions that the proponent may have regarding spill contingency plans.

Review Date: February 3, 2004 Reviewer: Robert Eno

Robert Eno