



Nunavut Regional Office  
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Your file - Votre référence

**NWB2NAN**

Our file - Notre référence

**9545-2-2-NAN-G**

16 February 2004

Dear Ms. Beaulieu

**Re: Dunsmuir Ventures Ltd. – Nanuq Project – Amendment - Type B Licence**

Thank you for providing INAC with an opportunity to review this application. I previously reviewed the proponent's A & R and Spill Response Plan on November 14, 2003. I compared my original comments with their amended plans and have the following comments to offer:

Abandonment and Restoration Plan:

The proponent does not appear to have changed their plan with respect to using a pit to dispose of garbage and, of significance to this application, flammable liquids. I want to reiterate that waste flammable liquids should not be incinerated/open burned in a fire pit as there is the possibility that these liquids will seep into the ground.

Spill Contingency Plan

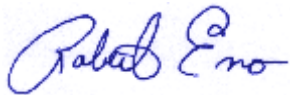
I note that the amended plan is much improved. The key shortcomings that were identified in my review of November 14, 2003 have largely been addressed to my satisfaction. There are however, a few minor comments that I would like to add here:

- Please note, for future reference, that a spill plan should be treated as a separate, stand-alone document. It should be kept in mind that while the responsible regulatory agencies keep copies of spill plans, they may not necessarily have the accompanying documents, such as the exploration permit application. For this reason, any useful information provided in the body of the application, such as the geographic coordinates of the camp, number of personnel etc., should also be included in a spill plan.
- The proponent has indicated that their personnel will receive spill response training. A description of the training should be included with the spill plan (such as a course outline, duration of training etc.). This information is useful to regulatory agencies in that it allows them to determine how well-prepared a proponent is to deal with accidental spills. Proper training of the spill response crew is one of the key elements of an effective and efficient response. It is strongly recommended that personnel be provided with spill response training that incorporates practical, hands-on exercises in addition to classroom/theory.

### General Comments

Overall, I am satisfied that the proponent has satisfactorily addressed the possible environmental impacts associated with this project and has further provided fairly detailed explanations as to how these impacts are to be mitigated.

I have included with this letter, a copy of INAC's Standard Recommendations. The proponent should make every attempt to follow these recommendations; where applicable.



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## **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 Territorial governments in Nunavut and the NWT have adopted a number of very useful regulations and guidelines under their respective Environmental Protection Act (s). INAC believes that these Acts, Regulations and in particular, guidelines, are quite helpful in assisting proponents to tailor their projects in such a manner that ensures that they will be in compliance with the overall spirit and intent of the various pieces of environmental legislation that govern development activities in Nunavut. These regulations and guidelines 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 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, but not be restricted to, 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. The Government of the Northwest Territories' Environmental Protection Service has developed a very useful spill planning and reporting guideline to complement their *Spill Contingency Planning and Reporting Regulations*; both of which have also been adopted by the Government of Nunavut. Environment Canada has also developed their own *Guidelines for the Preparation of Hazardous Material Spill Contingency Plans*. The proponent may find these guidelines to be helpful in developing a spill plan.

### **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 meters 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 inspection as well as removal of containers in the event of leaks or spills. Large fuel caches in excess of 20 drums, should be inspected daily. Additionally, the proponent is strongly advised to keep a written log of the inspections. For long term storage (> 6 months), it is strongly recommended that drummed fuel 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 30 meters 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 should 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 be able to deal with any accidents or spills involving that chemical.

## **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 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 or destruction 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 from under a old storage tanks) should be treated on site, such as by landfarming or thermal desorption, or it should be removed to an approved disposal facility 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.
- Speed on winter roads should not exceed: 30 km/hr for fully loaded vehicles; 50 km/hour for empty vehicles.
- Trucks should carry at least 10 square meters of polyethylene material (for lining a trench or depression), a spark-proof shovel & oil absorbent blankets or squares.
- Trucks should carry reliable radio and/or satellite phone communications.
- Trucks should carry sufficient response equipment for the safe removal of fuel from an overturned tanker (such as hatch cone covers, hoses etc).
- In general, the proponent should be fully prepared to deal with spills resulting from vehicle accidents along the road in a timely and efficient manner.

## **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.

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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.