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Department of Environment

Ministère de l'Environnement

Oct. 19, 2007

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board

via Email to: licensing@nunavutwaterboard.org

RE: NWB FILE # 2BE-TAK0204 – TAHERA DIAMOND CORP. – TAKAJUAK PROJECT

Dear Ms. Beaulieu:

The Government of Nunavut, Department of Environment (DOE) has reviewed the water license renewal application for the Takajuak project, from the Tahera Diamond Corp. for diamond exploration, approximately 160 km southeast of Kugluktuk. Based on the *Environmental Protection Act*, the DOE has the following comments to make regarding incineration, spill contingency, and abandonment & restoration.

A. CAMP INCINERATOR

The Government of Nunavut is a signatory to the *Canada-Wide Standards for Dioxins and Furans*, and the *Canada-Wide Standards for Mercury Emissions*. The DOE therefore has the following comments to make.

For camps of 10 to 50 people, the proponent shall apply appropriate technologies to ensure complete combustion of wastes, and the use of a dual-chamber forced-air incinerator is recommended. The use of burn barrels for incineration as indicated in page 6 of the *Exploration/ Remote Camp Supplementary Questionnaire*, is unacceptable. The proponent must make determined efforts to achieve compliance with the CWS. Efforts should include the implementation of a comprehensive waste management strategy (especially waste segregation) that is designed to reduce and control the volumes of wastes produced, transported, and disposed of.

Waste wood treated with preservatives such as creosote, pentachlorophenol or heavy metal solutions should not be burned. Additionally, plastics, electrical wire, asbestos and building demolition wastes (except clean wood) are wastes likely to produce dioxins and furans when burned and should be excluded from incineration.

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B. SPILL CONTINGENCY PLAN

Based on the DOE's *Spill Contingency Planning and Reporting Regulations,* and *Spill Reporting in Nunavut: a Guide to the New Regulations*, the DOE has the following comments to make:

- Methodology regarding fuel/chemical storage should be discussed in the spill plan; the following outlines some recommendations:
    - 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 90 feet 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.
    - Caches of drummed fuel and chemicals are particularly subject to spillage because they often become buried in snowdrifts and are thus vulnerable to damage from heavy equipment; most commonly, front end loaders. Furthermore, once buried, leaking containers cannot be detected until after the snow melts, by which time, most, if not all, of the spilled material has escaped off site with the spring melt. Drum cache locations should be clearly defined and marked so that they are visible even during the winter season.
    - It is advised to keep a stock of 55 gallon "overpack" or "salvage" drums. These afford a safe, effective and rapid means for containing leaking drums.
    - It 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.

C. ABANDONMENT & RESTORATION

To ensure proper reclamation of the project site after closure, the DOE recommends the following:

- Drill holes should be backfilled or capped at the end of project. The drill sumps should only be used for inert drilling fluids, not any other materials or substances. The sumps should also be properly closed out at the end of a project.

- Final inspections of the entire site should be conducted by the proponent and lead agency to make sure that all areas of the site have been reclaimed as much as possible to its previous condition. Soil samples and pictures before and after the project would make this process easy on the proponent and leading agencies involved in determining areas of concern.

The DOE thanks the NWB for the opportunity to provide comments on the Takajuak project. Please contact us if you have further questions.

Yours sincerely,

Original signed by

Helen Yeh
Environmental Assessment Coordinator
Department of Environment
Government of Nunavut