



**Environment Environnement
Canada Canada**

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Our file: 4703 001

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Via Email at licensing@nwb.nunavut.ca

RE: NWB2HEE – Diamondex Resources Ltd. – Heeqou Property Renewal

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

Diamondex Resources Ltd. is proposing to conduct a mineral exploration program at the Heeqou Property, located near Takiyuak Lake, NU. The proposed program would consist of glacial till collection, ground geophysical surveys and mapping, as well as diamond drilling. A temporary 14 person camp will be reestablished at the previous campsite.

The application lists two different start dates for the project – either February or March, 2005. Environment Canada would like to remind the proponent that all necessary permits and approvals must be received prior to the commencement of any work.

Environment Canada recommends that the following conditions be applied throughout all stages of the project:

- The proponent shall not deposit, nor permit the deposit of any fuel, drill cuttings, chemicals, wastes or sediment into any water body. According to the Fisheries Act, Section 36(3), the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.
- 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 demonstrated to be non-toxic.
- For "on-ice" drilling, 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 Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100mg/L).
- Land based drilling should not occur within 30 m of the high water mark of any water body. Drilling wastes from land based drilling shall be disposed of in a sump such that the contents do not enter any water body.
- If CaCl is to be used as a drilling additive in association with this project, EC would like to inform the proponent that the *Canadian Environmental Protection Act* has recently listed CaCl as a toxic substance. The proponent shall therefore ensure that all sumps containing CaCl are properly constructed and located in such a manner as to ensure that the contents will not enter any water



body.

- If an artesian flow is encountered the drill hole shall be immediately plugged and permanently sealed.
- The proponent shall not erect camps or store material on the surface ice of streams or lakes, except for immediate use.
- When storing barreled fuel on location, EC recommends the use of secondary containment, such as self-supporting insta-berms, rather than relying on natural depressions. All fuel caches shall be located above the high water mark of any definable water body and in such a manner as to prevent the contents from entering any water body frequented by fish.
- All sumps, including those for camp sewage, greywater, and drill cuttings, shall be located above the high water mark of any water body and in such a manner as to prevent the contents from entering any water frequented by fish, irrespective of the actual distance from the water. Further, all sumps shall be backfilled at the end of each field season, and contoured to match the existing landscape.
- The proponent shall ensure that all hazardous and/or non-combustible materials, including waste oils, receive proper treatment and disposal at an approved facility.
- Environment Canada recommends the use of an approved incinerator for the disposal of combustible camp wastes.
- The Spill Plan associated with the application should include the following information:
 - Contact information (i.e. telephone numbers) for personnel who should be contacted in the event of a spill.
 - A map of the camp facilities, including the location of all fuel caches and spill kits.
 - A list of the contents of each spill kit.
 - Information regarding where additional manpower and spill response equipment can be obtained if required.
 - The contact spill response number for Environment Canada should be (867) 920-5131 (the 24 –hour pager monitored by Environment Canada Emergency and Enforcement officers), not (867) 669-4700. Additionally the EC contact number for Iqaluit should be listed as (867) 975-4644.
 - Section 5.1 “Initial Action” of the Spill Plan seems to be missing some pages. The information regarding specific instructions to be followed to respond to various types of spills was not uploaded to the Nunavut ftp site.
 - Drip pans, or other similar preventative measures, should be employed when refueling equipment on site.
 - **All spills** are to be documented and reported to the NWT 24 hour Spill Line at (867) 920-8130.
- The Abandonment and Restoration Plan included with the application should indicate that after any combustible material on site is burned (i.e. tent frames), the ashes should be raked for non-combustible materials. Any non-combustible material shall be disposed of properly.

If there are any changes in the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 975-4639 or by email at colette.spagnuolo@ec.gc.ca.

Yours truly,

Original signed by

Colette Spagnuolo
Environmental Assessment / Contaminated Sites Specialist

cc: (Stephen Harbicht, Head, Assessment and Monitoring, Environment Canada, Yellowknife)