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April 13, 2004

Phyllis Beaulieu Licensing Administrator Nunavut Water Board P.O. Box 119 Gjoa Haven, NU X0B 1J0

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Via Email at licensing@nwb.nunavut.ca

## **RE**: NWB2ANI – Strongbow Resources Inc. – Anialik River Project

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*.

Strongbow Resources Inc. is proposing to conduct a mineral exploration program near the Anialik River, approximately 180 km southeast of Kugluktuk, NU. The proposed program will possibly include three phases. Phase I will run from mid-May until spring breakup, and will involve mainly airbourne geophysical surveys. Phase II will be conducted during the summer months and will involve geological mapping, prospecting, and ground truthing for gold and base metal deposits. Phase II may also include limited ground geophysics and till sampling, as well as limited amounts of diamond exploration. Phase III will involve further ground geophysical surveys and limited exploration drilling during the spring of 2005. Two camps will be established during 2004 to support the Phase II program, located at Rush Lake and/or Mistake Lake. Only one camp will be operational at any given time.

In order to facilitate the review of this application, EC requires the following information:

 Once finalized, EC requests that a map detailing the location of the drill holes be submitted.

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, 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.
- Environment Canada 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.

- 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 an artesian flow is encountered, the drill hole shall be immediately plugged and permanently sealed.
- When storing barrelled fuel at a location, EC recommends the use secondary containment, such as self-supporting insta-berms. Also, all fuel caches 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 body frequented by fish.
- All sumps (sewage, grey water and drilling muds) 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. Further, all sumps shall be backfilled upon completion of each field season and contoured to match the surrounding landscape.
- The proponent shall not store materials or erect camps on the surface ice of lakes or streams, except that which is for immediate use
- Environment Canada recommends the use of an approved incinerator for the disposal of combustible camp wastes.
- The proponent shall ensure that any non-combustible waste is disposed of appropriately at an approved facility.
- The proponent shall ensure that any hazardous materials, including waste oil, receive proper treatment and disposal at an approved facility.

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.meloche@ec.gc.ca.

Yours truly,

## Original signed by

Colette Meloche Environmental Assessment Specialist

cc: (Mike Fournier, Northern Environmental Assessment Coordinator, Environment Canada, Yellowknife)