

Environmental Assessment North
Environmental Protection Operations (EPO)
Qimugjuk Building 969
PO Box 1870
Iqaluit, NU X0A 0H0
Tel: (867) 975-4631
Fax: (867) 975-4645

24 May 2012

EC File: 4782 033
NWB File: 3BM-CAM0914

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
PO Box 119
Gjoa Haven, NU X0B 1J0

Via email: licensing@nunavutwaterboard.org

RE: 120509 3BM-CAM0914 Modification Upgrades to Existing Water Intake Structure

Environment Canada (EC) has reviewed the proposal to modify the existing water intake structure as submitted to the Nunavut Water Board (NWB). The following specialist advice has been provided pursuant to the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

The Hamlet of Cambridge Bay is proposing, under water license 3BM-CAM0914, to upgrade the water intake pumphouse and truckfill building. The new facility will replace the aging existing intake structure and will include new dual intake lines which will be located approximately 140m offshore at a depth of approximately 5m below surface. The water source will continue to be Water Lake with an estimated withdrawal of 203,117 litres/day. The construction is scheduled to occur in July 2012.

Upon review of the proposed upgrade information, EC provides the following comments for the NWB's consideration:

- The proponent shall not deposit, nor permit the deposit of chemicals, sediment, wastes, or fuels associated with the project 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 deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.
- Erosion control measures are not mentioned by the proponent in the information provided. EC suggests that sediment/erosion control measures, including placement of clean rip rap, re-vegetation with natural flora and the use of silt screen/fencing, be used during construction activities. Additional sediment/erosion control measures (e.g. matting, straw bales) may be required in conjunction with silt screen/fencing if the silt screen/fencing fails or is insufficient. EC recommends that the control measures be monitored daily to ensure water quality is protected.
- If fuel is to be stored and used on site during upgrade activities, EC recommends that a

Spill Contingency Plan be in place, outlining a clear path of response in the event of a spill and address the key areas of prevention, preparedness, response and recovery. EC recommends the use of secondary containment such as self-supporting insta-berms. Fuel caches shall be located above the high water mark of any waterbody and in such a manner as to prevent the contents from entering any waterbody frequented by fish. Refueling shall not take place below the high water mark of any waterbody.

- A spill kit, including shovels, barrels, absorbents, etc. should be readily available at all locations where fuel is being stored or transferred in order to provide immediate response in the event of a spill and should accommodate 110% of the capacity of the largest fuel storage container.
- Spills are to be documented and reported to the NWT/NU 24 hour Spill Line at (867)920-8130. EC recommends that all releases of harmful substances, regardless of quantity, are immediately reported where the release:
 - is near or into a water body;
 - is near or into a designated sensitive environment or sensitive wildlife habitat;
 - poses an imminent threat to human health or safety; or,
 - poses an imminent threat to a listed species at risk or its critical habitat.

If there are any changes to the proposed upgrades, EC should be notified as further review may be necessary. Please do not hesitate to contact the undersigned with any questions or comments with regards to the foregoing at (867) 975-4631 or by email at Paula.C.Smith@ec.gc.ca.

Yours truly,



Paula C. Smith
Environmental Assessment Coordinator

cc: Carey Ogilvie (Head, Environmental Assessment-North, EPO, Yellowknife, NT)
Allison Dunn (Sr. Environmental Assessment Coordinator, EPO, Iqaluit, NU)
Ron Bujold (Environmental Assessment Officer, EPO, Yellowknife, NT)