Environment Canada Prairie and Northern Region Nova Plaza P.O. Box 2310 Yellowknife, NT X1A 2P7

January 15th, 2010

Richard Dwyer Licensing Administrator Nunavut Water Board P.O. Box 119 Gjoa Haven, NU X0B 1J0 Your File: 3BM-PEL0712 Our File: 4782 070

Re: Hamlet of Kugaaruk - Plan Submission Review

- O&M Plan for Sewage Facility
- O&M Plan for Solid Waste Facility
- QA/QC Plan incorporated in O&M Plans
- Spill Contingency Plan for Sewage and Solid Waste Sites

On behalf of Environment Canada (EC), I have reviewed the information submitted to the Nunavut Water Board in compliance with Part F, Item 1(iii) and Item 2, as well as Part H, Item 10 of the terms and conditions in Water Licence 3BM-PEL0712. The following specialist advice has been provided pursuant to EC's mandated responsibilities arising from the *Canadian Environmental Protection Act*, and Section 36(3) of the *Fisheries Act*.

In general, the Operation and Maintenance (O&M) Plans contained sufficient information and guidance for proper operation and management of the Sewage and Solid Waste Sites, requiring only a few recommendations as detailed below. However, the Spill Contingency Plan is lacking some essential information to show adequate prevention, preparedness, response and recovery as it relates to spills.

O&M Plan for Sewage Facility

Section 3.2.3 Sewage Sludge Management Plan

This section provides appropriate guidance on frequency of sludge sampling and depth measurements (every 5 years) and action required when the sludge blanket becomes too thick or contaminant concentrations become too high. Environment Canada recommends adding information on methods used to sample the sludge and to perform sludge depth measurements.

O&M Plan for Solid Waste Facility

Section 3.2.4 Waste Barrels

Please remove the following sentence from the document as it is incorrect: "Please contact Environment Canada to order the proper storage and crating containers."

QA/QC Plan incorporated in O&M Plans

EC is satisfied with the content and level of detail on QA/QC measures provided in the O&M plans for the Sewage and Solid Waste Sites.

Spill Contingency Plan

Please note the new CEPA Storage Tank System for Petroleum Products and Allied Petroleum Products Regulations that came into force on June 12, 2008. These regulations apply to both



outside, aboveground and underground storage tank systems (including the piping and other tank associated equipment) under federal jurisdiction containing petroleum and allied petroleum products that have a capacity greater than 230 litres. This includes tanks located on federal or Aboriginal lands. Exceptions are pressurized tanks, mobile tanks, tanks regulated by the National Energy Board, and outdoor, aboveground storage tank systems that have a total combined capacity of 2500 litres or less and are connected to a heating appliance or emergency generator. All storage tank system owners must identify their tank systems to EC and installation of new systems must comply with the regulation's design requirements. Further information on these regulations can be found at www.ec.gc.ca/st-rs.

Section 2.2, Response Organization and Communication Lines

EC recommends adding measures to notify members of the public who may be adversely affected by a spill emergency.

Section 3.2, Potential Environmental Impacts of Spill

- Potential impacts of accidents and malfunctions that may occur should be identified.
 Incidents to consider are spills of chemical products into groundwater and potable water supply, explosions, fire and transportation accidents.
- Antifreeze is listed in Table 2 as being a hazardous material on-site, therefore the environmental impact of an antifreeze spill should be discussed in this section.

Section 3.3.5, Procedure for Transferring, Storing and Managing Spill Related Wastes

- Locations of disposal sites approved to accept wastes and any means of storage prior to disposal should be provided here. EC notes that landfarming is covered in section 3.3.6, but other disposal and storage means are required for wastes that cannot be landfarmed.
- Waste tracking should be implemented to ensure proper use, storage, and management of materials.

Section 3.3.7, Procedures for Restoring Affected Areas

This section does not provide any procedural details. EC recommends providing a description of the measures that will be used to restore affected areas after a spill.

Section 4.2 Off-site Resources

- The contact for EC should be replaced with:
 Environment Canada, Emergency Duty Officer 1-866-845-6037
- Also the spill line should be NT-NU 24-hour Spill Line (867) 920-8130

Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 669-4715 or by email at mary.kelly@ec.gc.ca

Yours truly,

Mary Kelly
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