February 26, 1998 Mr. Leo Caouette CWMS Trainer Hamlet of Baker Lake, Baker Lake, NT X0E 0A0

RE: BAKER LAKE WATER QUALITY STUDY

Dear Mr. Caouette:

The Nunavut Water Board has reviewed the "Baker Lake Water Quality Study" required under Part D, Item 2 & 3 of the Hamlet's Water Licence N6L3-1191. Based on the objectives set out in the Terms of Reference attached to the licence, the following conclusions were reached:

- i. The Guidelines for Canadian Drinking Water Quality were never exceeded therefore there does not appear to be health risks associated with the communities drinking water supply;
- ii. The "Surveillance Network Program" monitoring station 1191-2 described as the Run-off below the Waste Disposal Facilities was defined as "just prior to the inlet to Airplane Lake, prior to the culvert". The Licensee is required to comply with the SNP attached to the licence;
- iii. It is unclear based on the results of the study the level of contamination between Station C and D, therefore to further evaluate metal levels to determine if toxicity testing in Airplane Lake should be performed to ensure protection of Freshwater Aquatic Life. The NWB is requesting that the Hamlet install an additional SNP station at the outlet of Airplane Lake. The SNP shall be amended to include Station 1191-3: Outlet of Airplane Lake. Please attach the enclosed amended SNP to your licence.
- iv. The degree of contamination from the waste disposal sites indicated elevated levels of phenols, Total Copper, Total Iron and Total Lead. The exact origins of contaminants is still unknown. As such the Licensee is directed to submit the Operation and Maintenance plan for the Waste Disposal Facilities as soon as possible. The plan should address the management of hazardous wastes and leachate management for the solid waste facilities, clearly identifying drainage paths from each disposal site (abandoned and current). Further evaluation could be conducted on the drainage from each disposal site.

The "Baker Lake Water Quality Study" is approved as submitted. The NWB requested that the above conditions be implemented as soon as possible. Should you require clarification please do not hesitate to contact me 867-360-6338.

Sincerely,

Dionne Filiatrault Technical Advisor

CC. DIAND Water Resources

SURVEILLANCE NETWORK PROGRAM AMENDMENT NO. 1

The Surveillance Network Program shall be amended to include:

A	Location	of Su	rveillance	Stations
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Station Number Description

1191-3 Outlet of Airplane Lake at waters edge

B <u>Sampling and Analysis Requirements</u>

5. Water at station Number 1191-3 shall be sampled annually, during periods of open water and analyzed for the following parameters:

Calcium Conductivity
Magnesium Oil and Grease

Potasium Sodium

SulphateTotal CadmiumTotal ChromiumTotal CopperTotal IronTotal Lead

Total Mercury Total Nickel Total Organic Carbon Total Phenols

Total Zinc

This amendment is effective February 27, 1998:

Philippe di Pizzo Executive Director