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## Nunalingni Kavamatkunillu Pivikhaqautikkut Department of Community and Government Services Ministère des Services communautaires et gouvernementaux

Nunavut Water Board PO Box 119 GJOA HAVEN NU X0B 1J0 FAX No. 1+ 867 360 6369

Attention Dionne Filiatrault, P.Eng Executive director

Dear Ms. Filiatrault,

RE: Plan Of Action For Inspector's Direction Dated July 23, 2008 for Rankin Inlet

Re: Fuel Spill at Nippisar Lake Pumphouse Rankin Inlet, Nunavut

On June 30, 2008, a fuel spill occurred at the Nippisar Lake Pumphouse in Rankin Inlet.

Apparently youths attempting to climb on the roof of the pumphouse pulled down the fuel tank return line, and allowed the escape of a few hundreds litres of fuel oil into the sand and gravel surface next to the pumphouse. The fuel flowed overland away from the lake and seeped into the parking lot in front of the pumphouse. A small amount reached the shore of the lake.

An NT-NU Spill Report was prepared by CGS staff and forwarded to the GN Spill Report Centre.

Emergency response consisted of:

- Strongly repairing the pipe attachment to the building to avoid a repeat event
- · Use of a floater boom and absorbent mats in the lake
- Excavation of the impacted soil and containing the material in bags
- · Excavation continued until all evidence of fuel oil was removed
- Monitoring wells were installed
- EBA Engineering Ltd. arranged the removal and disposal of the impacted soil at the Hamlet landfill
- EBA collected confirmatory samples.

The site was inspected by Nuna Burnside Engineering and Environmental staff on September 10, 2008.

The inspection found no evidence of fuel oil impacts in the soil or lake water. Discussions with the plant operator Arsene Siksik indicated:

- The fuel oil sheen at the lake shore was contained and cleaned up
- The soil was excavated down to permafrost and apparently all the impacted area was removed
- There was never any indication of a threat to the submerged offshore intake.

A report entitled "Nippisar Lake Fuel Spill Assessment and Remediation, Rankin Inlet, Nunavut", dated September 10, 2008 was provided by EBA Engineering Consultants Ltd.



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The conclusions and recommendations are as follows:

"Based on the results of the project, impacts from the diesel spill at the Nippisar Lake pumphouse have been remediated and contained. Lake and drinking water samples indicate impacts to the water from the spill are negligible. EBA recommends the following actions:

- Seasonal sampling of the installed groundwater monitoring wells should be conducted to determine the effectiveness of the geomembrane containment skirt in containing impacts below the pumphouse. The wells should be developed and sampled for laboratory analysis of hydrocarbon parameters, and compared to federal and Alberta guidelines. If samples indicate exceedances of adopted criteria, monitoring wells should be pumped and recovered water treated or disposed of in accordance with applicable guidelines
- Impacted soils from the excavation activities, which were placed in the landfill, should be relocated to a controlled environment to prevent further leaching of impacts
- Source water protection options, including secondary containment for all components of fuel systems, should be considered for Nippisar Lake".

At this time, the GN feels there is not potential threat to the water quality of the lake from the fuel spill, and is evaluating an implementation plan for the recommendations provided.

Kindly contact Bryan Purdy at 1 8676458159 if questions of clarification arise.

Yours truly
Ralph Ruediger
Regional Director Kivalliq region
Community and Government Services