Repulse Bay Fuel Storage Facility Upgrade
Tank Hydrostatic Testing Procedure

1- Site of local area identifying areas of impact.
The area of impact is the Repulse Bay Fuel Storage Facility see TANK FARM on photo in annex 'C'.

2- Location of water source
A pond located approximately 0.5 km North of tank farm on the right hand side of the road going north. The pond has no aquatic life as per report from George 'Jianguo' Zhang (see annex 'A' and 'B' for report and George resume showing his qualifications). Annex 'C' is showing a photo of the pond.

3-Total quantity of water to be withdrawn from source.
3200 cubic meters at a rate of 600cum/day

4-Method to minimize volumes of water sources.
The same water will be pumped from tank to tank.

5-Method of monitoring volumes of fresh water sources.
The water will be pumped into known tank volumes.

6-Procedure, amount, method of disposal and location of waste and sludge to be disposed of.
Prior to start filling, the tanks will be completely drained and cleaned using a pressure washer. The dirty water used during the pressure washing will be stored in drums and considered as sludge. Hydrophobic pads and floor dry used to clean the bottom of the tanks will be stored in drums and also considered as sludge. We expect to have approximately 10 to 12 drums of waste (sludge). The drums will be turned over to the Repulse Bay Hamlet for storage in their hazardous storage site.

Pond water sample will be sent to Enviro-Test in Winnipeg for analysis. The first tank will be filled using the pond water. The water will remain in the tank for at least 24 hours and checked for leaks. The water will then be transferred into a second tank and the leak test repeated and so on until the five tanks are tested. If more water is required, the water will be taken from the Pond. Prior to dispose the water, sample from the last tank tested will be taken and sent to Enviro-Test in Winnipeg for analysis. The following test will be done on all samples from the pond and from the tank:

- Total Dissolved Solid
- Total Organic Carbon
- Metal Scan
- BTEX, TVH and THE

The results from the samples will be sent to Nunavut Water Board for approval

If the results are good, the water will be discharged back into the pond going through a solid waste collector. See drawing of collector in annex 'E'.

7- Provide a spill contingency action plan.

7.1 Introduction

The purpose of spill contingency action plan is to provide a plan of action for every foreseeable spill event in the performance of the hydrostatic testing of all new and existing fuel and gasoline storage tanks for the Repulse Bay Fuel Storage Facility Upgrade project.

7.2 Initial Action

(a) Be alert and consider your safety first. If possible, identify the product spilled
(b) Assess the hazard to persons in the vicinity of the spill
(c) Assess whether the spill can be readily stopped or brought under control;
(d) If safe to do so, and if possible, try to stop the flow of material;
(e) Report the spill without delay to the Site Superintendent. The Site Superintendent will ensure that government is notified at the same time by the 24 Hour Spill Report Line (867) 920-8130.
(f) Resume any effective action to contain, clean up , or stop the flow of the spilled product.

7.3 Reporting Procedure

All spills or potential spills of petroleum products or other hazardous materials must be reported to the 24-hour Spill Report Line to ensure that and investigation may be undertaken by the appropriate government authority.

SPILL REPORTING PROCEDURE

1. Fill out "SPILL REPORT" form as completely as possible before making the report
2. Report IMMEDIATELY to Yellowknife using the 24 –hour Spill Report

   24-HOUR SPILL REPORT LINE (867) 920-8130

3. Follow up immediately by sending a copy of the Spill Report.

   Fax: (867) 873-6924

   NOTE: Telephone calls can be made collect by informing the Operator that you wish to report a spill.

4. RCMP communications may be used if other means are not available

Additional Information or Assistant:

-Earle G. Baddaloo Director; Environmental Protection
Department of Environment,
P.O. Box 1000 Station 1360
IQALUIT, NU
X0A 0H0
Phone: (867) 975-7729 Fax: (867) 975-7739
š: ebaddaloo@gov.nu.ca

2 -Alain Chouinard, Environmental Protection Officer for Kivalliq
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P.O. Box 120
ARVIAT, NU
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3 -Joani Kringayark , Wildlife Officer
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P.O. Box 59
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Phone: (867) 462-4002 Fax: (867) 462-4400
jkringayark@gov.nu.ca

4 -Hamlet of Repulse Bay
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5. **INAC**

Email:
Environment Manager
nunavutenvironment@ainc-inac.gc.ca
Nunavut Projects Public Registry
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Environment Manager
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Mail:
INAC-NRO – Environment Division
Building 918 on Nunavut Drive
PO Box 100
Iqaluit NU X0A 0H0

And for Environment Canada:

Nunavut Office: 867-975-4636 (general)

Nunavut Office: 867-975-4644 (Protection services)

Alain Chouinard

7.4 Action Plan
The following are the potential spills and remedial actions:

- **Drum of sludge tip over and spill sludge on the ground**: As soon as noticed, the three men hydrostatic crew will clean the spill using shovels, hydrophobic pads and/or floor dry and put them back in drums.
- **The water during or after filling tanks, could leak out from a valve or another source**: The tanks are located inside a dyke with a High Density Polyethylene (HDPE) that can contain over 110% of the biggest tank volume. In this unlikely event, the water will be pumped back in the tank ensuring that the leakage source is repaired.

In any event, the site superintendent will be notified. The site superintendent will be responsible to proceed with the reporting as per item 7.3.

7.5 Environmental Mapping
See photo annex 'C'

7.6 Resource Inventory
7.6.1 Resources available on site:

- Manpower
- Floor Dry, Hydrophobic pads, shovel, wheelbarrow, rags.
- Heavy Equipment

7.6.2 Resources available off site
Not applicable, everything is on site for remediation of any spills.

8-Details of work to be completed and restoration work required.
The project consists in building one new tank 3200cum vertical tank, relocate/refurbish two 947cum vertical tanks, and relocate two 92cum horizontal tanks. See attached Sketch 1 for the new tank farm layout. On completion all tanks will be hydrostatically tested. The tank containment will be enlarged, and a new HDPE Liner installed. New dispenser building and operator's shelter will be installed.

9-Waste disposal alternatives for contaminated liquid waste. Cleaning materials, absorbent material and sludge.

The waste will be turnover to the Repulse Bay Hamlet for storage in their hazardous storage site.

10- Location of sumps or holding cells in relation to existing water bodies.

Sumps and holding cell are located in the tank farm dyke.

11-Will these undertakings interfere with existing water users or waste depositors?

No.