# UNLICENSED WATER INSPECTION ON THE HAMLET OF REPULSE BAY N.W.T

SECTION II'

REPUISE BAY

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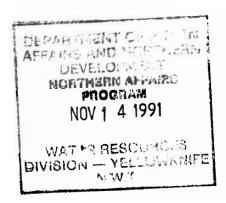
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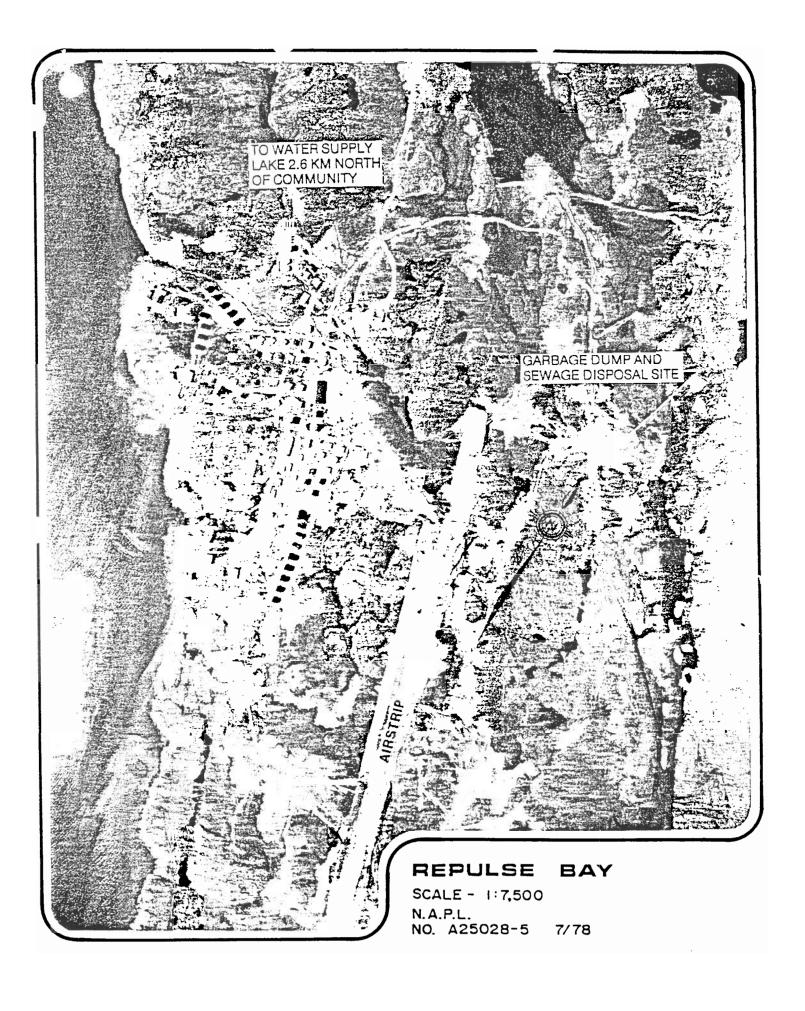
BY

# MURRAY W. SWYRIPA WATER RESOURCE OFFICER

NORTHERN AFFAIRS PROGRAM INDIAN AND NORTHERN AFFAIRS CANADA RANKIN INLET, N.W.T.



DATE: JULY 20, 1991 WATER REGISTER: N/A



## Hamlet of Repulse Bay, N.W.T.

# Unlicensed Water Inspection

July 20, 1991

#### Introduction

An inspection of the Hamlet of Repulse Bay's water supply, waste disposal and fuel storage facilities was conducted on July 20, 1991 by Murray Swyripa, Water Resource Officer for the Department of Indian and Northern Affairs, and Pierce Brewster, Environmental Health Officer for the Government of the Northwest Territories.

Chesterfield Inlet is located on the northern shore of Repulse Bay on the south shore of the Rae Isthmus. The Hamlet is approximately 1,416 air km northeast of Yellowknife in the Keewatin Region. The geographical co-ordinates of the community are 66 32'N latitude, 86 15'W longitude.

Repulse Bay achieved Hamlet status on July 01, 1978, and presently has a population of approximately 465 (June 1990, statistics). Repulse Bay, to this date, has never been issued a water license under the Northern Inland Waters Act.

#### Inspection

#### A. Water Supply

The present main source of freshwater for the Hamlet is Water Lake, which is located about 2.6 km north of the community. The quality of the water poses no public health concerns with Bacterial samples taken routinely and chemical analysis performed yearly. A water pumphouse and truckfill station (see photo 1) was constructed in 1987, the intake pipe

extends from the pumphouse into the Lake, in which two pumps draw water (see photo 2)

The intake pumps are equipped with flow recording devices, although data is not logged.

Treatment consists of a chlorine injection system (see photo 3), which engages when the truckfill is activated. The storage of this chemical is in containers within the pumphouse (no separate room). Records of the amount of chemical consumed is logged weekly.

Repulse Bay is under a fully trucked water distribution system contracted by the Hamlet council which trucks water to individual home storage tanks.

The intake and treatment facilities within the pumphouse are generally operated in a clean efficient manner (see photo 4) with signs posted indicating water intake.

#### B. Waste Disposal

#### 1. Liquid Waste

Sewage and bagged sewage is collected daily from individual holding tanks by a pumpout truck, contracted by the Hamlet. There is no treatment of liquid waste and the volume of waste disposed is not recorded. Bagged sewage is trucked to the garbage dump and is disposed of along with the solid waste -- no segregation of bagged sewage from the solid waste is practised. The fiquid pumpout is discharged directly onto the garbage at the dumpsite (see photo 5).

#### 2. Solid Waste

Garbage is regularly collected weekly, from individual homes with the Hamlet garbage truck and disposed of at the solid waste disposal site located 1.5 km north of the Hamlet (see

photo 6). Management of this site appears to be limited; restricted to the pushing of material within the active area. Some larger materials, such as vehicles, barrels and other noncombustibles are separated (see photo 6). The site is not fenced, hence resulting in extensive windblown materials nor is the site posted indicating liquid waste disposal site.

### C. Fuel Storage

The Hamlet of Repulse Bay has two main fuel storage facilities, with the largest site owned and operated by the GNWT, Government Service Petroleum Products. This facility is in a well maintained fenced area, with all tanks surrounded by a lined gravel berm (see photo 7). Government Services has a pump distribution system for their fuel. The tanks being utilized contain P-50 diesel fuel (1,892,221 litres), regular gasoline (369,012 litres) and Turbo "A" (capacity not available).

The other fuel facility is owned and operated by the Northwest Territories Power Corporation in an unfenced area near the utilities generator. Fuel storage consists of three 10,000 litre tanks (P50 diesel fuel). These tanks are not surrounded by a gravel berm (see photo 8), but rather are in an open area.

Both of the above facilities are well maintained with no evidence of contamination or spillage.

#### D. Records and Reporting

The Hamlet of Repulse Bay is an unlicensed community and therefore has no record or reporting requirements to submit at this time.

The inspector(s) would like to thank Mr. Ralph Ruediger, Regional Maintenance Officer for the GNWT, and Mr. Reagan Mukton DPW, Hamlet Foreman, for their assistance and cooperation in providing information during this inspection.

Murray W. Swyripa

Inspector Under the Northern Inland Waters Act

# APPENDIX 1 PHOTOGRAPHS

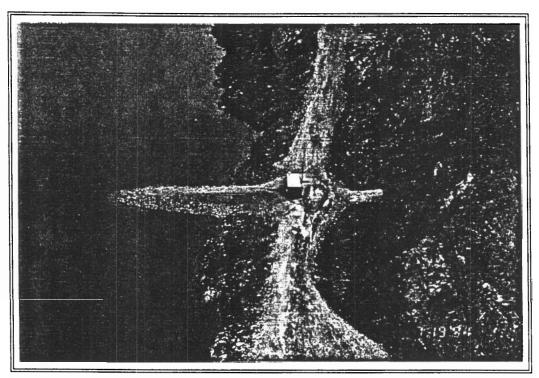


Photo one: Repulse Bay Pumphouse/Truckfill Station

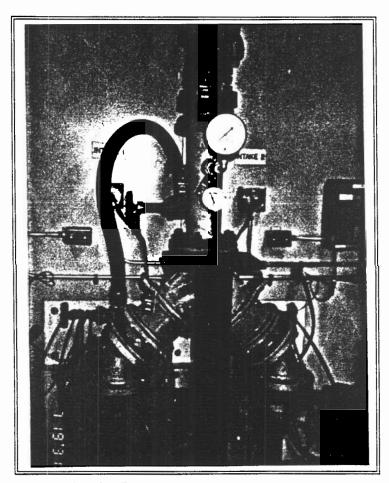


Photo two: Water Intake Pumps

Photos taken July 20, 1991 by M.W. Swyripa



Photo four: Water Treatment/Truckfill Facility

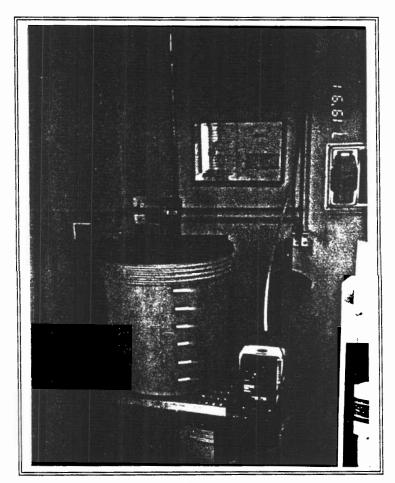


Photo three: Water Treatment Station

Photos taken July 20, 1991 by M.W. Swyripa

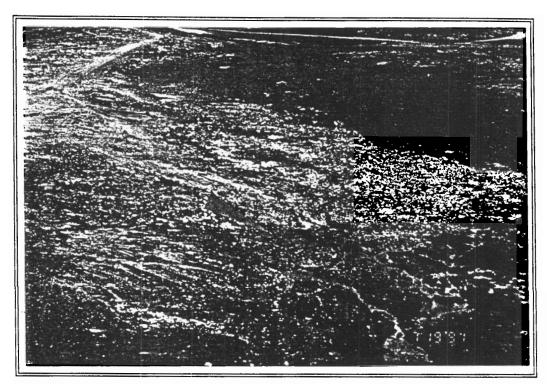


Photo five: Waste Disposal Site \*note Liquid Waste Outfall

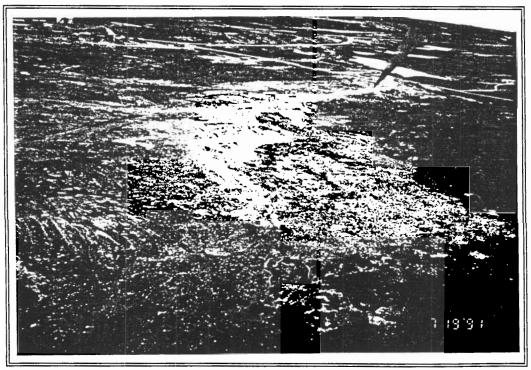


Photo six: Waste Disposal Site
\*note non-combustable segregation

Photos taken July 20, 1991 by M.W. Swyripa



Photo seven: GNWT Petroleum Products Fuel Storage

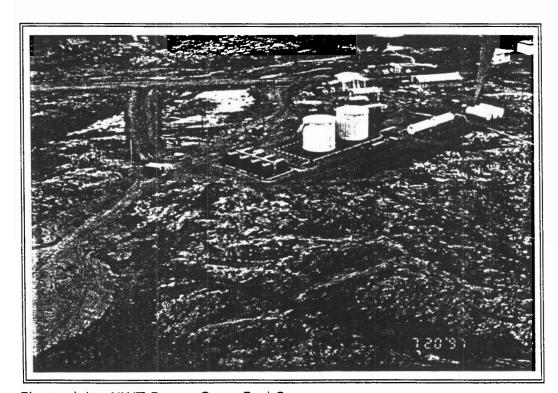


Photo eight: NWT Power Corp. Fuel Storage

Photos taken July 20, 1991 by M.W. Swyripa