

## INSPECTION REPORT ON AKLAVIK

### Introduction

On June 17, 1988, Kevin McDonnell, Water Resources Officer, Inuvik conducted an inspection of the water supply and waste disposal facilities at the Hamlet of Aklavik. Points of contact were Harry Gordon, Water and Sewage Foreman, GNWT-DPW, and Danny C. Gordon, Hamlet Foreman, Aklavik.

### A. Water Supply

Water is obtained year around from the Peel River. The intake pipe runs out into the river about 21 metres with a minimum depth below surface of about 4 metres. The intake runs into an enclosed treatment plant that utilizes a Neptune Microfloc System which treats the water by chemical coagulations and flocculation, filtration and disinfection. No problems were noted with the treatment plant.

The only building that has a direct line from the treatment building for water supply is the Senior Citizens home. The rest of the Hamlet has water delivered by Ronald Storr Contracting. There are about 200 buildings serviced for a population (1986 census) of 900. The cost of delivery is 3.4¢/l with May's monthly water quantity being 1 569 875 litres. Water is hauled daily in a 2,000 gallon water truck. From the DPW treatment plant the water is stored in an insulated heated 231 850 litre holding tank. In the past during the frost-free period, the water is pumped out of the tank by the Hamlet's small pumphouse located next to the treatment plant. The pumphouse services the Hamlet through 75 mm and 100 mm piping laid throughout the town. In a telephone call with Wayne Lister, Area Maintenance Officer, GNWT-DPW, Inuvik, on 88.07.04, it appears that there might be problems with the expected demand for water, and the predicted supply. The problem relates to the additional demands for water from new housing and upgraded units; from the silt loading from the river and the wear this places on the pumps; and the ability of the treatment system to adequately process the water. DPW is waiting for new pumps and will test the piping system later in the week of 88.07.04. If problems occur with the demand exceeding the supply then alternatives as restricted time for water supply or returning to truck delivery will be considered. About six truck loads per day of water is delivered and this can be adequately handled by the plant.

The Public Health Nurse, Arlene Monkman, does some water sampling for bacteria. They try to sample once a month but with the district Environmental Health Officer position being vacant, this has become somewhat sporadic. Generally, the nurse routinely samples for coliforms from the water truck, water tank, nursing station, Senior Citizens home, and randomly from dwellings and stand pipes. Over a year and a half ago there were high coliform counts found in the Senior Citizens home which was traced to a build-up in the hot water tank. Apparently Harry Gordon will take additional samples if there are problems.

B. Sewage Disposal

Truck pump-out is contracted to Robert Storr Contracting who uses a 2,000 gallon tank truck. Quantities hauled are calculated as the water used plus 7%. The cost of haulage is 2.9¢/l. Sewage is pumped out to Clearing Lake. No problems were noted with Clearing Lake.

Honeybags are trucked by Danny Greenland to a trench at the new dumpsite. Pick-ups are done every other day with about 15 - 16 hauls/month total. Greywater is either discharged to pump-out or to the ground if on the honeybag system. When the trench becomes full, a new trench is dug and the old trench backfilled.

C. Solid Waste Disposal

Peter Arey Sr. has the contract to haul solid waste to the dump. The frequency of hauling is every other day with the community paying \$160.00 per pick-up for the Hamlet. Approximately 15 pick-ups are done per month. Some tidying up remains to be done at the dumpsite. (A fence should be put around the dumpsite to prevent debris from being scattered).

D. Dams and Dykes

Not applicable.

E. Postings

The public water supply was not posted, however the waste disposal site was.

F. Fuel Storage

The two areas where fuel is stored in Aklavik are the Imperial Oil Fuel farm 1.8 km northwest of the town site, and the small Esso Service station located on the southeastern end of town. At both places the tanks are bermed but not lined.

G. Major Maintenance

Major maintenance was being done on the water supply system for the Hamlet.

H. Surveillance Network Program

Measurements and reports as requested in the SNP are being provided.

I. Reclamation and Restoration

The old dumpsite needs to be cleaned up and backfilled.

J. Records and Record Keeping

A record of the volume of water delivered by tank truck is being kept.

K. Contraventions

No contraventions were noted.

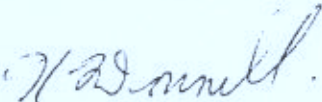
L. Official Onsite Discussion

No official onsite discussion, other than general questions and answers, took place.

M. Summary

DPW-GNWT are working on the water supply problem and hope to have a solution soon. The old dump requires restoration, and a fence should be put around the new dumpsite.

The Inspector would like to thank Harry Gordon and Danny C. Gordon for their cooperation.



Kevin McDonnell  
Water Resources Officer  
Inuvik

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