Annex A

Site Investigation Report for the Existence of Aquatic life
in the Designated Pond at the Hamlet of Repulsive Bay

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Jianguo 'George' Zhang
Environmental Officer, Ma. Sc

Department of Community & Government Services
Government of Nunavut
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1.0 Introduction

1.1 Background

The Hamlet, located on the northern shore of Repulsive Bay, is on the south shore of the Rae Isthmus. Its geographic coordinates are latitude 66° 32' N, longitude 86° 15' W. It is 443 air km southeast of Taloyoak and 1424 air km north-east of Yellowknife.

Formerly a relatively level plateau, the land in the Hamlet of Repulse Bay was cut up into a series of steep-sided, narrow valleys and ridges. These blocks begin at the coast where they form narrow deep fiords that point toward the northwest. There are numerous small freshwater ponds in this area, the water of which mainly results from the rain or spring run-off. Repulsive Bay receives an average of 15.0 cm of rainfall and 58.2 cm of snowfall per year. Mean annual precipitation totals 20.6 cm.

The mean high and low temperature in July are 15.7 and 5.8 °C, while in January the mean high and low temperature are -29.4 and -36.4 °C respectively.

Winds are generally from the north with annual average speed of 23.0 km/h.

A new fuel storage facility project has been planned at the location about 800 meters northeast of the community (Appendix-1). The project design has been completed and is to be constructed by Mosher Engineering Ltd. The staffs in Mosher Engineering are scheduled to conduct hydrostatic tests for the fuel storage tank to be built in the shallow pond beside the construction pond.

To ensure such activities don't cause any negative effects to the environment, aquatic life around, the construction company is required to apply for permit from Nunavut Water Board in advance.

1.2 The purposes of the site investigation

The purpose of the site investigation is to search and verify the existence of any possible aquatic life in the designated pond in the Hamlet of Repulsive Bay, where the hydrostatic tests for the fuel storage tank are to be conducted. The work of the investigation is required by NWB for the hydrostatic tests of fuel storage tank.

2.0 Method

The site investigation was conducted on July 19th , 2005 and mainly by visual inspection, casting and drawing the site-fabricated fish net in the pond to search any possible existence of aquatic life, as well as interviewing with local residents. Totally three people participated in this site investigation. One person wore the anti-water fishing clothes, and waded into the pond to search any possible fish by casting and drawing the net at different locations in the pond. The other two walked along the shore to check carefully for any possible aquatic life in the pond.

Site-fabricated fish net: A 1.5m ×1.5m metal net with fine meshes was bought from the local grocery store CO-OP. Four 2-meter-long plastic ropes were found from the Hamlet warehouse. One end of each of the four ropes was bound to each corner of the square net. The other ends of the ropes were bound together and inserted into a 1-meter-long steel pipe for handling and lifting. The completed fish net was indicated in Figure-1.

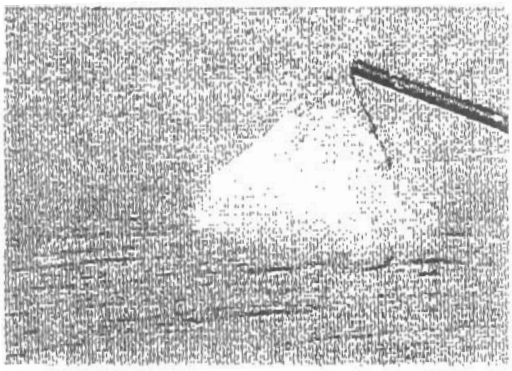

Figure-1 Site-fabricated fish net

3.0 Results and Discussion:

More than 30 castings & drawings were repeated at different locations in the investigated pond. The investigation lasted almost one and half hours. However, no fish was found, whether large or small. (Fig-2, 3)

From visual inspection, the water in the pond was very clear. Some vegetation plants were observed around the pond (Fig-3, 4), hence the level of Dissolved Oxygen (DO) should be no problem for aquatic life. Further investigations are required for explanation to such a case.

One of the three people is the supervisor to the municipal service in the Hamlet. He is a native and introduced that even under warmer weather, fish could rarely be seen in the shallow water ponds, like the one being investigated.

4. Conclusion

No aquatic life, including fish was observed in the investigated pond, where the hydrostatic tests for the fuel storage tank are to be constructed. Further investigations are required for explanation to such a case.

5.0 Acknowledgements:

The other two people participated in the site investigation:

Mr. Roland Tunglik, supervisor of municipal services, Hamlet of Repulsive Bay

Mr. Baljinder Brar, P. Eng., Project Officer of Department of Community & government Services, N.U

Appendix-1 Site map

See photo annex 'C' and Sketch 5 in annex 'E'

Appendix-2 Photos

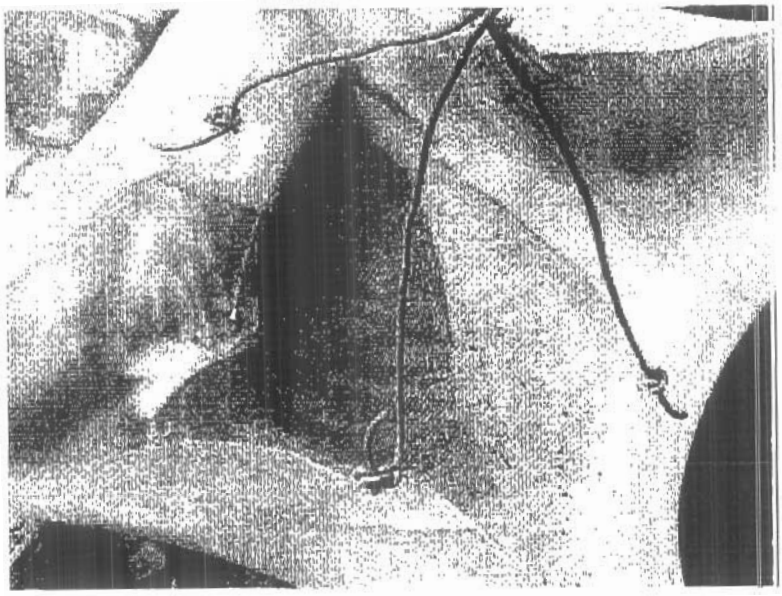

Figure-2 Empty net from water

Fig-3 Casting and searching fish in the pond

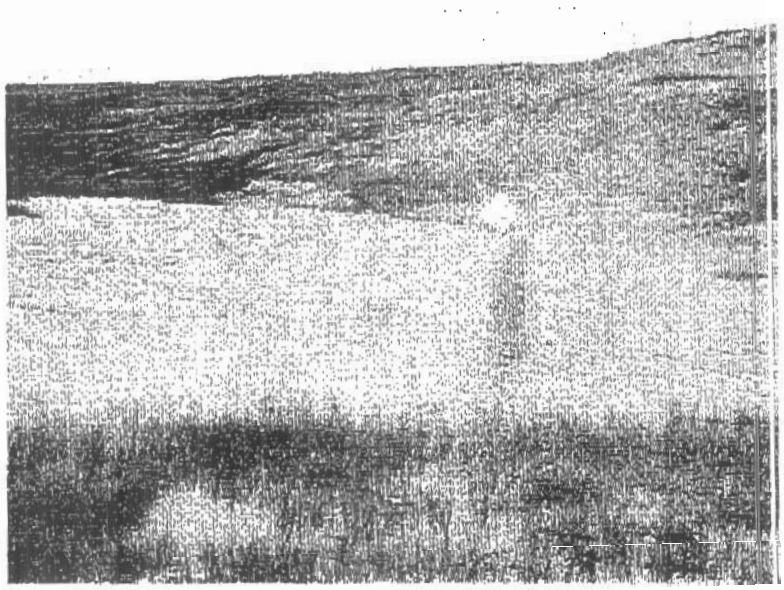

Fig-4a Vegetation plants around the pond

Fig-4b Vegetation plants around the pond