

## **EXECUTIVE SUMMARY**

Enclosed is a water license application for the Hamlet of Resolute Bay, Nunavut. The Hamlet is seeking a five-year license, valid through 2008, to obtain water for municipal use from Char Lake, located 1.5 km west of the community. The current population using this water source is estimated at 200 people, which is estimated to increase to 210 people in 2008. This will create a demand for slightly more than 14 million litres per year, thus the Hamlet requests an annual water use rate of 14.1 million litres.

The majority of the Hamlet is on an utilidor (piped) system. The south camp and buildings at the airport are served by trucked delivery with water from Strip Lake. An aboveground-insulated gravity-fed steel reservoir (530,000 L) was designed to provide for peak hour and fire demands. Dual hypochlorite solution injection pumps chlorinate the water at the water treatment and storage facility.

Most of the Hamlet is supplied by a shallow-buried water and sewer utility system. The liquid sewage is macerated prior to discharge into the Bay. Waste discharge from this system met all tested parameters of the Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life. A trucked pumpout service is provided for several houses not on the sewer system and the sewage is dumped at the solid waste site. The sewage is treated with lime and covered in gravel.

The solid waste disposal site is located seven kilometres southwest of Resolute Bay. Waste is burned daily and the site is covered and compacted monthly. There is little segregation of waste at the site.

Overall, this project will not substantially affect the quality, quantity, or flow of water through Inuit owned lands.