
Shibogama First Nations Council

Tribal Council Report Phase II - Executive Summary

Introduction

The Ontario Clean Water Agency (OCWA) was retained by the Ontario First Nations Technical Services Corporation (OFNTSC) to carry out an overall general assessment study of existing water and sewage facilities in First Nation communities with regard to the magnitude and scope of existing and potential problems in terms of health and safety risks.

In March 2001, a representative from OCWA traveled to each of the five communities within the Shibogama First Nation Council (Shibogama) and met with the facility operators. The Tribal Council Technical Services Advisor was in attendance at three of the five community visits.

From interviews with the operators and the completion of questionnaires, information was collected by OCWA and compiled into Community Reports, included in Appendix "A". At the time of the visits, walkthrough tours of the facilities were conducted by OCWA and observations were recorded in the reports. This Tribal Council Report summarizes the findings from the Community Reports.

Community Services

The five Shibogama communities are generally located between 350 and 450 km northeast of Sioux Lookout and are accessible by air. Based on the Capital Asset Inventory System (CAIS) and Indian and Northern Affairs Canada (INAC) reports, the total on-site Shibogama population amounts to 1,961, and there are 484 houses of which:

- 73% of the houses are served by communal water systems including in-ground distribution, 15% are serviced by water haulage to holding tanks, and the balance 12% are serviced by other means; and
- 48% of the houses are served by a communal sewage system, 23% are serviced by individual septic tanks, 17% are serviced by individual sewage holding tanks with trucked sewage, and the remaining 12% have other sewage services.

The water treatment facility in the Wunnumin Lake community is a Class I facility. Wawakapewin First Nation, Wapekeka First Nation, Kingfisher Lake First Nation, and Kasabonika Lake First Nation have Class II water treatment facilities. Wapekeka First Nation and Kingfisher Lake have Class I sewage treatment facility and Kasabonika Lake has a Class II sewage treatment facility.

Risk Assessment

It was reported that three Boil Water Advisories had been issued for the Wapekeka, Kingfisher Lake and Kasabonika Lake communities.

OCWA's assessment identifies the water system for Wunnumin Lake, Kingfisher Lake, and Kasabonika Lake to be high risk because of plant capacity limits are being reached, and THM's, iron, aluminum, sodium, colour, and total dissolved solids are exceeding GCDWQ.

Wapekeka and Wawakapewin water system has been identified as medium risk because chemical analysis have exceeded GCDWQ, record keeping is poor, water softener in Wawakapewin was not working at the time of the OCWA visit and an oil problem in the reservoir in Wapekeka.

The sewage collection system for Wapekeka has been identified as medium risk because of reoccurring overflows at the lift station and Kingfisher Lake has been identified as medium risk because of possible leaking lagoon cell and effluent exceedances.

Kasabonika Lake sewage collection system has been identified as high risk because of sewer, effluent bypassing lack of backup power and service disruptions.

Definition of Risk

High risk issues may include non-compliance events, broken or malfunctioning equipment, lack of necessary monitoring equipment, inadequate sampling/testing/reporting, safety issues, and lack of operator training. These items should be acted on immediately.

The report also identifies medium risk issues that should be attended to in the short term. These issues include design and capacity assessments, record drawings and manuals, backup power supplies, and the proximity of sewage effluent discharges and water intakes.

Long term planning objectives have also been identified in the report. These objectives are to ensure that a support structure is put in place to not only bring the facilities into compliance with approved operating standards, but also through operator training, testing and reporting protocols, planning and capital improvements, to maintain that level of operational excellence. This approach will ensure the long term health and safety of both the communities and the operators, while also maintaining the value of the capital assets.

Recommendations

The report recommends immediate action be taken on the high risk issues with attention being given to the medium risk issues. Concurrently, the long term planning issues should be formulated and implemented.

From OCWA's observations in the communities, it is recommended that consideration be given to further studies of the water distribution systems and the sewage collection systems. In addition, the individual water and sewage holding tanks, septic systems, and other individual services should also be reviewed on a continuing basis.

The information available through the CAIS and INAC reports was found to be not up to date and/or in agreement. It is recommended that these reports be updated and reconciled.

The foremost recommendation would focus on operator training programs together with a reporting structure to ensure both operating compliance and effective response to changing conditions.