

Ojibways of Hiawatha First Nation (Band No. 162)

Date of Visit: March 9, 2001

M.J. Newland (OCWA)

Site Address: R.R.#2

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Tribal Council Affiliation: Toronto Services Centre - Unaffiliated First Nations (South)

Operator: George Howard

Location: The Ojibways of Hiawatha First Nation community is located on the northwest shore of Rice Lake, 15 km southeast of Peterborough

Population: 170 people in the community (CAIS)

No. of Units: 80 housing units (CAIS)

1.0 Description of the Community Water Supply

Based on the CAIS report and information provided to OCWA, water to the houses in the Ojibways of Hiawatha community is treated as follows:

- 157 people are serviced by individual wells;
- 13 people have other services; and
- Seasonal communal service for a campground.

- 74 houses are serviced by individual wells;
- 6 houses have other services; and
- Seasonal communal service for a campground.

2.0 Description of the Community Sewage Facilities

Based on the CAIS report, sewage from the houses in the Ojibways of Hiawatha community is treated as follows:

- 170 people are serviced by individual septic tanks.

- 80 houses are serviced by individual septic tanks.

3.0 Overall Assessment for Communal Water Treatment Supply

The questionnaire developed by PWGSC required OCWA to undertake a risk assessment of the Water Source, Design, Operation, Reporting, and Operators. To properly assess these areas, a revisit to the water treatment facilities would be required.

OCWA was requested to undertake the evaluation without a visit to the site. With the available information, OCWA has undertaken the requested assessment of the facilities.

The ranking system used is as follows:

- 0 = Not enough information to assess
- 1-4 = Low Risk
- 5-7 = Medium Risk
- 8-10 = High Risk

For more detailed information on the Risk Assessment used see the Terms of Reference, Appendix B.

SECTION Water	SECTION RANKING Water	RISK Water
A. Water Source		
Biological	0	
Chemical	0	
Physical	0	
Overall Ranking for Water Source	0	No lab data available
B. Design		
Biological	0	No tests available
Chemical	0	No tests available
Physical	0	No tests available
Risk to Public Health	1	No boil water advisories
Condition of Laboratory Equipment	0	
Overall Ranking for Design	1	
C. Operations		
Reservoir Cleanliness	0	
Emergency Plan	0	
Overall Ranking for Operations	10	No on-line chlorine residual analyzer, no turbidity meter re – occurring pipe leakage problems, no service maintenance on distribution system.
D. Reporting		
Ranking for Laboratories and Testing	0	
Ranking for Boil Water Advisories	1	No boil water advisories

SECTION Water	SECTION RANKING Water	RISK Water
Overall Ranking for Reporting	1	
E. Operators		
Overall Ranking for Operators	10	No operator designated
F. Statistical Data		
Overall Ranking for Individual Wells	0	
Overall Ranking for the System	7	Medium Risk

4.0 Communal Water System (Seasonal Campground)

4.1 Water Source

The raw water is fed from groundwater.

4.2 Design

The communal water system in this community feeds water to a public campground. A well feeds groundwater to pressure tanks and a chlorination system. There is no source water protection on the well. There is a water reservoir located at the plant, which has a capacity of 95 m³. The plant has not been classified and the capacity of the plant is unknown. The average plant flow is 454 m³ per day.

4.3 Operations

Disinfection for the system is sodium hypochlorite, but none was on site at the time of the OCWA visit. The ventilation in the plant is inadequate for its size, and the chemical storage area is also inadequate. No diesel backup power is available in case of power failure. When the campgrounds are open, chlorine residuals are checked seven days a week. No on-line chlorine residual analyzer is available on site.

The campsite has not experienced any service disruptions for the operating season (May 12th to Labour Day) in the past two years. There is a re-occurring operational problem with leakage from the distribution system. A list of technicians is available and the turnaround time to get on site is within two hours. No spare parts are available on site. There is no service maintenance on the distribution system and, as a result, all the valves have seized. The available office space and laboratory is not adequate. Maintenance manuals are available but no operating manuals or as-built drawings are available.

4.4 Reporting

Chlorine residuals are tested on a daily basis but turbidity is never tested. Bacteriological samples are tested on a weekly basis and submitted to the Peterborough Health Unit. No history of sample analyses exists at the site and the results are maintained at the band office.

There have been no boil water advisories in the past two years and no health related outbreaks. Chemical analyses on the system have never been conducted.

4.5 Operator

There is no one designated operator for this system - the responsibility for the facility is designated on a daily basis amongst the maintenance staff. None of the personnel in the maintenance department is certified to operate the system.

5.0 Deficiencies in the Campground Water Supply

1. There is no source water protection on the well.
2. The plant has not been classified and the capacity of the plant is unknown.
3. The average plant flow is 454 m³ per day.

4. The disinfection on the system is sodium hypochlorite but none was on site at the time of the OCWA visit.
5. The ventilation in the plant is inadequate for its size and the chemical storage area is also inadequate.
6. No diesel backup power is available in case of power failure.
7. No chlorine residual analyzer is available on site.
8. There is reoccurring leakage from the distribution system.
9. No spare parts are available on site.
10. There is no service maintenance on the distribution system and as a result all the valves have seized.
11. The available office space and laboratory is inadequate.
12. Maintenance manuals are available but no operating manuals or as-built drawings are available.

6.0 Classification

Based upon the terms of reference - Appendix I – Plant Classification Guideline developed by Public Works and Government Services Canada and with discussions with the Ontario Ministry of the Environment Classification Group, OCWA classified this plant as follows:

Water Treatment Facility- Class I

7.0 Recommendations

- Implement a start-up procedure for the campground to ensure that water quality is maintained after a winter shut down.
- Implement a training program that can lead to operator certification.
- Implement a preventive maintenance program, including a main valve replacement and operating program.
- Implement a sampling and analysis program.
- Provide chemical storage for the plant and adequate ventilation.
- Provide an on-line chlorine residual analyzer and turbidity meter.
- There are no hydrants on the system.
- Leaking water from the distribution system is a reoccurring operational problem.
- There is no adequate laboratory or office area for the facility.
- Obtain operating and maintenance manuals and as-built drawing and keep on site.
- No spare parts are available.

8.0 Overall Community Risk Assessment

Water Category – Seasonal Campground – Medium Risk

- **Medium Risk because of the following:**
 - No designated operator; and
 - Professional assistance is needed.

Note: Information within this report is based on discussions with the part time plant operator and a quick visual walkthrough the facilities. No detailed review was undertaken by OCWA.