# Couchiching First Nation (Band No. 126)

**Date of Visit:** March 12, 2001
By Keith Lusignan (OCWA), P. Zachariasz (Technical Services Advisor)
**Site Address:** Box 723
Fort Frances ON P9A 3N1
**Phone No.:** 807-274-3228 **Fax No.:** 807-274-6458
**Tribal Council Affiliation:** Pwi-di-goo-zing Ne-yaa-zhing Tribal Council
**Operators:** Randy Bruyere, Steve Morrisseau
**Location:** The Couchiching First Nation community is located immediately north of the Town of Fort Frances
**Population:** 567 people in the community (November 2000 - INAC)
**No. of Units:** 217 housing unit (CAIS)

## 1.0 Description of the Community Water Supply

Based on the CAIS report, water to the houses in the Couchiching community is treated as follows:

- 512 people are serviced by a pipeline from Fort Frances
- 5 people use individual holding tanks with trucked water
- 50 people have other services

- 196 houses are serviced by a pipeline from Fort Frances;
- 2 houses are serviced by individual holding tanks with trucked water; and
- 19 houses have other services.

## 2.0 Description of the Community Sewage Facilities

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

- 462 people are serviced by the Town of Fort Frances Sewage Treatment plant
- 105 people have other services

- 177 houses are serviced by the Town of Fort Frances Sewage Treatment plant; and
- 40 houses have other services.

## 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 data available |
| **B. Design** | | |
| Biological | 1 | 4 total coliform exceedances out of 89 (4%), 1 E.Coli exceedance out of 89 (1%) |
| Chemical | 1 | No exceedances |
| Physical | 5 | Low hardness, aluminum exceedance |
| Risk to Public Health | 1 | No boil water advisory |
| Condition of Laboratory Equipment | 0 | Not inspected |
| Overall Ranking for Design | 3 | |
| **C. Operations** | | |
| Reservoir Cleanliness | 0 | Not inspected |
| Emergency Plan | 0 | Unknown |
| Overall Ranking for Operations | 5 | No main valve maintenance program, emergency spare parts not readily available |
| **D. Reporting** | | |
| Ranking for Laboratories and Testing | 1 | Regular bacteriological testing |
| 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 | 4 | Little training but confidence |
| **F. Statistical Data** | | |
| Overall Ranking for Individual Wells | 0 | |
| Overall Ranking for the System | 4 | Low Risk |

## 4.0 Overall Assessment for Communal Sewage Treatment Facilities

The questionnaire developed by PWGSC required OCWA to undertake a risk assessment of the Effluent Receiver, Design, Operation, Reporting, and Operators. To properly assess these areas, a revisit to the sewage treatment facility 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 Sewage | SECTION RANKING Sewage | RISK Sewage |
|---|---|---|
| **A. Effluent Receiver** | | |
| Overall Ranking for Effluent Receiver | 0 | |
| **B. Design** | | |
| Quality of Treated Effluent | 0 | Town of Fort Frances services community |
| Ranking of Design of Sewage Plant | 0 | |
| Ranking of Concerns and Hazards within the Plant | 5 | Lids of pump station are flimsy |
| Condition of Laboratory Equipment | 0 | |
| Overall Ranking for Design | 5 | |
| **C. Operations** | | |
| Ranking for Emergency Plan | 0 | |
| Overall Ranking for Operations | 5 | Power failure at pump stations cause service disruptions |
| **D. Reporting** | | |
| Overall Ranking for Reporting | 0 | |
| **E. Operators** | | |
| Overall Ranking for Operators | 4 | Some training |
| **F. Statistical Data** | | |
| Overall Ranking for Individual Septic Tanks | 0 | |
| Overall Ranking for the Systems | 4 | Low Risk |

## 5.0 Communal Water Treatment Plant (196 houses)

### 5.1 Water Source

The community is serviced by a forcemain from the Town of Fort Frances.

### 5.2 Design

The operator has an annual flushing program but no annual main valve operating and maintenance program for the water distribution system. Emergency spare parts are not readily available, however a contact listing of technicians/trades people is available.

The following table summarizes the distribution system chemical exceedance data available from Health Canada:

| Date | Location | Exceedances | Result | GCDWQ Limit |
|---|---|---|---|---|
| Sept. 6, 2001 | Band Office | Hardness | 22 mg/L | 80 to 100 mg/L (OG) |
| | | Aluminum | 0.11 mg/L | 0.1 mg/L (OG) |

AO - aesthetic objective, OG - operational guideline

### 5.3 Operations

No information is available.

### 5.4 Reporting

Health Canada conducts bacteriological tests at least twice per month. The results are kept at the plant, the Administration Office and the Health Canada office at the Couchiching complex in Fort Frances.

The following table summarizes the bacteriological data available from Health Canada:

| Period | Frequency | Regularity | Exceedances |
|---|---|---|---|
| 2000/04/26 to 2001/09/19 | 2 to 14 times per month | ▪ 2 months missing in 2000<br>▪ 1 month missing in 2001 | ▪ Total coliform exceedances were noted on 2000/07/26, 2000/08/01, 2000/08/08 and 2000/08/23.<br>▪ E. Coli exceedances were noted on 2000/08/15. |

The Town of Fort Frances would conduct additional water tests. The Town would have copies of those test results.

On the week of May 28, 2001, OCWA contacted the Town of Fort Frances, and the Town confirmed that there were no problems with water supplied to the Couchiching community.

No boil advisories have been issued on the Town of Fort Frances and the Town reports there are no problems with quality and quantity of water supply to the Couchiching community.

### 5.5 Operators

The Town of Fort Frances operator is Randy White.

Randy Bruyere and Steve Morrisseau attend to both the water and sewage systems for the Couchiching community. s.19(1) The Town of Fort Frances work crews assist with work that is too large for the two operators to handle.

## 6.0 Deficiencies in the Community Water Supply

1. An inventory of spare parts is not available.

s.19(1)

2.

## 7.0 Communal Sewage Facilities (177 houses)

### 7.1 Effluent Receiver

No information about the effluent receiver is available.

### 7.2 Design

The sewage service in the community consists of collection sewers, three pumping stations, and a trunk sewage line to the Town of Fort Frances. Two of the pumping stations were built in 1975 and the third was added in 1996. There are two portable and one fixed diesel generator available for the sewage pumping stations.

### 7.3 Operations

A meter is used for billing purposes to record the usage of sewage from the community but the meter does not work. The Town of Fort Frances operates the sewage treatment plant while the Couchiching First Nations operate the sewage collection system and three pumping stations. There are three pumping stations with backup power.

The pumps are well maintained and the pumping station wet wells are cleaned once per year. No bypasses have occurred. Safety equipment is available.

The fiberglass lids of the pumping stations are flimsy and could present a safety hazard.

### 7.4 Reporting

The Town of Fort Frances conduct wastewater sampling tests at its sewage treatment facility.

On the week of May 28, 2001, OCWA contacted the Town of Fort Frances, and the Town confirmed that there were no problems with the sewage treatment.

### 7.5 Operators

s.19(1) Randy Bruyere and Steve Morrisseau attend to both the water and sewage systems for the Couchiching community. they have received training by the Circuit Rider Training Program. The Flygt pump supplier has provided some training on the sewage collection system. The Town of Fort Frances work crews assist with work that is too large for the two operators to handle.

## 8.0 Deficiencies in the Community Sewage Facilities

1. The meter in final sewage lift station is used for billing purposes does not work.

2. Fiberglass lids on pumping stations are not strong enough and could present a safety hazard.

3. The operators are not certified but they are on the Circuit Rider Training Program.

## 9.0 Recommendations

- Implement a training program that can lead to certification of the operators.
- Develop a comprehensive operating and maintenance program on the water distribution system to address valve and hydrant maintenance.
- Purchase adequate emergency spare parts.
- Repair meter in final sewage lift station.
- Replace and secure sewage lift station hatches.
- Develop a comprehensive contingency plan to address operational problems, breakdowns, vacations and sickness, and boil water advisories.

## 10.0 Plant 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 these plants as follows:

Water Treatment Facility - N/A (serviced by pipeline from Town of Fort Frances)
Sewage Treatment Facility - N/A (serviced by pipeline from Town of Fort Frances)

## 11.0 Overall Community Risk Assessment

**Water Category – Low Risk**
**Sewage Category – Low Risk**

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