

Mississaugas of the New Credit First Nation (Band No. 120)

Date of Visit: March 21, 2001

By M.J. Newland (OCWA)

Site Address: R.R. #6

Hagersville, ON N0A 1H0

Phone No.: 905-768-1133

Fax No.: 905-768-1225

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

Operators: Brandon Hill, Roger Sault

Location: The Mississaugas of the New Credit First Nation community is located 16 km southeast of Brantford

Population: 711 people in the community (November 2000 - INAC)

No. of Units: 202 housing units (October 2001 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 Mississaugas of the New Credit community is treated as follows:

- 243 people are serviced by piped water from the City of Nanticoke;
- 465 are serviced by individual wells and/or holding tanks;
- 3 people have no service.

- 69 houses are serviced by a communal water system in the City of Nanticoke;
- 132 houses are serviced by individual wells and/or holding tanks; and
- 1 house has no service.

2.0 Description of the Community Sewage Facilities

Based on the CAIS report, and information provided to OCWA, sewage from the houses in the Mississaugas of the New Credit community is treated as follows:

- 172 people are serviced by a communal sewage system;
- 535 people are serviced by septic tanks; and
- 4 people have no service.

- 49 houses are serviced by a communal sewage system;
- 152 houses are serviced by individual septic tanks; and
- 1 house has no service.

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	
B. Design		
Biological	0	
Chemical	0	
Physical	0	
Risk to Public Health	0	
Condition of Laboratory Equipment	0	Not inspected
Overall Ranking for Design	0	
C. Operations		
Reservoir Cleanliness	0	
Emergency Plan	0	
Overall Ranking for Operations	0	
D. Reporting		
Ranking for Laboratories and Testing	1	Health representative conducts sampling but not kept in community
Ranking for Boil Water Advisories	1	No boil water advisories
Overall Ranking for Reporting	1	

SECTION Water	SECTION RANKING Water	RISK Water
E. Operators		
Overall Ranking for Operators	0	
F. Statistical Data		
Overall Ranking for Individual Wells	0	
Overall Ranking for the System	1	Low Risk

*Note: This community is serviced by the City of Nanticoke. OCWA operates the treatment plant.

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	Data not available
B. Design		
Quality of Treated Effluent	0	Data not available
Ranking of Design of Sewage Plant	1	
Ranking of Concerns and Hazards within the Plant	5	Inadequate ventilation
Condition of Laboratory Equipment	0	No lab equipment
Overall Ranking for Design	5	No lab/office areas
C. Operations		
Ranking for Emergency Plan	0	
Overall Ranking for Operations	1	
D. Reporting		
Overall Ranking for Reporting	1	
E. Operators		
Overall Ranking for Operators	7	Additional training required for operators
F. Statistical Data		
Overall Ranking for Individual Septic Tanks	0	
Overall Ranking for the Systems	4	Low Risk

5.0 Communal Water Supply (69 houses)

5.1 Water Source

The water supply for the Mississaugas of the New Credit community is supplied from the City of Nanticoke water system.

5.2 Design

No information is available.

5.3 Operations

OCWA operates the treatment plant that supplies the water to the City of Nanticoke and the community.

OCWA is not aware of any water quality or quantity problems with the water supply.

5.4 Reporting

The health representative does water sampling. This information is not maintained in the community and neither operator has seen any results from tests done on the water system.

There have been no boil water advisories.

6.0 Deficiencies for the Community Water Supply

1. Operators have had little or no training in the operating and maintenance of the distribution system.
2. Samples are collected by Health Canada but no results are forwarded to the operators.
3. There are no emergency spare parts available and there is no contact list of technicians or trades people.
4. There are no flushing or maintenance programs for the system.

7.0 Communal Sewage Treatment Facilities (49 houses)

7.1 Effluent Receiver

The effluent receiver for this community is Boston Creek.

7.2 Design

The system was built in 1998 and consists of a two-cell lagoon system with sand filtration and phosphorous removal.

There is no backup power on the system in case of power failure, but Roger Sault of Public Works reports that as of November 2002, they were in the process of purchasing a backup generator. In the meantime, the community has a truck on standby in case of power failure at a pumping station. There is insufficient ventilation for the chemical storage area. There is adequate safety equipment on site. There is no office

or lab area. There is a workshop area available off site. Maintenance manuals are available at Lift Station #2 for all of the stations.

7.3 Operations

Operating manuals and as-built drawings are available. The system has not experienced any service disruptions.

The sewage pumping stations have been cleaned. It is not clear whether routine maintenance is done on the pumping stations. A list of technicians is not available and no spare parts are available on site. The lagoon has not required discharging as of the date of the OCWA visit as it has not filled up. No sewage backups or bypasses have been experienced at the site. There have been no disease or health related outbreaks or odour complaints.

7.4 Reporting

Samples will be collected and submitted for analysis when the lagoon is discharged.

7.5 Operators

The operators for the sewage treatment plant are Brandon Hill and Roger Sault. [REDACTED] both have received some training on the operations of the system. The Ontario First Nations Technical Services Corporation conducted the training, [REDACTED]. Some training that would be helpful is sampling protocols, pump control systems, math, pumping station maintenance and collection system maintenance.

s.19(1)

8.0 Deficiencies in the Community Sewage Facilities

1. There is insufficient ventilation for the chemical storage area.
2. Facility does not have an office or lab area.
3. A list of technicians is not available and no spare parts are available on site.
4. Operators of system require further training.

9.0 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 operated plant) | - Class N/A (Community supplied by City of Nanticoke, OCWA) |
| Sewage Treatment Facility | - Class I |

10.0 Recommendations

- Implement a training program that can lead to operator certification.
- Develop a contingency plan for all emergencies for both water and sewage systems.
- Increase communication between the health representative and the operators.
- Provide laboratory and/or office space.

11.0 Overall Community Risk Assessment

- **Water Category – Low Risk (supplied by City of Nanticoke)**
- **Sewage Category – Low Risk**
- **Low Risk because of the following:**
 - **Operators are not sufficiently trained**

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