

Ministry of the Environment

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Ministère de l'Environnement

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Ontario

January 7, 2003

Mary McGuaig, Clerk
Corporation of the Nation Municipality
958 Road 500 West, R.R. #3
Casselman ON K0A 1M0

**RE: Cambridge (Central) Waster Disposal Site
Compliance Inspection Report**

Dear Madam:

The above-mentioned facility was inspected by Marc Robert, Sr. Environmental Officer of this office, on November 28, 2002.

Your attention is directed to Section 5.0 (Action(s) Required) and Section 6.0 (Other Inspection Findings) of the report. Please provide, by February 6, 2003, a workplan and schedule for bringing your facility into compliance.

If you have any questions or comments, please contact Marc Robert at this office at extension 229.

Yours truly,

A handwritten signature in cursive script, reading 'Michael Seguin'.

Michael Seguin
Cornwall Area Office

File Storage Number: SIRUCAC5252

MR:sp
Enclosure

Réunion Conseil
Council Mtg - 20/01/03
D M YR
Action - reports
Clerk - [signature]
Greffier - [signature]

COMPLIANCE INSPECTION REPORT

CAMBRIDGE (CENTRAL)

**SOLID NON-HAZARDOUS
WASTE DISPOSAL SITE**

**REPORT PREPARED BY THE CORNWALL OFFICE OF THE
MINISTRY OF THE ENVIRONMENT, EASTERN REGION**

**Inspected by: Marc Robert
Inspection: November 28, 2002**



Closed Waste Disposal Site Inspection Report

Client:	The Corporation of the Municipality of The Nation Mailing Address: Rural Route, 3, Casselman, Ontario, Canada, K0A 1M0 Physical Address: 958 Highway 500 West, The Nation, Municipality, United Counties of Prescott and Russell, Ontario, Canada Telephone: (613)764-5444, FAX: (613)764-3310 Client #: 8081-4GBRZH, Client Type: Municipal Government		
Inspection Site Address:	Central (Cambridge) Waste Disposal Site Address: Lot: 14, Concession: 5, The Nation, Municipality, United Counties of Prescott and Russell, K0A 1M0 District Office: Cornwall GeoReference: Map Datum: NAD83, Zone: 18, Accuracy Estimate: 10 -100 metres eg. Topographic Map, Method: Map, UTM Easting: 18490650.00, UTM Northing: 5018445.00		
Contact Name:	Mary McCuaig	Title:	Clerk
Contact Telephone:	(613)764-5444 ext222	Contact Fax:	(613)764-3310
Last Inspection Date:	2001/03/13		
Inspection Start Date:	2002/11/28	Inspection Finish Date:	2002/11/28
Region:	Eastern		

1.0 INTRODUCTION

The purpose of the compliance inspection program is to confirm that closed solid non-hazardous waste landfilling sites are in compliance with Ministry of the Environment (MOE) legislation and control documents and are in conformance with MOE waste-related policy and guidelines.

Specifically, this includes compliance/conformance with:

- The Environmental Protection Act (EPA);
- Ontario's General - Waste Regulation (O.Reg. 347);
- Certificates of Approval (C's of A); and
- Orders (Provincial Officer's Orders and/or Director's Orders)

The Nation Municipality's Central (Cambridge) municipal waste disposal site is located on Lot 14, Concession 5, in the former Township of Cambridge, now The Nation Municipality.

Photos of the Central waste disposal site, taken at the time of the inspection, are included in Appendix "A" of this report.

2.0 INSPECTION OBSERVATIONS

Certificate of Approval Number(s): ☒ Yes ☐ No

Certificate of Approval (C of A) No. A471101 dated June 7, 1982, was amended by a Notice (same number) dated August 1, 2001, for closure of the landfill site. In general, the Notice forbids the depositing of waste at the landfill site effective the issuance of the Notice.

C of A No. 5011-5ETFCJ dated October 24, 2002, was issued to The Nation Municipality for the construction of sewage works to control and treat leachate-impacted surface water emanating from the Central landfill site. This C of A has been appealed by the Municipality to the Environmental Review Tribunal.

Copies of the Certificate's of Approval are found in Appendix "B" of this report.

2.1 FINANCIAL ASSURANCE

MOE Guideline F-15 (Financial Assurance) identifies the criteria for the use of financial assurance to ensure that various regulatory requirements are met. In general, financial assurance is required as a condition of an approval under Part V of the Environmental Protection Act (EPA) for private landfill sites for which a hearing is required under Section 30 of the EPA; or which will accept non-hazardous solid industrial, commercial or domestic wastes and which have a lifetime capacity of at least 40,000 cubic meters (1500 people).

The Central waste disposal site is municipally owned. Therefore, there was no record of financial assurance for the landfill site at the time of my inspection, nor is one required.

2.2 CLOSURE PLAN

A closure plan which was submitted as part of an application for Certificate of Approval dated February 22, 2001, was approved by the MOE by way of the August 1, 2001 Notice to amend Certificate of Approval No. A471101.

Condition 2 of the Notice states that all work related to the closure of the Central landfill site shall be completed by August 31, 2002. At the time of my inspection, there was no information on file to indicate that all closure work had been completed (see Section 6.0 of this report).

2.3 ACCESS CONTROL

Since issuance of the August 1, 2002 Notice, the landfill site has been closed to all waste disposal operations and access to the site is restricted. A sign to this effect has been posted at the main entrance to the site.

Direct access to the Central waste disposal site is by two entry points: a main entrance to the site off County Road 3 and another secondary entrance located behind the Nation Municipality's municipal offices and garage. There is no fence around the landfill site. However dense forest vegetation prevents easy access to the site. Direct access to the site is controlled by steel gates erected across both entrances. At the time of my inspection, these gates were closed and locked.

At the time of my inspection there was no evidence of illegal dumping occurring in the waste disposal site, nor at its entrances.

2.4 FINAL COVER

The closure of a landfill site requires the application of final cover to isolate the landfilled waste from surface exposure for public health and aesthetic reasons. As well, the final cover determines the infiltration of precipitation and thereby greatly influences the waste decomposition rate and long term management of leachate; provides control of landfill gas; provides the appropriate ground, contours and landscape for the planned end-use of the landfill site. (source: MOE's Guidance Manual For Landfill Sites Receiving Municipal Waste, Nov. 1993).

The Closure Plan for the Central waste disposal site which was approved as part of the August 1, 2001 Notice to amend C of A No. A471101, requires the application of a minimal final cover over the landfill site and the implementation of remedial measures that would collect, store and manage leachate generated from the site.

At the time of my inspection, final cover appeared to have been uniformly applied over the entire waste disposal area of the Central landfill site. The thickness of the final cover appeared adequate as no waste was seen protruding through the cover material. Seeding of the soil layer appeared also to have been completed as a uniform vegetative cover was visible. Erosion of the final cover along the base of the waste mound was noticeable at several locations and settling of the final cover was evident at the summit of the waste mound. The Municipality should take steps to repair the final cover where required.

Works to collect, store and manage leachate from the landfill site have not yet been constructed (see Section 2.5 of this report).

2.5 LEACHATE CONTROL SYSTEM

It is the MOE's opinion that a leachate control system is required for the Central waste in order to control and treat leachate-impacted surface water that flows from the Central landfill site into the South Nation River. The Nation Municipality applied for and received C of A No. 5011-5ETFCJ dated October 24, 2002, for the construction and operation of sewage works to abate the site's leachate pollution problem. However, the municipality was not satisfied with the requirements of the C of A and has appealed it to the Environmental Review Tribunal.

2.6 METHANE GAS CONTROL SYSTEM

The Central waste disposal site is without a methane gas control system, nor has one been required by way of a C of A or an Order. Also, the landfill site's closure plan did not state the need for such a system. At the time of my inspection, methane gas odours were not noticeable at the site.

2.7 MONITORING PROGRAMS:

A ground and surface water monitoring program was approved under Condition 3 of the August 1, 2001, Notice to amend C of A No. A471101. A breakdown of the surface and groundwater monitoring programs are found in Appendix "C" of this report. Findings of the monitoring program are described in the following section. Also, Condition 4 of the Notice required the construction of additional groundwater monitoring wells along the east boundary of the landfill site in order to better assess the extent of the groundwater contamination at this location. On August 1, 2002, the MOE received notification from Golder Associates Ltd., a hydrogeological consultant for The Nation Municipality, that a total of six (6) new groundwater monitoring wells had been constructed during June 2002 at the required location.

Monitoring for landfill site gases is not required at the Central landfill site by way of a control document.

2.8 GROUND WATER/SURFACE WATER IMPACTS

It has been shown that leachate impacted surface waters flow from the Central waste disposal site into the South Nation River. Monitoring has demonstrated that the concentration of unionized ammonia in these waters surpasses that of the Provincial Water Quality Objectives and is having a localized adverse impact on the water quality of the South Nation River. The construction of sewage works to control and treat the leachate-impacted surface waters is required.

Also, a 2001 Groundwater and Surface water monitoring program report for the Central landfill site dated March 2002 concluded that the site is not in compliance with the MOE's Guideline B-7 (Incorporation of the Reasonable Use Concept into MOE Groundwater Management Activities) along the east boundary of the site. Also the discharge of leachate impacted surface water onto the east adjoining property has resulted in an adverse impact to off-site water quality at this location. Additional studies to determine the extent of the ground and surface water contamination have been recommended by the municipality's consultant. A review of the report by the Ministry of the Environment's Technical Support Section (Surface Water Unit) agreed with the findings of the report and the proposed 2002 surface water monitoring and sampling program.

A review by the Ministry of the Environment's Technical Support Section (Groundwater Unit) is pending.

Additional groundwater monitoring wells that were constructed during June 2002 should provide information that will assist in assessing the extent of the off-property groundwater contamination.

At the time of my inspection, there was what appeared to be leachate entering a perimeter ditch along the south and east sides of the waste mound.

2.9 Registration On Title:

On December 8, 1988, the existence and location of the Central waste disposal site was registered on title. However, since the closure of the site no new registration on title to this effect has occurred.

3.0 REVIEW OF PREVIOUS NON-COMPLIANCE ISSUES

Prior to closure of the Central waste disposal site, previous MOE compliance inspection reports had noted that waste disposal activities at the site had progressed beyond the approved boundaries of the site. Closure of the landfill site has addressed this issue of non-compliance. Work to address off-property groundwater and surface water impacts is still required.

4.0 SUMMARY OF INSPECTION FINDINGS (HEALTH/ENVIRONMENTAL IMPACT)

Was there any indication of a known or anticipated human health impact during the inspection and/or review of relevant material, related to this Ministry's mandate ?

No

Specifics:

Was there any indication of a known or anticipated environmental impact during the inspection and/or review of relevant material ?

Yes

Specifics: Studies have indicated that leachate from the Central waste disposal site is having an adverse effect on ground and surface waters beyond the approved limits of the landfill site.

Was there any indication of a known or suspected violation of a legal requirement during the inspection and/or review of relevant material which could cause a human health impact or environmental impairment ?

Yes

Specifics: Condition 5 of the August 1, 2001, Notice to amend C of A No. A471101 required The Nation Municipality to address off-site leachate contamination so as to bring the Central waste disposal site into compliance with the Ministry's Guideline B-7 (Reasonable Use Concept) no later than August 31, 2002. At the time of my inspection this work had not yet been completed.

Was there any indication of a potential for environmental impairment during the inspection and/or the review of relevant material ?

No

Specifics:

5.0 ACTION(S) REQUIRED

The Nation Municipality should accelerate its abatement program for bringing the Central landfill site into compliance with the MOE's Guideline B-7.

6.0 OTHER INSPECTION FINDINGS

The Closure Plan for the Central waste disposal site which was approved as part of the August 1, 2001 Notice to amend C of A No. A471101 described work that was required for proper closure of the landfill site and a biannual (twice-a-year) maintenance program for the site. It also remarked that a summary of the maintenance program inspections would be provided in the site's post-closure annual monitoring reports.

Unfortunately, the landfill site's 2001 Monitoring Report dated March 2002 was limited to groundwater and surface water monitoring information and did not provide a summary of the site closure work that had been completed to date nor did it include site maintenance inspection information. It was therefore not possible to determine compliance with Condition 2 of the Notice. The Municipality should ensure that its landfill site's 2002 groundwater and surface water monitoring report contains this information.

7.0 INCIDENT REPORT

☒ Applicable ☐ Not Applicable

4706-5GGPLM



8.0 ATTACHMENTS

Required attachments:

Appendix "A": Photos of the Central Waste Disposal Site

Appendix "B": Certificates of Approval

Appendix "C": Approved Groundwater and Surface Water Monitoring Program

PREPARED BY:

Environmental Officer:

Name:

Marc F. Robert


District Office:

Cornwall Area Office

Date:

2003/01/07

Signature



REVIEWED BY:

District Supervisor:

Name:

Michael Seguin

District Office:

Cornwall Area Office

Date:

2003/01/07

Signature:



File Storage Number:

SIRUCAC5252

Note:

"This inspection report does not in any way suggest that there is or has been compliance with applicable legislation and regulations as they may apply to this facility. It is, and remains, the responsibility of the owner and/or the operating authority to ensure compliance with all applicable legislative and regulatory requirements"

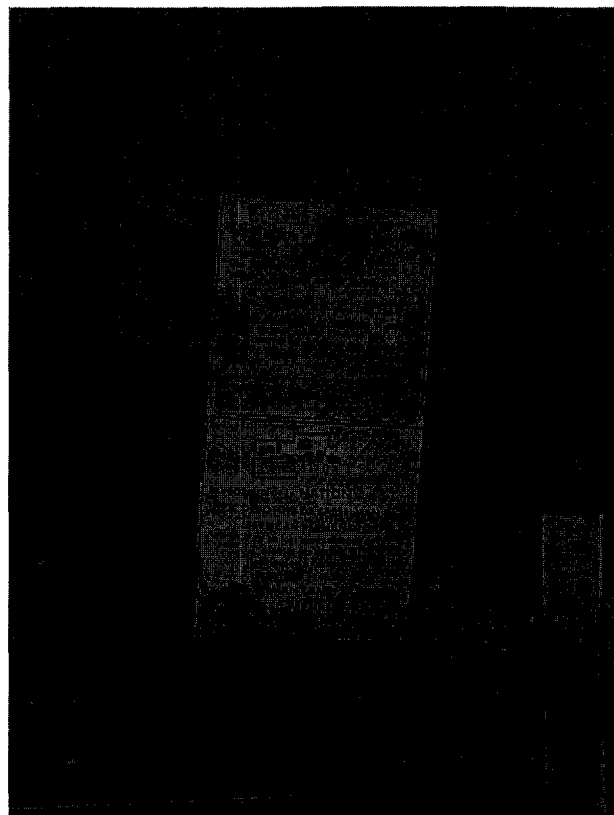
Appendix "A"

The Nation Municipality (Central) Waste Disposal Site

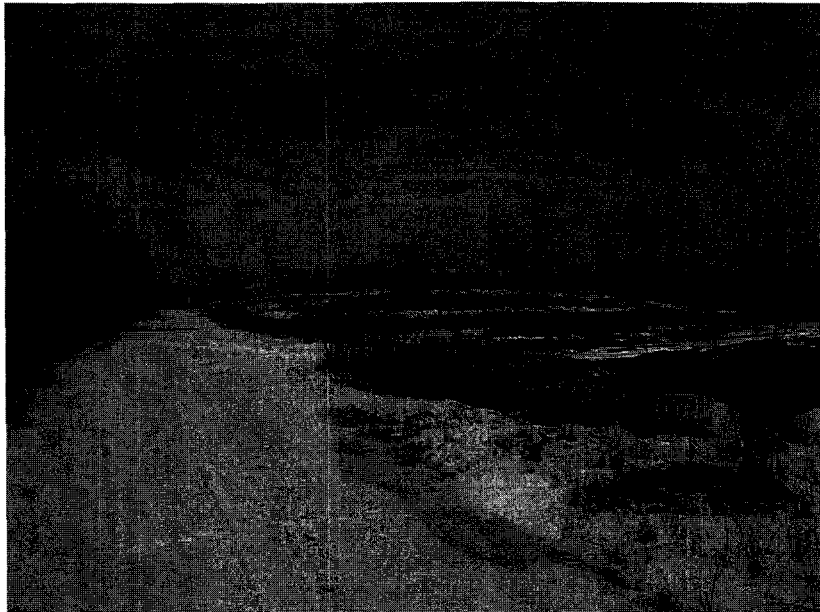
Photos



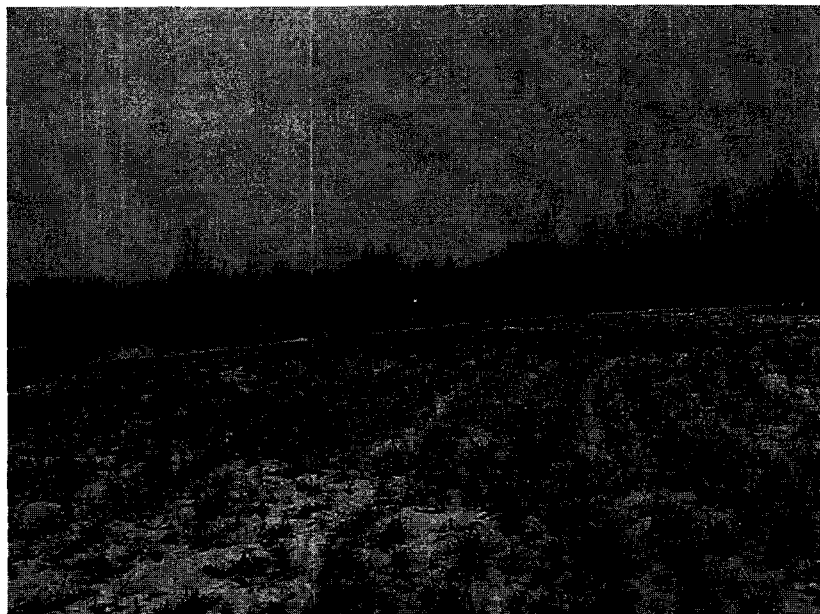
1. Main entrance to the Central waste disposal site.



2. Sign at the main entrance to the Central landfill site indicating that the site is closed to waste disposal operations.



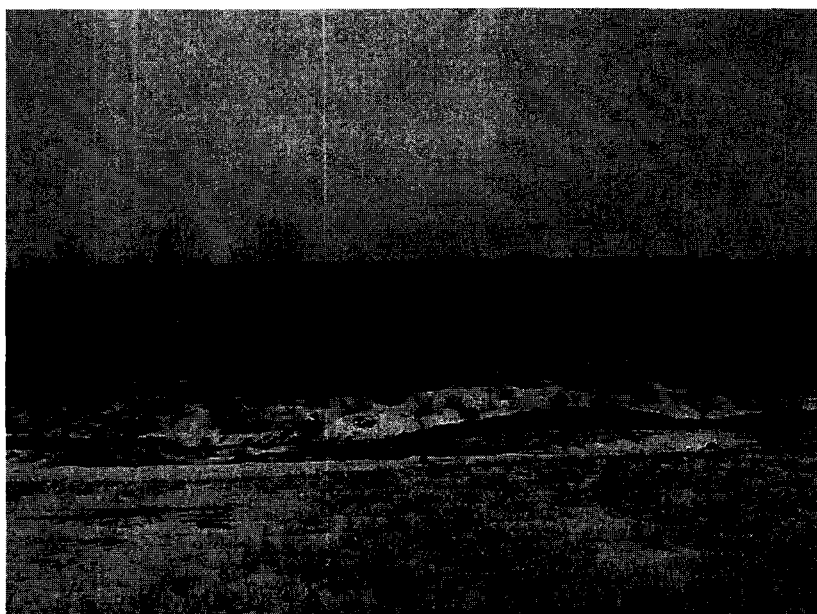
3. Closed waste disposal area of the Central landfill site.



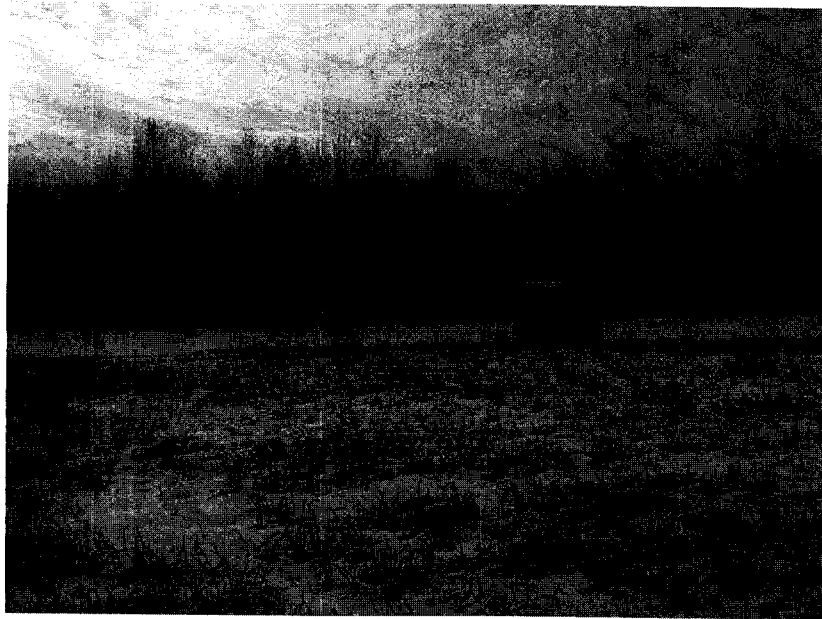
4. North view from the top of the waste disposal area.



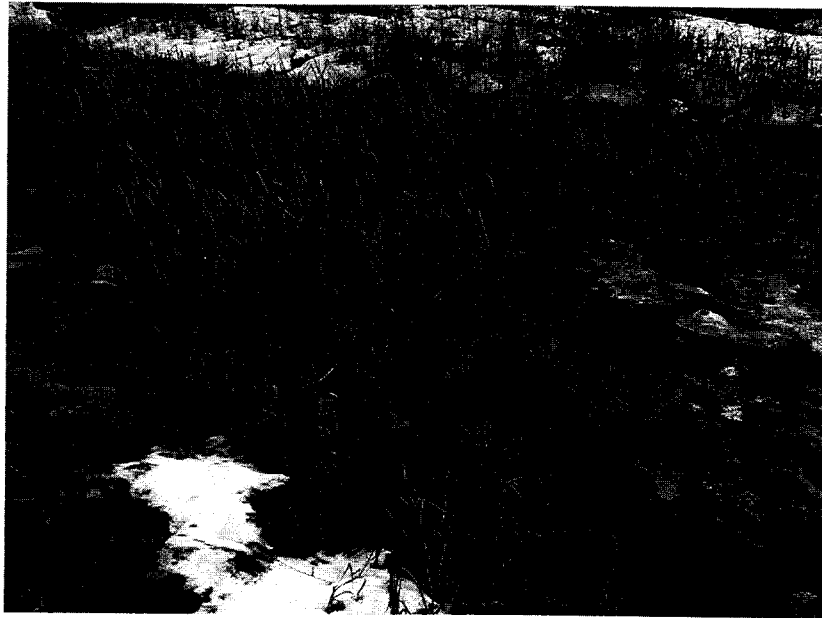
5. South view from the Central landfill site waste disposal area.



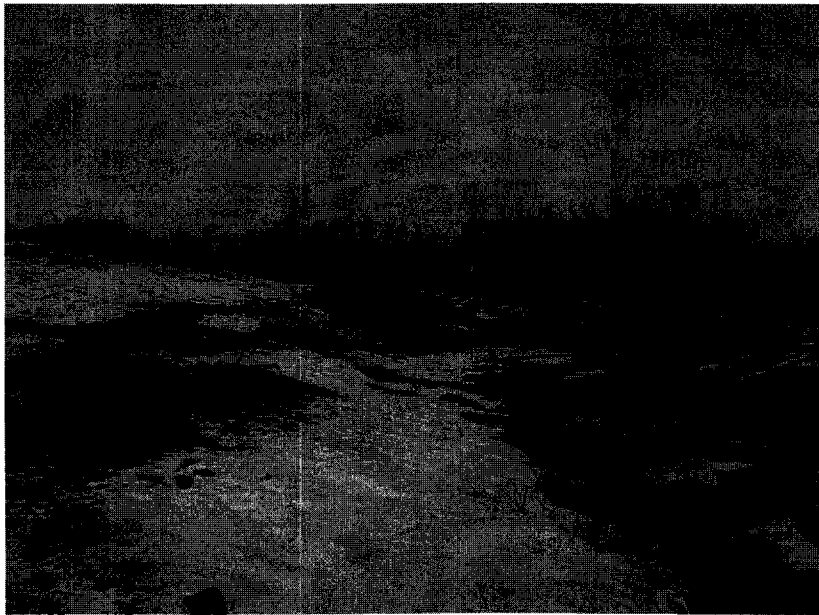
6. East view from the Central landfill site waste disposal area.



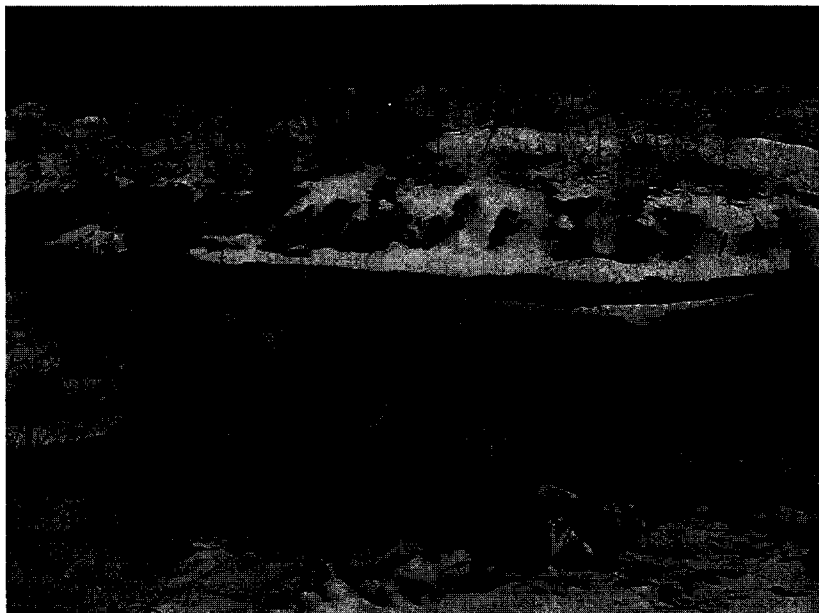
7. West view from the Central landfill site waste disposal area.



8. Possible leachate along the south perimeter of the waste disposal area.



9. Drainage ditch along the east perimeter of the waste disposal area.



10. Possible leachate in the ditch along the east perimeter of the waste disposal area.

Appendix "B"

The Nation Municipality (Central) Waste Disposal Site

Certificates of Approval



Ontario

Ministry
of the
Environment

Ministère
de
l'Environnement

AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL
WASTE DISPOSAL SITE
NUMBER A471101
Notice No. 1

Corporation of the Nation Municipality
958 Highway 500 West
Casselman, Ontario
K0A 1M0

Site Location: Central Landfill
Lot 14, Concession 5, the former Township of Cambridge, Part 1 & 3 R.P. 4127
The Nation Municipality, United Counties Of Prescott & Russell

You are hereby notified that I have amended Provisional Certificate of Approval No. A471101 issued on June 7, 1982 for the use and operation of 3 hectare landfill within 16.37 hectare total Site area, as follows:

1. No waste shall be disposed of at the Central Landfill Site effective the issuance date of this Notice.
2. All work related to the closure of the Central Landfill shall be completed by August 31, 2002.
3. The Central Landfill Site shall be closed as per the closure plan and final contours indicated on Figure 5 of the 2001 supporting documentation prepared by Stantec Consulting Limited for the site. Groundwater and Surface Water monitoring shall be carried out as per Tables 4 and 5 of the same document.
4. Within six months of the issuance date of this Notice, The Nation Municipality shall install appropriate number of additional monitoring wells along the eastern boundary of the Central Landfill and submit justification for the number of wells and a map showing the location of the same to the District Manager, Cornwall District Office, Ministry of the Environment.
5. By August 31, 2002, the Corporation of the Nation Municipality shall address off-site leachate contamination so that the Central Landfill Site complies with the Reasonable Use Guideline of the Ministry of the Environment.

all in accordance with the application for Certificate of Approval dated February 22, 2001, and the supporting information and documentation prepared by Stantec Consulting Limited.

This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A471101 dated June 7, 1982, as amended.

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Appeal Board within 15 days after receipt of this Notice, require a hearing by the Board. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the waste disposal site is located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Appeal Board
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Section 39, *Environmental Protection Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Appeal Board's requirements for an appeal can be obtained directly from the Board at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 1st day of August, 2001

Henry Jun, P.Eng.
Director
Section 39, *Environmental Protection Act*

TG/
c: District Manager, MOE Cornwall



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of the
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l'Environnement

CERTIFICATE OF APPROVAL
MUNICIPAL AND PRIVATE SEWAGE WORKS
NUMBER 5011-5ETFCJ

The Corporation of the Municipality of The Nation
Rural Route, No. 3
Casselman, Ontario
K0A 1M0

Site Location: Central Landfill
Lot 14, Concession 5, Part 1 & 3 R.P. 4127
Casselman Village, United Counties Of Prescott & Russell

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

the establishment of sewage works for the collection, transmission, treatment and disposal of water that has become impacted with landfill leachate, consisting of the following:

- two (2) 150 millimetre diameter perforated pipelines extending along the north side of the Casselman waste disposal area, discharging to a reservoir located in the main gully area;
- one (1) 150 to 200 millimetre diameter perforated pipeline extending along the east (perforated) and north (non-perforated) sides of the Nation waste disposal area, discharging to a reservoir located in the main gully area;
- one (1) clay-lined reservoir located in the main gully area with an operating volume of 258 cubic metres, discharging to the leachate lagoon via a pumping station, consisting of a 1.8 metres diameter wet well equipped with two (2) pumps, each rated at 2.85 litres per second at a TDH of 25 metres and a 75 millimetre diameter forcemain, including an overflow spillway, at an elevation of 49.0 metres, to the South Nation River ;
- one (1) leachate lagoon having a total effective volume of 16,000 cubic metres (at elevation 64.5 metres), with berms constructed of silty clay and a geosynthetic clay liner placed on the bottom, 0.5 metres freeboard, 4:1 and 3:1 internal and external side slopes, discharging by gravity back to the reservoir via the pumping station and forcemain and via an overflow, at elevation 64.75 metres, and discharge piping;

- all other controls, electrical equipment, instrumentation, piping, valves and appurtenances essential for the proper operation of the aforementioned sewage works;

all in accordance with the following submitted supporting documents:

1. Application for Approval of Municipal and Private Water and Sewage Works Mary McCuaig of the Corporation of the Nation Municipality dated February 22, 2001;
2. Nation Municipality, Leachate Management Design Report, dated 28 February 2001, prepared by Stantec Consulting Limited and appendices;
3. Report on Geotechnical and Hydrogeological Investigation - Proposed Lagoon - Central Landfill Site - Nation Municipality, Ontario prepared by Golder Associates Ltd. dated November 2000;
4. Report on Geotechnical and Hydrogeological Investigation - Proposed Dyke - Casselman Village and Nation Municipality Landfills, Ontario prepared by Golder Associates Ltd. dated December 1999;
5. Facsimile transmission and attachments dated April 6, 2001 from Gerry Lalonde of Stantec Consulting Ltd. to Randy Chin of the Ministry of the Environment;
6. Letter and attachments dated October 24, 2001 from Gerry Lalonde of Stantec Consulting Ltd. to Randy Chin of the Ministry of the Environment;
7. Letters dated November 26, 2001 and July 31, 2002 from Mary McCuaig of The Nation Municipality to Randy Chin of the Ministry of the Environment; and
8. Letter dated January 31, 2002, containing the Total Phosphorus Management Agreement between the Corporation of Casselman, the Nation Municipality and the South Nation River Conservation Authority, signed on February 18, 2002 by the Corporation of Casselman, on February 20, 2002 by the Nation Municipality and on February 25, 2002 by the South Nation River Conservation Authority.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

"certificate" means this entire certificate of approval document, issued in accordance with Section 53 of the *Ontario Water Resources Act*, and includes any schedules;

"Director" means any Ministry employee appointed by the Minister pursuant to section 5 of the *Ontario Water Resources Act*;

"Ministry" means the Ontario Ministry of the Environment;

"District Manager" means the District Manager of the Kingston District Office of the Ministry;

"Owner" means the Corporation of the Nation Municipality; and

"works" means the sewage works described in the Owner's application, this certificate and in the supporting documentation referred to herein, to the extent approved by this certificate.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL CONDITION

(1) Except as otherwise provided by these Conditions, the Owner shall design, build, install, operate and maintain the works in accordance with the description given in this Certificate, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this Certificate.

(2) Where there is a conflict between a provision of any submitted document referred to in this Certificate and the Conditions of this Certificate, the Conditions in this Certificate shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

2. DISCHARGE TO THE SOUTH NATION RIVER

(1) The Owner shall control all discharges from the reservoir to the South Nation River such that no discharge occurs between April 1st and September 30th of any calendar year and only under conditions of maximum dilution to ensure compliance to Provincial Water Quality Objectives. During conditions that do not enable compliance to Provincial Water Quality Objectives, all discharges from the reservoir must be directed to the lagoon.

(2) Except for overflows, the Owner shall control all discharges from the leachate lagoon such that discharge occurs only during November and December of any calendar year and only under conditions of maximum dilution in the South Nation River to ensure compliance to Provincial Water Quality Objectives.

(3) In furtherance to subsection (2), the Owner shall, prior to the initiation of discharge from the leachate lagoon, collect a representative grab sample of the lagoon and have the sample analyzed for Calcium, Magnesium, Sodium, Potassium, Aluminum, Barium, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Molybdenum, Nickel, Total Phosphorus,

Silicon, Silver, Strontium, Sulphur, Thallium, Tin, Titanium, Vanadium, Zinc, Hardness(Ca & Mg), Alkalinity, Total Dissolved Solids, Chloride, Sulphate, Nitrate, Nitrite, Ortho-phosphate, Total Ammonia, Dissolved Organic Carbon, Chemical Oxygen Demand, 5-day Biochemical Oxygen Demand, Phenolics, pH and Temperature.

(4) Notwithstanding subsections (2) and (3), the owner shall collect a grab sample of any discharge from the reservoir to the South Nation River, bi-weekly (once every 2 weeks), and have the samples analyzed for the parameters identified in subsection (3).

(5) The methods and protocols for sampling, analysis and recording for monitoring pursuant to this condition shall conform, in order of precedence, to the methods and protocols specified in the following:

(a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (August 1994), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and

(b) the publication "Standard Methods for the Examination of Water and Wastewater" (17th edition) as amended from time to time by more recently published editions.

(6) The Owner shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this condition.

3. RECEIVING WATER MONITORING

(1) The Owner shall establish surface water monitoring station(s) on the South Nation River, to measure river flows and collect water quality samples. These station(s) shall be located in locations agreeable to the District Manager with at least one (1) station located upstream of the landfill sites.

(2) The Owner shall measure, record and calculate the flowrate of the South Nation River at each station, once each month, collect a representative grab sample of the river water and have the samples analyzed for the parameters identified in Condition 2 (3) as well as, Temperature, Conductivity, pH, Dissolved Oxygen, Total Kjeldahl Nitrogen, Sulphate, Turbidity and Total Suspended Solids.

(3) Prior to establishing the stations required in subsection (1), the Owner shall obtain written concurrence of their locations from the District Manager.

4. REPORTING

(1) One week prior to the start up of the operation of the works, the Owner shall notify the District Manager (in writing) of the pending start up date.

(2) The Owner shall prepare and submit a performance report to the District Manager on an annual basis within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

- (a) a summary and interpretation of all monitoring data and a comparison to Provincial Water Quality Objectives;
- (b) a description of any operating problems encountered and corrective actions taken;
- (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage works;
- (d) a summary of any effluent quality assurance or control measures undertaken in the reporting period; and
- (e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment.

(3) After the successful submission of three (3) annual reports pursuant to subsection (2), the Owner may terminate the submission of the reports but must continue to prepare the reports, with the written concurrence of the District Manager.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Certificate and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
2. Conditions 2, 3 and 4 are included to require the owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved works does not cause any impairment to the receiving watercourse.

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

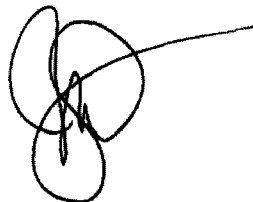
AND

The Director
Section 53, *Ontario Water Resources Act*
Ministry of Environment and Energy
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 24th day of October, 2002



Mohamed Dhalla, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

RC/

c: District Manager, MOE Cornwall
Gilles Lortie - Corporation of Casselman
Gerry Lalonde, Stantec Consulting Ltd.



Ontario

Ministry
of the
Environment

Ministère
de
l'Environnement

AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL
WASTE DISPOSAL SITE
NUMBER A471101
Notice No. 1

Corporation of the Nation Municipality
958 Highway 500 West
Casselman, Ontario
K0A 1M0

Site Location: Central Landfill
Lot 14, Concession 5, the former Township of Cambridge, Part 1 & 3 R.P. 4127
The Nation Municipality, United Counties Of Prescott & Russell

You are hereby notified that I have amended Provisional Certificate of Approval No. A471101 issued on June 7, 1982 for the use and operation of 3 hectare landfill within 16.37 hectare total Site area, as follows:

1. No waste shall be disposed of at the Central Landfill Site effective the issuance date of this Notice.
2. All work related to the closure of the Central Landfill shall be completed by August 31, 2002.
3. The Central Landfill Site shall be closed as per the closure plan and final contours indicated on Figure 5 of the 2001 supporting documentation prepared by Stantec Consulting Limited for the site. Groundwater and Surface Water monitoring shall be carried out as per Tables 4 and 5 of the same document.
4. Within six months of the issuance date of this Notice, The Nation Municipality shall install appropriate number of additional monitoring wells along the eastern boundary of the Central Landfill and submit justification for the number of wells and a map showing the location of the same to the District Manager, Cornwall District Office, Ministry of the Environment.
5. By August 31, 2002, the Corporation of the Nation Municipality shall address off-site leachate contamination so that the Central Landfill Site complies with the Reasonable Use Guideline of the Ministry of the Environment.

all in accordance with the application for Certificate of Approval dated February 22, 2001, and the supporting information and documentation prepared by Stantec Consulting Limited.

This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A471101 dated June 7, 1982, as amended.

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Appeal Board within 15 days after receipt of this Notice, require a hearing by the Board. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the waste disposal site is located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Appeal Board
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Section 39, *Environmental Protection Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Appeal Board's requirements for an appeal can be obtained directly from the Board at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 1st day of August, 2001

Henry Jun, P.Eng.
Director
Section 39, *Environmental Protection Act*

TG/
c: District Manager, MOE Cornwall

Appendix "C"

The Nation Municipality (Central) Waste Disposal Site

Approved Groundwater and Surface Water
Monitoring Program

TABLE 6

**CENTRAL LANDFILL SITE
PROPOSED 2002 GROUNDWATER MONITORING PROGRAM
NATION MUNICIPALITY, ONTARIO**

A. 2002 GROUNDWATER MONITORING PROGRAM

1.0 MONITORING SESSIONS

1.1 Water Level and Quality Monitoring

Spring (April/May)

Fall (October)

2.0 SAMPLING LOCATIONS

2.1 Groundwater Monitoring Wells

G99-7, G00-4A, G00-4B and four to five new proposed shallow monitoring wells

3.0 FIELD MEASURED PARAMETERS

Groundwater levels in all monitoring wells
temperature, conductivity, pH for all groundwater samples

4.0 LABORATORY MEASURED PARAMETERS

calcium, magnesium, sodium, potassium, aluminum, barium, beryllium, boron, cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, nickel, total phosphorus, silicon, silver, strontium, sulphur, thallium, tin, titanium, vanadium, zinc

hardness (calculated from laboratory calcium and magnesium analyses)

alkalinity, TDS, chloride, sulphate, nitrate, nitrite, ortho-phosphate, BOD

ammonia, DOC, COD

phenols

Special Note For Parameters with Established Provincial Water Quality Criteria - All laboratory analyses on groundwater samples will be performed by a private analytical laboratory and the method detection limits (MDLs) for the specific analyses should be commensurate with the standards established in the Provincial Water Quality Objectives or the Ontario Drinking Water Objectives, whichever is lower.

TABLE 7

**CENTRAL LANDFILL SITE
PROPOSED 2002 SURFACE WATER MONITORING PROGRAM
NATION MUNICIPALITY, ONTARIO**

A. 2002 SURFACE WATER MONITORING PROGRAM

1.0 MONITORING SESSIONS

1.1 Water Quality Monitoring

Monthly from April 2002 to December 2002, with the exception of SW1 and new proposed sampling locations to east of landfill site. Sampling at SW1 and new proposed sampling locations will be completed in the spring (April/May) and fall (October) only.

2.0 SAMPLING LOCATIONS

2.1 Surface Water Monitoring Stations

SW1, SW6, SW7, SW8, SW9, SW10 and three to four new proposed sampling locations

3.0 FIELD MEASURED PARAMETERS

temperature, conductivity, pH, dissolved oxygen, and flow estimates for all surface water samples

4.0 LABORATORY MEASURED PARAMETERS

calcium, magnesium, sodium, potassium, aluminum, barium, beryllium, boron, cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, nickel, total phosphorus, silicon, silver, strontium, sulphur, thallium, tin, titanium, vanadium, zinc

hardness (calculated from laboratory calcium and magnesium analyses)

alkalinity, BOD, TDS, chloride, sulphate, nitrate, nitrite, ortho-phosphate

ammonia, DOC, COD

phenols

nitrate, nitrite, TKN, sulphate, turbidity, TSS

Special Note For Parameters with Established Provincial Water Quality Criteria - All laboratory analyses on surface water samples will be performed by a private analytical laboratory and the method detection limits (MDLs) for the specific analyses should be commensurate with the standards established in the Provincial Water Quality Objectives or the Ontario Drinking Water Objectives, whichever is lower.