

Ministry of
the Environment

Ministère de
l'Environnement

Safe Drinking Water
Branch

Direction du contrôle de la qualité
de l'eau potable



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300 Water St
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Place Robinson, Tour Sud
300, rue Water
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Téléphone : 705 755-4300
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July 30, 2010

Ms. Janice Lavalley
Chief Administrative Officer
The Corporation of the Township of Smith-Ennismore-Lakefield
PO Box 270
Bridgenorth, ON K0L 1H0

Dear Ms. Lavalley:

**Re: Woodland Acres Subdivision Distribution System Compliance Inspection
Report 10/11 Inspection Number 1-8FDXB**

The enclosed report documents findings of the inspection that was performed at the Woodland Acres Subdivision Distribution System on **June 3, 2010**.

Two sections of the reports, namely *Actions Required* and *Recommended Actions* cite due dates for the submission of information or plans to my attention.

Please note that *Actions Required* are linked to incidents of non-compliance with regulatory requirements contained within an Act, a Regulation, or site-specific approvals, licenses, permits, orders, or instructions. Such violations could result in the issuance of mandatory abatement instruments including Orders, tickets, penalties, or referrals to the ministry's Investigations and Enforcement Branch. Please respond to these actions required **within the time frame specified within the report**.

Recommended Actions convey information that the owner or operating authority should consider implementing in order to advance efforts already in place to address such issues as emergency preparedness, the fulsome availability of information to consumers, and conformance with existing and emerging industry standards. Please note that items which appear as recommended actions do not, in themselves, constitute violations.

Thank you for the assistance afforded to me during the conduct of the compliance assessment. Should you have any questions regarding the content of the enclosed report please do not hesitate to contact me.

Yours truly,

A handwritten signature in black ink, appearing to read "Lynette Carter".

Lynette Carter
Drinking Water Inspector
Peterborough District Office

Encl. (1)

MOE File Storage Number: SI PB SM CO3 540 Woodland Acres Subdivision Distribution System

c: Dr. Rosana Pellizzari, Medical Officer of Health, Peterborough County-City Health Unit 10 Hospital Drive, Peterborough, ON, K9J 4Y1

Mr. Lane Vance, Manager of Financial Services, The Corporation of the Township of Smith-Ennismore-Lakefield, PO Box 270, Bridgenorth, ON, K0L 1H0

Mr. Wayne Stiver, P. Eng., Vice-President, Peterborough Utility Services Inc., 1867 Ashburnham Drive, P.O. Box 4125, Station Main, Peterborough, ON K9J 6Z5

Mr. Kevan Light, Superintendent, Peterborough Utility Services Inc., 1867 Ashburnham Drive, P.O. Box 4125, Station Main, Peterborough, ON K9J 6Z5

Mr. René Gagnon, Water Treatment Plant Supervisor, Peterborough Utility Services Inc., 1867 Ashburnham Drive, P.O. Box 4125, Station Main, Peterborough, ON K9J 6Z5

Mr. James Hunt, Manager – Source Water Protection, Trent Conservation Coalition, 714 Murray Street, RR#1, Trenton, ON K8V 5P4



Ministry of the Environment

WOODLAND ACRES SUBDIVISION DISTRIBUTION SYSTEM

Drinking Water System Inspection Report

DWS Number:	210001503
Inspection Number:	1-8FDXB
Date of Inspection:	Jun 03, 2010
Inspected By:	Lynette Carter

**Table of Contents: Woodland Acres Subdivision Distribution
System Inspection Report**

OWNER INFORMATION	2
CONTACT INFORMATION	2
INSPECTION DETAILS	3
DWS COMPONENTS DESCRIPTION	3
INSPECTION SUMMARY	5
Introduction	5
Treatment Processes	5
Distribution System	5
Operations Manuals	6
Logbooks	6
Security	6
Certification and Training	6
Water Quality Monitoring	6
Water Quality Assessment	7
Reporting & Corrective Action	7
Non-Compliance w/Regulatory Requirements and Actions Required	8
Summary of Best Practice Issues and Recommendations	9
SIGNATURES	10

APPENDIX A- Drinking Water System Components Description
APPENDIX B- Certificate of Approval
APPENDIX C- MOE Audit Sample Results
APPENDIX D- Inspection Rating Record

OWNER INFORMATION:

Company Name: SMITH-ENNISMORE-LAKEFIELD, THE CORPORATION OF THE TOWNSHIP OF
Street Number: 1310 **Unit Identifier:**
Street Name: CENTRE Line N
City: BRIDGENORTH
Province: ON **Postal Code:** K0L 1H0

CONTACT INFORMATION

Type:	Owner	Name:	Janice Lavalley
Phone:	(705) 292-9507	Fax:	(705) 292-8964
Email:	lavalley@nexicom.net		
Title:	CAO, Township of Smith-Ennismore-Lakefield		
Type:	Owner	Name:	Lane Vance
Phone:	(705) 292-9507	Fax:	(705) 292-8964
Email:	rlvance@nexicom.net		
Title:	Manager of Financial Services & Treasurer, Township of Smith-Ennismore-Lakefield		
Type:	Operating Authority	Name:	Wayne Stiver
Phone:	(705) 748-9301 x1237	Fax:	(705) 748-0120
Email:	wstiver@peterboroughutilities.ca		
Title:	Vice President, Peterborough Utilities Services Inc.		
Type:	Operating Authority	Name:	Kevan Light
Phone:	(705) 748-9301 x2310	Fax:	(705) 748-3138
Email:	klight@peterboroughutilities.ca		
Title:	Superintendent, Peterborough Water Treatment Plant		
Type:	Operating Authority	Name:	René Gagnon
Phone:	(705) 748-9301 x2380	Fax:	(705) 748-3138
Email:	rgagnon@peterboroughutilities.ca		
Title:	Water Treatment Plant Supervisor		
Type:	MOH - Peterborough County-City	Name:	Dr. Rosana Pellizzari
Phone:	(705) 743-1000	Fax:	(705) 743-2897
Email:	pellizzari@pcchu.ca		
Title:	Medical Officer of Health, Peterborough County-City Health Unit		
Type:	Other-Source water Protection	Name:	James Hunt
Phone:	(613) 394-3915 x252	Fax:	(613) 394-5226
Email:	info@trentsourceprotection.on.ca		
Title:	Source Water Protection Committee Chair, Trent Conservation Coalition		

INSPECTION DETAILS:

DWS Name: WOODLAND ACRES SUBDIVISION DISTRIBUTION SYSTEM
DWS Address: 1310 CENTRE LINE of SMITH
County/District: Smith-Ennismore-Lakefield
District/Area Office: Peterborough District
DWS Category: Large Municipal Residential
DWS Number: 210001503
Inspection Type: Announced
Inspection Number: 1-8FDXB
Date of Inspection: Jun 03, 2010
Date of Previous Inspection: Nov 12, 2009

DRINKING WATER SYSTEM COMPONENTS DESCRIPTION

Site (Name): Peterborough Water Treatment Plant
Type: Treated Water POE **Sub Type:** Treatment Facility

Comments:

The Woodland Acres Subdivision Stand Alone Distribution System is supplied with potable water produced by the Peterborough Water Treatment Plant. The Peterborough WTP obtains raw water through two 760 mm cast iron intake pipes that extend 22 m into the Otonabee River.

The Peterborough Water Treatment Plant is a conventional plant which includes coagulation, flocculation, sedimentation, filtration and chlorine disinfection in the treatment process.

Water passes through coarse mesh screens, into the low lift suction well, where four low lift pumps direct the raw water header to into six flocculation chambers and attached sedimentation basins. Aluminum sulphate and activated silica are injected prior to the water entering the flocculation tanks to assist in floc formation prior to the flocculation process.

Filtration is achieved through eleven filters, three of which utilize granular activated carbon, while the remainder are dual media (anthracite/sand) gravity filters. Each filter is equipped with an alarmed turbidimeter and particle counter. Backwashing of the filters can be initiated automatically; however, standard operating procedure dictates that the operator manually initiate the backwash cycle, in order to ensure that the backwash cycle is visually monitored.

Primary disinfection of the filtered water occurs in the chlorine contact tank through a baffle system to ensure adequate chlorine contact time. The water then flows into Clear Well No.3, where secondary chlorination is performed to ensure that a proper chlorine residual is maintained throughout the distribution system. Hydrofluorosilic acid is added to produce a flouride ion concentration of 0.65 mg/L. Sodium silicate is added to raise the pH and reduce the corrosivity of the finished water. water exiting Clear Well No.3 flows by gravity through a 750 mm conduit to the Water Street Pumping Station, located on the Otonabee River, approximately 320 m south of the treatment plant. The pumping station consists of three water driven centrifugal pumps and two electric centrifugal pumps which direct water into Pressure Zone 1.

Treated effluent exiting Clear Well No.3 may also flow into Clear Well No.2; where approximately 4% of the Plant's total treated water is diverted for the purpose of filter back-wash operations. The remainder of the water entering Clear Well No.2 flows through a 900 mm conduit into the Plant's high lift pumping station. The high lift pumping gallery consists of three vertical turbine pumps which direct treated water into Pressure Zone 2 (including Woodland Acres Subdivision) and to four pumping stations that redirect water into Pressure Zone 3.

Site (Name): Distribution

Type: Other

Sub Type: Other

Comments:

The Woodland Acres Subdivision is located in the southeast extremity of Smith-Ennismore-Lakefield Township (Smith Ward), and receives treated water from the Peterborough Water Treatment Plant. The Woodland Acres Distribution System was connected to Pressure Zone 2 of the Peterborough Distribution System in January 2001. Woodland Acres Subdivision is connected to the Peterborough Distribution System through a 300 mm diameter watermain that was constructed along Water Street, from Nassau Mills Road to Woodland Drive, and along Woodland Drive to the pumphouse, located at the corner of Woodland Drive and Woodward Avenue. The existing distribution system includes a pressure boosting station located at the corner of Woodland Drive and Woodward Avenue which serves to increase the distribution system pressure within elevated phases of the subdivision. The pumping station includes an 80 kW standby diesel generator, magnetic flow meter, pressure relief valve, dial-out alarm system, instrumentation and controls, and the following four booster pumps:

- One duty pump rated at 4.4 L/s at 24.6 m TDH,
- Two standby pumps rated at 13.2 L/s at 24.6 m TDH, and
- One fire flow pump rated at 69.4 L/s at 24.6 m TDH.

The distribution system currently consists of 3,775 m of 150 mm, concrete-asbestos and PVC watermain, 20 hydrants, 200 residential service connections (including two small apartment buildings) and 21 serviced, vacant lots. The estimated population of the subdivision is 650 persons (with possibly another 70 persons occupying the vacant lots). Watermains have been installed for Phase 3 and 4 of the development and the impact of an undetermined number of additional residences is yet to be determined.

INSPECTION SUMMARY

INTRODUCTION

- * The primary focus of this inspection is to confirm compliance with Ministry of the Environment legislation and authorizing documents such as Orders and Certificates of Approval, as well as evaluating conformance with Ministry drinking water related policies and guidelines during the inspection period.

This report is based on an inspection of a "stand alone connected distribution system". This type of system receives treated water from a separately owned "donor" system. This report contains all of the elements required to assess key compliance and conformance issues associated with a "receiver" system to ensure that the system was not being operated or managed in a "deficient" condition, as defined under O. Reg. 172/03. The report does not contain items associated with the inspection of the donor system, such as source waters, intakes/wells and treatment facilities.

Your system was chosen for a focused inspection during this inspection cycle because inspection findings over the past three years were such that the number of violations were minimal or non existent, there were few or no orders issued to you that were of significance in the maintenance of water potability and there were no deficiencies as defined in O. Reg. 172/03. The undertaking of a focused inspection at your drinking water system during this year's inspection cycle does not ensure that a similar type of inspection will be conducted at any point in the future.

On June 3, 2010 an announced inspection of the Woodland Acres Subdivision Distribution System commenced. The Ministry was accompanied by Mr. René Gagnon. Audit samples were collected on this date and submitted to the Ministry's Laboratory for analysis.

TREATMENT PROCESSES

- * The owner had ensured that all equipment was installed in accordance with the Permit, Licence or Approval issued under Part V of the SDWA.
- * Records confirmed that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes was operated so that at all times and all locations in the distribution system the chlorine residual was never less than 0.05 mg/l free or 0.25 mg/l combined.
- * The Operator-in-Charge had ensured that all equipment used in the processes was monitored, inspected, and evaluated.

DISTRIBUTION SYSTEM

- * Existing parts of the distribution system that were taken out of service for inspection, repair or other activities that may lead to contamination, and all new parts of the distribution system that came in contact with drinking water, were disinfected in accordance with the Procedure for Disinfection of Drinking Water In Ontario.
- * Based on the records available the owner was able to maintain proper pressures in the distribution system.

OPERATIONS MANUALS

- * The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.

LOGBOOKS

- * Logs for the distribution subsystem(s) of the drinking water system contained the required information.
- * Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5.

SECURITY

- * The owner had provided security measures to protect components of the drinking-water system.

CERTIFICATION AND TRAINING

- * The overall responsible operator had been designated for each subsystem.
- * Operators in charge had been designated for all subsystems which comprised the drinking-water system.
- * Only certified operators made adjustments to the treatment equipment.

WATER QUALITY MONITORING

- * All microbiological water quality monitoring requirements for distribution samples were being met.
- * All trihalomethanes water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

Trihalomethane sampling was completed on July 7, 2009, October 20, 2009, January 14, 2010, and April 15, 2010.

- * All sampling requirements for lead prescribed by schedule 15.1 of O. Reg. 170/03 were being met.

The Woodland Acres Subdivision Distribution System completes lead sampling as prescribed by Schedule 15.1 of Ontario Regulation 170/03 as if it were part of the donor system, the Peterborough Water Treatment Plant. Regulatory Relief was granted through Certificate of Approval number PB210001503RR-01. Samples were collected in the Woodland Acres Subdivision Distribution System during the sampling rounds in the inspection review period.

WATER QUALITY MONITORING

- * All sampling requirements for alkalinity and pH prescribed by schedule 15.1 of O. Reg. 170/03 were being met.

The Woodland Acres Subdivision Distribution System completes lead sampling as prescribed by Schedule 15.1 of Ontario Regulation 170/03 as if it were part of the donor system, the Peterborough Water Treatment Plant. Regulatory Relief was granted through Certificate of Approval number PB210001503RR-01. Samples were collected in the Woodland Acres Subdivision Distribution System during the sampling rounds in the inspection review period.

- * The secondary disinfectant residual was measured as required for the distribution system.

Secondary disinfectant residuals are taken daily in the distribution system.

- * Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.
- * Testing for parameters required by legislation, Order, or a Permit, Licence or Approval issued under Part V of the SDWA was conducted by laboratories in Ontario licenced to test for that parameter, or by eligible laboratories outside Ontario.

WATER QUALITY ASSESSMENT

- * The inspector collected audit samples during the inspection.

Audit samples were collected by the Ministry on June 3, 2010. SWIPDISTEND samples were collected at 90 Parkdale St, and SWIPDIST sample was collected at 218 Woodward Avenue. Audit sample results showed no exceedances of the Ontario Drinking Water Standards. See Appendix C.

- * Records show that all water sample results taken during the review period met the Ontario Drinking Water Quality Standards (O.Reg. 169/03).

REPORTING & CORRECTIVE ACTIONS

- * All reporting requirements for lead sampling were complied with as per schedule 15.1-9 of O.Reg. 170/03.
- * All changes to the system registration information were provided within ten (10) days of the change.

NON-COMPLIANCE WITH REGULATORY REQUIREMENTS AND ACTIONS REQUIRED

This section provides a summary of all non-compliance with regulatory requirements identified during the inspection period, as well as actions required to address these issues. Further details pertaining to these items can be found in the body of the inspection report.

Not Applicable

SUMMARY OF BEST PRACTICE ISSUES AND RECOMMENDATIONS

This section provides a summary of all best practice issues identified during the inspection period. Details pertaining to these items can be found in the body of the inspection report. Best Management Practices are recommendations and not mandatory requirements, but may lead to safe drinking water for the consumer.

In the interest of continuous improvement in the interim, it is recommended that owners and operators develop an awareness of the following practices and consider measures to implement them so that all drinking water systems continuously improve their processes.

Not Applicable

SIGNATURES

Inspected By:

Lynette Carter

Signature: (Provincial Officer):



Reviewed & Approved By:

Jackie Fuller

Signature: (Supervisor):



Review & Approval Date:

July 30, 2010

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



DRINKING WATER SYSTEM COMPONENT LOCATION DETAILS

DRINKING WATER SYSTEM COMPONENTS DESCRIPTION

Name: Peterborough Water Treatment Plant
Station Id #:
Type: Treated Water POE
Sub Type: Treatment Facility

Street Number: 1230 **Street Name:** Water Street North

Lot: **Concession:**
Part: **Reference Plan:**

Map Datum: NAD 83
Geo-Referencing Method: GPS
Accuracy Estimate: 1-10 Meters (Good Quality GPS)
Location Reference: Near Object **UTM Zone:**
UTM Northing: **UTM Easting:**
Latitude: **Longitude:**

Name: Distribution
Station Id #:
Type: Other
Sub Type: Other

Street Number: **Street Name:**

Lot: **Concession:**
Part: **Reference Plan:**

Map Datum: NAD 83
Geo-Referencing Method: GPS
Accuracy Estimate: 1-10 Meters (Good Quality GPS)
Location Reference: Near Object **UTM Zone:**
UTM Northing: **UTM Easting:**
Latitude: **Longitude:**



CERTIFICATE OF APPROVAL



Ontario

Ministry of the Environment
Ministère de l'Environnement

CERTIFICATE OF APPROVAL
MUNICIPAL AND PRIVATE WATER WORKS
NUMBER 2577-4WKPKJ

Township of Smith-Ennismore-Lakefield
P.O. Box 270
Bridgenorth, Ontario
K0L 1H0

Site Location: Lot 218, RP-89
Smith-Ennismore Township, County of Peterborough

You have applied in accordance with Section 52 of the Ontario Water Resources Act for approval of:

A Water booster pumping station to be located on the southeast corner of the intersection of Woodland Drive and Woodward Avenue, Lot 218, Registered Plan 89, to serve the Woodland Acres community in the Township of Smith-Ennismore-Lakefield consisting of:

- the demolition of the existing water storage reservoir and the pump house building;
- a new single level pump house;
- four new booster pumps including appurtenances:
 - a duty pump rated to deliver an average day flow of 4.4 L/s at a TDH of 24.6 m
 - 2 pumps each rated to deliver a maximum hour flow of 13.2 L/s at a TDH of 24.6 m
 - a pump rated to deliver a maximum day and fire flow of 69.4 L/s at a TDH of 24.6 m
- an 80 KW standby diesel generator with automatic switchover;
- a 300 mm dia inlet and outlet watermain, including a permanent fire hydrant adjacent to the booster pumping station, to connect to the existing 300 mm dia watermain on Woodland Drive;
- all instrumentation and controls to operate the station automatically.

all in accordance with:

1. Application for Approval of Municipal and Private Works signed on March 14, 2001 by Norman Kyle, CAO, Township of Smith-Ennismore.
2. Phases I & II Class Environmental Report, dated July 2000 prepared by Simcoe Engineering Group Limited.
3. Woodland Acres Phases I & II Subdivision Water Distribution System

4. Analyses dated May 2000, prepared by Simcoe Engineering Group Limited.
Engineering Drawings (Nos. B01,G01,M01-04,S01-03,E01-06,D27-28)
prepared by Simcoe Engineering Group Limited.

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

- (1) "Owner" means The Corporation of the Township of Smith-Ennismore-Lakefield and its successors and assignees;
- (2) "L" refers to litres;
- (3) "m" refers to metres;
- (4) "mm" refers to millimetre;
- (5) "s" refers to seconds;
- (6) "TDH" refers to total dynamic head;
- (7) "dia" refers to diameter.

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 Appeal Board within 15 days after receipt of this Notice, require a hearing by the Board. 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 Appeal Board

The Director
Section 52, *Ontario Water Resources Act*

Ministry of the Environment
Safe Drinking Water Branch
Floor 19
2 St Clair Ave W
Toronto ON M4V 1L5
Fax: (416)314-1037
Telephone: (416) 314-8184

Ministère de l'Environnement
Direction du contrôle de la qualité de
l'eau potable
Étage 19
2 av St Clair Ouest
Toronto ON M4V 1L5
Télécopieur: (416)314-1037
Téléphone: (416) 314-8184



September 5, 2008

Janice Lavalley
Chief Administrative Officer
Corporation of the Township of Smith-Ennismore-Lakefield
P.O. Box 270
Bridgenorth, ON
K0L2H0

RE: **Regulatory Relief From Lead Sampling Requirements
Woodland Acres Subdivision Distribution System
Certificate of Approval Number PB210001503RR-01**

We have enclosed a new Certificate of Approval in accordance with Part V, of the SDWA. This Certificate provides regulatory relief from lead sampling requirements of Regulation 170/03 for the above drinking water system, subject to the Terms and Conditions listed in Part 4.

If you have any questions regarding the above approval, please contact Nadir Sunderji, P.Eng., Senior Water Engineer, at (416) 314-8189.

A handwritten signature in black ink that reads "Aziz S. Ahmed". The signature is written in a cursive style and is underlined with a single horizontal line.

Aziz S. Ahmed, P.Eng.
Director, Part V SDWA

cc. Drinking Water Supervisor, MOE Peterborough District Office

2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

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 water works are approved under Section 52 of the Ontario Water Resources Act.

DATED AT TORONTO this 10th day of May, 2001

Mohamed Dhalla, P.Eng.
Director
Section 52, *Ontario Water Resources Act*

SK/

c: District Manager, MOE Peterborough
Larry Manley, Simcoe Engineering Group Limited



Ministry of the Environment
Ministère de l'Environnement

CERTIFICATE OF APPROVAL
MUNICIPAL DRINKING WATER SYSTEMS
NUMBER PB210001503RR-01
Page 1 of 4

Corporation of the Township of Smith-Ennismore-Lakefield
P.O. Box 270
Bridgenorth, ON
K0L2H0

Pursuant to the Safe Drinking Water Act, 2002, S.O. 2002, c. 32, and the regulations made thereunder and subject to the limitations thereof, this approval is issued under Part V of the Safe Drinking Water Act, 2002, S.O. 2002, c. 32 to:

Corporation of the Township of Smith-Ennismore-Lakefield
P.O. Box 270
Bridgenorth, ON
K0L2H0

PART 1 – DRINKING WATER SYSTEM IDENTIFICATION

- 1.1 with respect to the drinking water system serving Corporation of the Township of Smith-Ennismore-Lakefield, known as Woodland Acres Subdivision Distribution System, identified as DWS Number 210001503.

PART 2 – RELIEF FROM REGULATORY REQUIREMENTS

- 2.1 for relief from regulatory requirements of Section 5(4)b(iii) of Regulation 170/03, pursuant to section 38 of the *Safe Drinking Water Act*, as follows:

The owner of the drinking-water system from which the water is obtained has agreed in writing to comply, on behalf of the owner of the system that obtains the water and the operating authority for the system,

- (a) with Schedule 15.1, in the case of a large municipal residential system, a small municipal residential system or a non-municipal year-round residential system,

- 2.2 In exchange for the relief granted under 2.1 above, and subject to the Terms and Conditions of Part 4 below, the Owner is required to comply with the following:

The owner of the drinking-water system from which the water is obtained has agreed in writing to sample and test in accordance with Schedule 15.1, the water in the distribution system of the system that obtains the water as if it were part of the distribution system of the system from which the water is obtained.

PART 3 – DEFINITIONS AND INFORMATION

3.1 Words and phrases not defined in this approval shall be given the same meaning as those set out in the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32 and any regulations made in accordance with that act, unless the context requires otherwise.

3.2 In this approval

"adverse effect", "contaminant", "impairment" and "natural environment" shall have the same meanings as in the *Environmental Protection Act*, R.S.O.1990, c. E.19 and the *Ontario Water Resources Act*, R.S.O.1990, c. O.40;

"approval" means this entire approval document, issued in accordance with section 36 of the *SDWA*, and includes any schedules to it;

"Director" means a Director appointed pursuant to s. 6 of the *SDWA* for the purposes of Part V of the *SDWA*;

"provincial officer" means a provincial officer appointed pursuant to s. 8 of the *SDWA*;

"*SDWA*" means the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32, as amended.

PART 4 – TERMS AND CONDITIONS

4.1 The relief from regulatory requirements granted under this approval is in effect for the following sampling periods described under Schedule 15.1-4(2):

December 15, 2007 to April 15, 2008

4.2 Notwithstanding condition 4.1 above, the relief from regulatory requirements granted under this approval is also in effect for the following sampling periods:

June 15, 2008 to October 15, 2008

December 15, 2008 to April 15, 2009

June 15, 2009 to October 15, 2009

This relief is conditional upon the Owner submitting to the Director the following documentation prior to the end of the particular sampling period:

- i. Confirmation in writing that agreement for the supplying municipal system to undertake sampling in accordance with Schedule 15.1 of Regulation 170/03 was in effect.

- ii. Confirmation that the owner of the supplying municipal system submitted sampling results for sampling in accordance with Schedule 15.1 of Regulation 170/03.
- 4.3 The relief from regulatory requirements granted under this approval will not apply to a sampling period described in 4.2, if the Owner does not comply with the conditions under 4.2 for that sampling period.
- 4.4 In the event O.Reg. 170/03 is amended to require fewer sampling locations than specified under the relief granted in this approval, then the regulation shall prevail.
- 4.5 Section 15.1-5 (Reduced Sampling) of the Regulation does not apply to this drinking water system as long as the relief from regulatory requirements granted under this approval is in effect.

SCHEDULE A

The following documents form part of this approval:

1. Request for Regulatory Relief From Lead Sampling Requirement in Schedule 15.1 Of Regulation 170/03, dated February 22, 2008.

All or part of this decision may be reviewable in accordance with the provisions of Part X of the SDWA. In accordance with Section 129(1) of the Safe Drinking Water Act, Chapter 32 Statutes of Ontario, 2002, 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 129(2) sets out a procedure upon which the 15 days may be extended by the Tribunal. Section 129(3) of the Safe Drinking Water Act, Chapter 32 Statutes of Ontario, 2002, provides that the Notice requiring the hearing shall state:

1. The aspect of the decision, including the portion of the permit, licence, approval, order or notice of administrative penalty in respect of which the hearing is required; and
2. The grounds for review to be relied on by the person at the hearing.

Except with leave of the Tribunal, a person requiring a hearing in relation to a reviewable decision is not entitled to,

- (a) a review of an aspect of the decision other than that stated in the notice requiring the hearing; or
- (b) a review of the decision other than on the grounds stated in the notice

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
655 Bay Street, 15th Floor
Toronto, Ontario
MSG 1E5

AND

The Director
Part V, *Safe Drinking Water Act, 2002*
Ministry of the Environment
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 water works are approved under Part V of the Safe Drinking Water Act.

DATED AT TORONTO this 5th day of September, 2008

A handwritten signature in black ink that reads "A. Ahmed". The signature is written in a cursive style and is underlined with a single horizontal line.

Aziz S. Ahmed, P.Eng.
Director, *Part V*
Safe Drinking Water Act

NS/

c: Drinking Water Supervisor, MOE Peterborough District Office

MINISTRY AUDIT SAMPLE RESULTS

APPENDIX C
TABLE 3
WOODLAND ACRES SUBDIVISION DISTRIBUTION SYSTEM
AUDIT SAMPLE RESULTS - 03-JUN-2010
SUMMARY OF MICROBIOLOGICAL PARAMETERS - HEALTH RELATED

Sample Legend:

Sample # 1 - 218 WOODWARD AVE DISTRIBUTION

Sample # 2 - 90 PARKDALE DISTRIBUTION

Parameter	Units	MC ¹	SAMPLE # 1	SAMPLE # 2
NT: ESCHERICHIA COLI	C/100ML	0	ABSENT	ABSENT
NT: TOTAL COLIFORMS	C/100ML	0	ABSENT	ABSENT

Notes:

- Escherichia coli is a more definitive indicator of fecal contamination than fecal coliforms or total coliforms.
- At elevated levels, the general bacterial population may interfere with the detection of coliforms. This general population can be estimated from either background colony counts on the total coliform membrane filters or heterotrophic plate counts (HPC).

Shortforms:

C/100mL - Count per 100 millilitre

C/mL - Count per millilitre

Footnotes:

- 1 Maximum Concentration as per O.Reg 169/03.
- 2 Aesthetic Objective:

APPENDIX C

TABLE 4

WOODLAND ACRES SUBDIVISION DISTRIBUTION SYSTEM

AUDIT SAMPLE RESULTS - 03-JUN-2010

SUMMARY OF CHEMICAL / PHYSICAL PARAMETERS - HEALTH RELATED

Sample Legend:

Sample # 1 - 90 PARKDALE DISTRIBUTION

Parameter	Units	MC ¹	SAMPLE	
			#	1
1,1-DICHLOROETHENE	UG/L	14	.05	<=W
1,1-DICHLOROETHYLENE	UG/L	14	.05	<=W
1,2-DICHLOROBENZENE	UG/L	200	.05	<=W
1,2-DICHLOROETHANE	UG/L	5	.05	<=W
1,4-DICHLOROBENZENE	UG/L	5	.05	<=W
BENZENE	UG/L	5	.05	<=W
CARBON TETRACHLORIDE	UG/L	5	.2	<=W
CHLOROBENZENE	UG/L	80	.05	<=W
CHLOROETHENE	UG/L	2	.05	<=W
DICHLOROMETHANE	UG/L	50	.2	<=W
LEAD	UG/L	10 c	.6	+/-0.16
TETRACHLOROETHENE	UG/L	30	.05	<=W
TRICHLOROETHENE	UG/L	5	.05	<=W
TRIHALOMETHANES; TOTAL	UG/L	100 e	80.5	

Shortforms:

<T	- A measurable trace amount; interpret with caution	NA	- Result-not available
<W	- No measurable response (zero) : < Reported value	NS	- Not sampled
<=W	- No measurable response (zero) : < Reported value	NG/L	- Nanograms per litre
<	- Actual result is less than reported value	UG/L	- Micrograms per litre
ND	- Not detected	MG/L	- Milligrams per litre
!NP	- No appropriate procedure available		

Footnotes:

- 1 Maximum Concentration as per O.Reg 169/03.
- 2 Aesthetic Objective.
- 3 Operational Guideline.
- 4 Includes *alpha*-chlordane, *gamma*-Chlordane and Oxychlordane.
- 5 Includes *p,p'*-DDE, *o,p'*-DDT, *p,p'*-DDD and *p,p'*-DDT.
 - a Total toxic equivalents when compared with 2,3,7,8,-TCDD (tetrachlorodibenzo-p-dioxin).
 - b Where fluoride is added to drinking water, it is recommended that the concentration be adjusted to 0.5 - 0.8 mg/L, the optimum level for control of tooth decay. Where supplies contain naturally occurring fluoride at levels higher than 1.5 mg/L but less than 2.4 mg/L the Ministry of Health and Long Term Care recommends an approach through local boards of health to raise public and professional awareness to control excessive exposure to fluoride from other sources.
 - c This standard applies to water at the point of consumption. Since lead is a component in some plumbing systems, first flush water may contain higher concentrations of lead than water that has been flushed for five minutes.
 - d Where both nitrate and nitrite are present, the total of the two should not exceed 10 mg/L (as nitrogen).
 - e The standard is expressed as a running annual average of quarterly samples measured at a point reflecting the maximum residence time in the distribution system.
 - f An aesthetic objective of 5 NTU for Turbidity has been set for all waters at the point of consumption.

ADVERSE RESULTS OF A DRINKING-WATER TEST UNDER O.REG. 170/03

According to section 16-3 of O.Reg. 170/03, the following are prescribed as adverse results of a drinking-water test for the purpose of section 18 of the Safe Drinking Water Act 2002:

1. A result that exceeds any of the standards prescribed by Schedule 1, 2 or 3 to the Ontario Drinking-Water Quality Standards, other than the standard for fluoride, if the result is from a sample of drinking water.
2. A result indicating the presence of *Aeromonas* spp., *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Clostridium* spp. or fecal streptococci (Group D streptococci) in a sample of drinking water.
3. A result indicating the presence of a pesticide not listed in Schedule 2 to the Ontario Drinking-Water Quality Standards in a sample of drinking water, at any concentration.
4. If the drinking-water system is required to provide secondary disinfection in accordance with section 1-5 of Schedule 1 or section 2-5 of Schedule 2, the system provides chlorination, the system does not provide chloramination and a report under subsection 18(1) of the Act has not been made in respect of free chlorine residual in the preceding 24 hours, a result indicating that the concentration of free chlorine residual in the preceding 24 hours, a result indicating that the concentration of free chlorine residual is less than 0.05 milligrams per litre in,
 - i. a distribution sample that is a grab sample, or
 - ii. two distribution samples that are tested by continuous monitoring equipment, if the two samples were taken 15 minutes or more apart and the later of the two samples was the first sample that was taken 15 minutes or more after the earlier sample.
5. If the drinking-water system is required to provide secondary disinfection in accordance with section 1-5 of Schedule 1 or section 2-5 of Schedule 2, the system provides chloramination and a report under subsection 18(1) of the Act has not been made in respect of combined chlorine residual in the preceding 24 hours, a result indicating that the concentration of combined chlorine residual is less than 0.25 milligrams per litre and the concentration of free chlorine residual is less than 0.05 milligrams per litre in,
 - i. a distribution sample that is a grab sample, or
 - ii. two distribution samples that are tested by continuous monitoring equipment, if the two samples were taken 15 minutes or more apart and the later of the two samples was the first sample that was taken 15 minutes or more after the earlier sample.
6. If the drinking-water system is required to provide filtration and a report under subsection 18 (1) of the Act has not been made in respect of turbidity in the preceding 24 hours, a result indicating that turbidity exceeds 1.0 Nephelometric Turbidity Units (NTU) in,
 - i. a grab sample of water taken from a filter effluent line, or
 - ii. two samples of water from a filter effluent line that are tested by continuous monitoring equipment, if,
 - A. two samples were taken 15 minutes or more apart and the later of the two samples was the first sample that was taken 15 minutes or more after the earlier sample, and
 - B. the filter effluent line is directing water to the next stage of the treatment process.
7. If an approval or order, including an OWRA order, identifies a parameter as a health-related parameter and establishes a maximum concentration for the parameter, a result indicating that the parameter exceeds the maximum concentration in a sample of drinking water.
8. A result indicating that the concentration of sodium exceeds 20 milligrams per litre in a sample of drinking water, if a report under subsection 18 (1) of the Act has not been made in respect of sodium in the preceding 60 months.
9. A result indicating that the concentration of fluoride exceeds 1.5 milligrams per litre in a sample of drinking water, if,
 - i. the drinking-water system provides fluoridation and a report under subsection 18 (1) of the Act has not been made in respect of fluoride in the preceding 24 hours, or
 - ii. the drinking-water system does not provide fluoridation and a report under subsection 18 (1) of the Act has not been made in respect of fluoride in the preceding 60 months.

APPENDIX C
TABLE 5
WOODLAND ACRES SUBDIVISION DISTRIBUTION SYSTEM
AUDIT SAMPLE RESULTS - 03-JUN-2010
SUMMARY OF MICRO, CHEMICAL / PHYSICAL PARAMETERS - NOT HEALTH RELATED

Sample Legend:

Sample # 1 - 218 WOODWARD AVE DISTRIBUTION

Sample # 2 - 90 PARKDALE DISTRIBUTION

Parameter	Units	OBJECTIVE	TYPE OF OBJECTIVE	SAMPLE	
				# 1	# 2
1,2-DICHLOROBENZENE	UG/L	3	AO		.05 <=W
ETHYLBENZENE	UG/L	2.4	AO		.05 <=W
M- AND P-XYLENE	UG/L	300	AO		.05 <=W
NT: DETERIORATION INDICATORS	C/100ML	0	AO	NOT DETECTED	NOT DETECTED
O-XYLENE	UG/L	300	AO		.05 <=W
TOLUENE	UG/L	24	AO		.05 <=W

Shortforms:

<T	- A measurable trace amount; interpret with caution	AO	- Aesthetic Objective
<W	- No measurable response (zero). <Reported value	OG	- Operational Guideline
<=W	- No measurable response (zero). <Reported value	FTU = NTU	- Nephelometric Turbidity Unit
<	- Actual result is less than reported value	TCU	- True Colour Units
ND	- Not detected	NG/L	- Nanograms per litre
NA	- Result not available	UG/L	- Micrograms per litre
NS	- Not sampled	MG/L	- Milligrams per litre
DEG	- Degree celsius		

Footnotes:

- a Organic Nitrogen = (Total Kjeldahl Nitrogen - (Ammonia + Ammonium))
- b The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.
- c When sulphate levels exceed 500 mg/L, water may have a laxative effect on some people.
- d Applicable for all water at the point of consumption.

APPENDIX C
TABLE 6
WOODLAND ACRES SUBDIVISION DISTRIBUTION SYSTEM
AUDIT SAMPLE RESULTS - 03-JUN-2010
SUMMARY OF PARAMETERS WITH NO ODWQS

Sample Legend:

Sample # 1 - 90 PARKDALE DISTRIBUTION

Parameter	Units	SAMPLE # 1
1,1,1-TRICHLOROETHANE	UG/L	.05 <=W
1,1,2,2-TETRACHLOROETHANE	UG/L	.2 <=W
1,1,2-TRICHLOROETHANE	UG/L	.1 <=W
1,1-DICHLOROETHANE	UG/L	.05 <=W
1,2-DIBROMOETHANE	UG/L	.1 <=W
1,2-DICHLOROPROPANE	UG/L	.05 <=W
1,3-DICHLOROBENZENE	UG/L	.05 <=W
BROMODICHLOROMETHANE	UG/L	5.2
BROMOFORM	UG/L	.5 <=W
CHLOROFORM	UG/L	75.1
CIS-1,2-DICHLOROETHENE	UG/L	.05 <=W
DIBROMOCHLOROMETHANE	UG/L	.2 <T
DICHLOROACETONITRILE	UG/L	4.5 <T
DIISOPROPYLETHER	UG/L	.05 <=W
STYRENE	UG/L	.05 <=W
TERT-BUTYL METHYL ETHER	UG/L	.05 <=W
TRANS-1,2-DICHLOROETHENE	UG/L	.05 <=W

Shortforms:

<T	- A measurable trace amount; interpret with caution	NA	- Result not available
<W	- No measurable response (zero) : < Reported value	NS	- Not sampled
<=W	- No measurable response (zero) : < Reported value	NG/L	- Nanograms per litre
<	- Actual result is less than reported value	UG/L	- Micrograms per litre
ND	- Not detected	MG/L	- Milligrams per litre
!NP	- No appropriate procedure available		

NO DATUM FOUND FOR THE FOLLOWING TABLE(S):

-TABLE 1 - SUMMARY OF PARAMETERS EXCEEDING ODWQS

-TABLE 2 - SUMMARY OF PARAMETERS EXCEEDING HALF OF THEIR HEALTH-RELATED ODWQS

INSPECTION REPORT RATING

Ministry of the Environment - Inspection Summary Rating Record (Reporting Year - 2010-2011)

DWS Name: WOODLAND ACRES SUBDIVISION DISTRIBUTION SYSTEM
DWS Number: 210001503
DWS Owner: Smith-Ennismore-Lakefield, The Corporation Of The Township Of
Municipal Location: Smith-Ennismore-Lakefield

Regulation: O.REG 170/03
Category: Large Municipal Residential System
Type Of Inspection: Adhoc
Inspection Date: June 3, 2010
Ministry Office: Peterborough District

Maximum Question Rating: 222

Inspection Module	Non-Compliance Rating
Treatment Processes	0 / 56
Operations Manuals	0 / 14
Logbooks	0 / 18
Certification and Training	0 / 28
Water Quality Monitoring	0 / 90
Reporting & Corrective Actions	0 / 16
TOTAL	0 / 222

Inspection Risk Rating 0.00%

FINAL INSPECTION RATING: 100.00%

Ministry of the Environment - Detailed Inspection Rating Record (Reporting Year - 2010-2011) ^{4. c) Attachment}

DWS Name: WOODLAND ACRES SUBDIVISION DISTRIBUTION SYSTEM
DWS Number: 210001503
DWS Owner: Smith-Ennismore-Lakefield, The Corporation Of The Township Of
Municipal Location: Smith-Ennismore-Lakefield

Regulation: O.REG 170/03

Category: Large Municipal Residential System

Type Of Inspection: Adhoc

Inspection Date: June 3, 2010

Ministry Office: Peterborough District

Maximum Question Rating: 222

Inspection Risk Rating | 0.00%

FINAL INSPECTION RATING: | 100.00%