

Ministry of the Environment

Safe Drinking Water Branch
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Ministère de l'Environnement

Direction du contrôle de la qualité de l'eau potable
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July 6, 2015

File no. MI-SM-NE-540

The Corporation of the Village of Newbury
22910 Hagerty Road
Newbury, Ontario N0L 1Z0

Attention: Ms. Betty Gordon, Clerk Treasurer
Re: Newbury Distribution System (Water Works # 260005463)
Inspection conducted on May 21, 2015

The enclosed Drinking Water Inspection Report outlines non-compliance, if any, with Ministry legislation, and policies for the above noted water system. Violations noted in this report, if any, have been evaluated based on community risk. These violations will be monitored for compliance with the minimum standards for drinking water in Ontario as set forth under the *Safe Drinking Water Act* and associated regulations. Where risk is deemed to be high and/or compliance is an ongoing concern, violations will be forwarded to this Ministry's Investigation and Enforcement Branch.

In order to measure individual inspection results, the Ministry has established an inspection compliance risk framework based on the principles of the Inspection, Investigation & Enforcement (II&E) Secretariat and advice of internal/external risk experts. The Inspection Summary Rating Record (IRR), included as Appendix F of the inspection report, provides the Ministry, the system owner and the local Public Health Units with a summarized quantitative measure of the drinking water system's annual inspection and regulated water quality testing performance.

Please note the attached IRR methodology memo describing how the risk rating model has improved to better reflect the health related and administrative non-compliance found in an inspection report. IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water Inspector's Annual Report.

"Section 19 of the Safe Drinking Water Act (Standard of Care) creates a number of obligations for individuals who exercise decision-making authority over municipal drinking water systems. Please be aware that the Ministry has encouraged such individuals, particularly municipal councillors, to take steps to be better informed about the drinking water systems over which they have decision-making authority. These steps could include asking for a copy of this inspection report and a review of its findings. Further information about Section 19 can be found in *"Taking Care of Your Drinking Water: A guide for members of municipal council"* found under "Resources" on the Drinking Water Ontario website at www.ontario.ca/drinkingwater."

If you have any questions regarding the report, please feel free to call me at (519) 873-5019.

Yours truly,

A handwritten signature in black ink, appearing to read "Stephen", enclosed within a circular scribble.

Stephen Dunn
Drinking Water Inspector
Ministry of Environment

cc. Middlesex London Health Unit
Lower Thames River Conservation Authority
London District file



Ministry of the Environment and Climate Change

**NEWBURY (WEST ELGIN AWS) DISTRIBUTION SYSTEM
Inspection Report**

Site Number:	260005463
Inspection Number:	1-BZBCK
Date of Inspection:	May 21, 2015
Inspected By:	Stephen Dunn

OWNER INFORMATION:

Company Name: NEWBURY, THE CORPORATION OF THE VILLAGE OF
Street Number: 22910 **Unit Identifier:**
Street Name: HAGERTY Rd
City: NEWBURY
Province: ON **Postal Code:** N0L 1Z0

INSPECTION DETAILS:

Site Name: NEWBURY (WEST ELGIN AWS) DISTRIBUTION SYSTEM
Site Address: 22910 HAGERTY RD N NEWBURG N0L 1Z0
County/District: Newbury
MOECC District/Area Office: London District
Health Unit: MIDDLESEX-LONDON HEALTH UNIT
Conservation Authority: N/A
MNR Office: N/A
Category: Large Municipal Residential
Site Number: 260005463
Inspection Type: Announced
Inspection Number: 1-BZBCK
Date of Inspection: May 21, 2015
Date of Previous Inspection: Apr 23, 2014

COMPONENTS DESCRIPTION

Site (Name): MOE DWS Mapping
Type: DWS Mapping Point **Sub Type:**
Comments:
 Not Applicable

Site (Name): Distribution system
Type: Other **Sub Type:** Other
Comments:

The Newbury Water Distribution System was constructed in 1991 and involves several components as follows:

- 1 - a connection to the Southwest Middlesex DWS that receives water from the West Elgin Distribution System
- 2 - a water transmission line from the point of connection to the Village of Newbury
- 3 - a water distribution system within the Village of Newbury with 187 service connections
- 4 - associated watermain appurtenances such as valves, hydrants, air release chambers, drains, etc...

INSPECTION SUMMARY

INTRODUCTION

- * The primary focus of this inspection is to confirm compliance with Ministry of the Environment and Climate Change (MOECC) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period.

This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O. Reg.170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.

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 the elements required to assess key compliance and conformance issues associated with a "receiver" system. This report does not contain items associated with the inspection of the donor system, such as source waters, intakes/wells and treatment facilities.

This report is based on a "focused" inspection of the system. Although the inspection involved fewer activities than those normally undertaken in a detailed inspection, it contained critical elements required to assess key compliance issues. This system was chosen for a focused inspection because the system's performance met the ministry's criteria, most importantly that there were no deficiencies as identified in O.Reg. 172/03 over the past 3 years. The undertaking of a focused inspection at this drinking water system does not ensure that a similar type of inspection will be conducted at any point in the future.

This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

Documents and records in association with this report include, but are not limited to:

- Ministry of the Environment Municipal Drinking Water Licence No. 249-101
- Ministry of the Environment Drinking Water Works Permit No. 249-201
- Village of Newbury Operations Manual
- Village of Newbury Water By-law # 851-91
- Newbury Distribution System Annual and Summary Report
- Operational documents and records maintained by the owner and operating authority from the period from April 1, 2014 to April 30, 2015.

Newbury Distribution System receives drinking water from Southwest Middlesex Drinking Water System (Waterworks #260005502) which receives treated water from West Elgin Distribution System (Waterworks #260094627)

TREATMENT PROCESS MONITORING

TREATMENT PROCESS MONITORING

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

Free chlorine grab samples are collected from different locations in the system on two separate days during the week, at least 48 hours apart. Generally, four samples are collected on the first day of the week followed by three taken at least three days later. After a review of all the free chlorine residual grab samples collected for the inspection period it was determined that secondary disinfectant monitoring requirements were met.

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 Schedule B, Condition 2.3 of the Drinking Water Works Permit.**
- * **Based on the records available the owner was able to maintain proper pressures in the distribution system.**

The Operations Manual for the Newbury Distribution System includes a form that customers can fill out should they have a complaint about the pressure of the water. During the inspection review period there were no customer complaints regarding the water pressure within the Village of Newbury and a review of the logbooks indicate that there have been no complaints.

OPERATIONS MANUALS

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

During the review of Newbury's Operations and Maintenance Manual (O&MM) there were plans, drawings and a description of the system that met the requirements. Although there are no chemical application points, Newbury does maintain watermains, hydrants and a chamber with a pressure reducing valve in the distribution system.

- * **The operations and maintenance manuals did meet the requirements of the Permit and Licence or Approval issued under Part V of the SDWA.**

LOGBOOKS

- * **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.**

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

WATER QUALITY MONITORING

- * **All microbiological water quality monitoring requirements for distribution samples were being met.**

In accordance with O. Reg. 170/03, Schedule 10-2, the owner of the Newbury Distribution System is required to obtain eight (8) distribution samples, with at least one (1) of the samples being taken each week. Each of the samples must be analyzed for E. coli and total coliform and 25 per cent of the samples each month must be analyzed for general bacterial population expressed as colony counts on a heterotrophic plate count (HPC).

A review of the statement of analytical results provided by the owner, confirmed that based on a population of approximately 439, two (2) distribution samples were taken each week for a total of at least eight (8) samples every month. All of the samples were analyzed for E. coli and total coliform and at least four (4) of those eight (8) samples were analyzed for HPC.

- * **All trihalomethanes water quality monitoring requirements prescribed by legislation were conducted within the required frequency.**

The trihalomethane samples are taken at 22903 Haggerty Road, which is the last connection on the main distribution line, and has been determined to be a point in the distribution system that is likely to have an elevated potential for the formation of trihalomethanes.

According to chemical records for the Newbury Distribution System, trihalomethane samples were collected on July 23, October 15, 2014, January 22 and April 21, 2015 with results showing 80.4 ug/L, 105 ug/L, 50.4 ug/L and 50.3 ug/L, respectively.

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

- * **Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.**

A review of the records indicated that for every microbiological sample that is taken within the Newbury Distribution System, a corresponding chlorine residual test is conducted at the same time and at the same location.

WATER QUALITY ASSESSMENT

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

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 RECOMMENDATIONS AND BEST PRACTICE ISSUES

This section provides a summary of all recommendations and best practice issues identified during the inspection period. Details pertaining to these items can be found in the body of the inspection report. In the interest of continuous improvement in the interim, it is recommended that owners and operators develop an awareness of the following issues and consider measures to address them.

Not Applicable

SIGNATURES

Inspected By:

Stephen Dunn

Signature: (Provincial Officer):



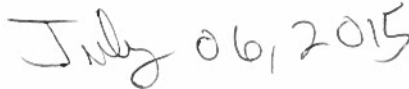
Reviewed & Approved By:

Tom Clubb

Signature: (Supervisor):



Review & Approval Date:



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.



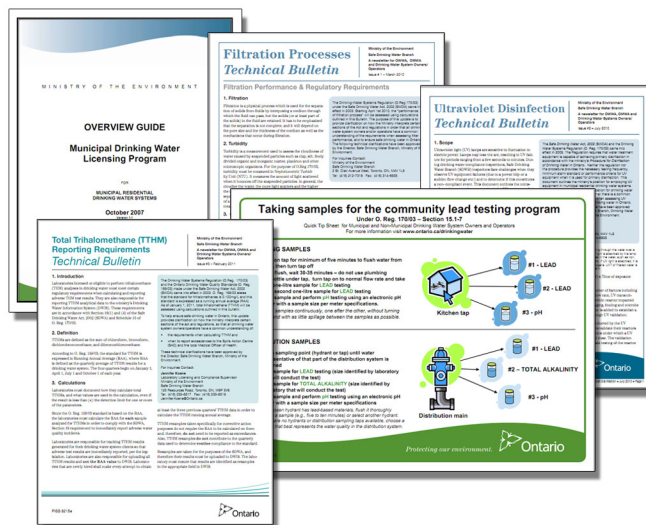
Stakeholder Appendix

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

Many useful materials are posted on the Ministry of the Environment's **Drinking Water Ontario** website at www.ontario.ca/drinkingwater to help in the operation of your drinking water system.

Below is a list of key materials frequently used by owners and operators of municipal drinking water systems. To read or download these materials, go to **Drinking Water Ontario** and search in the **Resources** section by **Publication Number**.

Visit **Drinking Water Ontario** for more useful materials. Contact the Public Information Centre if you need assistance or have questions at 1-800-565-4923/416-325-4000 or picemail.moe@ontario.ca.



PUBLICATION NUMBER	PUBLICATION TITLE
4448e01	Procedure for Disinfection of Drinking Water in Ontario
7152e	Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids
7467	Filtration Processes Technical Bulletin
7685	Ultraviolet Disinfection Technical Bulletin
8215	Total Trihalomethane (TTHM) Reporting Requirements Technical Bulletin (February 2011)
2601e	Overview Guide: Municipal Drinking Water Licensing Program
0000	Municipal Drinking Water Licensing Program Bulletin, Issue 1, January 2011
0000	Certification Guide for Operators and Water Quality Analysts
6560e	Taking Samples for the Community Lead Testing Program
7423e	Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption
7128e	Drinking Water System Contact List
4449e01	Technical Support Document for Ontario Drinking Water Quality Standards



Inspection Rating Record

Ministry of the Environment - Inspection Summary Rating Record (Reporting Year - 2015-2016)

DWS Name: NEWBURY (WEST ELGIN AWS) DISTRIBUTION SYSTEM
DWS Number: 260005463
DWS Owner: Newbury, The Corporation Of The Village Of
Municipal Location: Newbury

Regulation: O.REG 170/03
Category: Large Municipal Residential System
Type Of Inspection: Adhoc
Inspection Date: May 21, 2015
Ministry Office: London District

Maximum Question Rating: 163

Inspection Module	Non-Compliance Rating
Distribution System	0 / 21
Operations Manuals	0 / 28
Logbooks	0 / 14
Certification and Training	0 / 28
Water Quality Monitoring	0 / 51
Treatment Process Monitoring	0 / 21
TOTAL	0 / 163

Inspection Risk Rating	0.00%
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FINAL INSPECTION RATING:	100.00%
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Ministry of the Environment - Detailed Inspection Rating Record (Reporting Year - 2015-2016)

DWS Name: NEWBURY (WEST ELGIN AWS) DISTRIBUTION SYSTEM
DWS Number: 260005463
DWS Owner: Newbury, The Corporation Of The Village Of
Municipal Location: Newbury

Regulation: O.REG 170/03
Category: Large Municipal Residential System
Type Of Inspection: Adhoc
Inspection Date: May 21, 2015
Ministry Office: London District

Maximum Question Rating: 163

Inspection Risk Rating | 0.00%

FINAL INSPECTION RATING: | 100.00%