

**SUMMARY REPORT
TOWN OF ERIN**

**ERIN WELL SUPPLY
DRINKING –WATER SYSTEM NO. 220000013**

Certificate of Approval No. 0106-7DKQP2
Certificate of Approval No. PB220000013RR-01
Certificate of Approval No. 4010-7ZDRJE
Municipal Drinking Water License Number 102-101
Drinking Water Works Permit Number 102-201
PTTW# 4364-7LWPT7
PTTW# 2201-7LQN73

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Submitted by: Frank Smedley
Water Superintendent

Signature: _____

Date: March 2, 2011
Prepared by: Louise Warn

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THE TOWN OF ERIN
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Municipal Drinking Water License Number 102-101
Drinking Water Works Permit Number 102-201
Effective January 12, 2009 PTTW# 4364-7LWPT7, replaces 93-P-2104
Effective January 12, 2009 PTTW# 2201-7LQN73, replaces 93-P-2114

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**Non-Compliance with Regulatory Requirements and Actions Required &
Summary of Best Practice Issues and Recommendations**

Section 1 – Introduction

This is the Summary Report for the Town of Erin – Erin Well Supply, as required by O.Reg 170/03, Schedule 22, as amended, Summary Reports for Municipalities. For purposes of that regulation, the Town of Erin - Erin Well Supply is considered to be a municipal large residential system.

A copy of Schedule 22 from O.Reg. 170/03 is in Appendix 1 of this report.

Section 2 – Background

The reporting period for this report is January 1, 2010 to December 31, 2010.

During the reporting period, the Town of Erin – Erin Well Supply was operated pursuant to:

- Certificate of Approval No. PB220000013RR-01, issued August 11, 2009;
- Certificate of Approval No. 0106-7DKQP2, issued May 12, 2008. Certificate of Approval No. 0106-7DKQP2 revokes and replaces Certificate of Approval No. 7242-6DCKQS issued on June 14, 2005;
- Certificate of Approval NO. 4010-7ZDRJE, issued January 11, 2010. Certificate of Approval No. 4010-7ZDRJE revokes and replaces Certificate of Approval NO. 0106-7DKQP2
- Municipal Drinking Water License Number 102-101, issued December 20, 2010; *once issued, a condition on the license revokes all Cs of A which were previously issued for the drinking water system.*
- Drinking Water Works Permit Number 102-201, issued December 20, 2010

The Ministry of Environment conducted an inspection of the Erin Well Supply which commenced on July 16, 2010. The MOE Inspection Report indicates that there was one issue of non compliance identified by the inspector during the inspection period.

A copy of the ‘Non-Compliance with Regulatory Requirements and Actions Required’ and the ‘Summary of Best Practice Issues and Recommendations’ sections of the Erin Well Supply 2010 Inspection Report is in Appendix 2 of this report.

The summary report is required to provide the following:

1. A list of those occasions where the system failed to meet the requirements of the Safe Drinking Water Act, the regulations, the system’s approval, and any order.
2. Descriptions of the measures that were taken to correct the failure.
3. A summary of the quantities and flow rates of water supplied during the reporting period.
4. The monthly average and maximum daily instantaneous peak flow rates.
5. A comparison of the data summarized above to the rated capacity and flow rates in the system’s approval.

Section 3 – Failure to Meet Requirements

The following is a summary of the occasions when the system failed to meet the regulations or the system’s approval or any order that has been issued.

Safe Drinking Water Act, 2002 S.O. 2002, chapter 32

Duties of owners and operating authorities

11. (1) Every owner of a municipal drinking-water system or a regulated non-municipal drinking-water system and, if an operating authority is responsible for the operation of the system, the operating authority for the system shall ensure the following:

1. That all water provided by the system to the point where the system is connected to a user’s plumbing system meets the requirements of the prescribed drinking-water quality standards.

**SCHEDULE 1
 MICROBIOLOGICAL STANDARDS**

Item	Microbiological Parameter	Standard (expressed as a maximum)
1.	<i>Escherichia coli</i> (E. coli)	Not detectable
2.	Fecal coliforms	Not detectable
3.	Total coliforms	Not detectable
4.	General bacteria population expressed as background colony counts on the total coliform membrane filter	200 colony forming units (CFU) per 100 milliliters
5.	General bacteria population expressed as colony counts on a heterotrophic plate count	500 colony forming units (CFU) per milliliter

O. Reg. 169/03, Sched. 1.

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
<i>01/12/2010</i>	<i>Loss of Pressure</i>			<i>Shut down water, consumers notified, watermain repaired, resampled, all ok</i>	<i>01/15/2010</i>

Section 4 – Summaries of Quantities and Flow Rates and Water Supply

Table 1 provides information with respect to the quantity and flow rates of water supplied to the system during the reporting period.

1. The monthly average taking for all wells individually and for all wells combined, the maximum day taking from each well individually and from all wells combined, and the daily instantaneous peak flow rate for each well and for all wells combined. There are footnotes to the table that provide additional information regarding the data.

Table 1
Town of Erin, Erin Well Supply
Pumping Volume % Flow Summary
(January 1 to December 31, 2010)

Well	Monthly Average (m ³ /mo.)	Approved Rated Capacity (m ³ /month)	Maximum Daily Flow (m ³ /day)	Approved Rated Capacity (m ³ /day) ¹	Maximum Daily Instantaneous Peak Flow Rate (L/min.)	Approved Rated Capacity (L/min) ¹
<i>E7</i>	15,307.97	65,700	1720.04	2,160	1282.68	1,800
<i>E8</i>	17,425.71	59,860	1962.09	1,968	1359.88	1,640
Combined Wells:	35,240.836	125,560	3173.19	4,128	N/A	N/A

1. Based on water taking rates and amounts specified in Table A of PTTW # 4364-7LWPT7 & PTTW # 2201-7LQN73

Section 5 – Summary and Conclusion

In conclusion, E7 is pumping at a 23.3% average of the approved rated capacity of 65,700 m³ per month, and E8 is pumping at a 29.11% average of the approved rated capacity of 59,738 m³ per month. The Erin Well Supply system is pumping at an average of 28.07% of the approved rated capacity of 125,560 m³ per month.

This report will be given to the members of the Town of Erin Council on or before March 31, 2011, as required by Section 22-2 (1) (a) of Schedule 22 of O. Reg 170/03, as amended. It will be circulated to Council as an information item on the first available agenda following the date completed to formally put the report on the public record. The report is available to the public at no cost, and will be posted on the Town’s website.

APPENDIX 1

Summary Report, Town of Erin, Erin Well Supply
Reporting Period, January 1, 2010 – December 31, 2010

APPENDIX 1

SCHEDULE 22
SUMMARY REPORTS FOR MUNICIPALITIES

Municipal: Large Residential
Small Residential

Application

22-1. This Schedule applies to the following drinking-water systems:

1. Large municipal residential systems.
2. Small municipal residential systems.

Report

22-2. (1) The owner of a drinking-water system shall ensure that, not later than March 31 of each year after 2003, a report is prepared in accordance with subsections (2) and (3) for the preceding calendar year and is given to,

- (a) in the case of a drinking-water system owned by a municipality, the members of the municipal council;
- (b) in the case of a drinking-water system owned by a municipal service board established under section 195 of the *Municipal Act, 2001*, the members of the municipal service board; or
- (c) in the case of a drinking-water system owned by a corporation, the board of directors of the corporation.

(2) The report must,

- (a) list the requirements of the Act, the regulations, the system's approval and any order that the system failed to meet at any time during the period covered by the report and specify the duration of the failure; and
- (b) for each failure referred to in clause (a), describe the measures that were taken to correct the failure.

(3) The report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system:

1. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows and daily instantaneous peak flow rates.
2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval.

(4) If a report is prepared under subsection (1) for a system that supplies water to a municipality under the terms of a contract, the owner of the system shall give a copy of the report to the municipality by March 31.

(5) For the purpose of subsection (1), the preceding calendar year for the report that is required to be prepared not later than March 31, 2004 shall be deemed to be the period from July 1, 2003 to December 31, 2003

OWRA approvals

22-3. A provision of an OWRA approval that requires the completion and presentation of a compliance report does not apply to a drinking-water system if the owner of the system complies with section 22-2.

O. Reg. 170/03, Sched. 22; O. Reg. 249/03, s. 24

24. (1) Section 22-2 (1) of Schedule 22 to the Regulation is amended by striking out "each year after 2004" in the portion before clause (a) and substituting "each year after 2003".

(2) Section 22-2 of Schedule 22 to the Regulation is amended by adding the following subsection:

(5) For the purpose of subsection (1), the preceding calendar year for the report that is required to be prepared not later than March 31, 2004 shall be deemed to be the period from July 1, 2003 to December 31, 2003.

(3) Schedule 22 to the Regulation is amended by adding the following section:

OWRA approvals

22-3. A provision of an OWRA approval that requires the completion and presentation of a compliance report does not apply to a drinking-water system if the owner of the system complies with section 22-2.

APPENDIX 2



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.

1. The following instances of non-compliances were also noted during the inspection:

Sodium hypochlorite used for primary disinfection at the two pumphouses in the Erin WS is obtained by the operating authority from a local merchant, known as the 'Hillsburgh Feed Mill'. This sodium hypochlorite is originally manufactured by Lavo inc, and is NSF approved when delivered in bulk to the feed mill. It loses it's NSF rating though when it is repackaged by the feed mill into smaller containers, as 'Hillsburgh Feed Mill' is not an NSF approved repackager. As a result of this, the chemical being used by operations staff in the Erin DWS is not an NSF approved chemical, and therefore does not meet this C of A requirement.

Action(s) Required:

Actions required:

- 1.) Immediately, obtain and begin utilizing sodium hypochlorite for primary and secondary disinfection which meets the requirements of section 6.1 of C of A # 4010-7ZDRJE.
- 2.) Upon successful completion of this action, report the source and usage quantity of the sodium hypochlorite to Drinking Water Inspector Rick Neubrand, Ministry of the Environment, One Stone Road West, 4th Floor, Guelph, Ontario, N1G 4Y2.



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.

1. The following issues were also noted during the inspection:

- 1.) All equipment listed in the C of A appeared to be installed and / or present as described. Note: There is no listing of the water tower in the Certificate of Approval (C of A).
- 2.) In assessing logbooks and on-line analyzer data, it was found that although records were made of on-site responses to alarms, better detail could be incorporated into such notes.
- 3.) In assessing the sampling points at the endpoints of the distribution system, it was discovered that operating authority staff were taking distribution system samples from ground level water line blowoff outlets, and not from dedicated distribution system sample taps or within homes / residences. This has the possibility of inadvertent contamination of the blowoff, from activities including lawn cutting, snow removal, or even adverse animal interactions (fecal or drinking activities).

Recommendation:

- 1.) Actions required: During the next C of A amendment or issuance of a Drinking Water License / Works Permit, ensure the water tower is included within the equipment / facility listing.
- 2.) It is recommended that more detailed information be included in logbooks, for better assessment of alarm responses which will better aid with future inspections.
- 3.) As this is a small community and the fact that many homes / residences are unavailable for sampling during regular business hours, it is recommended that dedicated lockable distribution system sample taps be installed, rather than using ground-level blowoffs or hydrants for distribution sampling.