# SUMMARY REPORT TOWN OF ERIN

# HILLSBURGH WELL SUPPLY DRINKING -WATER SYSTEM NO. 220007285

Municipal Drinking Water License Number 102-102 Drinking Water Works Permit Number 102-202 PTTW # 6306-8X5KRY PTTW # 8548-6SBGWC

Submitted by: Frank Smedley
Water Supposite

**Water Superintendent** 

Signature: \_\_\_\_

**Date:** February 25, 2014

Prepared by: Sara McDougall

# SUMMARY REPORT FOR THE TOWN OF ERIN HILLSBURGH WELL SUPPLY

Ministry of Environment

Municipal Drinking Water License Number 102-102

Drinking Water Works Permit Number 102-202

Permit to Take Water No. 6306-8X5KRY

Permit to Take Water No. 8548-6SBGWC

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#### **Section 1 – Introduction**

The 2013 Hillsburgh Well Supply Summary Report addresses the requirements outlined in Schedule 22 of the Ontario Drinking Water Systems Regulation (O. Reg. 170/03) under the *Safe Drinking Water Act*, 2002. For purposes of that regulation, the Town of Erin - Hillsburgh Well Supply is considered to be a large municipal residential system.

The summary report identifies Hillsburgh Well Supply's Licenses and Permits, and includes a statement of compliance with the terms and conditions of the Drinking Water Works Permits, Municipal Drinking Water Licenses, Permits to Take Water and the drinking water regulations under the *Safe Drinking Water Act*. The report also includes a summary of the quantities and flow rates of water supplied, including monthly average and maximum daily flows during the period from January 1<sup>st</sup> to December 31<sup>st</sup>, 2013.

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

## Section 2 – Background

In 2002, the *Safe Drinking Water Act* was passed by the Ontario government, and by 2003, all municipal and non-municipal drinking water systems in Ontario were governed by this Act and its Regulations.

A list of the Regulations enacted under the *Safe Drinking Water Act* can be found in Appendix 2 of this report.

The reporting period for this report is January 1, 2013 to December 31, 2013.

The Town of Erin continues to operate our water systems through adherence to our Municipal Drinking Water License and our Drinking Water Works Permit. The Municipal Drinking Water License provides the required legislative authority to operate the system, and the Drinking Water Works Permit provides the descriptive scope of our water system and the authority to establish and alter the system.

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

- Municipal Drinking Water License Number 102-102, issued December 20, 2010; once issued, a condition on the license revokes all C of A's which were previously issued for the drinking water system.
- Drinking Water Works Permit Number 102-202, issued December 20, 2010

Both our license and our permit were issued through our demonstration of compliance to the Drinking Water Quality Management Standard (DWQMS).

## **DWOMS**

The Standard contains 21 Elements which specify the minimum requirements for the Quality Management System of an Operating Authority for a subject system:

- a. to facilitate the Operating authority's ability to consistently produce and/or deliver drinking water that meets applicable legislative, regulatory and Owner requirements, and
- b. to enhance consumer protection through the effective application and continual improvement of the Quality Management System.

## **Operational Plan**

Our adopted Quality Management System (QMS) Operational Plan continues to govern the water system in assuring conformance to the Standard and continuous operational improvements.

A portion of this required conformance is included in the Financial Plan submitted under O. Reg. 453/07. We must fulfill our submitted financial commitment to infrastructure renewal and utility operations in a demonstrated life cycle based full cost recovery model.

Copies of our QMS Operational Plan are available at the Municipal Office.

## **Section 3 – External Audit & MOE Inspections**

On October 16, 2013 the Ministry of Environment conducted an inspection of the Hillsburgh Well Supply System for the period of December 1, 2012 – September 15, 2013. The inspection included a review of operational standards and procedures, record keeping, sampling protocols, status of operator's licensing, training initiatives and a random field test for the analysis of system free chlorine residual in conjunction with joint microbiological water sample collections.

This audit provided a scoring of 100% in meeting all legislative requirements of the *Safe Drinking Water Act* and associated regulations under the act.

The summary of best practice issues and recommendation, and the final inspection scoring for this inspection period are included in Appendix 3.

On November 20<sup>th</sup>, 2013 SAI Global conducted an external off-site system verification audit of the Town of Erin's Quality Management System. This audit resulted in zero non-conformances and one opportunity for improvement. SAI Global's recommendation is: Maintenance of existing accreditation. The results of the external off-site system verification audit are included in Appendix 4.

## **Section 4 – Statement of Compliance**

The Hillsburgh Well Supply System complied with the terms and conditions of all Licenses and Permits, Ontario Drinking Water Quality Standards Regulation (O. Reg. 169/03), and the Drinking Water Systems Regulation (O. Reg. 170/03) with the exception of those two events detailed below and in Appendix 3 and 4 of this report.

The following is a summary of the two events where the system failed to meet the regulations or the system's approval or any order that has been issued.

#### Event #1:

#### 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.

#### ONTARIO REGULATION 169/03: ONTARIO DRINKING WATER QUALITY STANDARDS

# $\frac{\text{SCHEDULE 1}}{\text{MICROBIOLOGICAL STANDARDS}}$

Item	Microbiological Parameter	Standard (expressed as a maximum)
1.	Escherichia coli (E. coli)	Not detectable
2.	Revoked: O. Reg. 248/06, s. 1.	
3.	Total coliforms	Not detectable
4.	Revoked: O. Reg. 248/06, s. 1.	
5.	Revoked: O. Reg. 248/06, s. 1.	

O. Reg. 169/03, Sched. 1; O. Reg. 248/06, s. 1.

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
September 12, 2013	Total Coliforms	1	CFU/100mL	Resampled – results had hits on Total Coliforms. Reviewed sampling procedures, Flushed & resampled – Results OK	September 23, 2013

## Event # 2:

Water Takings Authorized by This Permit

Amounts of Taking Permitted

The Permit Holder shall only take water from the source, during the periods and at the rates and amounts of taking specified in Table A. Water takings are authorized only for the purposes specified in Table A.

#### Table A

Source Name Source: Taking Taking Max.  / Description: Specific Major Taken per Type: Purpose: Category: Minute (litres):	Max: Num. of Hrs Taken per Day:	1.104.044.00000000000000000000000000000	Max. Num. of Days Taken per Year:	Zone/ Easting/ Northing:
1 Hillsburgh Well Well Municipal Water Supply 454 #H3 Drilled	24	655,000	365	17 568986 4849304
	Total Taking:	655,000	<del>.</del>	

On February 20, 2013 the Glendevon well had a maximum daily instantaneous peak flow rate of 463.38 L/min, which was higher than the PTTW approved rated capacity of 454 L/min. The well maintenance logs showed that there was a raw flow rate adjustment done on that day to decrease the flow after the pump turned on to ensure we are meeting the requirements of the PTTW.

Raw Well	Maximum Daily Instantaneous Peak Flow Rate (L/min.)	Approved Rated Capacity (L/min) <sup>1</sup>
GD	463.38	454

# Section 5 – Summaries of Quantities and Flow Rates and Water Supply

The following table is a summary of flows for the reporting period of January 1 – December 31, 2013.

Table 1

HH	Total	Flow	Avera	ge Day	Ma	x Day	Max Flo	w Rate
Date	Raw m <sup>3</sup>	Treated m <sup>3</sup>	Raw m <sup>3</sup>	Treated m <sup>3</sup>	Raw m <sup>3</sup> (rated capacity = 982 m <sup>3</sup> /day)	Treated m³ (rated capacity = 1011 m³/day)	Raw L/min (rated capacity = 682 L/min)	Treated L/sec
January	2408.218	2245.565	80.274	74.852	261.492	182.793	589.22	25.30
February	1719.539	1464.335	61.412	52.298	251.702	133.073	643.11	5.12
March	1637.074	1316.947	52.809	42.482	227.093	56.373	637.79	8.73
April	1614.863	1245.121	53.829	41.504	204.337	60.639	639.35	13.18
May	2409.749	1668.891	77.734	53.835	229.984	110.432	639.87	20.73
June	1947.071	1486.436	64.902	49.548	213.915	73.207	669.00	19.17
July	2354.458	1769.321	75.950	57.075	212.418	100.858	660.15	3.49
August	2398.358	1842.672	77.366	59.441	216.534	100.244	664.01	10.41
September	2092.138	1752.261	69.738	58.409	226.497	141.050	619.67	7.31
October	1700.592	1228.029	54.858	39.614	192.875	49.491	621.23	4.86
November	1624.221	1158.139	54.141	38.605	220.792	69.807	653.47	3.50
December	2589.526	1928.486	83.533	62.209	271.103	132.387	667.19	21.88
Total	24495.81	19106.20						
GD	Total	Flow	Avera	ge Day	Ma	x Day	Max Flo	w Rate
GD Date	Total Raw m <sup>3</sup>	Flow  Treated m <sup>3</sup>	Averaş Raw m³	ge Day  Treated m³	Raw m <sup>3</sup> (rated capacity = 655 m <sup>3</sup> /day)	Treated m³ (rated capacity = 654 m³/day)	Max Flo  Raw L/min (rated capacity = 454 L/min)	w Rate  Treated L/min
				Treated	Raw m³ (rated capacity =	Treated m <sup>3</sup> (rated capacity =	Raw L/min (rated capacity =	Treated
Date	Raw m <sup>3</sup> 2189.503 2441.188	Treated m <sup>3</sup>	Raw m <sup>3</sup> 70.629 87.185	Treated m <sup>3</sup>	Raw m <sup>3</sup> (rated capacity = 655 m <sup>3</sup> /day) 144.913 119.775	Treated m³ (rated capacity = 654 m³/day)	Raw L/min (rated capacity = 454 L/min) 402.99 463.38	Treated L/min
Date January	Raw m <sup>3</sup> 2189.503	Treated m <sup>3</sup> 2362.940	Raw m <sup>3</sup>	Treated m <sup>3</sup>	Raw m³ (rated capacity = 655 m³/day) 144.913	Treated m³ (rated capacity = 654 m³/day)	Raw L/min (rated capacity = 454 L/min) 402.99	Treated L/min 968.05
Date January February	Raw m <sup>3</sup> 2189.503 2441.188	Treated m <sup>3</sup> 2362.940 2623.011	Raw m <sup>3</sup> 70.629 87.185	Treated m³ 76.224 93.679 104.837 104.831	Raw m <sup>3</sup> (rated capacity = 655 m <sup>3</sup> /day) 144.913 119.775	Treated m³ (rated capacity = 654 m³/day)  151.280 125.331	Raw L/min (rated capacity = 454 L/min) 402.99 463.38	Treated L/min 968.05 673.93
Date January February March	Raw m <sup>3</sup> 2189.503 2441.188 2972.413 2896.932 3478.780	2362.940 2623.011 3249.950 3144.914 3791.862	70.629 87.185 95.884 96.564 112.219	Treated m³  76.224  93.679  104.837  104.831  122.318	Raw m³ (rated capacity = 655 m³/day) 144.913 119.775 127.808 124.943 194.615	Treated m³ (rated capacity = 654 m³/day)  151.280 125.331 136.789 134.290 202.730	Raw L/min (rated capacity = 454 L/min) 402.99 463.38 428.14 427.90 424.57	Treated L/min  968.05 673.93 669.02 1057.74 990.02
Date January February March April	Raw m <sup>3</sup> 2189.503 2441.188 2972.413 2896.932	2362.940 2623.011 3249.950 3144.914	Raw m <sup>3</sup> 70.629 87.185 95.884 96.564	Treated m³ 76.224 93.679 104.837 104.831	Raw m³ (rated capacity = 655 m³/day) 144.913 119.775 127.808 124.943	Treated m³ (rated capacity = 654 m³/day)  151.280 125.331 136.789 134.290	Raw L/min (rated capacity = 454 L/min) 402.99 463.38 428.14 427.90	Treated L/min  968.05  673.93  669.02  1057.74
January February March April May	Raw m³  2189.503 2441.188 2972.413 2896.932 3478.780 3422.841 3408.246	2362.940 2623.011 3249.950 3144.914 3791.862 3585.046 3788.788	70.629 87.185 95.884 96.564 112.219 114.095 109.943	Treated m³  76.224  93.679  104.837  104.831  122.318  123.622  122.219	Raw m³ (rated capacity = 655 m³/day) 144.913 119.775 127.808 124.943 194.615 152.269	Treated m³ (rated capacity = 654 m³/day)  151.280 125.331 136.789 134.290 202.730 161.661 167.008	Raw L/min (rated capacity = 454 L/min) 402.99 463.38 428.14 427.90 424.57 421.40 418.61	Treated L/min  968.05 673.93 669.02 1057.74 990.02 776.49 457.39
January February March April May June July August	Raw m³  2189.503 2441.188 2972.413 2896.932 3478.780 3422.841 3408.246 3345.277	2362.940 2623.011 3249.950 3144.914 3791.862 3585.046 3788.788 2050.268	70.629 87.185 95.884 96.564 112.219 114.095 109.943 107.912	Treated m³  76.224  93.679  104.837  104.831  122.318  123.622  122.219  66.138	Raw m³ (rated capacity = 655 m³/day)  144.913  119.775  127.808  124.943  194.615  152.269  153.738  137.468	Treated m³ (rated capacity = 654 m³/day)  151.280  125.331  136.789  134.290  202.730  161.661  167.008  122.213	Raw L/min (rated capacity = 454 L/min) 402.99 463.38 428.14 427.90 424.57 421.40 418.61 417.16	Treated L/min  968.05 673.93 669.02 1057.74 990.02 776.49 457.39 823.86
January February March April May June July	Raw m³  2189.503 2441.188 2972.413 2896.932 3478.780 3422.841 3408.246 3345.277 2484.060	2362.940 2623.011 3249.950 3144.914 3791.862 3585.046 3788.788 2050.268 2649.944	70.629 87.185 95.884 96.564 112.219 114.095 109.943 107.912 82.802	Treated m³  76.224  93.679  104.837  104.831  122.318  123.622  122.219  66.138  88.331	Raw m³ (rated capacity = 655 m³/day)  144.913  119.775  127.808  124.943  194.615  152.269  153.738  137.468  259.774	Treated m³ (rated capacity = 654 m³/day)  151.280  125.331  136.789  134.290  202.730  161.661  167.008  122.213  251.809	Raw L/min (rated capacity = 454 L/min) 402.99 463.38 428.14 427.90 424.57 421.40 418.61 417.16 415.08	Treated L/min  968.05 673.93 669.02 1057.74 990.02 776.49 457.39 823.86 863.88
January February March April May June July August	Raw m³  2189.503 2441.188 2972.413 2896.932 3478.780 3422.841 3408.246 3345.277	2362.940 2623.011 3249.950 3144.914 3791.862 3585.046 3788.788 2050.268	Raw m³  70.629  87.185  95.884  96.564  112.219  114.095  109.943  107.912  82.802  87.834	Treated m³  76.224  93.679  104.837  104.831  122.318  123.622  122.219  66.138	Raw m³ (rated capacity = 655 m³/day)  144.913  119.775  127.808  124.943  194.615  152.269  153.738  137.468	Treated m³ (rated capacity = 654 m³/day)  151.280  125.331  136.789  134.290  202.730  161.661  167.008  122.213	Raw L/min (rated capacity = 454 L/min) 402.99 463.38 428.14 427.90 424.57 421.40 418.61 417.16	Treated L/min  968.05 673.93 669.02 1057.74 990.02 776.49 457.39 823.86
January February March April May June July August September	Raw m³  2189.503 2441.188 2972.413 2896.932 3478.780 3422.841 3408.246 3345.277 2484.060 2722.853 2656.547	2362.940 2623.011 3249.950 3144.914 3791.862 3585.046 3788.788 2050.268 2649.944 2936.479 2844.338	70.629 87.185 95.884 96.564 112.219 114.095 109.943 107.912 82.802	Treated m³  76.224  93.679  104.837  104.831  122.318  123.622  122.219  66.138  88.331	Raw m³ (rated capacity = 655 m³/day)  144.913  119.775  127.808  124.943  194.615  152.269  153.738  137.468  259.774	Treated m³ (rated capacity = 654 m³/day)  151.280  125.331  136.789  134.290  202.730  161.661  167.008  122.213  251.809	Raw L/min (rated capacity = 454 L/min) 402.99 463.38 428.14 427.90 424.57 421.40 418.61 417.16 415.08	Treated L/min  968.05 673.93 669.02 1057.74 990.02 776.49 457.39 823.86 863.88
January February March April May June July August September October	Raw m³  2189.503 2441.188 2972.413 2896.932 3478.780 3422.841 3408.246 3345.277 2484.060 2722.853	2362.940 2623.011 3249.950 3144.914 3791.862 3585.046 3788.788 2050.268 2649.944 2936.479	Raw m³  70.629  87.185  95.884  96.564  112.219  114.095  109.943  107.912  82.802  87.834	Treated m³  76.224  93.679  104.837  104.831  122.318  123.622  122.219  66.138  88.331  94.725	Raw m³ (rated capacity = 655 m³/day)  144.913  119.775  127.808  124.943  194.615  152.269  153.738  137.468  259.774  115.695	Treated m³ (rated capacity = 654 m³/day)  151.280  125.331  136.789  134.290  202.730  161.661  167.008  122.213  251.809  118.630	Raw L/min (rated capacity = 454 L/min) 402.99 463.38 428.14 427.90 424.57 421.40 418.61 417.16 415.08 402.49	Treated L/min  968.05 673.93 669.02 1057.74 990.02 776.49 457.39 823.86 863.88 857.21

The following table is a summary of the flow rates and the rated capacity flow rates approved in the system's approval.

Table 2

НН	Peak D	ay Flow	Rated Capac	eity (m³/day)	Percent Rated Capacity (%	
	(m <sup>3</sup> /	day)				
	Raw	Treated	Raw	Treated	Raw	Treated
January	261.492	182.793	982	1011	26.63%	18.08%
February	251.702	133.073	982	1011	25.63%	13.16%
March	227.093	56.373	982	1011	23.13%	5.58%
April	204.337	60.639	982	1011	20.81%	6.00%
May	229.984	110.432	982	1011	23.42%	10.92%
June	213.915	73.207	982	1011	21.78%	7.24%
July	212.418	100.858	982	1011	21.63%	9.98%
August	216.534	100.244	982	1011	22.05%	9.92%
September	226.497	141.050	982	1011	23.06%	13.95%
October	192.875	49.491	982	1011	19.64%	4.90%
November	220.792	69.807	982	1011	22.48%	6.90%
December	271.103	132.387	982	1011	27.61%	13.09%

GD		ay Flow day)	Rated Capac	rity (m³/day)	Percent Rated	Capacity (%)
	Raw	Treated	Raw	Treated	Raw	Treated
January	144.913	151.280	655	654	22.12%	23.13%
February	119.775	125.331	655	654	18.29%	19.16%
March	127.808	136.789	655	654	19.51%	20.92%
April	124.943	134.290	655	654	19.08%	20.53%
May	194.615	202.730	655	654	29.71%	31.00%
June	152.269	161.661	655	654	23.25%	24.72%
July	153.738	167.008	655	654	23.47%	25.54%
August	137.468	122.213	655	654	20.99%	18.69%
September	259.774	251.809	655	654	39.66%	38.50%
October	115.695	118.630	655	654	17.66%	18.14%
November	138.214	145.992	655	654	21.10%	22.32%
December	108.661	114.331	655	654	16.59%	17.48%

## **Section 6 – Summary and Conclusion**

Table 3 provides information with respect to the quantity and flow rates of water supplied to the system during the reporting period.

The monthly average taking for all wells individually and for all wells combined, the
maximum daily 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 3 Town of Erin, Hillsburgh Well Supply Pumping Volume % Flow Summary

(January 1 to December 31, 2013)

Raw Well	Monthly Average (m³/mo.)	Approved Rated Capacity (m³/month)	Maximum Daily Flow (m³/day)	Approved Rated Capacity (m³/day)¹	Maximum Daily Instantaneous Peak Flow Rate (L/min.)	Approved Rated Capacity (L/min) <sup>1</sup>
HH	2041.32	29869	271.10	982	669.00	682
GD	2810.70	19923	259.77	655	463.38	454
Combined Wells:	4852.02	49792		1,637	N/A	N/A

<sup>1.</sup> Based on water taking rates and amounts specified in Table A of PTTW #8548-6SBGWC & PTTW #6306-8X5KRY

In conclusion, HH is pumping at a 6.83% average of the approved rated capacity of 29,869 m³ per month, and GD is pumping at a 14.11% average of the approved rated capacity of 19,923 m³ per month. The Hillsburgh Well Supply system is pumping at an average 9.74% of the approved rated capacity of 49,792 m³ per month.

This report will be given to the members of the Town of Erin Council on or before March 31, 2014, 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.

## 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, drinking water works permit, municipal drinking water licence, and any orders applicable to the system that were not met at any time during the period covered by the report; and
  - (b) for each requirement referred to in clause (a) that was not met, specify the duration of the failure and 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.
  - 2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water licence, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5 (4), to the flow rates specified in the written agreement.
- (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) Revoked: O. Reg. 253/05, s. 18.

#### **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; O. Reg. 253/05, s. 18; O. Reg. 418/09, s. 26.

## Regulations under the Safe Drinking Water Act, 2002

- O. Reg. 128/04: Certification of Drinking Water System Operators and Water Quality Analysts
- O. Reg. 169/03: Ontario Drinking Water Quality Standards
- O. Reg. 170/03: Drinking Water Systems
- O. Reg. 171/03: Definitions of Words and Expressions Used in the Act
- O. Reg. 172/03: Definitions of Deficiency and Municipal Drinking Water System
- O. Reg. 188/07: Licensing of Municipal Drinking Water Systems
- O. Reg. 242/05: Compliance and Enforcement
- O. Reg. 243/07: Schools Private Schools and Day Nurseries
- O. Reg. 248/03: Drinking Water Testing Services
- O. Reg. 453/07: The Financial Plans Regulation
- O. Reg. 229/07: Service of Documents



Ministry of the Environment Inspection Report

## 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

Report Generated for dhesima on 15/11/2013 (dd/mm/yyyy) Site #: 220007285

HILLSBURGH DRINKING WATER SYSTEM
Date of Inspection: 16/10/2013 (dd/mm/yyyy)

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#### 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.

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

- 1. The reservoir air vent for Glendevin pumping station have coarse mesh.
- 2. The continuous analyzers in the pumphouses are verified using handheld colorimeter and are adjusted if the reading differs more than 0.05mg/l.
- 3. The operators did not strike out the unused lines in the logbook for each day. There were numerous overwritten entries in all logbooks.
- 4. The pumping station has a water pipe connecting the part of the distribution line after the check valve back to the reservoir at the point where the high lift pump pumps the water out. This water line continuously feed the distribution water to the reservoir when the high lift pump is not working.

#### Recommendation:

- 1. The ORO is recommended to install finer mesh on the vent to prevent the insects entering into the reservoir.
- 2. The operator is recommended to develop a procedure with the guideline on the percentage error and the frequency of the deviation of the continuous analyser reading from the verification device, which will prompt the service call for the equipment technician.
- 3. The operators are required to strike out the unused lines before entering the notes for the next day in the logbook as well as single strike, initial and rewrite any corrected entry in the logbook.
- 4. The Town is recommended to develop a sampling procedure for the operators for the occasions when the highlift pump is not working continuously. The procedure may include not grabbing the first water out of the sampling tap as soon as the highlift pump turned on and get the water sample representing the treated water in the reservoir.

HILLSBURGH DRINKING WATER SYSTEM
Date of Inspection: 16/10/2013 (dd/mm/yyyy)

#### Ministry of the Environment - Inspection Summary Rating Record (Reporting Year - 2013-2014)

DWS Name: HILLSBURGH DRINKING WATER SYSTEM

**DWS Number: 220007285** 

DWS Owner: Erin, The Corporation Of The Town Of

Municipal Location: Erin

Regulation: O.REG 170/03

Category: Large Municipal Residential System

Type Of Inspection: Focused
Inspection Date: October 16, 2013
Ministry Office: Guelph District

#### Maximum Question Rating: 521

Inspection Module	Non-Compliance Rating
Source	0 / 28
Capacity Assessment	0 / 30
Treatment Processes	0 / 81
Operations Manuals	0 / 28
Logbooks	0 / 14
Certification and Training	0 / 28
Water Quality Monitoring	0 / 112
Reporting & Corrective Actions	0 / 88
Other Inspection Findings	0 / 0
Treatment Process Monitoring	0 / 112
TOTAL	0 / 521

Inspection Risk Rating 0.00%

FINAL INSPECTION RATING: 100.00%

Inspection Rating Record Generated On 15-NOV-13 (Inspection ID: 1-ANVI7).



1631559-01 #DWAR.12.08 Rev.01

## **ACCREDITATION PROGRAM FOR OPERATING AUTHORITIES SYSTEMS VERIFICATION AUDIT REPORT - 2012**

FILE #: 1631559-01

The Corporation of the Town of Erin **OAP 102** 

**Operating Authority for:** 

**Erin Drinking Water System** Hillsburgh Heights Drinking Water System

12 Month Surveillance Audit

Prepared by: Janet McKenzie

Date: November 20, 2013

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#### **Audit Objectives**

The objective of the audit was to determine whether the drinking water Quality Management System (QMS) of the subject system conforms to the requirements of the Ontario Ministry of the Environment's (MOE) Drinking Water Quality Management Standard (DWQMS) at all of the locations noted in the Applicant Profile Form (AP 602). It was also intended to gather the information necessary for SAI Global to assess whether accreditation can be offered to the operating authority.

#### **Audit Scope**

The facilities and processes associated with the operating authority's QMS were objectively evaluated to obtain audit evidence and to determine a) whether the quality management activities and related results conform with DWQMS requirements, and b) if they have been effectively implemented.

#### Audit Criteria:

- The Drinking Water Quality Management Standard
- · Current QMS manuals, procedures and records implemented by the Operating Authority
- SAI Global Accreditation Program Handbook

#### Auditor:

Janet McKenzie

## **Audit Report Distribution List:**

The Audit Report is distributed as follows:

- Operating Authority
- Owner
- · Ministry of the Environment Director

## **Confidentiality and Documentation Requirements**

The SAI Global stores their records and reports to ensure their preservation and confidentiality. Unless required by law, the SAI Global will not disclose audit records to a third party without prior written consent of the applicant. The only exception will be that the SAI Global will provide audit and corrective action reports to the Ontario Ministry of the Environment. For more information, please refer to the SAI Global Accreditation Program Handbook.

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#### PART A. MANAGEMENT SUMMARY

This was an off-site system verification audit of the The Corporation of the Town of Erin conformance with the requirements of DWQMS: Oct. 2006.

The overall effectiveness of the The Corporation of the Town of Erin Quality Management System is considered:

√ Effective

Zero non-conformities and one opportunity for improvement were identified during this assessment, as noted in Part D of this report.

The audit objectives have been accomplished within the audit scope in accordance with the audit plan and the time allocation.

#### Notes

Copies of this report distributed outside the organization must include all pages.

As part of the SAI Global Terms, it is necessary for you to notify the SAI Global of any changes to your Quality Management System that you believe are significant enough to risk non-conformity with DWQMS: Oct. 2006. For more information, please refer to the SAI Global Accreditation Program Handbook.

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#### PART B. GENERAL INFORMATION

Operating Authority:

The Corporation of the Town of Erin OAP 102 Legal name and address

Address 5684 Trafalgar Road Hillsburgh Ontario

Applicant representative Ms. Louise Warn

Title Compliance Administator

519-855-4407 519-855-4821 \_Fax Telephone louise.warn@erin.ca

Owner:

E-mail

Legal name and address ⊠ same as above, or:

Applicant representative Louise Warn

Title Compliance Administator 519-855-4407 «CIS13» 519-855-4821 Telephone Fax E-mail louise.warn@erin.ca

This audit report covers the subject systems listed:

Erin Drinking Water System Hillsburgh Heights Drinking Water System

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## PART C. SUMMARY OF FINDINGS

5	SUMMARY OF FINDIN	NGS							
OPERATING AUTHORITY The Corporation of the Town of Erin OAP 102							1631559-01		
ACCREDITATION CYCLE: 12	Month Surveillance	Audit							
AUDIT TYPE ⊠ Systems	AUDITOR Janet	McKe	nzie	Novem	ber 20,	2013			
SUBJECT SYSTEM(S) AUDIT  ② Hillsburgh Heights Drinking W		g Wate	er Sys	tem					
REQUIREMENT 4	SYSTEM →	0	2	3	4	(5)	6		
1. Quality Management System		1111	7111						
2. Quality Management System Poli	icy	1111		E STORY		ALC: U	Page 1		
3. Commitment and Endorsement		С	С	ALX !		01 1 W	1000		
4. Quality Management System Rep	presentative	С	С	THE BANK	135 15				
5. Document and Records Control		OFI	OFI				H		
6. Drinking-Water System		C	C	5-48 (		TOVE	(C (2)		
7. Risk Assessment	C	C							
8. Risk Assessment Outcomes	Danasasikiliking and	1	C		A Live		DE LO		
9. Organizational Structure, Roles, Responsibilities and				2 A TO					
Authorities  10. Competencies			111			1,000			
11. Personnel Coverage		HH	111			No.	6 19		
12. Communications		1111	444	ar mi		Same.			
13. Essential Supplies and Services		1111	111	SUSIN					
14. Review and Provision of Infrastru	ucture	1111	111		S Sain				
15. Infrastructure Maintenance, Reha		1111	1111			I TUCK			
Renewal		7111	1111			3			
16. Sampling, Testing and Monitorin	g	C	С	ing es	1758	THE RES	DIE N		
17. Measurement & Recording Equip	pment Calibration	1111		Street,					
and Maintenance		1777	777	SHEE	2 47		182		
18. Emergency Management		C	C		11000	in the			
19. Internal Audits		C	C		ETH		1 3 3 3		
20. Management Review 21. Continual Improvement		C	C				THE RESERVE		
Major non-conformity. The auditor ha (a) a required element of the DWQMs (b) a systemic problem with a QMS is (c) a minor non-conformity identified Mn Minor non-conformity. In the opinion incorporated satisfactorily into a QMS OFI Opportunity for improvement. Conformation of the confor	S has not been incorporated sevidenced by two or more in a corrective action reque- of the auditor, part of a req S.	llowing: d into a G minor no st has no uired ele	QMS; on-confo t been r ment of	emedied. the DWQ	MS has		1		
C Conforms to requirement.									
Not applicable to this audit.									

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#### PART D. FINDINGS/COMMENTS

DWQMS Reference: Commitment and Endorsement

Section 3, Town of Erin: DWQMS Operational Plan, Revision #7, Client Reference:

July 2013. Appendix 2

Results: Conformity

DWQMS Reference: Quality Management System Representative

Client Reference: Section 4, Town of Erin: DWQMS Operational Plan, Revision #7,

July 2013.

Conformity Results:

Document and Record Control DWQMS Reference:

Town of Erin, DWQMS Operational Plan, Revision #7, July 2013. Client Reference:

Drinking water system schematics (Well 2, 3, 7 & 8)

Results: Opportunity for improvement

The Drinking Water System schematics are current however they Details:

have not been updated in the DWQMS Operational Plan.

DWQMS Reference: Drinking Water System

Client Reference: Section 6, Town of Erin: DWQMS Operational Plan, Revision #7,

July 2013.

Drinking water system schematics (Well 2,3, 7 & 8)

Results: Conformity

**DWQMS** Reference Risk Assessment

Client Reference: Town of Erin, DWQMS Operational Plan, Revision #7, July 2013.

Appendix 14, 15 & 16

Results: Conformity

DWQMS Reference: Risk Assessment Outcomes

Town of Erin, DWQMS Operational Plan, Revision #7, July 2013. Client Reference:

Appendix 14, 15,16

Results: Conformity

DWQMS Reference: Sampling, Testing and Monitoring

Client Reference: Section 16, Town of Erin: DWQMS Operational Plan, Revision #7,

July 2013. Appendix23

Results: Conformity

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DWQMS Reference: 18 Emergency Management

Client Reference: Section 18, Town of Erin: DWQMS Operational Plan, Revision #7,

July 2013. Appendix 25

Results: Conformity

DWQMS Reference: 19 Internal Audits

Client Reference: Section 19, Town of Erin: DWQMS Operational Plan, Revision #7,

July 2013, Appendix 26 & 27

Internal audit report, June 28, 2013

Results: Conformity

DWQMS Reference: 20 Management Review

Client Reference: Town of Erin, DWQMS Operational Plan, Revision #7, July 2013,

Appendix 28

Management Review Agenda & Meeting minutes - July 2013

Results Conformity

DWQMS Reference: 21 Continual Improvement

Client Reference: Town of Erin, DWQMS Operational Plan, Revision #7, July 2013,

Appendix 29

Results: Conformity

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PART E.

## **RECOMMENDATION – Systems Audit**

The auditor recommends the following:
☐ Offer of accreditation
<ul> <li>Offer of accreditation after response to corrective action requests has been deemed acceptable to the SAI Global</li> </ul>
<ul> <li>On-site verification audit after response to corrective action requests has been deemed acceptable by the SAI Global</li> </ul>
☐ On-site verification audit as next step in the accreditation process
☐ On-site verification of corrective action requests
Maintenance of existing accreditation
☐ Complete re-assessment
Final comments:
J. M. Goi.

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E-signature of Lead Auditor / Auditor

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