

**Ministry of
the Environment**

Safe Drinking Water
Branch

101 17th St. E, 3rd Floor
Owen Sound ON N4K 0A5

**Ministère de
l'Environnement**

Direction du contrôle de la qualité de
l'eau potable

101, 17^e rue Est, 3^e étage
Owen Sound ON N4K 0A5



March 12, 2012

Town of Saugeen Shores
P.O. Box 820
600 Tomlinson Drive
Port Elgin ON N0H 2C0

Attention: Lawrence Allison, Chief Administrative Officer

Re: Saugeen Shores Drinking Water System Inspection Report

Please find attached the 2011-12 municipal water treatment plant inspection report for the above mentioned facility. The physical inspection was conducted on January 19, 2012 and reviews operations since the previous inspection completed on November 15, 2010.

The inspection process remains predominantly the same as last year. Consequently, the report looks similar to the report you received last year for this facility except for a few minor changes. The report continues to address the drinking water system source, capacity assessment, treatment processes, operations manuals, operator logbooks, contingency and emergency planning, security, operator certification and training, water quality monitoring, reporting, notification & corrective action, and compliance with regulatory requirements.

Should you or your staff have any questions or concerns regarding this inspection report, please feel free to contact me at (519) 376-3683.

Yours truly,

A handwritten signature in black ink, appearing to read "Matthew Shannon".

Matthew Shannon
Drinking Water Inspector
Safe Drinking Water Branch
Owen Sound Office

cc: Allison Kershaw, Drinking Water Inspections Program Supervisor, Ministry of the Environment
Stuart Doyle, Director of Public Works, Town of Saugeen Shores
Cory McNeil, Cluster Manager, Ontario Clean Water Agency
David Trombley, Process Compliance Technician, Ontario Clean Water Agency
Dr. Hazel Lynn, Medical Officer of Health, Grey-Bruce Health Unit
Gary Senior, Sr. Manager, Environmental Planning & Regulations, SVCA



Ministry of the Environment

**SAUGEEN SHORES DRINKING WATER SYSTEM
Drinking Water System Inspection Report**

DWS Number:	210000078
Inspection Number:	1-95Z9M
Date of Inspection:	Jan 19, 2012
Inspected By:	Matthew Shannon

OWNER INFORMATION:

Company Name: SAUGEEN SHORES, THE CORPORATION OF THE TOWN OF
Street Number: 600 **Unit Identifier:**
Street Name: TOMLINSON Dr
City: PORT ELGIN
Province: ON **Postal Code:** N0H 2C0

CONTACT INFORMATION

Type: Operating Authority **Name:** Cory McNeil
Phone: (519) 797-2561 **Fax:** (519) 797-3080
Email: cmcneil@ocwa.com
Title: Operations Manager

Type: Operating Authority **Name:** David Trombley
Phone: (519) 941-1938 **Fax:**
Email: dtrombley@ocwa.com
Title: Process and Compliance Technician

Type: Operator **Name:** Steve Walmsley
Phone: (519) 797-2561 **Fax:** (519) 797-3080
Email: swalmsley@ocwa.com
Title: Operator In Overall Responsibility

Type: Operator **Name:** Paul Shular
Phone: (519) 797-2561 **Fax:** (519) 797-3080
Email:
Title: Operator

Type: Owner **Name:** Lawrence Allison
Phone: (519) 832-2008 **Fax:** (519) 832-2140
Email: allisonl@saugeenshores.ca
Title: Chief Administrative Officer

Type: Owner **Name:** Stuart Doyle
Phone: (519) 832-2008 **Fax:** (519) 832-2140
Email: doyles@saugeenshores.ca
Title: Director of Public Works

INSPECTION DETAILS:

DWS Name: SAUGEEN SHORES DRINKING WATER SYSTEM
DWS Address: 140 ISLAND ST SOUTHAMPTON N0H 2L0
County/District: Saugeen Shores
MOE District/Area Office: Owen Sound Area Office
Health Unit: GREY BRUCE HEALTH UNIT
Conservation Authority: N/A
MNR Office: N/A
DWS Category: Large Municipal Residential
DWS Number: 210000078
Inspection Type: Unannounced
Inspection Number: 1-95Z9M
Date of Inspection: Jan 19, 2012
Date of Previous Inspection: Nov 10, 2010

DRINKING WATER SYSTEM COMPONENTS DESCRIPTION

Site (Name): RAW WATER
Type: Source **Sub Type:** Surface

Comments:

The Southampton water treatment plant is a surface water treatment plant. The plant draws raw water from Lake Huron through a recently commissioned (December 10, 2008) 750 mm diameter continuously welded high density polyethylene intake. The intake structure is approximately 1600m long and has a chlorine solution feed line for zebra mussel control and a raw sample line. The intake is 9.5 to 10m above the bottom of the lake and about 5.5m below the lake's low water level. The decommissioned 600 mm intake will be maintained as a standby.

Three vertical turbine pumps (two duty, one standby), with variable frequency drives, each rated at 104 litres per second at a TDH of 37 metres are located in the low lift pumping station.

Site (Name): TREATED WATER
Type: Treated Water POE **Sub Type:** Pumphouse

Comments:

Water is pumped from the low lift station to the main treatment building where it is directed through the following:

Four individual submerged membrane trains (Zeeweed 1000) each with a capacity of 5,950 cubic metres per day. In order to remove sharp particles that could damage the membranes, self cleaning 0.5 mm strainers have been installed at the low lift pumping station. Each membrane train has a dedicated permeate (effluent) pump. The system uses a combination of on-line particle counting, turbidimeter measurements, and automated pressure decay testing to monitor the membrane integrity.

There are two clear wells in parallel with a total storage volume of 3,720 cubic metres with intra basin baffling. The sodium hypochlorite disinfection system consists of two storage tanks and two metering pumps (one duty, one standby) each rated at 20 litres per hour.

Site (Name): DISTRIBUTION (WATER INSPECTIONS)

Type: Other

Sub Type:

Comments:

The Southampton water treatment plant is supplying both Southampton distribution system (Zone 1) and Port Elgin distribution system (Zone 2). A 450 mm water main has been constructed along Highway 21 for transmission of water from Southampton to the Port Elgin distribution system and interconnection of the existing water storage facilities.

The Southampton distribution system (Zone 1) services approximately 5270 residents in Saugeen Township as well as supplying up to 1000 cubic meters per day to Saugeen First Nations Reserve.

Treated water is fed from the Southampton water treatment plant to the Southampton distribution system via three vertical turbine pumps (two duty, one standby), two of which have a rated capacity of 60 litres per second at total dynamic head (TDH) of 50 metres, and one at 50 litres per second at a TDH of 49.7 metres.

There is one standpipe for water storage with a capacity of 3409 cubic metres in the Southampton distribution system. There is also a booster pump station located on Rankin Street South, on the north side of the Saugeen River, which increases line pressure in the service area and on the Saugeen First Nations.

The Port Elgin distribution system (Zone 2) services approximately 6800 year-round residents. During the summer months the population is reported to double.

Treated water is fed directly from the Southampton water treatment plant to the Port Elgin distribution system via three vertical turbine pumps (two duty, one standby) each rated at 54 litres per second at a total TDH of 80 metres.

Water storage in the Port Elgin distribution system includes a reservoir with a capacity of 4,546 cubic metres and a standpipe with a capacity of 2,000 cubic metres.

Within the Port Elgin distribution system, a re-chlorination facility is located adjacent to MacGregor Point Provincial Park.

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.

The Ministry is implementing a rigorous and comprehensive approach in the inspection of drinking water systems that keys on the source, treatment and distribution components of the system as well as management practices.

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 a "focused" inspection of your system. Although the inspection involved fewer activities than those normally undertaken by a detailed inspection, it contained most of the elements required to assess key compliance issues.

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.

CAPACITY ASSESSMENT

- * There was sufficient monitoring of flow as required by the Permit and Licence or Approval issued under Part V of the SDWA
- * The owner was in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the Permit and Licence or Approval issued under Part V of the SDWA.

TREATMENT PROCESSES

- * The owner had ensured that all equipment was installed in accordance with the Permit and Licence or Approval issued under Part V of the SDWA.
- * Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a Permit, Licence or Approval issued under Part V of the SDWA at all times that water was being supplied to consumers.

The operating authority notified the ministry that filter train turbidimeters were left on 'hold' from July 26 – August 4, 2011. On August 3rd, 2011 it was noticed that the filter train turbidity readings

TREATMENT PROCESSES

had not changed since July 26, 2011. The operator followed up and found that the filter turbidity analyzers had been left in "HOLD" mode after the calibration procedure on the 26th of July. The maximum treated water turbidity for the time period was 0.09 NTU. Another indicator that the filter trains were running under normal conditions is that the particle counters used by the Zenon filtration system have a warning alarm set point of 200 cnts/ml total for the four channels of each filter train and this alarm was not reached for either of the four filter trains.

MOE Approvals Branch believed that treatment equipment was still operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 during the period that the turbidimeters were locked on 'hold' mode.

- * **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

- * **Backflow preventers were installed at each service connection to Industrial/Commercial/Institutional and agricultural process that were considered high hazard facilities.**

OPERATIONS MANUALS

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

CONTINGENCY/EMERGENCY PLANNING

- * **The contingency/emergency plan was available for reference by all staff as required by the Permit and Licence or Approval issued under Part V of the SDWA.**

SECURITY

- * **All storage facilities were completely covered and secure.**

SECURITY

- * Air vents and overflows associated with reservoirs and elevated storage structures were equipped with screens.
- * 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.

The overall responsible operator is Steve Walmsley.
- * 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 microbiological water quality monitoring requirements for treated samples were being met.
- * All inorganic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

Inorganic parameters listed in Schedule 23 of O. Reg. 170/03 were last sampled January 10, 2012.
- * All organic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

Organic parameters listed in Schedule 24 of O. Reg. 170/03 were last sampled January 10, 2012.
- * All trihalomethanes water quality monitoring requirements prescribed by legislation were conducted within the required frequency.
- * All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency for the DWS.
- * All sodium water quality monitoring requirements prescribed by legislation were conducted within the required frequency.
- * All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

WATER QUALITY MONITORING

- * All sampling requirements for lead prescribed by schedule 15.1 of O. Reg. 170/03 were being met.
- * All sampling requirements for alkalinity and pH prescribed by schedule 15.1 of O. Reg. 170/03 were being met.
- * All continuous monitoring equipment utilized for sampling and testing required by O.Reg.170/03, or approval or order, were equipped with alarms or shut-off mechanisms that satisfied the standards described in Schedule 6.
- * All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.
- * Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.
- * Primary disinfection chlorine monitoring was being conducted at a location approved by Permit, Licence or Approval issued under Part V of the SDWA, or at/near a location where the intended CT had just been achieved.
- * The secondary disinfectant residual was measured as required for 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.
- * Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03.
- * All continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was recording data with the prescribed format.
- * Continuous monitoring of each filter effluent line was being performed for turbidity.
- * 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.

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).

REPORTING & CORRECTIVE ACTIONS

- * All reporting requirements for lead sampling were complied with as per schedule 15.1-9 of O.Reg. 170/03.
- * Where required continuous monitoring equipment used for the monitoring of chlorine residual and/or turbidity triggered an alarm or an automatic shut-off, a qualified person responded in a timely manner and took appropriate actions.

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:

Matthew Shannon

Signature: (Provincial Officer):

Reviewed & Approved By:

Allison Kershaw

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.



Ministry of the Environment
Drinking Water Inspection Report

APPENDIX A

DRINKING WATER INSPECTION LABORATORY RESULTS

APPENDIX A
TABLE 3
SAUGEEEN SHORES DRINKING WATER SYSTEM
AUDIT SAMPLE RESULTS - 19-JAN-2012
SUMMARY OF MICROBIOLOGICAL PARAMETERS - HEALTH RELATED

Sample Legend:

Sample # 1 - SOUTHAMPTON LOWLIFT DISTRIBUTION

Sample # 2 - SOUTHAMPTON STP DISTRIBUTION

Parameter	Units	MC ¹	SAMPLE	SAMPLE
			# 1	# 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 A
TABLE 4
SAUGEEEN SHORES DRINKING WATER SYSTEM
AUDIT SAMPLE RESULTS - 19-JAN-2012

SUMMARY OF CHEMICAL / PHYSICAL PARAMETERS - HEALTH RELATED

Sample Legend:

Sample # 1 - SOUTHAMPTON STP DISTRIBUTION

Parameter	Units	MC ¹	SAMPLE	
			# 1	
1,1-DICHLOROETHENE	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	.2	+/-0.16
TETRACHLOROETHENE	UG/L	30	.05	<=W
TRICHLOROETHENE	UG/L	5	.05	<=W
TRIHALOMETHANES; TOTAL	UG/L	100 e	33.5	

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 A

TABLE 5

SAUGEEEN SHORES DRINKING WATER SYSTEM

AUDIT SAMPLE RESULTS - 19-JAN-2012

SUMMARY OF MICRO, CHEMICAL / PHYSICAL PARAMETERS - NOT HEALTH RELATED

Sample Legend:

Sample # 1 - SOUTHAMPTON LOWLIFT DISTRIBUTION

Sample # 2 - SOUTHAMPTON STP DISTRIBUTION

Parameter	Units	OBJECTIVE	TYPE OF OBJECTIVE	SAMPLE	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 measureable 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 A
TABLE 6
SAUGEEEN SHORES DRINKING WATER SYSTEM
AUDIT SAMPLE RESULTS - 19-JAN-2012
SUMMARY OF PARAMETERS WITH NO ODWQS

Sample Legend:

Sample # 1 - SOUTHAMPTON STP 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	6.8	
BROMOFORM	UG/L	.5	<=W
CHLOROFORM	UG/L	25.1	
CIS-1,2-DICHLOROETHENE	UG/L	.05	<=W
DIBROMOCHLOROMETHANE	UG/L	1.4	<T
DICHLOROACETONITRILE	UG/L	1	<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
 <W - No measurable response (zero) : < Reported value
 <=W - No measurable response (zero) : < Reported value
 < - Actual result is less than reported value
 ND - Not detected
 !NP - No appropriate procedure available

NA - Result not available
 NS - Not sampled
 NG/L - Nanograms per litre
 UG/L - Micrograms per litre
 MG/L - Milligrams per litre

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



APPENDIX B

INSPECTION SUMMARY RATING RECORD



Ministry of the Environment - Inspection Summary Rating Record (Reporting Year - 2011-2012)

DWS Name: SAUGEEN SHORES DRINKING WATER SYSTEM
DWS Number: 210000078
DWS Owner: Saugeen Shores, The Corporation Of The Town Of
Municipal Location: Saugeen Shores

Regulation: O.REG 170/03
Category: Large Municipal Residential System
Type Of Inspection: Focused
Inspection Date: January 19, 2012
Ministry Office: Owen Sound Area Office

Maximum Question Rating: 490

Inspection Module	Non-Compliance Rating
Capacity Assessment	0 / 30
Treatment Processes	0 / 77
Operations Manuals	0 / 28
Logbooks	0 / 14
Contingency/Emergency Planning	0 / 7
Certification and Training	0 / 28
Water Quality Monitoring	0 / 277
Reporting & Corrective Actions	0 / 29
TOTAL	0 / 490

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 - 2011-2012)

DWS Name: SAUGEEN SHORES DRINKING WATER SYSTEM
DWS Number: 210000078
DWS Owner: Saugeen Shores, The Corporation Of The Town Of
Municipal Location: Saugeen Shores

Regulation: O.REG 170/03
Category: Large Municipal Residential System
Type Of Inspection: Focused
Inspection Date: January 19, 2012
Ministry Office: Owen Sound Area Office

Maximum Question Rating: 490

Inspection Risk Rating | 0.00%

FINAL INSPECTION RATING: | 100.00%