### Ministry of the Environment, Conservation and Parks

Ministère de l'Environnement, de la Protection de la nature et des Parcs



101 17<sup>th</sup> St. E., 3<sup>rd</sup> Floor Owen Sound, ON N4K 0A5 Tel': 519 371-2901 Fax: 519 371-2905 101, 17e rue Est, 3e étage Owen Sound ON N4K 0A5 Tél.: 519 371-2901 Téléc.: 519 371-2905

July 18, 2018

Sent by Email: <a href="mailto:tsbpcao@bmts.com">tsbpcao@bmts.com</a>

The Corporation of the Town of South Bruce Peninsula 315 George St., P.O. Box 310 Wiarton, Ontario N0H 2T0

Attention: Brad McRoberts, CAO

Dear Brad:

### Re: 2018/2019 Inspection Report 1-ILUHI

Oliphant Drinking Water System Municipal Drinking Water Licence # 094-105 Drinking Water Works Permit # 094-205

Please note that as of June 29, 2018 the Ministry of the Environment and Climate Change's name has changed to the Ministry of the Environment, Conservation and Parks. This name change will take some time to be reflected in ministry materials and systems.

The enclosed report documents findings of the inspection that was performed on June 8, 2018.

Two sections of the report, namely "Actions Required" and "Recommended Actions", specify due dates for the submission of information or plans to my attention.

Please note that "Actions Required" are linked to incidents of non-compliance with regulatory requirements contained within an Act, a Regulation, or site-specific approvals, orders or instructions; "Recommended Actions" convey information that the owner or operating authority should consider implementing in order to conform with existing and emerging industry standards.

The report includes an Inspection Summary Rating Record as an appendix. This record forms part of the ministry's comprehensive, risk-based inspection process. The rating provides a quantitative measure of the inspection results for this specific drinking water system for the reporting year. An inspection rating that is less than 100 per cent does not mean that the drinking water from the system is unsafe. The primary goals of this assessment are to encourage ongoing improvement of drinking water systems and to measure this progress from year to year.

I would like to remind you that Section 19 of the Safe Drinking Water Act, 2002 (Standard of Care) creates a number of obligations for individuals who exercise decision-making authority over municipal drinking water systems, including members of municipal councils. "Taking Care of Your Drinking Water: A guide for members of municipal council", a publication found on the <u>Drinking Water Ontario website</u>

(http://www.ontario.ca/environment-and-energy/municipal- drinking-water-systems-licencing-registration-and-permits), provides further information about these obligations.

Should you have any questions regarding the content of the enclosed report, please do not hesitate to contact me.

Yours truly, Shayne Finlay Provincial Officer Water Inspector 519-376-2024 / Cell 519-270-8955 Fax 519-371-2905 shayne.finlay@ontario.ca

ec: -John Ritchie, Water Compliance Supervisor, MOECC

- Leo Paul Frigault, Operations Manager, OCWA
- Dr. Hazel Lynn, Medical Officer of Health, Grey-Bruce Health Unit
- John Bittorf, Water Resources Coordinator, Grey Sauble Conservation Authority

File SI BR SB FI 540



**Ministry of the Environment and Climate Change** 

## **OLIPHANT DRINKING WATER SYSTEM**

# **Inspection Report**

Site Number: Inspection Number: Date of Inspection: Inspected By: 220007695 1-ILUHI Jun 08, 2018 Shayne Finlay



## **OWNER INFORMATION:**

Company Name:	SOUTH BRUCE PENINSUL	A, THE CORPORATION	OF THE TOWN OF
Street Number:	315	Unit Identifier:	Box 310
Street Name:	GEORGE St		
City:	WIARTON		
Province:	ON	Postal Code:	N0H 2T0

## **CONTACT INFORMATION**

Type: Phone: Email:	Operating Authority (519) 534-1600 medney2@ocwa.com	Name: Fax:	Megan Edney
Title:	Process Compliance Technician	(OCWA).	
Type: Phone: Email:	Operating Authority (519) 534-1600 Ifrigault@ocwa.com	Name: Fax:	Leo-Paul Frigault
Title:	OCWA - Operations Manager, N	/est Highlands Hut	Э.
Туре:	Owner	Name:	Brad McRoberts
Phone: Email: Title:	(519) 534-1400 x122 tsbpcao@bmts.com Chief Administrative Officer	Fax:	(519) 534-4976

## **INSPECTION DETAILS:**

Site Name:	OLIPHANT DRINKING WATER SYSTEM
Site Address:	7 FIDDLEHEAD LANE WIARTON ON N0H 2T0
County/District:	The South Bruce Peninsula
MOECC District/Area Office:	Owen Sound Area Office
Health Unit:	GREY BRUCE HEALTH UNIT
Conservation Authority:	Grey Sauble Conservation Authority
MNR Office:	Midhurst District Office
Category:	Small Municipal Residential
Site Number:	220007695
Inspection Type:	Announced
Inspection Number:	1-ILUHI
Date of Inspection:	Jun 08, 2018
Date of Previous Inspection:	Jun 20, 2017

## **COMPONENTS DESCRIPTION**

Site (Name): Type:	MOE DWS Mapping DWS Mapping Point	Sub Type:	
Site (Name):	Distribution System		



Pumphouse

Type: Other Sub Type: Other

#### Comments:

The Oliphant Well Supply supplies water to the former Fiddlehead and Cammidge & Collins distribution systems. There are approximately 27 homes served by this drinking water system.

Sub Type:

Site (Name):	Pumphouse
Tunoi	Tracted Water D

Treated Water POE Type:

#### **Comments:**

The pumphouse is located at 7 Fiddlehead Lane in Oliphant (Lot 13). The drinking water system is designed to include: iron and DOC removal (via potassium permangante, polymer and greensand filtration); and disinfection through the use of filtration (coagulant, static fixer and clarifier), UV and chlorination (sodium hypochlorite). Ammonium sulphate is added upstream of the clearwell to allow for the use of chloramination as secondary disinfection in the distribution system.

At the time of the inspection the treatment equipment was not in operation with the exception of the trim chlorination system. The municipality began transporting water from the Wiarton drinking water system on January 19, 2011 at which time secondary disinfection was switched to chlorination.

Site (Name):	Well #2			
Туре:	Source	Sub Type:	GUDI	
Comments:				
Well 2 is drilled	to a depth of 36	6.6 metres. It has a 150 mm diameter cas	sing and is equ	ipr

to a depth of 36.6 metres. It has a 150 mm diameter casing and is equipped with a submersible pump rated at 3.78 L/sec.

Site (Name): Well #1 Type: Source

GUDI Sub Type:

#### Comments:

Well 1 is located 3.6 metres south of the pumphouse and is drilled to a depth of approximately 27.4 metres. It has a steel casing provided to a depth of approximately 15 metres. The lack of overburden protection in conjunction with the limited depth of well casing into the bedrock leaves the well vulnerable to surface water contamination and influences. The well is equipped with a submersible pump rated at 3.78L/sec.



## **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 related policies and guidelines during the inspection period. The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment and distribution components 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 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.

On June 8, 2018 Provincial Officer Shayne Finlay began conducting the inspection of the Oliphant Water Treatment System located in the municipality of South Bruce Peninsula. The system is operated by OCWA. This year's inspection cycle covers the period from June 20, 2017 - June 8,2018. At the time of the inspection water was being transported from Wiarton WTP to the pumphouse and the Oliphant water treatment plant was operating as a storage reservoir and a re-chlorination station. Ontario Regulation 170/03 Section 5 Exemptions: residential systems gives Oliphant WS relief from sampling nitrate and nitrite, sodium, fluoride, inorganic and organics while transporting water.

#### Source

- The owner was maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials.
- Measures were in place to protect the groundwater and/or GUDI source in accordance with any the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.

#### **Capacity Assessment**

• There was sufficient monitoring of flow as required by the Municipal Drinking Water Licence or Drinking Water Works Permit issued under Part V of the SDWA.

The Licence for the Oliphant drinking water system (094-105) requires monitoring and recording of flow rate and the daily volume of water conveyed into the treatment system and conveyed into the distribution system. Transported water is currently delivered directly into the clearwell so monitoring of flow rate into the treatment system is not necessary. The operating authority continues to monitor and record flow rate and the daily volume of water conveyed into the distribution system. The 2017 Average water usage is approximately 5.87 cubic



#### Capacity Assessment

metres per day.

• The owner was in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the Municipal Drinking Water Licence issued under Part V of the SDWA.

The Licence for the Oliphant drinking water system (094-105) requires monitoring and recording of flow rate and the daily volume of water conveyed into the treatment system and conveyed into the distribution system.

Transported water is currently delivered directly into the clearwell so monitoring of flow rate into the treatment system is not necessary. The operating authority continues to monitor and record flow rate and the daily volume of water conveyed into the distribution system.

#### **Treatment Processes**

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

It 's noted that primary disinfection equipment is installed however not in use. The OA re-chlorinates the hauled water as needed.

 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.

#### Treatment Process Monitoring

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

Subsection 7-2 (5) of schedule 7, O.Reg.170/03 the owner of a small municipal residential system that provides secondary disinfection and the operating authority for the system shall ensure that at least two distribution samples are taken each week in accordance with subsection (6) and are tested immediately for, (a) free chlorine residual. Records provided by the owner and reviewed during the inspection indicate that the owner complied with these requirements, testing free chlorine residual for secondary disinfection monitoring purposes 2 days each week and at least 48 hours apart.

• Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.

The operators review the daily SCADA system at least every 72 hours. The operator conducting the review signs and dates the daily SCADA report.

 All continuous monitoring equipment utilized for sampling and testing required by O. Reg.170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, were equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6.

The distribution water chlorine analyzer has an alarm set point of 0.50 mg\L at which point operators are notified via alarm dialer and the high lift pumps locks out.

• Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was



#### **Treatment Process Monitoring**

performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format.

All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's
instructions or the regulation.

#### **Operations Manuals**

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

Operations manuals were updated in 2017.

• The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence 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.

#### Security

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

#### **Certification and Training**

• The overall responsible operator had been designated for each subsystem.

The ORO for the Sauble Systems is James Learn, with back being provided by Andrew Bellamy.

- Operators in charge had been designated for all subsystems which comprised the drinking-water system.
- All operators possessed the required certification.
- Only certified operators made adjustments to the treatment equipment.

#### Water Quality Monitoring

 All microbiological water quality monitoring requirements for distribution samples prescribed by legislation were being met.

For SMR DWS, distribution bacteriological samples shall be taken:

1) once every 2 weeks provided that the system is in compliance with Schedule 1 of O.Reg.170/03, or

2) one sample every week if the system does not meet the requirements of Schedule 1 of O. Reg.170/03.

Each sample must be tested for EC + TC and, if secondary disinfection is provided, must also be tested for HPC; the OA samples weekly this requirement has been met.



#### Water Quality Monitoring

• All haloacetic acid water quality monitoring requirements prescribed by legislation are being conducted within the required frequency and at the required location.

Section 13-6.1 (1)of Schedule 13, O.Reg.170/03 requires the Owner and the Operating Authority to ensure that at least one distribution sample is taken every 3 months from a point in the drinking water system's distribution system that is connected to the drinking water system, that is likely to have an elevated potential for the formation of Haloacetic Acids (HAA), and tested for HAAs. Section 6-1.1 of Schedule 6, O.Reg.170/03 requires that these samples be taken at least 60 days, and not more than 120 days, after a sample was taken for that purpose in the previous three month period. The standard for Haloacetic Acids does not come into effect until January 1, 2020. It will be expressed as a Running Annual Average (RAA), where the RAA is defined as the average for quarterly HAA results for a drinking water system. HAAs will generally form at the beginning of the distribution system. Sampling for the inspection period occurred July 10, 2017, October 16, 2017, January 8, 2018 and April 9, 2018.

 All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.

Section 13-6 of Schedule 13, O.Reg.170/03 requires the Owner and the Operating Authority to ensure that at least one distribution sample is taken every 3 months from a point in the drinking water system's distribution system, or in plumbing that is connected to the drinking water system, that is likely to have an elevated potential for the formation of Trihalomethanes (THMs), and tested for THMs. Section 6-1.1 of Schedule 6, O.Reg.170/03 requires that these samples be taken at least 60 days, and not more than 120 days, after a sample was taken for that purpose in the previous three month period. Sampling for the inspection period occurred July 10,2017, October 16,2017, January 8, 2018 and April 9,2018.

- All water quality monitoring requirements imposed by the Municipal Drinking Water Licence and Drinking Water Works Permit 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.

#### Water Quality Assessment

• Records showed that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O.Reg. 169/03).

#### Reporting & Corrective Actions

 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 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:

Shayne Finlay

Signature: (Provincial Officer)

Reviewed & Approved By:

Signature: (Supervisor)

John Ritchie

Review & Approval Date: 16/07/2018

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.



# **APPENDIX A**

# **REFERENCE GUIDE FOR STAKEHOLDERS**

# Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

Many useful materials are available to help you operate your drinking water system. Below is a list of key materials owners and operators of municipal residential drinking water systems frequently use.

To access these materials online click on their titles in the table below or use your web browser to search for their titles. 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**.

For more information on Ontario's drinking water visit **www.ontario.ca/drinkingwater** and email **drinking.water@ontario.ca** to subscribe to drinking water news.



PUBLICATION TITLE	PUBLICATION NUMBER
Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils	7889e01
FORMS: Drinking Water System Profile Information, Laboratory Services Notification, Adverse Test Result Notification Form	7419e, 5387e, 4444e
Procedure for Disinfection of Drinking Water in Ontario	4448e01
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids	7152e
Total Trihalomethane (TTHM) Reporting Requirements Technical Bulletin (February 2011)	8215e
Filtration Processes Technical Bulletin	7467
Ultraviolet Disinfection Technical Bulletin	7685
Guide for Applying for Drinking Water Works Permit Amendments, Licence Amendments, Licence Renewals and New System Applications	7014e01
Certification Guide for Operators and Water Quality Analysts	
Guide to Drinking Water Operator Training Requirements	9802e
Taking Samples for the Community Lead Testing Program	6560e01
Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption	7423e
Guide: Requesting Regulatory Relief from Lead Sampling Requirements	6610
Drinking Water System Contact List	7128e
Technical Support Document for Ontario Drinking Water Quality Standards	4449e01

ontario.ca/drinkingwater



# Principaux guides et documents de référence sur les réseaux résidentiels municipaux d'eau potable

De nombreux documents utiles peuvent vous aider à exploiter votre réseau d'eau potable. Vous trouverez ci-après une liste de documents que les propriétaires et exploitants de réseaux résidentiels municipaux d'eau potable utilisent fréquemment.

Pour accéder à ces documents en ligne, cliquez sur leur titre dans le tableau ci-dessous ou faites une recherche à l'aide de votre navigateur Web. Communiquez avec le Centre d'information au public au 1 800 565-4923 ou au 416 325-4000, ou encore à **picemail.moe@ontario.ca** si vous avez des questions ou besoin d'aide.



Pour plus de renseignements sur l'eau potable en Ontario, consultez le site **www.ontario.ca/** eaupotable ou envoyez un courriel à drinking.water@ontario.ca pour suivre l'information sur l'eau potable.

TITRE DE LA PUBLICATION	NUMÉRO DE PUBLICATION
Prendre soin de votre eau potable – Un guide destiné aux membres des conseils municipaux	7889f01
Renseignements sur le profil du réseau d'eau potable, Avis de demande de services de laboratoire, Formulaire de communication de résultats d'analyse insatisfaisants et du règlement des problèmes	7419f, 5387f, 4444f
Marche à suivre pour désinfecter l'eau potable en Ontario	4448f01
Strategies for Minimizing the Disinfection Products Thrihalomethanes and Haloacetic Acids (en anglais seulement)	7152e
Total Trihalomethane (TTHM) Reporting Requirements: Technical Bulletin (février 2011) (en anglais seulement)	8215e
Filtration Processes Technical Bulletin (en anglais seulement)	7467
Ultraviolet Disinfection Technical Bulletin (en anglais seulement)	7685
Guide de présentation d'une demande de modification du permis d'aménagement de station de production d'eau potable, de modification du permis de réseau municipal d'eau potable, de renouvellement du permis de réseau municipal d'eau potable et de permis pour un nouveau réseau	7014f01
Guide sur l'accréditation des exploitants de réseaux d'eau potable et des analystes de la qualité de l'eau de réseaux d'eau potable	
Guide sur les exigences relatives à la formation des exploitants de réseaux d'eau potable	9802f
Prélèvement d'échantillons dans le cadre du programme d'analyse de la teneur en plomb de l'eau dans les collectivités	6560f01
Échantillonnage et analyse du plomb dans les collectivités : échantillonnage normalisé ou réduit et admissibilité à l'exemption	7423f
Guide: Requesting Regulatory Relief from Lead Sampling Requirements (en anglais seulement)	6610
Liste des personnes-ressources du réseau d'eau potable	7128f
Document d'aide technique pour les normes, directives et objectifs associés à la qualité de l'eau potable en Ontario	4449f01

ontario.ca/eaupotable





# **APPENDIX B**

# **INSPECTION SUMMARY RATING RECORD**

DWS Name:	OLIPHANT DRINKING WATER SYSTEM
DWS Number:	220007695
DWS Owner:	South Bruce Peninsula, The Corporation Of The Town Of
Municipal Location:	The South Bruce Peninsula
Regulation:	O.REG 170/03
Category:	Small Municipal Residential System
Type Of Inspection:	Focused
Inspection Date:	June 8, 2018
Ministry Office:	Owen Sound District Office

## Maximum Question Rating: 373

Inspection Module	Non-Compliance Rating
Source	0 / 28
Capacity Assessment	0 / 30
Treatment Processes	0 / 56
Operations Manuals	0 / 28
Logbooks	0 / 14
Certification and Training	0 / 42
Water Quality Monitoring	0 / 63
Reporting & Corrective Actions	0 / 21
Treatment Process Monitoring	0 / 91
TOTAL	0 / 373

Inspection Risk Rating 0.00%

FINAL INSPECTION RATING: 100.00%

DWS Name:	OLIPHANT DRINKING WATER SYSTEM
DWS Number:	220007695
DWS Owner:	South Bruce Peninsula, The Corporation Of The Town Of
Municipal Location:	The South Bruce Peninsula
Regulation:	O.REG 170/03
Category:	Small Municipal Residential System
Type Of Inspection:	Focused
Inspection Date:	June 8, 2018
Ministry Office:	Owen Sound District Office

#### Maximum Question Rating: 373

Inspection Risk Rating 0.00%

FINAL INSPECTION RATING: 100.00%