

or you provided guidance on their ECA and/or PTTW applications, could you please help out Michael?
Thank you,
Nilima

From: McQuire, Michael (OMAFRA) <Michael.McQuire@ontario.ca>
Sent: March 3, 2021 1:51 PM
To: Gandhi, Nilima (MECP) <Nilima.Gandhi@ontario.ca>
Cc: Khan, Mohammad Sajjad (MECP) <mohammad.khan@ontario.ca>; Relf, Mike (OMAFRA) <mike.relf@ontario.ca>
Subject: RE: MECP contact for Warton area

Hi Nilima,

s.21 I was contacted in February by [REDACTED] regarding an aquaculture development project in the Warton area by a company called Georgian Bay Innovation Group. The address of the project is 83 Berford lake rd, South Bruce Peninsula. I provided support in completing the company's aquaculture license application to [REDACTED]

Due to the large-scale nature of the project OMAFRA is doing some due-diligence on the project proposal and would like to speak with the MECP contact the company (Georgian Bay Innovation Group) has dealt with regarding PTTW and ECA for aquaculture facilities. Can you provide the MECP contact the company has been working with? So that we can follow-up and complete the due-diligence process.

Thanks

Mike

Michael McQuire
Aquaculture and Aquaponics Specialist
Ontario Ministry of Agriculture, Food and Rural Affairs
Agricultural Development Branch
(519) 841-4699
michael.mcquire@ontario.ca

-
Note: As part of providing accessible customer service, please let me know if you have any accommodation needs or require communication supports or alternate formats.

From: Gandhi, Nilima (MECP) <Nilima.Gandhi@ontario.ca>
Sent: March 3, 2021 12:52 PM

**Pages 530 to / à 531
are not relevant
sont non pertinentes**

From: [Mitchell, Ian \(MECP\)](#)
To: [Smith, Ryan \(MECP\)](#)
Cc: [Lehouillier, Jason \(MECP\)](#); [Gandhi, Nilima \(MECP\)](#); [Geurts, Hugh \(MECP\)](#); [Munro, Alison \(MECP\)](#); [Belanger, Renee \(MECP\)](#)
Subject: RE: MECP contact for Warton area
Date: March 4, 2021 4:13:11 PM

Hi Ryan

The consultant (Tatham) happened to call me yesterday about this. I don't know anything yet about this proposal but they are apparently proposing a sewage discharge to Colpoy's Bay. Since our EO for this area is in flux I suggested they send information to me for pre-submission consultation. When I get something I'll let you know.

Ian Mitchell
District Engineer
Ministry of the Environment, Conservation and Parks
Owen Sound District
101-17th St E
Owen Sound ON N4K 0A5
Phone (519) 374-1388
Fax (519) 371-2905

We want to hear from you. How was my service? You can provide feedback at 1-888-745-8888

From: Gandhi, Nilima (MECP) <Nilima.Gandhi@ontario.ca>
Sent: March 4, 2021 3:57 PM
To: Smith, Ryan (MECP) <Ryan.Smith@ontario.ca>; Geurts, Hugh (MECP) <Hugh.Geurts@ontario.ca>; Munro, Alison (MECP) <Alison.Munro@ontario.ca>
Cc: Lehouillier, Jason (MECP) <Jason.Lehouillier@ontario.ca>; Mitchell, Ian (MECP) <ian.mitchell@ontario.ca>
Subject: RE: MECP contact for Warton area

Hi Ryan,

That sound great! The client is working on their initial stages of PTTW and ECA applications. Ian has advised the Client's consultant to contact the PTTW unit in Toronto for more information and Ian himself has offered to review their ECA application when they are ready to submit one. I have copied Ian here to inform him that you are interested in assisting on the reviews of their applications.

Thank you again,
Nilima

From: Smith, Ryan (MECP) <Ryan.Smith@ontario.ca>
Sent: March 4, 2021 3:48 PM

Page 533
is not relevant
est non pertinente

area". The Bighead River ultimately discharges near Meaford which is ~somewhat~ in the same area but highly unlikely the same one that is being referenced.

If possible, an address would be helpful...

That being said, I can also confirm that I have not had any previous involvement.

We can always follow up with Scott Gass/Ian Mitchell who have a good idea of these types of files in the Owen Sound District Office if we are still having trouble tracking this information down.

Thanks,

Ryan.

From: Gandhi, Nilima (MECP) <Nilima.Gandhi@ontario.ca>
Sent: Wednesday, March 3, 2021 4:30 PM
To: Geurts, Hugh (MECP) <Hugh.Geurts@ontario.ca>; Smith, Ryan (MECP) <Ryan.Smith@ontario.ca>; Munro, Alison (MECP) <Alison.Munro@ontario.ca>
Cc: Lehouillier, Jason (MECP) <Jason.Lehouillier@ontario.ca>
Subject: FW: MECP contact for Wiarton area

Good afternoon everyone,

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Subject: RE: MECP contact for Wiarton area

Hi Nilima,

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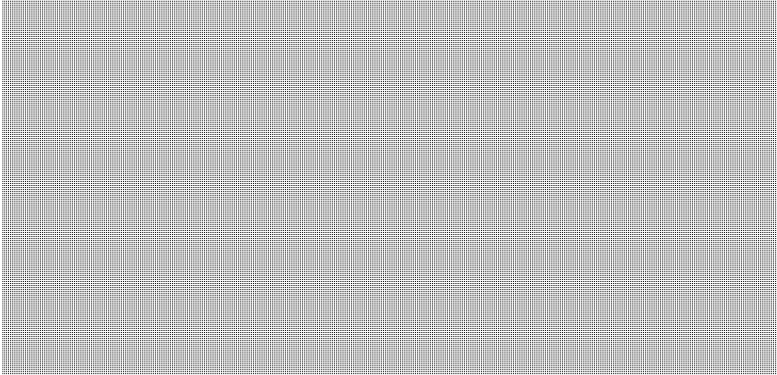
s.21

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the project proposal and would like to speak with the MECP contact the company (Georgian Bay Innovation Group) has dealt with regarding PTTW and ECA for aquaculture facilities. Can you provide the MECP contact the company has been working with? So that we can follow-up and complete the due-diligence process.

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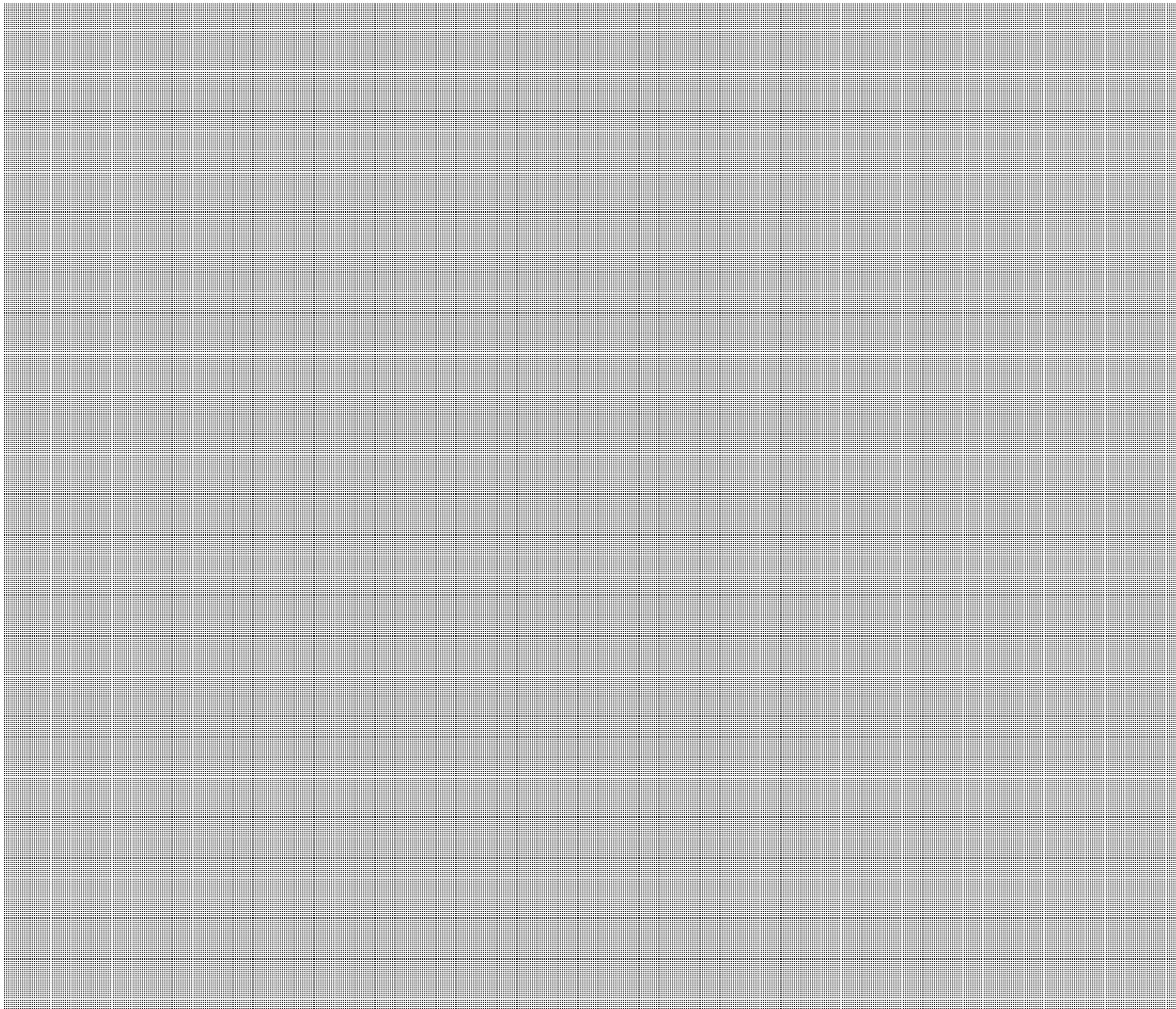
s.21



-
Note: As part of providing accessible customer service, please let me know if you have any accommodation needs or require communication supports or alternate formats.

-

s.N/R



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Mohammad Sajjad Khan, Ph.D., P.Eng.

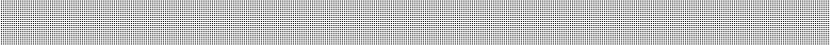
Surface Water Specialist, West Central Region
Ontario Ministry of the Environment, Conservation and Parks
119 King Street West, 12th Floor, Hamilton ON L8P 4Y7
Tel: 365-889-1553 (off); Fax: 905 521-7820
E-mail: mohammad.khan@ontario.ca

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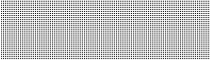
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s.21 **From:** McQuire, Michael (OMAFRA) <Michael.McQuire@ontario.ca>

Sent: March 3, 2021 12:10 PM

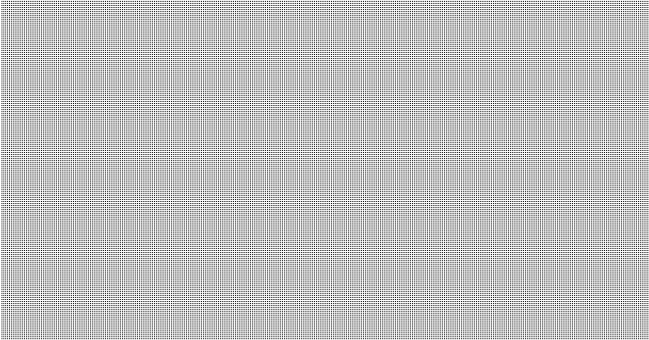
s.21 **To:** 

Subject: MECP contact for Wiarton area

s.21 

I am emailing you looking for a contact person within MECP that would work on ECA's and PTTW for aquaculture in the Wiarton/Owen Sound area. I'm working on a development project in that area and need a contact at MECP for support.

Thanks

s.21 

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From: [Belanger, Renee \(MECP\)](#)
To: [Mitchell, Ian \(MECP\)](#)
Subject: RE: MECP contact for Wiaraton area
Date: April 22, 2021 3:21:00 PM

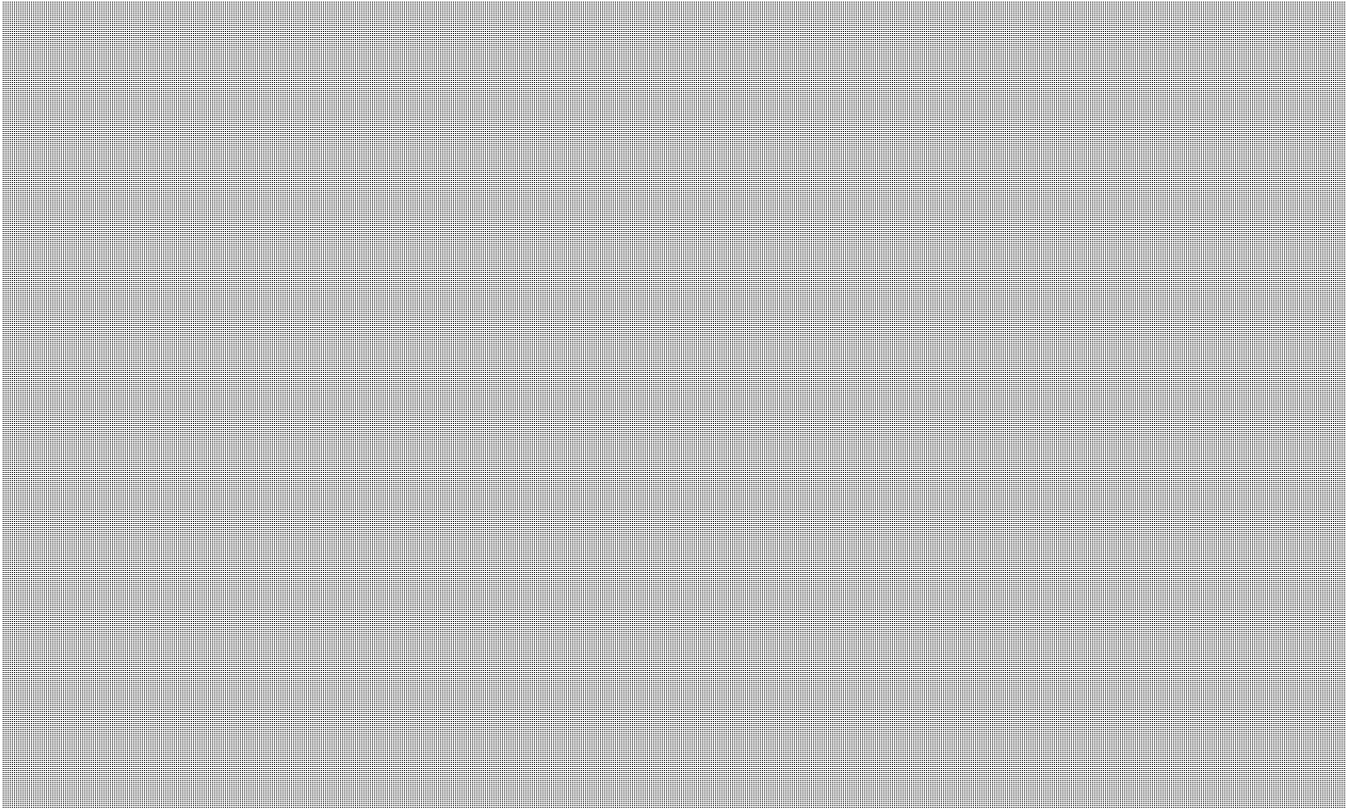
s.21

[REDACTED] he must be working with Georgian Bay Innovation Group on the project. They have been working with DFO, MNRF and OMAFRA. [REDACTED] briefly said that the project has so far had support from council (municipal) and that they were in the process of consulting with local indigenous communities. One thing Hugh did suggest and ask of them is that they try to find if a study had ever been done on the bay that related to currents and turn over. Main concerns during the meeting were to do with the sewage discharge. I am sure there will be more conversations in the near future with the consultant.

Renee

s.N/R

s.13



From: Mitchell, Ian (MECP) <ian.mitchell@ontario.ca>
Sent: March 4, 2021 4:13 PM
To: Smith, Ryan (MECP) <Ryan.Smith@ontario.ca>
Cc: Lehouillier, Jason (MECP) <Jason.Lehouillier@ontario.ca>; Gandhi, Nilima (MECP) <Nilima.Gandhi@ontario.ca>; Geurts, Hugh (MECP) <Hugh.Geurts@ontario.ca>; Munro, Alison (MECP) <Alison.Munro@ontario.ca>; Belanger, Renee (MECP) <Renee.Belanger@ontario.ca>
Subject: RE: MECP contact for Wiarton area

Hi Ryan

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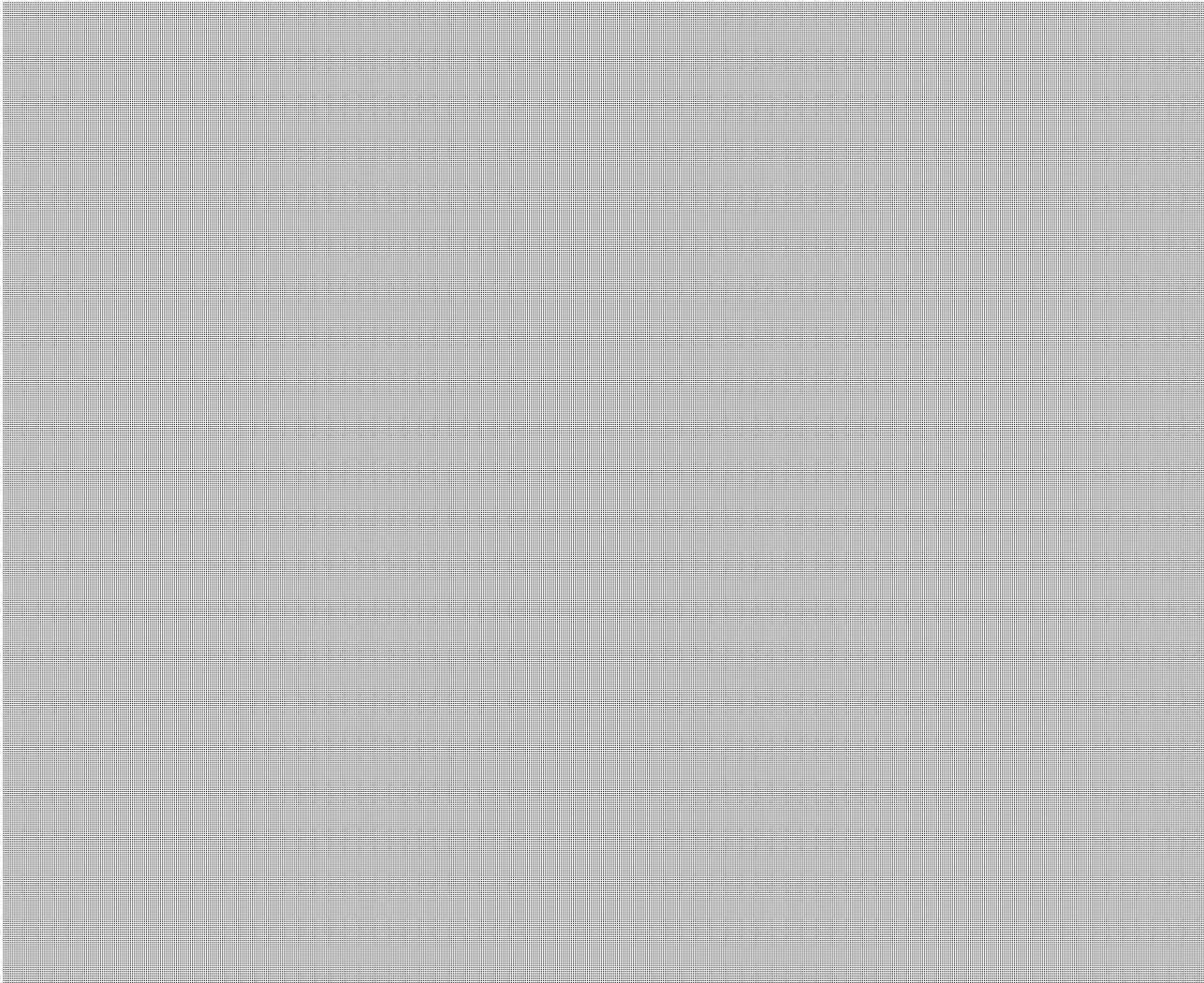
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Hi Ryan,

That sound great! The client is working on their initial stages of PTTW and ECA applications. Ian has advised the Client's consultant to contact the PTTW unit in Toronto for more information and Ian himself has offered to review their ECA application when they are ready to submit one. I have copied Ian here to inform him that you are interested in assisting on the reviews of their applications.

Thank you again,
Nilima

s.N/R



Thank you for your response and guidance on how to move forward on this request! I have sent an e-mail to Ian to find out more on this, if he knows.

Moving forward if anyone of you would like to take a lead on this, please let me know. If not, I will be happy to continue working with Mike on this file. As Jason suggested, I may seek input from you all as well NR from time to time.

Have a great day!
Nilima

From: Smith, Ryan (MECP) <Ryan.Smith@ontario.ca>
Sent: March 3, 2021 5:50 PM
To: Gandhi, Nilima (MECP) <Nilima.Gandhi@ontario.ca>; Geurts, Hugh (MECP) <Hugh.Geurts@ontario.ca>; Munro, Alison (MECP) <Alison.Munro@ontario.ca>
Cc: Lehouillier, Jason (MECP) <Jason.Lehouillier@ontario.ca>
Subject: RE: MECP contact for Wiarton area

Hello all:

s.21

I am wondering if this is something that Scott A may have been handling prior to [REDACTED]. The only reference I could find in his files is "Grey County, Aquaculture Report, Bighead River", which I don't think is exactly in the "Wiarnton/Owen Sound area". The Bighead River ultimately discharges near Meaford which is ~somewhat~ in the same area but highly unlikely the same one that is being referenced.

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That being said, I can also confirm that I have not had any previous involvement.

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Cc: Lehouillier, Jason (MECP) <Jason.Lehouillier@ontario.ca>
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Cc: Khan, Mohammad Sajjad (MECP) <mohammad.khan@ontario.ca>; Relf, Mike (OMAFRA) <mike.relf@ontario.ca>

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Thanks

Mike

Michael McQuire

Aquaculture and Aquaponics Specialist
Ontario Ministry of Agriculture, Food and Rural Affairs
Agricultural Development Branch
(519) 841-4699
michael.mcquire@ontario.ca

-

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-

From: Gandhi, Nilima (MECP) <Nilima.Gandhi@ontario.ca>

Sent: March 3, 2021 12:52 PM

To: McQuire, Michael (OMAFRA) <Michael.McQuire@ontario.ca>
Cc: Khan, Mohammad Sajjad (MECP) <mohammad.khan@ontario.ca>
Subject: Re: MECP contact for Wiarnton area

Good afternoon Michael,
I am a surface water specialist in the Southwest Region office (London) of MECP. I will be happy to assist you or direct you to an appropriate technical support staff in our office if you could please let me know the specifics of information or assistance that you need.
Thank you,
Nilima

From: Khan, Mohammad Sajjad (MECP) <mohammad.khan@ontario.ca>
Sent: March 3, 2021 12:39 PM
To: Gandhi, Nilima (MECP) <Nilima.Gandhi@ontario.ca>
Cc: McQuire, Michael (OMAFRA) <Michael.McQuire@ontario.ca>
Subject: RE: MECP contact for Wiarnton area

Hi Nilima,

This is in your region, could you please help Michael? Thanks.

Sajjad

=====
Mohammad Sajjad Khan, Ph.D., P.Eng.
Surface Water Specialist, West Central Region
Ontario Ministry of the Environment, Conservation and Parks
119 King Street West, 12th Floor, Hamilton ON L8P 4Y7
Tel: 365-889-1553 (off); Fax: 905 521-7820
E-mail: mohammad.khan@ontario.ca

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Sent: March 3, 2021 12:10 PM
To: Khan, Mohammad Sajjad (MECP) <mohammad.khan@ontario.ca>
Subject: MECP contact for Wiarnton area

Hi Sajjad,

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Thanks

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Michael McQuire

Aquaculture and Aquaponics Specialist

Ontario Ministry of Agriculture, Food and Rural Affairs

Agricultural Development Branch

(519) 841-4699

michael.mcquire@ontario.ca

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From: [Mitchell, Ian \(MECP\)](#)
To: [Graham, Robert G. \(MECP\)](#)
Cc: [Geurts, Hugh \(MECP\)](#); [Belanger, Renee \(MECP\)](#)
Subject: RE: Warton WWTP
Date: May 27, 2021 11:58:56 AM

Thanks Bob I think I'll have the proponent contact the municipality for any drawings and to locate the discharge so you don't need to bother, unless you want it for your information

Thanks for the quick response

Ian Mitchell
District Engineer
Ministry of the Environment, Conservation and Parks
Owen Sound District
101-17th St E
Owen Sound ON N4K 0A5
Phone (519) 374-1388
Fax (519) 371-2905

We want to hear from you. How was my service? You can provide feedback at 1-888-745-8888 or ontario.ca/inspectionfeedback

From: Graham, Robert G. (MECP) <Robert.G.Graham@ontario.ca>
Sent: May 27, 2021 11:56 AM
To: Mitchell, Ian (MECP) <ian.mitchell@ontario.ca>
Cc: Geurts, Hugh (MECP) <Hugh.Geurts@ontario.ca>; Belanger, Renee (MECP) <Renee.Belanger@ontario.ca>
Subject: RE: Warton WWTP

Hi Ian,

Amended ECA No. 6045-ARDJS7 dated November 23, 2017 is the current control document. Please find attached a copy of the 2020 AR which may assist with additional information. The Report identifies that the plant discharge utilizes the pipe located on Mary Street to Isaac Street (original) as well as the original abandoned force main on Taylor Street. Both pipes intersect at the discharge pipe located at George and Tyson Streets.

Since assuming responsibility for SBP, I have yet to be assigned an on-site inspection to acquaint myself fully with the WWTP, however I will reach out to OCWA to obtain a schematic of the discharge location and forward it on.

Bob Graham

Provincial Officer
Drinking Water and Environmental Compliance Division
Ministry of the Environment, Conservation and Parks
Owen Sound District Office 101-17th Street East
Owen Sound ON N4K 0A5
Telephone (519) 374-0216
Fax: (519) 371-2905
E-mail: robert.g.graham@ontario.ca

We want to hear from you. How was my service? You can provide feedback at 1-888-745-8888 or ontario.ca/inspectionfeedback

Nous attendons vos commentaires. Qu'avez-vous pensé de mon service? Vous pouvez nous faire part de vos commentaires au 1-888-745-8888 ou à ontario.ca/retroactioninspection

Please consider the environment before printing this email note.

IMPORTANT NOTICE: The information contained in this correspondence is confidential and intended for the use of the individual(s) named above.

Unauthorized reproduction and/or distribution is prohibited

From: Mitchell, Ian (MECP) <ian.mitchell@ontario.ca>
Sent: May-27-21 11:12 AM
To: Graham, Robert G. (MECP) <Robert.G.Graham@ontario.ca>
Cc: Geurts, Hugh (MECP) <Hugh.Geurts@ontario.ca>; Belanger, Renee (MECP) <Renee.Belanger@ontario.ca>
Subject: Warton WWTP

Hi Bob we just got off the phone regarding a proposed aquafarm that will be discharging to Colpoy's bay They asked about the location of the Warton STP discharge. Do you happen to have a figure or something that shows the discharge location? Also is the attached the current ECA for Warton? I think it is... but there were a number of fairly recent amendments from what I can see so I want to be sure.

Thanks

Ian Mitchell
District Engineer
Ministry of the Environment, Conservation and Parks
Owen Sound District
101-17th St E
Owen Sound ON N4K 0A5

Phone (519) 374-1388

Fax (519) 371-2905

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AMENDED ENVIRONMENTAL COMPLIANCE APPROVALNUMBER 6045-ARDJS7
Issue Date: November 23, 2017

The Corporation of the Town of South Bruce Peninsula
315 George St
South Bruce Peninsula, Ontario
N0H 2T0

Site Location: Wiarton Wastewater Treatment Plant
441048 Elm Street (Lot 2, Concession 21E)
Georgian Bluffs Township, County of Grey
N0H 2T0

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

Establishment, usage and operation of an existing municipal sewage works in accordance with Section 53 of OWRA, for the collection, transmission, treatment of sanitary sewage and disposal of effluent to Colpoys Bay via a Sewage Treatment Plant, Wiarton Wastewater Treatment Plant, located in Lot 2, Concession 21E, Township of Georgian Bluffs, as follows:

Classification of Collection System: Separate Sewer System

Capacity of Sewage Treatment Plant:

- **Rated Capacity** - Based on the commissioned Previous Works: 4,400 m³/d

PROPOSED WORKS :

Septage Equalization Storage Pond

- One (1) 8.4 L/s capacity pump conveying septage from the Septage Receiving Management System described below and discharging through one (1) 100 mm diameter 40 m long forcemain to the Septage Equalization Storage Pond described below;
- One (1) Septage Equalization Storage Pond having a total storage capacity of 2,000 m³,

consisting of a pond interior berm with 3H:1V slopes, pond bottom area of 250 m², and pond top area of 1220 m², providing a 0.6 m freeboard, equipped with 200 mm diameter pond drain pipe discharging by gravity to the filter backwash pumping station described below under Effluent Filtration Plant section;

- One (1) 56 kW air blowers providing 660 L/s @ 40 kPa of air for mixing of contents of the septage receiving and equalization storage pond described above, equipped with soundproof enclosures and silencers, to be located in the existing Filter and Disinfection Building;

Standby Power Diesel Generator

- One (1) 300 kW and 375 kVA capacity stand-by power diesel generator and one (1) 2,270 L capacity double-walled diesel storage tank, designed to provide 24-hour fuel supply, equipped with acoustic silencer and piping, and to be located outdoors; and

All in accordance with the submitted supporting documents listed in Schedule A.

PREVIOUS WORKS APPROVED ON OCTOBER 6, 2015 UNDER ECA No. 6375-A2PKKS:

Septage Receiving Management System

- One (1) septage reception station including piping and magnetic flow meter to be installed in an underground concrete chamber, equipped with controlled access and record keeping of septage being received, discharging to an existing filter backwash pumping station described below under Effluent Filtration Plant section;

Screening of Raw Sewage

- One (1) concrete channel with approximate dimensions of 0.5 m width x 1.1 m depth x 8.85 m length housing one (1) mechanical stainless steel fine screen (Escalator[®] Fine Screen or equivalent) with 6 mm openings operating in upstream water depth of 0.45 m, equipped with 0.5 hp screen drive motor, screen cleaning brush, and 2.0 hp screened solids compactor, discharging to the Moving Bed Biofilm Reactor (MBBR) described below;
- One (1) concrete channel located parallel to the mechanical screen channel described above, designed to handle overflows and having an approximate dimensions of 1.4 m depth x 1.05 m width x 8.5 m length, equipped with one (1) overflow weir, one (1) fixed screen with 12 mm x 12 mm openings, and one (1) fixed screen with 6 mm x 6 mm openings, discharging to the Moving Bed Biofilm Reactor (MBBR) described below;

Moving Bed Biofilm Reactor (MBBR)

- One (1) Moving Bed Biofilm Reactor (MBBR) consisting of three (3) concrete cells, with Cell #1 having approximate dimensions of 11.0 m wide x 6.0 m deep x 5.3 m long, Cell

#2 having approximate dimensions of 11.0 m wide x 6.0 m deep x 5.3 m long, and Cell #3 having approximate dimensions of 11.0 m wide x 6.0 m deep x 9.5 m long, consisting of:

- Cell #1 and Cell #2 to be used for BOD₅ removal providing a total reactor volume of 632.5 m³ at 5.0 m liquid depth, filled with disk shaped free-floating carrier media (Anox™ K5 free-floating media or equivalent), providing a total of 233,990 m² media carrier surface area, equipped with two (2) medium bubble stainless steel aeration system in Cell 1, two (2) medium bubble stainless steel aeration system in Cell 2, and media retaining sieves with 6 mm diameter openings;
- Cell #3 to be used for nitrification providing a total reactor volume of 519.1 m³ at 5.0 m liquid depth, filled with disk shaped free-floating carrier media (Anox™ K5 free-floating media or equivalent), providing a total of 183,152 m² media carrier surface area, equipped with three (3) medium bubble stainless steel aeration system and media retaining sieves with 6 mm diameter openings;
- Two (2) 30 hp air blowers (one duty, one standby) providing 1,675 Nm³/h at 7.9 Psi of air to the Moving Bed Biofilm Reactors (MBBR) equipped with soundproof enclosures and silencers; and

Floating Islands Wetland and Lagoon Mixers

- Installation of constructed Floating Treatment Wetlands in Waste Stabilization Lagoons (Cell #2 and Cell #3), consisting of approximately five thousand (5,000) modules of PhytoLinks floating treatment wetlands, each PhytoLinks module is an engineered hexagon-shaped floating material designed to grow emergent aquatic macrophytes hydroponically, installed downstream of the MBBR to provide effluent polishing;
- Installation of wastewater circulation devices with a combined total capacity of circulating up to 361,700 m³/d of wastewater, designed to provide passive mixing and aeration on the bottom of the lagoon to digest the sludge; and
- Including all controls and associated appurtenances.

All in accordance with the submitted supporting documents listed in Schedule A.

PREVIOUS WORKS APPROVED ON SEPTEMBER 23, 2011 UNDER ECA No. 8533-8L3HJ3 :

Lagoon Influent Distribution Chamber

Decommissioning of the existing lagoon influent distribution chamber and installation of a new concrete influent distribution chamber with overall approximate dimension of 5.35 m long x 4.00 m wide x 3.00 m high equipped with the following:

- One (1) 300 mm diameter PVC influent inlet forcemain and one (1) spare 300 mm

diameter PVC influent inlet forcemain, both equipped with a 300 mm diameter knife gate valves, discharging to an influent chamber described below;

- One (1) 165 m long 300 mm diameter PVC influent bypass forcemain equipped with a 300 mm diameter knife gate valve discharging to Lagoon Cell No. 2;
- One (1) 150 mm diameter PVC filter backwash inlet forcemain equipped with a 150 mm diameter knife gate valves discharging to an influent chamber described below;
- One (1) 25 m long 150 mm diameter PVC filter backwash bypass forcemain equipped with a 150 mm diameter knife gate valve discharging to Lagoon Cell No. 2;
- One (1) influent inlet chamber with approximate dimension of 3.40 m wide x 1.20 m long x 1.2 m high equipped with two (2) aluminium sluice gate valves discharging to two (2) influent outlet chambers described below:
- One (1) influent outlet chamber with approximate dimension of 1.60 m wide x 1.20 m long x 1.2 m high discharging through a 40 m long 400 mm diameter PVC influent pipe to Lagoon Cell No. 1;
- One (1) influent outlet chamber with approximate dimension of 1.60 m wide x 1.20 m long x 1.2 m high discharging through a 25 m long 450 mm diameter PVC overflow pipe to Lagoon Cell No. 1; and
- Including all controls and associated appurtenances.

All in accordance with the submitted supporting documents listed in Schedule A.

PREVIOUS WORKS APPROVED ON APRIL 26, 2006:

Sewage Pumping Station No. 1 (Taylor Street Pumping Station)

Upgrades to the existing Sewage Pumping Station No.1 located at No. 524 Taylor Street, approximately 60 m south of George Street consisting of:

- An existing wet well with two compartments, each approximately 3.1 m x 2.35 m x 0.95 m (operating depth for duty pump) with flow control gates, emergency isolating sluice gate, access ladders, railing, platform and ventilation;
- Installation of two (2) new 60 hp 1775 rpm sewage pumps located in a dry well each with a rated capacity of 103.0 L/sec at a TDH of 29.0 m (one duty, one standby) and a combined rated capacity of 130.0 L/sec at a TDH of 39.0 m;
- Installation of a forcemain air relief and/or vacuum relief valve in the dry well;
- Installation of three (3) new air relief and/or vacuum relief valve chambers along the

forcemain between Sewage Pumping Stations No. 1 and No. 2;

- One (1) existing flow meter; and
- Including minor modifications to pump inlet and discharge piping, electrical, pump controls, and associated appurtenances and other mechanical upgrades.

Sewage Lagoons

- Add a second outlet pipe from the splitter box into Cell No. 1 to prevent any sewage overflow;

All in accordance with the submitted supporting documents listed in Schedule A.

PREVIOUS WORKS APPROVED ON OR BEFORE NOVEMBER 9, 2005:

TRUNK SEWERS

Construction of a trunk sewer as follows:

STREET	FROM	TO
Blue Water Park	William St. approx. 135 m East of Claude St.	Brown St. approx. 200 m north of George St.
Easement	Brown St. approx. 200 m north of George St.	Scott St. approx. 70 m north of George St.
Easement	Scott St. 70 m north of George St.	George St. approx. 125 m east of Scott St.
Easement	George St. approx. 125 m east of Scott St.	Pumping Station (# 524 Taylor St.)
George St.	Existing Pumping Station George St./Taylor St.	George St. approx. 125 m east of Scott Street

SEWAGE PUMPING STATIONS

Sewage Pumping Station No. 2

Sanitary Sewage Pumping Station No. 2 to be constructed on a site on the southwest corner of the intersection of Elm Street and Taylor Street, consisting of:

- An inground divided wet well equipped with three (3) submersible sewage pumps each with a rated capacity of 116 L/sec at a TDH of 30.5 m (one duty, two standby) and two (2) pumps in parallel having a rated capacity of 164.81 L/sec at a TDH of 36.68 m (two duty, one standby);
- Ultrasonic liquid level float control system with alarms and backup float control system, piping, inlet bar screen, lockable access hatchway, ladder, benching, mechanical ventilation system c/w two (2) goosenecked vents with bird screens;
- An overflow to Elm Street, connecting sanitary sewer from Elm Street and connecting inlet and outlet sanitary forcemain discharge piping to Taylor Street;

- A separate attached inground valve chamber housing a valved bypass piping, valves and piping, and a goose-necked vent with bird screen; and
- An above ground Control Building located on the southwest corner of the intersection of Elm Street and Taylor Street adjacent to and east of the Sanitary Sewage Pumping Station No. 2 housing a 250 kW diesel generator set, control panel, ventilation, etc., together with a below floor level pipe chase housing a flowmeter and valves and piping;

STANDBY POWER AND EMERGENCY OVERFLOW SYSTEM

- Emergency station overflow sewer 600 mm diameter approximately 120 m in length from the pumping station to manhole at Taylor Street / George Street and manhole connection to the Marine outfall at the intersection of Tyson Street / George Street, with control sluice gate;
- Standby power to be provided by a 125 kW diesel generator set to be located at the station;
- Provision of an emergency bypass connection on the discharge forcemain;
- Including all the necessary appurtenances and controls, heating, ventilation, and electrical works.

WASTE STABILIZATION LAGOONS

Sewage Lagoons

Expansion of the existing three-cell waste stabilization pond (total 6 ha) from an existing 760 m³/day at a nominal operating depth of 1.52 m to 2006 m³/day with continuous discharge to Colpoy's Bay, located on Lot 1, Concession 21, Township of Keppel, County of Grey, and consisting of:

- Improvements to existing berms by addition of fill material, grading, and seeding;
- New control structure (inlet, outlet, and inter-cell);
- Installation of additional interconnecting pipes between adjacent cells;

Lagoon Aeration System

Installation of a submerged air diffusion system consisting of header feeder pipes, and distribution diffusion tubes installed across the cells as follows:

- Cell No. 1 - 37 lines at spacings varying from 3.05 m to 6.1 m centre to centre;

- Cell No. 2 - 10 lines at spacing of 17 m centre to centre;
- Cell No. 3 - 5 lines at spacing of 38 m centre to centre;
- Two (2) rotary positive displacement blowers, each rated at 165 L/sec against a head of 42 kPa (one as standby) and belt driven by 15 kW motors;
- Installation of new fine-bubble aeration system in Cell 1, including new air header and lateral pipes and membrane diffusion tubes;
- Replacement of all aeration tubes in Cells 2 and 3 with new ones;
- Modification of piping and ventilation system in existing blower building;

PHOSPHORUS REMOVAL SYSTEM

- Installation of a 22,700 L chemical storage tank for storage of phosphorus removal chemical;
- Installation of two (2) positive displacement type chemical metering pumps (one on standby) each capable of pumping 41 L/hr at 1034 kPa, for dosing phosphorus removal chemical to the sewage at a dosing point located in the outlet foremain;

EFFLUENT FILTRATION PLANT

Construction of an Effluent Filtration Plant with a peak design flow capacity of 5,734 m³/day located in a filtration building consisting of the following:

- Three (3) effluent filter cells, each cell having two (2) filter modules, providing a total filtration area of 27.9 m² and filtration depth of 2.0 m, equipped with air compressors for continuous filter backwash, influent flow measurement weir with ultrasonic level detector, and a bypass weir to allow filter bypass during events of high peak flows exceeding 5,734 m³/day;
- One (1) 3.0 m diameter and 6.5 m deep precast concrete wet well for receiving filter backwash and septage, equipped with two (2) submersible pumps each with a capacity of 23.3 L/sec @ 19.5 m TDH and a 2.7 m x 2.1 m precast valve chamber, discharging into Cell No. 1 through a 200 mm diameter forcemain;
- One (1) 12,000 L capacity coagulant storage tank (2.13 m diameter x 3.5 m high), equipped with two (2) coagulant metering pumps (one duty and one standby) dosing coagulant at a flow paced rate upstream of the filtration units;
- Installation of a third rotary positive displacement blower rated at 165 L/sec against a

head of 42 kPa and belt driven by 15 kW motors (standby blower); and

- Including controls, instrumentation, and associated appurtenances.

EFFLUENT DISINFECTION SYSTEM

installation of an Ultraviolet Disinfection System (Wedeco Model TAK55M 6-2 or Equivalent) designed for a of 8,000 m³/day, consisting of:

- One (1) UV disinfection unit with approximate dimensions of 2.0 m long x 0.470 m wide x 0.684 m minimum water depth, containing one (1) UV bank with two (2) UV modules each with twelve (12) high intensity low pressure UV lamps (a total of 24 lamps), designed to provide a 30.0 mJ/cm² UV dosage at 55 % Transmittance at 254 nm during peak design flow of 8,000 m³/day;
- Provision of a hypochlorite solution storage tank complete with 100% spill containment, and an 11.36 L/hr capacity metering pump for seasonal chlorination of lagoon effluent (before filtration and UV disinfection) for control of algae growth between May and September of each year.

OUTFALL AND OVERFLOW SEWERS

- Construction of outfall (including marine section) and overflow sewers as follows:

STREET	FROM	TO
Lagoon Site	Effluent Chambers	Elm Street / Taylor Street intersection
Taylor Street	Elm Street	George Street
Taylor Street	Pumping Station	George Street
George Street	Taylor Street	Tyson Street
George Street	Isaac Street	Tyson Street

- Construction of a new section of 300 mm diameter outfall sewer north of Cell 3 and conversion of an existing 200 mm diameter back-up forcemain to a second effluent outfall sewer;
- Including all the necessary appurtenances.

LAGOON FACILITY CONTROL BUILDING

Construction of a 10.6 m x 6.9 m building to accommodate the following:

- Two (2) motor driven blowers complete with connecting pipework and all necessary appurtenances;

- Motor control centre; and
- Including yard piping, electrical power supply and equipment, heating and ventilation equipment and all other necessary appurtenances and controls.

All in accordance with the submitted supporting documents listed in Schedule A.

For the purpose of this environmental compliance approval, the following definitions apply:

1. "Annual Average Effluent Concentration" means the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar year, weighted by the quantity of the Final Effluent discharged over the days deemed to be represented by each sample;
2. "Annual Average Daily Effluent Flow" means the cumulative total Final Effluent discharged during a calendar year divided by the number of days during which Final Effluent was discharged that year;
3. "Annual Average Daily Effluent Loading" means the value obtained by multiplying the Annual Average Effluent Concentration of a contaminant by the Annual Average Daily Effluent Flow over the same calendar year;
4. "Annual Average Daily Influent Flow" means the cumulative total sewage flow of Influent to the Sewage Treatment Plant during a calendar year divided by the number of days during which sewage was flowing to the Sewage Treatment Plant that year;
5. "Approval" means this entire document and any schedules attached to it, and the application;
6. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
7. "Bypass" means diversion of sewage around one or more unit processes within the Sewage Treatment Plant with the diverted sewage flows being returned to the Sewage Treatment Plant treatment train upstream of the Final Effluent sampling point;
8. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
9. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;
10. "*E. coli* " refers to the thermally tolerant forms of *Escherichia* that can survive at 44.5 degrees Celsius;
11. "EPA" means the *Environmental Protection Act* , R.S.O. 1990, c.E.19, as amended;
12. "Equivalent Equipment" means alternate piece(s) of equipment that meets the design requirements

and performance specifications of the piece(s) of equipment to be substituted;

13. "Event" means an action or occurrence, at a given location within the Works that causes a Bypass or Overflow. An Event ends when there is no recurrence of Bypass or Overflow in the 12-hour period following the last Bypass or Overflow. Overflows and Bypasses are separate Events even when they occur concurrently;
14. "Final Effluent" means effluent that are discharged to the environment through the approved effluent disposal facilities, including all Bypasses, that are required to meet the compliance limits stipulated in the Approval for the Sewage Treatment Plant at the Final Effluent sampling point;
15. "Geometric Mean Density" means the geometric mean of all Single Sample Results of density measurement in the samples taken over the period specified;
16. "Imported Sewage" means portable toilet waste, holding tank waste, leachate, septage, processed organics hauled to the Sewage Treatment Plant by licensed waste management system operators and at the specific characteristics and quantities approved for co-treatment in the Sewage Treatment Plant;
17. "Influent" means flows to the Sewage Treatment Plant from the collection system and Imported Sewage but excluding process return flows;
18. "Limited Operational Flexibility" (LOF) means the protocol under which the Owner shall follow in order to undertake any modification that is pre-approved in this Approval;
19. "Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;
20. "Monthly Average Effluent Concentration" means the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month, weighted by the quantity of the Final Effluent discharged over the days deemed to be represented by each sample;
21. "Monthly Average Daily Effluent Flow" means the cumulative total Final Effluent discharged during a calendar month divided by the number of days during which Final Effluent was discharged that month;
22. "Monthly Average Daily Effluent Loading" means the value obtained by multiplying the Monthly Average Effluent Concentration of a contaminant by the Monthly Average Daily Effluent Flow over the same calendar month;
23. "Overflow" means a discharge to the environment from the Works at a location other than the approved effluent disposal facilities or via the effluent disposal facilities downstream of the Final Effluent sampling point;
24. "Owner" means The Corporation of the Town of South Bruce Peninsula and its successors and

assignees;

25. "OWRA" means the *Ontario Water Resources Act* , R.S.O. 1990, c. O.40, as amended;
26. "Peak Daily Flow Rate" (also referred to as maximum daily flow or maximum day flow) means the largest volume of flow to be received during a one-day period for which the sewage treatment process unit or equipment is designed to handle;
27. "Peak Hourly Flow Rate" (also referred to as maximum hourly flow or maximum hour flow) means the largest volume of flow to be received during a one-hour period for which the sewage treatment process unit or equipment is designed to handle;
28. "Peak Instantaneous Flow Rate" means the instantaneous maximum flow rate as measured by a metering device for which the sewage treatment process unit or equipment is designed to handle;
29. "Preliminary Treatment System" means all facilities in the Sewage Treatment Plant associated with screening and grit removal;
30. "Previous Works" means those portions of the Works included in the Approval that have been constructed previously;
31. "Primary Treatment System" means all facilities in the Sewage Treatment Plant associated with the primary sedimentation unit process and includes chemically enhanced primary treatment;
32. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
33. "Rated Capacity" means the Annual Average Daily Influent Flow for which the Sewage Treatment Plant is designed to handle;
34. "Sanitary Sewers" means pipes that collect and convey wastewater from residential, commercial, institutional and industrial buildings, and some infiltration and inflow from extraneous sources such as groundwater and surface runoff through means other than stormwater catch basins;
35. "Secondary Treatment System" means all facilities in the Sewage Treatment Plant associated with biological treatment, secondary sedimentation and phosphorus removal unit processes;
36. "Sewage Treatment Plant" means the entire sewage treatment excluding the Final Effluent disposal facilities;
37. "Single Sample Result" means the test result of a parameter in the effluent discharged on any day, as measured by a probe, analyzer or in a composite or grab sample, as required;
38. "Water Supervisor" means the Water Compliance Supervisor for the Safe Drinking Water Branch (SDWB) for the London office of the Ministry;

39. "Works" means the approved sewage works, and includes Proposed Works, Previous Works and modifications made under Limited Operational Flexibility.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
2. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.
3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.

2. CHANGE OF OWNER AND OPERATOR

1. The Owner shall, within thirty (30) calendar days of issuance of this Approval, prepare/update and submit to the Water Supervisor the Municipal and Local Services Board Wastewater System Profile Information Form (obtainable from the Water Supervisor) under any of the following situations:
 - a. the form has not been previously submitted for the sewage works;
 - b. this Approval is issued for extension, re-rating or process treatment upgrade of the sewage works;
 - c. every time when a notification is provided to the Water Supervisor in compliance with requirements of change of Owner or operator under this condition.
2. The Owner shall notify the Water Supervisor and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of address of Owner;

- b. change of Owner, including address of new owner;
 - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act, R.S.O. 1990, c. B.17* , as amended, shall be included in the notification;
 - d. change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the *Corporations Information Act, R.S.O. 1990, c. C.39* , as amended, shall be included in the notification.
3. The Owner shall notify the Water Supervisor, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of address of operator;
 - b. change of operator, including address of new operator.
 4. In the event of any change in ownership of the Works, the Owner shall notify the succeeding owner in writing, of the existence of this Approval, and forward a copy of the notice to the Water Supervisor.
 5. The Owner shall ensure that all communications made pursuant to this condition refer to the number at the top of this Approval.

3. TIMING FOR CONSTRUCTION OF PROPOSED WORKS

1. All Proposed Works in this Approval shall be constructed and installed and must commence operation within five (5) years of issuance of this Approval, after which time the Approval cease to apply in respect of any portions of the Works not in operation.
2. One (1) week prior to commissioning operation of any portion of the Proposed Works, the Owner shall notify the Water Supervisor, in writing, of the pending start up date. The notification shall include a statement, certified by a Professional Engineer, that the portion of the Proposed Works to be commissioned is constructed in accordance with this Approval.
3. Within one (1) year of completion of construction of the Proposed Works, a set of record drawings of the Works shall be prepared or updated. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works for the operational life of the Works.
4. In the event that the construction, installation and/or operation of any portion of the Proposed Works is anticipated to be delayed beyond the time period stipulated in paragraph 1 of this condition, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment

application shall include the reason(s) for the delay and whether there is any design change(s).

4. BYPASSES

1. Any Bypass is prohibited, except:
 - a. in an emergency situation when a structural, mechanical or electrical failure causes a temporary reduction in the capacity of a treatment process or when an unforeseen flow condition exceeds the design capacity of a treatment process that is likely to result in personal injury, loss of life, health hazard, basement flooding, severe property damage, equipment damage or treatment process upset, if a portion of the flow is not bypassed; and
 - b. where the Bypass is a direct and unavoidable result of a planned repair and maintenance procedure or other circumstance(s), the Owner having notified the Water Supervisor in writing at least fifteen (15) days prior to the occurrence of Bypass, including an estimated quantity and duration of the Bypass, an assessment of the impact on the quality of the Final Effluent and the mitigation measures if necessary, and the Water Supervisor has given written consent of the Bypass.
2. At the beginning of a Bypass Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:
 - a. the date and time of the beginning of the Bypass;
 - b. the location of the Bypass and the treatment process(es) bypassed;
 - c. the reason(s) for the Bypass.
3. Upon confirmation of the end of a Bypass Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:
 - a. the date and time of the end of the Bypass;
 - b. the measured or estimated volume of Bypass.
4. For any Bypass Event, the Owner shall collect daily sample(s) of the Final Effluent, inclusive of the Event and analyze for all effluent parameters outlined in Compliance Limits condition, following the same protocol specified in the Monitoring and Recording condition as for the regular samples. The sample(s) shall be in addition to the regular Final Effluent samples required under the monitoring and recording condition, except when the Event occurs on a scheduled routine monitoring day.

5. The Owner shall submit a summary report of the Bypass Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15. The summary reports shall contain, at a minimum, the types of information set out in Subsections (2), (3) and (4) and assessment of the impact of the Event(s) on Final Effluent, plant operation and the receiver, and planned mitigation strategies, as appropriate.

5. OVERFLOWS

1. Any Overflow is prohibited, except:
 - a. in an emergency situation when a structural, mechanical or electrical failure causes a temporary reduction in the capacity of the Works or when an unforeseen flow condition exceeds the design capacity of the Works that is likely to result in personal injury, loss of life, health hazard, basement flooding, severe property damage, equipment damage or treatment process upset, if a portion of the flow is not overflowed;
 - b. where the Overflow is a direct and unavoidable result of a planned repair and maintenance procedure or other circumstance(s), the Owner having notified the Water Supervisor in writing at least fifteen (15) days prior to the occurrence of Overflow, including an estimated quantity and duration of the Overflow, an assessment of the impact on the environment and the mitigation measures if necessary, and the Water Supervisor has given written consent of the Overflow;
2. At the beginning of an Overflow Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:
 - a. the date and time of the beginning of the Overflow;
 - b. the location of the Overflow and the receiver and disinfection status of the Overflow;
 - c. the reason(s) for the Overflow.
3. Upon confirmation of the end of an Overflow Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:
 - a. the date and time of the end of the Overflow;
 - b. the measured or estimated volume of the Overflow;
 - c. the mitigation measures taken.

4. For any Overflow Event in the Sewage Treatment Plant, the Owner shall collect grab sample(s) of the Overflow, one near the beginning of the Event and one every eight (8) hours for the duration of the Event, and have them analyzed at least for CBOD₅, total suspended solids, total phosphorus, total ammonia nitrogen, total Kjeldahl nitrogen, *E. coli* , except that raw sewage and primary treated effluent Overflow shall be analyzed for BOD₅, total suspended solids, total phosphorus and total Kjeldahl nitrogen only. For any Overflow Event at a sewage pumping station in the collection system, the Owner shall collect at least one (1) grab sample representative of the Overflow Event and have it analyzed for BOD₅, total suspended solids, total phosphorus and total Kjeldahl nitrogen.
5. The Owner shall submit a summary report of the Overflow Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15. The summary report shall contain, at a minimum; the types of information set out in Subsections (2), (3) and (4) and assessment of the impact of the Event(s) on plant operation and the receiver, and planned mitigation strategies, as appropriate.

6. DESIGN OBJECTIVES

1. The Owner shall design and operate the Sewage Treatment Plant in accordance with the following objectives:
 - a. Final Effluent parameters design objectives listed in the table(s) included in Schedule B:
 - b. Final Effluent is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discoloration on the receiving waters.
 - c. Annual Average Daily Influent Flow is within the Rated Capacity of the Sewage Treatment Plant.
2. The Owner shall make an assessment of the issues and recommendations for pro-active actions if any is required under the following situations and include in the annual report to the Water Supervisor:
 - a. when any of the design objectives is not achieved more than 50% of the time in a year;
 - b. when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity.

7. COMPLIANCE LIMITS

1. The Owner shall operate and maintain the Sewage Treatment Plant such that the Final Effluent

parameters compliance limits listed in the table(s) included in Schedule C are met.

8. OPERATION AND MAINTENANCE

1. The Owner shall exercise due diligence in ensuring that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and regulations, adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the Works.
2. The Owner shall prepare/update the operations manual for the Works within six (6) months of completion of construction of the Proposed Works, that includes, but not necessarily limited to, the following information:
 - a. operating procedures for routine operation of the Works;
 - b. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
 - c. repair and maintenance programs, including the frequency of repair and maintenance for the Works;
 - d. procedures for the inspection and calibration of monitoring equipment;
 - e. a spill prevention and contingency plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the Water Supervisor;
 - f. procedures for receiving, responding and recording public complaints, including recording any followup actions taken.
3. The Owner shall maintain the operations manual up-to-date and retain a copy at the location of the Works for the operational life of the Works and upon request, make the manual available to Ministry staff.
4. The Owner shall provide for the overall operation of the Works an operator who possesses the level of knowledge, training and experience sufficient to allow for the safe and environmentally sound operation of the Works in accordance with the requirements of this Approval and, where required by regulation, holds a licence that is applicable to those type and class of the facilities included in the Works. At least three (3) months prior to commissioning of the Works, the Owner shall submit a statement of qualifications of the person to be appointed as the operator of the Works, including copies of certificates, license as required, to the Water Supervisor for

review and approval of the appointment.

9. MONITORING AND RECORDING

1. The Owner shall, upon commencement of operation of the Works, carry out a routine monitoring program of collecting samples at the required sampling points, at the frequency specified or higher, by means of the specified sample type and analyzed for each parameter listed in the tables under the monitoring program included in Schedule D and record all results, as follows:
 - a. all samples and measurements are to be taken at a time and in a location characteristic of the quality and quantity of the sewage stream over the time period being monitored.
 - b. a schedule of the day of the week/month and time of the day for the routine sampling shall be forwarded to the Water Supervisor for record. The sampling schedule shall be revised and updated every year through rotation of the day of the week/month and time of the day for the routine sampling program.
 - c. definitions and preparation requirements for each sample type are included in document referenced in paragraph 4.b.
 - d. definitions for frequency:
 - i. Daily means once every day;
 - ii. Weekly means once every week;
 - iii. Bi-weekly means once every two weeks;
 - iv. Monthly means once every month;
 - v. Quarterly means once every three months; and
 - vi. Annually means once every year.
2. In addition to the routine monitoring program required in paragraph 1, the Owner shall collect samples of the Final Effluent, by means of the specified sample type and analyzed for each parameter listed in the tables under the monitoring program included in Schedule D on any day when there is any abnormal operating conditions with or without occurrence of Bypass or Overflow.
3. The Single Sample Results obtained on any routine monitoring day are deemed to be representative of the quality of the Final Effluent on that day and the calendar days that followed until the next routine monitoring day, except for any intervening day(s) when abnormal operating conditions occurred.
4. The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents:
 - a. the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for

- Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended;
- b. the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended; and
 - c. the publication "Standard Methods for the Examination of Water and Wastewater", as amended.
5. The temperature and pH of the Final Effluent shall be determined in the field at the time of sampling for Total Ammonia Nitrogen. The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.
 6. The Owner shall monitor and record the flow rate and daily quantity of the following sewage streams with an accuracy to within plus or minus 15 per cent (+/- 15%) of the actual flowrate:
 - a. Influent flow to the Sewage Treatment Plant by continuous flow measuring devices and instrumentations/pumping rates, or in lieu of an actual installation of equipment, adopt the flow measurements of the Final Effluent for the purpose of estimating Influent flows if the Influent and Final Effluent streams are considered not significantly different in flow rates and quantities;
 - b. Final Effluent discharged from the Sewage Treatment Plant by continuous flow measuring devices and instrumentations/pumping rates, or in lieu of an actual installation of equipment, adopt the flow measurements of the Influent for the purpose of estimating Final Effluent flows if the Influent and Final Effluent streams are considered not significantly different in flow rates and quantities;
 - c. Each type of Imported Sewage received for co-treatment at the Sewage Treatment Plant by flow measuring devices and instrumentations/pumping rates/haul truck manifests.
 7. The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

10. LIMITED OPERATIONAL FLEXIBILITY

1. The Owner may make pre-authorized modifications to the sewage pumping stations and Sewage Treatment Plant of the Works in accordance with the document "Limited Operational Flexibility - Protocol for Pre-Authorized Modifications to Municipal Sewage Works", included as Schedule E of this Approval, subject to the following:
 - a. the modifications will not involve the addition of any new treatment process or the removal of an existing treatment process, including chemical systems, from the liquid or solids

treatment trains as originally designed and approved.

- b. the scope and technical aspects of the modifications are in line with those delineated in Schedule E and conform with the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended, MOE regulations, policies, guidelines, and industry engineering standards;
 - c. the modifications shall not negatively impact on the performance of any process or equipment in the Works or result in deterioration in the Final Effluent quality;
 - d. where the pre-authorized modification requires notification, a "Notice of Modifications to Sewage Works" (included in Schedule E) shall be completed with declarations from a Professional Engineer and the Owner and submitted to the Water Supervisor at least thirty (30) days prior to the scheduled implementation date. The notification shall also include technical memorandum, engineering plans and specifications, as applicable and appropriate to support the declarations that the modifications conform with LOF.
2. The following modifications are not pre-authorized under Limited Operational Flexibility:
- a. Modifications that involve addition or extension of process structures, tankages or channels;
 - b. Modifications that involves relocation of the Final Effluent outfall or any other discharge location or that may require reassessment of the impact to the receiver or environment;
 - c. Modifications that involves addition of or change in technology of a treatment process or that may involve reassessment of the treatment train process design;
 - d. Modifications that requires changes to be made to the emergency response, spill prevention and contingency plan; or
 - e. Modifications that are required pursuant to an order issued by the Ministry.

11. REPORTING

1. The Owner shall report to the Water Supervisor orally as soon as possible any non-compliance with the compliance limits, and in writing within seven (7) days of non-compliance.
2. The Owner shall, within fifteen (15) days of occurrence of a spill within the meaning of Part X of the *Environmental Protection Act*, submit a full written report of the occurrence to the Water Supervisor describing the cause and discovery of the spill, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation, in addition to fulfilling the requirements under the EPA and Ont. Reg. 675/98 "Classification and Exemption of Spills and Reporting of Discharges".

3. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
4. The Owner shall prepare performance reports on a calendar year basis and submit to the Water Supervisor by March 31 of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
 - a. a summary and interpretation of all Influent and Imported Sewage monitoring data, including sewage characteristics, flow rates and a comparison to the values used in the design of the Works;
 - b. a summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;
 - c. a summary of all operating issues encountered and corrective actions taken;
 - d. a summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works;
 - e. a summary of any effluent quality assurance or control measures undertaken;
 - f. a summary of the calibration and maintenance carried out on all Influent, Imported Sewage and Final Effluent monitoring equipment;
 - g. a summary of efforts made to achieve the design objectives;
 - h. a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
 - i. a summary of any complaints received and any steps taken to address the complaints;
 - j. a summary of all Bypasses, Overflows, spills within the meaning of Part X of EPA and abnormal discharge events, and other abnormal operating conditions;
 - k. a copy of all Notice of Modifications to Sewage Works submitted to the Water Supervisor under paragraph 1.d. of Condition 10, with a summary report on status of implementation of all modification.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 regarding general provisions is imposed to ensure that the Works are constructed and

operated in the manner in which they were described and upon which approval was granted.

2. Condition 2 regarding change of owner and operator is included to ensure that the Ministry records are kept accurate and current with respect to ownership and operator of the Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
3. Condition 3 regarding timing for construction of proposed works is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction to ensure the ongoing protection of the environment, and that prior to the commencement of construction of the portion of the Works that are approved in principle only, the Director will have the opportunity to review detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of the Works, to determine capability to comply with the Ministry's requirements stipulated in the terms and conditions of the Approval, and also, ensure that the Works are constructed in accordance with the Approval and that record drawings of the Works "as constructed" are updated and maintained for future references.
4. Condition 4 regarding Bypasses is included to indicate that Bypass is prohibited, except in circumstances where the failure to Bypass could result in greater damage to the environment than the Bypass itself. The notification and documentation requirements allow the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency of Bypass Events.
5. Condition 5 regarding Overflows is included to indicate that Overflow of untreated or partially treated sewage to the receiver is prohibited, except in circumstances where the failure to Overflow could result in greater damage to the environment than the Overflow itself. The notification and documentation requirements allow the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency of Overflow Events.
6. Condition 6 regarding design objectives is imposed to establish non-enforceable design objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
7. Condition 7 regarding compliance limits is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements.
8. Condition 8 regarding operation and maintenance is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the Works.
9. Condition 9 regarding monitoring and recording is included to enable the Owner to evaluate and

demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and compliance limits.

10. Condition 10 regarding Limited Operational Flexibility is included to ensure that the Works are constructed, maintained and operated in accordance with the Approval, and that any pre-approved modification will not negatively impact on the performance of the Works.
11. Condition 11 regarding reporting is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for this Approval.

Schedule A

PREVIOUS WORKS APPROVED ON OR BEFORE NOVEMBER 9, 2005:

1. Application for Approval of Municipal and Private Sewage Works submitted by The Town of South Bruce Peninsula.
2. Environmental Assessment Report, design brief, plans and specifications together with associated pipework, mechanical and electrical works, instrumentation and controls prepared by Henderson, Paddon & Associates Limited.
3. Application for Approval of Municipal and Private Sewage Works submitted by the Town of South Bruce Peninsula dated August 30, 2002, and drawing and design specifications prepared by Henderson, Paddon & Associates Limited in the document titled "Design Brief - Effluent Filtration System for Former Town of Wiarton Wastewater Treatment Lagoons - Town of South Bruce Peninsula" dated September 2002.
4. Application for Approval of Municipal and Private Sewage Works submitted by the Town of South Bruce Peninsula dated June 3, 2005, and drawing and design specifications prepared by Henderson, Paddon & Associates Limited.
5. "Design Summary - Effluent Filtration System for Former Town of Wiarton Wastewater Treatment Lagoons - Installation of UV Disinfection System, Town of South Bruce Peninsula" dated March 2003.

PREVIOUS WORKS APPROVED ON APRIL 26, 2006:

1. Application for Approval of Municipal and Private Sewage Works submitted by The Town of South Bruce Peninsula dated January 17, 2006, and design specifications and drawings prepared by Henderson, Paddon & Associates Limited, Consulting Engineers, Owen Sound, Ontario.
2. "Design Report, Upgrades to Existing Sanitary Sewage Pumping Station No. 1, Former Town of Wiarton, Town of Bruce Peninsula" dated January 2006, prepared by Henderson, Paddon & Associates Limited, Consulting Engineers.

PREVIOUS WORKS APPROVED ON SEPTEMBER 23, 2011 UNDER ECA No. 8533-8L3HJ3 :

1. Application for Approval of Sewage Works submitted by The Town of South Bruce Peninsula dated July 29, 2011 and design specifications and drawings prepared by Gamsby and Mannerow Limited, Guelph, Ontario;
2. "Wiarion Sewage Lagoons Influent Distribution Chamber Replacement Design Brief" dated July 2011, prepared by Gamsby and Mannerow Limited, Guelph, Ontario.

PREVIOUS WORKS APPROVED ON ON OCTOBER 6, 2015 UNDER ECA No. 6375-A2PKKS:

1. Application for Environmental Compliance Approval submitted by The Town of South Bruce Peninsula dated July 6, 2015 and design brief and engineering drawings prepared by Exp Services Inc., Brampton, Ontario.
2. Completion of Study Completion of Municipal Class EA for the proposed expansion of the Wiarton Wastewater Treatment Plant dated April 30, 2015.
3. Class EA, Detailed Design and Contract Administration for Expansion / Upgrade of Wiarton Wastewater Treatment System - MOE Meeting and Meeting Minutes - October 3, 2014.

PROPOSED WORKS:

1. Application for Environmental Compliance Approval submitted by The Town of South Bruce Peninsula dated December 22, 2016 and design brief and engineering drawings prepared by B. M. Ross and Associates Ltd., Town of Goderich, Ontario.

Schedule B

Final Effluent Design Objectives

Concentration Objectives - Commissioned Previous Works

Final Effluent Parameter	Averaging Calculator	Objective (maximum unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	10.0 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	10.0 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.15 mg/L
Total Ammonia Nitrogen (May 1 to October 31)	Monthly Average Effluent Concentration	3.0 mg/L
Total Ammonia Nitrogen (November 1 to April 30)	Monthly Average Effluent Concentration	6.0 mg/L

Schedule C

Final Effluent Compliance Limits

Concentration Limits

Final Effluent Parameter	Averaging Calculator	Limit (maximum unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	15.0 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	15.0 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.3 mg/L
Total Ammonia Nitrogen (May 1 to October 31)	Monthly Average Effluent Concentration	3.0 mg/L
Total Ammonia Nitrogen (November 1 to April 30)	Monthly Average Effluent Concentration	6.0 mg/L
<i>E. coli</i> (May 15 - September 15)	Monthly Geometric Mean Density	200 organisms per 100 mL
pH	Single Sample Result	between 6.0 - 9.5 inclusive

Loading Limits

Final Effluent Parameter	Averaging Calculator	Limit (maximum unless otherwise indicated)
CBOD5	Monthly Average Effluent Loading	66.0 kg/d
Total Suspended Solids	Monthly Average Effluent Loading	66.0 kg/d
Total Phosphorus	Monthly Average Effluent Loading	1.32 kg/d
Total Ammonia Nitrogen (May 1 to October 31)	Monthly Average Effluent Loading	13.2 kg/d
Total Ammonia Nitrogen (November 1 to April 30)	Monthly Average Effluent Loading	26.4 kg/d

Schedule D

Monitoring Program

Influent - Influent sampling point

Parameters	Sample Type	Frequency
BOD5	Grab	Monthly
Total Suspended Solids	Grab	Monthly
Total Phosphorus	Grab	Monthly
Total Kjeldahl Nitrogen	Grab	Monthly

Final Effluent - Final Effluent sampling point

Parameters	Sample Type	Frequency
CBOD5	8 hour composite	Biweekly
Total Suspended Solids	8 hour composite	Biweekly
Total Phosphorus	8 hour composite	Biweekly
Total Ammonia Nitrogen	8 hour composite	Biweekly
<i>E. coli</i>	Grab	Biweekly
pH	Grab	Biweekly
Temperature	Grab	Biweekly

Imported Sewage - Imported Sewage (Septage) Receiving Station

Parameters	Sample Type	Frequency ^{*NOTE 1}
BOD5	Grab	Monthly
Total Suspended Solids	Grab	Monthly
Total Phosphorus	Grab	Monthly
Total Kjeldahl Nitrogen	Grab	Monthly
Total Ammonia Nitrogen	Grab	Monthly
Chemical Oxygen Demand	Grab	Monthly
Metals: Aluminum, Arsenic, Barium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Potassium, Selenium, Silver, Sodium, Tin, Zinc *NOTE 2		
Organics: Acetone, Benzene, Ethylbenzene, Isopropyl alcohol, Methyl alcohol, Methylene chloride, Methyl ethyl ketone, Toluene, Xylene *NOTE 1		

*NOTE 1: The Owner shall record the quantity of septage received at the Works and sample the septage at least at a monthly frequency when a septage is received.

*NOTE 2: Sample Type is Grab and Frequency is Quarterly

Schedule E

Limited Operational Flexibility

Protocol for Pre-Authorized Modifications to Municipal Sewage Works

1. General

1. Pre-authorized modifications are permitted only where Limited Operational Flexibility has already been granted in the Approval and only permitted to be made at the pumping stations and sewage treatment plant in the Works, subject to the conditions of the Approval.
2. Where there is a conflict between the types and scope of pre-authorized modifications listed in this document, and the Approval where Limited Operational Flexibility has been granted, the Approval shall take precedence.
3. The Owner shall consult the Water Supervisor on any proposed modifications that may fall within the scope and intention of the Limited Operational Flexibility but is not listed explicitly or included as an example in this document.
4. The Owner shall ensure that any pre-authorized modifications will not:
 - a. adversely affect the hydraulic profile of the Sewage Treatment Plant or the performance of any upstream or downstream processes, both in terms of hydraulics and treatment performance;
 - b. result in new Overflow or Bypass locations, or any potential increase in frequency or quantity of Overflow(s) or Bypass(es).
 - c. result in a reduction in the required Peak Flow Rate of the treatment process or equipment as originally designed.

2. Modifications that do not require pre-authorization:

1. Sewage works that are exempt from Ministry approval requirements;
2. Modifications to the electrical system, instrumentation and control system.

3. Pre-authorized modifications that do not require prior notification

1. Normal or emergency maintenance activities, such as repairs, renovations, refurbishments and replacements with Equivalent Equipment, or other improvements to an existing approved piece of equipment of a treatment process do not require pre-authorization. Examples of these activities are:
 - a. Repairing a piece of equipment and putting it back into operation, including replacement of minor

components such as belts, gear boxes, seals, bearings;

- b. Repairing a piece of equipment by replacing a major component of the equipment such as motor, with the same make and model or another with the same or very close power rating but the capacity of the pump or blower will still be essentially the same as originally designed and approved;
 - c. Replacing the entire piece of equipment with Equivalent Equipment.
2. Improvements to equipment efficiency or treatment process control do not require pre-authorization. Examples of these activities are:
- a. Adding variable frequency drive to pumps;
 - b. Adding on-line analyzer, dissolved oxygen probe, ORP probe, flow measurement or other process control device.
4. Pre-Authorized Modifications that require notification
1. Pumping Stations
 - a. Replacement, realignment of existing sewers including manholes, valves, gates, weirs and associated appurtenances provided that the modifications will not add new influent source(s) or result in an increase in flow from existing sources as originally approved.
 - b. Extension or partition of wetwell to increase retention time for emergency response and improve station maintenance and pump operation;
 - c. Replacement or installation of inlet screens to the wetwell;
 - d. Replacement or installation of flowmeters, construction of station bypass;
 - e. Replacement, reconfiguration or addition of pumps and modifications to pump suctions and discharge pipings including valve, gates, motors, variable frequency drives and associated appurtenances to maintain firm pumping capacity or modulate the pump rate provided that the modifications will not result in a reduction in the firm pumping capacity or discharge head or an increase in the peak pumping rate of the pumping station as originally designed;
 - f. Replacement, realignment of existing forcemain(s) valves, gates, and associated appurtenances provided that the modifications will not reduce the flow capacity or increase the total dynamic head and transient in the forcemain.
 2. Sewage Treatment Plant
 1. Sewers and appurtenances
 - a. Replacement, realignment of existing sewers (including pipes and channels) or construction of

new sewers, including manholes, valves, gates, weirs and associated appurtenances within the a sewage treatment plant, provided that the modifications will not add new influent source(s) or result in an increase in flow from existing sources as originally approved and that the modifications will remove hydraulic bottlenecks or improve the conveyance of sewage into and through the sewage works.

2. Flow Distribution Chambers/Splitters

- a. Replacement or modification of existing flow distribution chamber/splitters or construction of new flow distribution chamber/splitters, including replacements and installation of sluice gates, weirs, valves for distribution of flows to the downstream process trains, provided that the modifications will not result in a change in flow distribution ratio to the downstream process trains as originally designed.

3. Preliminary Treatment System

- a. Replacement of existing screens and grit removal units with equipment of the same or higher process performance technology, including where necessary replacement and upgrading of existing screenings dewatering washing compactors, hydrocyclones, grit classifiers, grit pumps, air blowers conveyor system, disposal bins and other ancillary equipment to the screening and grit removal processes.
- b. Replacement and installation of channel aeration systems, including air blowers, air supply main, air headers, air laterals, air distribution grids and diffusers.

4. Primary Treatment System

- a. Replacement of existing sludge removal mechanism, including sludge chamber;
- b. Replacement and installation of scum removal mechanism, including scum chamber;
- c. Replacement and installation of primary sludge pumps, scum pumps, provided that:the modifications will not result in a reduction in the firm pumping capacity or discharge head that the primary sludge pump(s) and scum pump(s) are originally designed to handle.

5. Secondary Treatment System

1. Biological Treatment

- a. Conversion of complete mix aeration tank to plug-flow multi-pass aeration tank, including modifications to internal structural configuration;
- b. Addition of inlet gates in multi-pass aeration tank for step-feed operation mode;
- c. Partitioning of an anoxic/flip zone in the inlet of the aeration tank, including installation of

submersible mixer(s);

- d. Replacement of aeration system including air blowers, air supply main, air headers, air laterals, air distribution grids and diffusers, provided that the modifications will not result in a reduction in the firm capacity or discharge pressure that the blowers are originally designed to supply or in the net oxygen transferred to the wastewater required for biological treatment as originally required.

2. Secondary Sedimentation

- a. Replacement of sludge removal mechanism, including sludge chamber;
- b. Replacement and installation of scum removal mechanism, including scum chamber;
- c. Replacement and installation of return activated sludge pump(s), waste activated sludge pump(s), scum pump(s), provided that the modifications will not result in a reduction in the firm pumping capacity or discharge head that the activated sludge pump(s) and scum pump(s) are originally designed to handle.

6. Tertiary Treatment System

- a. Replacement of filtration system with equipment of the same filtration technology, including feed pumps, backwash pumps, filter reject pumps, filtrate extract pumps, holding tanks associated with the pumping system, provided that the modifications will not result in a reduction in the capacity of the filtration system as originally designed.

7. Disinfection System

1. UV Irridation

- a. Replacement of UV irradiation system, provided that the modifications will not result in a reduction in the design capacity of the disinfection system or the radiation level as originally designed.

2. Chlorination/Dechlorination and Ozonation Systems

- a. Extension and reconfiguration of contact tank to increase retention time for effective disinfection and reduce dead zones and minimize short-circuiting;
- b. Replacement and installation of chemical storage tanks, provided that the tanks are provided with effective spill containment.

8. Supplementary Treatment Systems

1. Chemical systems

- a. Replacement, relocation and installation of chemical storage tanks for existing chemical systems only, provided that the tanks are sited with effective spill containment;
- b. Replacement and installation of chemical dosing pumps provided that the modifications will not result in a reduction in the firm capacity that the dosing pumps are originally designed to handle.
- c. Relocation and addition of chemical dosing point(s) including chemical feed pipes and valves and controls, to improve phosphorus removal efficiency;
- d. Use of an alternate chemical provided that it is a non-proprietary product and is a commonly used alternative to the chemical approved in the Works, provided that the chemical storage tanks, chemical dosing pumps, feed pipes and controls are also upgraded, as necessary..

9. Final Effluent Disposal Facilities

- a. Replacement and realignment of the Final Effluent channel, sewer or forcemain, including manholes, valves and appurtenances from the end of the treatment train to the discharge outfall section, provided that the sewer conveys only effluent discharged from the Sewage Treatment Plant and that the replacement or re-aligned sewer has similar dimensions and performance criteria and is in the same or approximately the same location and that the hydraulic capacity will not be reduced.

10. Sludge Management System

1. Sludge Holding and Thickening

- a. Replacement and installation of sludge holding tanks, sludge handling pumps, such as transfer pumps, feed pumps, recirculation pumps, provided that modifications will not result in reduction in the solids storage or handling capacities;

2. Sludge Digestion

- a. Replacement and installation of digesters, sludge handling pumps, such as transfer pumps, feed pumps, recirculation pumps, provided that modifications will not result in reduction in the solids storage or handling capacities;
- b. replacement of sludge digester covers.

3. Sludge Dewatering and Disposal

- a. Replacement of sludge dewatering equipment, sludge handling pumps, such as transfer pumps, feed pumps, cake pumps, loading pumps, provided that modifications will not result in reduction in solids storage or handling capacities.

11. Standby Power System

1. Replacement and installation of standby power system, including feed from alternate power grid, emergency power generator, fuel supply and storage systems, provided that the existing standby power generation capacity is not reduced.

12. Pilot Study

1. Small side-stream pilot study for existing or new technologies, alternative treatment process or chemical, provided:
 - i. all effluent from the pilot system is hauled off-site for proper disposal or returned back to the sewage treatment plant for at a point no further than immediately downstream of the location from where the side-stream is drawn;
 - ii. no proprietary treatment process or propriety chemical is involved in the pilot study;
 - iii. the effluent from the pilot system returned to the sewage treatment plant does not significantly alter the composition/concentration of or add any new contaminant/inhibiting substances to the sewage to be treated in the downstream process;
 - iv. the pilot study will not have any negative impacts on the operation of the sewage treatment plant or cause a deterioration of effluent quality;
 - v. the pilot study does not exceed a maximum of two years and a notification of completion shall be submitted to the Water Supervisor within one month of completion of the pilot project.

13. Lagoons

- a. installing baffles in lagoon provided that the operating capacity of the lagoon system is not reduced;
- b. raise top elevation of lagoon berms to increase free-board;
- c. replace and install interconnecting pipes and chambers between cells, provided that the process design operating sequence is not changed;
- d. replace and install mechanical aerators, or replace mechanical aerators with diffused aeration system provided that the mixing and aeration capacity are not reduced;
- e. removal of accumulated sludge and disposal to an approved location offsite.

This page contains an image of the form entitled "Notice of Modification to Sewage Works"



Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA AND SEND A COPY TO THE WATER SUPERVISOR (FOR MUNICIPAL) OR DISTRICT MANAGER (FOR NON-MUNICIPAL SYSTEMS)

Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility <i>(Insert the ECA's owner number and issuance date and notice number, which should start with "01" and consecutive numbers thereafter)</i>		
ECA Number	Issuance Date (mm/dd/yyyy)	Notice number (if applicable)
ECA Owner		Municipality

Part 2: Description of the modifications as part of the Limited Operational Flexibility <i>(Attach a detailed description of the sewage works)</i>
<p>Description shall include:</p> <ol style="list-style-type: none"> 1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, equipment type/model, material, process name, etc.) 2. Confirmation that the anticipated environmental effects are negligible. 3. List of updated versions of, or amendments to, all relevant technical documents that are affected by the modifications as applicable, i.e. submission of documentation is not required, but the listing of updated documents is (design brief, drawings, emergency plan, etc.)

Part 3 – Declaration by Professional Engineer	
<p>I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:</p> <ol style="list-style-type: none"> 1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario; 2. Has been designed in accordance with the Limited Operational Flexibility as described in the ECA; 3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act, and other appropriate regulations. <p>I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate</p>	
Name (Print)	PEO License Number
Signature	Date (mm/dd/yyyy)
Name of Employer	

Part 4 – Declaration by Owner	
<p>I hereby declare that:</p> <ol style="list-style-type: none"> 1. I am authorized by the Owner to complete this Declaration; 2. The Owner consents to the modification; and 3. This modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA. 4. The Owner has fulfilled all applicable requirements of the Environmental Assessment Act. <p>I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate</p>	
Name of Owner Representative (Print)	Owner representative title (Print)
Owner Representative's Signature	Date (mm/dd/yyyy)

EAB Form December 2013



**Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s).
6211-AGEU4W issued on February 24, 2017**

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Director appointed for the purposes of Part II.1 of
the Environmental Protection Act
Ministry of the Environment and Climate Change
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 23rd day of November, 2017



Fariha Pannu, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

SH/
c: DWMD Supervisor, MOECC Owen Sound
Andrew Garland, BM Ross and Associates Ltd., The Corporation of the Town of South Bruce Peninsula



Notice of Modifications Dec-2013.pdf

A PROPONENT'S INTRODUCTION TO THE DELEGATION OF PROCEDURAL ASPECTS OF CONSULTATION WITH ABORIGINAL COMMUNITIES

DEFINITIONS

The following definitions are specific to this document and may not apply in other contexts:

Aboriginal communities – the First Nation or Métis communities identified by the Crown for the purpose of consultation.

Consultation – the Crown's legal obligation to consult when the Crown has knowledge of an established or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. This is the type of consultation required pursuant to s. 35 of the *Constitution Act, 1982*. Note that this definition does not include consultation with Aboriginal communities for other reasons, such as regulatory requirements.

Crown – the Ontario Crown, acting through a particular ministry or ministries.

Procedural aspects of consultation – those portions of consultation related to the process of consultation, such as notifying an Aboriginal community about a project, providing information about the potential impacts of a project, responding to concerns raised by an Aboriginal community and proposing changes to the project to avoid negative impacts.

Proponent – the person or entity that wants to undertake a project and requires an Ontario Crown decision or approval for the project.

I. PURPOSE

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that may adversely impact that right. In outlining a framework for the duty to consult, the Supreme Court of Canada has stated that the Crown may delegate procedural aspects of consultation to third parties. This document provides general information about the Ontario Crown's approach to delegation of the procedural aspects of consultation to proponents.

This document is not intended to instruct a proponent about an individual project, and it does not constitute legal advice.

II. WHY IS IT NECESSARY TO CONSULT WITH ABORIGINAL COMMUNITIES?

The objective of the modern law of Aboriginal and treaty rights is the *reconciliation* of Aboriginal peoples and non-Aboriginal peoples and their respective rights, claims and interests. Consultation is an important component of the reconciliation process.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. For example, the Crown's duty to consult is triggered when it considers issuing a permit, authorization or approval for a project which has the potential to adversely impact an Aboriginal right, such as the right to hunt, fish, or trap in a particular area.

The scope of consultation required in particular circumstances ranges across a spectrum depending on both the nature of the asserted or established right and the seriousness of the potential adverse impacts on that right.

Depending on the particular circumstances, the Crown may also need to take steps to accommodate the potentially impacted Aboriginal or treaty right. For example, the Crown may be required to avoid or minimize the potential adverse impacts of the project.

III. THE CROWN'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

The Crown has the responsibility for ensuring that the duty to consult, and accommodate where appropriate, is met. However, the Crown may delegate the procedural aspects of consultation to a proponent.

There are different ways in which the Crown may delegate the procedural aspects of consultation to a proponent, including through a letter, a memorandum of understanding, legislation, regulation, policy and codes of practice.

If the Crown decides to delegate procedural aspects of consultation, the Crown will generally:

- Ensure that the delegation of procedural aspects of consultation and the responsibilities of the proponent are clearly communicated to the proponent;
- Identify which Aboriginal communities must be consulted;
- Provide contact information for the Aboriginal communities;
- Revise, as necessary, the list of Aboriginal communities to be consulted as new information becomes available and is assessed by the Crown;
- Assess the scope of consultation owed to the Aboriginal communities;

- Maintain appropriate oversight of the actions taken by the proponent in fulfilling the procedural aspects of consultation;
- Assess the adequacy of consultation that is undertaken and any accommodation that may be required;
- Provide a contact within any responsible ministry in case issues arise that require direction from the Crown; and
- Participate in the consultation process as necessary and as determined by the Crown.

IV. THE PROPONENT'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

Where aspects of the consultation process have been delegated to a proponent, the Crown, in meeting its duty to consult, will rely on the proponent's consultation activities and documentation of those activities. The consultation process informs the Crown's decision of whether or not to approve a proposed project or activity.

A proponent's role and responsibilities will vary depending on a variety of factors including the extent of consultation required in the circumstance and the procedural aspects of consultation the Crown has delegated to it. Proponents are often in a better position than the Crown to discuss a project and its potential impacts with Aboriginal communities and to determine ways to avoid or minimize the adverse impacts of a project.

A proponent can raise issues or questions with the Crown at any time during the consultation process. If issues or concerns arise during the consultation that cannot be addressed by the proponent, the proponent should contact the Crown.

a) What might a proponent be required to do in carrying out the procedural aspects of consultation?

Where the Crown delegates procedural aspects of consultation, it is often the proponent's responsibility to provide notice of the proposed project to the identified Aboriginal communities. The notice should indicate that the Crown has delegated the procedural aspects of consultation to the proponent and should include the following information:

- a description of the proposed project or activity;
- mapping;
- proposed timelines;
- details regarding anticipated environmental and other impacts;
- details regarding opportunities to comment; and
- any changes to the proposed project that have been made for seasonal conditions or other factors, where relevant.

Proponents should provide enough information and time to allow Aboriginal communities to provide meaningful feedback regarding the potential impacts of the project. Depending on the nature of consultation required for a project, a proponent also may be required to:

- provide the Crown with copies of any consultation plans prepared and an opportunity to review and comment;
- ensure that any necessary follow-up discussions with Aboriginal communities take place in a timely manner, including to confirm receipt of information, share and update information and to address questions or concerns that may arise;
- as appropriate, discuss with Aboriginal communities potential mitigation measures and/or changes to the project in response to concerns raised by Aboriginal communities;
- use language that is accessible and not overly technical, and translate material into Aboriginal languages where requested or appropriate;
- bear the reasonable costs associated with the consultation process such as, but not limited to, meeting hall rental, meal costs, document translation(s), or to address technical & capacity issues;
- provide the Crown with all the details about potential impacts on established or asserted Aboriginal or treaty rights, how these concerns have been considered and addressed by the proponent and the Aboriginal communities and any steps taken to mitigate the potential impacts;
- provide the Crown with complete and accurate documentation from these meetings and communications; and
- notify the Crown immediately if an Aboriginal community not identified by the Crown approaches the proponent seeking consultation opportunities.

b) What documentation and reporting does the Crown need from the proponent?

Proponents should keep records of all communications with the Aboriginal communities involved in the consultation process and any information provided to these Aboriginal communities.

As the Crown is required to assess the adequacy of consultation, it needs documentation to satisfy itself that the proponent has fulfilled the procedural aspects of consultation delegated to it. The documentation required would typically include:

- the date of meetings, the agendas, any materials distributed, those in attendance and copies of any minutes prepared;
- the description of the proposed project that was shared at the meeting;
- any and all concerns or other feedback provided by the communities;
- any information that was shared by a community in relation to its asserted or established Aboriginal or treaty rights and any potential adverse impacts of the proposed activity, approval or disposition on such rights;

- any proposed project changes or mitigation measures that were discussed, and feedback from Aboriginal communities about the proposed changes and measures;
- any commitments made by the proponent in response to any concerns raised, and feedback from Aboriginal communities on those commitments;
- copies of correspondence to or from Aboriginal communities, and any materials distributed electronically or by mail;
- information regarding any financial assistance provided by the proponent to enable participation by Aboriginal communities in the consultation;
- periodic consultation progress reports or copies of meeting notes if requested by the Crown;
- a summary of how the delegated aspects of consultation were carried out and the results; and
- a summary of issues raised by the Aboriginal communities, how the issues were addressed and any outstanding issues.

In certain circumstances, the Crown may share and discuss the proponent's consultation record with an Aboriginal community to ensure that it is an accurate reflection of the consultation process.

c) Will the Crown require a proponent to provide information about its commercial arrangements with Aboriginal communities?

The Crown may require a proponent to share information about aspects of commercial arrangements between the proponent and Aboriginal communities where the arrangements:

- include elements that are directed at mitigating or otherwise addressing impacts of the project;
- include securing an Aboriginal community's support for the project; or
- may potentially affect the obligations of the Crown to the Aboriginal communities.

The proponent should make every reasonable effort to exempt the Crown from confidentiality provisions in commercial arrangements with Aboriginal communities to the extent necessary to allow this information to be shared with the Crown.

The Crown cannot guarantee that information shared with the Crown will remain confidential. Confidential commercial information should not be provided to the Crown as part of the consultation record if it is not relevant to the duty to consult or otherwise required to be submitted to the Crown as part of the regulatory process.

V. WHAT ARE THE ROLES AND RESPONSIBILITIES OF ABORIGINAL COMMUNITIES' IN THE CONSULTATION PROCESS?

Like the Crown, Aboriginal communities are expected to engage in consultation in good faith. This includes:

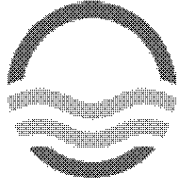
- responding to the consultation notice;
- engaging in the proposed consultation process;
- providing relevant information;
- clearly articulating the potential impacts of the proposed project on Aboriginal or treaty rights; and
- discussing ways to mitigate any adverse impacts.

Some Aboriginal communities have developed tools, such as consultation protocols, policies or processes that provide guidance on how they would prefer to be consulted. Although not legally binding, proponents are encouraged to respect these community processes where it is reasonable to do so. Please note that there is no obligation for a proponent to pay a fee to an Aboriginal community in order to enter into a consultation process.

To ensure that the Crown is aware of existing community consultation protocols, proponents should contact the relevant Crown ministry when presented with a consultation protocol by an Aboriginal community or anyone purporting to be a representative of an Aboriginal community.

VI. WHAT IF MORE THAN ONE PROVINCIAL CROWN MINISTRY IS INVOLVED IN APPROVING A PROPONENT'S PROJECT?

Depending on the project and the required permits or approvals, one or more ministries may delegate procedural aspects of the Crown's duty to consult to the proponent. The proponent may contact individual ministries for guidance related to the delegation of procedural aspects of consultation for ministry-specific permits/approvals required for the project in question. Proponents are encouraged to seek input from all involved Crown ministries sooner rather than later.



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

WIARTON
WASTEWATER TREATMENT PLANT

ANNUAL PERFORMANCE REPORT

For the period of
JANUARY 1, 2017 TO DECEMBER 31, 2017

Prepared by the Ontario Clean Water Agency
For The Corporation of the Town of South Bruce Peninsula

1. System Description

The Wiarton Wastewater Treatment System began operating in its present configuration in 2016. The facility includes a three (3)-cell Moving Bed Bioreactor System (MBBR), a three (3)-cell (6ha.) waste stabilization lagoon system that is aerated and operated in series configuration, a Dynasand Filtration System and a UV disinfection System.

The collection system serves the former Town of Wiarton. All raw sewage, including waste from the Wiarton Water Filtration Plant sewage pump station is collected at Sewage Pump Station no. 1 (SPS no.1) located at the intersection of George and Taylor Street. SPS no.1 is equipped with two (2) 60 hp 1775 rpm sewage pumps located in a dry well each with a rated capacity of 103.0 L/s at a TDH of 29.0 m (one duty, one standby) and a combined rated capacity of 130 L/s at a TDH of 39.0 m. The dry well is equipped with a forcemain air relief and vacuum relief valve. The sewage is then pumped to Sewage Pump Station no.2 (SPS no.2) located at the intersection of Taylor and Elm Street. SPS no.2 is equipped with three (3) 90 hp sewage pumps located in a wet well each with a rated capacity of 116 L/s at a TDH of 30.5 m (one (1) duty, two (2) standby), and two pumps in parallel having a rated capacity of 164.81 L/sec at a TDH of 36.68m (two (2) duty, one (1) standby) From there, the raw sewage is pumped to a three (3)-cell MBBR System and then flows to a three (3)-cell waste stabilization lagoon system which provides effluent polishing. Coagulant is injected at the MBBR effluent to provide precipitation of phosphorous in the lagoons. The discharge from lagoon cell #3 is continuous.

The Septage Receiving Station has controlled access and a magnetic flow meter to record volumes of septage being received. The Septage Receiving Station discharges to the filter backwash pumping station.

Disinfection that utilizes the UV disinfection system is only required from May 15 to September 15 but is currently being operated year round.

The plant discharge utilizes the pipe located on Mary Street to Isaac Street (original) as well as the original abandoned forcemain on Taylor Street. Both pipes intersect at the discharge pipe located at George and Tyson Streets.

An overview of the Wiarton Wastewater Treatment System can be found in Table 1 and a summary of the monitoring program can be found in Table 2.

Table 1. Wiarton Wastewater Treatment System Overview

Facility Name	Warton Wastewater Treatment Plant
Facility Type	MBBR 3-cell, Aerated Lagoon3-cell, Sand Filtration, UV disinfection with pumping stations (3)
Plant Classification	II
Works Number	20002681
Recommended Rated Capacity	2,500 m ³ /day 4,400 m ³ /day (under ECA 6045-ARDJS7, issued November 23, 2017)
Number of Households	1,100
Receiving Water	Colpoy's Bay (Georgian Bay)
Environmental Compliance Approval Certificate of Approval	ECA 6375-A2PKKS (January 1, 2017 to February 23, 2017) ECA 6211-AGEU4W (February 24, 2017 to November 22, 2017) ECA 6045-ARDJS7 (November 23, 2017 to December 31, 2017)
	3-0709-82-006 (Air)

Table 2. Monitoring Program for Wiarton WWTP

Source	Parameter	Frequency	Method
Influent	Flow (m ³)	Daily	Flow Meter
	BOD ₅ , TSS, TP, TKN	Monthly	External Analysis
Effluent	Flow (m ³)	Daily	Flow Meter
	CBOD ₅ , TSS, Total Ammonia (TAN)) Nitrogen, Total Phosphorus	Bi-Weekly	External Analysis
	E. Coli	Bi-Weekly	External Analysis
	pH, Temperature	Bi-Weekly	In-House & External Analysis
	Temperature	Bi-Weekly	In-House & External Analysis
Septage	Flow (m ³)	Daily	Flow Meter
	BOD ₅ , Total Suspended Solids, Total Phosphorous, Total Kjeldahl Nitrogen, Total Ammonia Nitrogen (TAN), Chemical Oxygen Demand Organics: Acetone, Benzene, Ethylbenzene, Isopropyl alcohol, Methyl alcohol, Methylene Chloride, Methyl ethyl, ketone, Toluene, Xylene	Monthly	External Analysis
	Metals: Aluminum, Arsenic, Barium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Potassium, Selenium, Silver, Sodium, Tin, Zinc	Quarterly	External Analysis
MBBR	DO, pH, Temperature, Ammonia	Daily	Online analyzers
	BOD, TSS, Alkalinity, Total Phosphorous	Bi-Weekly	External Analysis

2. Monitoring Data

ECA 6375-A2PKKS requires:

(a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 7, including an overview of the success and adequacy of the Works;

ECA 6211-AGEU4W requires:

(a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 7, including an overview of the success and adequacy of the Works;

ECA 6045-ARDJS7 requires:

- (a). a summary and interpretation of all Influent and Imported Sewage monitoring data, including sewage characteristics, flow rates and a comparison to the values used in the design of the Works;
- (b). a summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;

2.1 Sampling Frequency

Both raw sewage and effluent are sampled on a regular basis. The sampling types and frequencies are summarized in Table 3, Table 4 and Table 5. The sampling frequencies either meet or exceed the requirements set out in ECA 6375-A2PKKS, ECA 6211-AGEU4W and ECA 6045-ARDJS7.

Table 3. Raw Sewage Monitoring – Sampling Frequencies as Required (by ECA 6375-A2PKKS, ECA 6211-AGEU4W and ECA 6045-ARDJS7)

Parameter	Sample Type	Frequency
BOD ₅	Grab	Monthly
Total Suspended Solids	Grab	Monthly
Total Phosphorous	Grab	Monthly
Total Kjeldahl Nitrogen	Grab	Monthly

Table 4. Effluent Sampling Monitoring – Sampling Frequencies as Required

Parameters	Frequency	ECA 6375-A2PKKS	ECA 6211-AGEU4W	ECA 6045-ARDJS7
CBOD ₅	Bi-weekly	24-hour Composite	24-hour Composite	8-hr Composite
Total Suspended Solids	Bi-weekly	24-hour Composite	24-hour Composite	8-hr Composite
Total Phosphorous	Bi-weekly	24-hour Composite	24-hour Composite	8-hr Composite
Total Ammonia Nitrogen (TAN)	Bi-weekly	24-hour Composite	24-hour Composite	8-hr Composite
E. Coli	Bi-weekly	Grab	Grab	Grab
pH	Bi-weekly	Grab	Grab	Grab
Temperature	Bi-weekly	Grab	Grab	Grab

Table 5. Imported Sewage Monitoring – Sampling Frequencies as Required by Schedule D of ECA 6045-ARDJS7

Parameters	Sample Type	ECA 6045-ARDJS7
BOD ₅	Grab	Monthly
Total Suspended Solids	Grab	Monthly
Total Phosphorous	Grab	Monthly
Total Kjeldahl Nitrogen	Grab	Monthly
Total Ammonia Nitrogen (TAN)	Grab	Monthly
Chemical Oxygen Demand	Grab	Monthly
Organics: Acetone, Benzene, Ethylbenzene, Isopropyl alcohol, Methyl alcohol, Methylene Chloride, Methyl ethyl, ketone, Toluene, Xylene	Grab	Monthly
Metals: Aluminum, Arsenic, Barium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Potassium, Selenium, Silver, Sodium, Tin, Zinc	Grab	Quarterly

2.2 Effluent Limits

The effluent limits that are to be met as per ECA 6375-A2PKKS, ECA 6211-AGEU4W, and ECA 6045-ARDJS7 for the Wiaraton Sewage Treatment Lagoon are found in Table 6.

Table 6. Effluent Limits as per ECA 6375-A2PKKS, ECA 6211-AGEU4W, and ECA 6045-ARDJS7.

Effluent Parameter	ECA 6375-A2PKKS (Section 7)		ECA 6211-AGEU4W (Section 8)		ECA 6045-ARDJS7 (Schedule C)	
	Monthly Average Concentration (mg/L)	Monthly Average Waste Loading (kg/day)	Monthly Average Concentration (mg/L)	Monthly Average Waste Loading (kg/day)	Monthly Average Concentration (mg/L) *	Monthly Average Waste Loading (kg/day)
CBOD ₅	20	50	20	50	15	66
Total Suspended Solids	24	60	24	60	15	66
Total Phosphorous as P	0.5	1.25	0.5	1.25	0.3	1.32
Total Ammonia Nitrogen (May 1 to October 31)	n/a	n/a	n/a	n/a	3	13.2
Total Ammonia Nitrogen (November 1 to April 30)	n/a	n/a	n/a	n/a	6	26.4
pH	Maintained between 6.0 to 9.5, inclusive, at all times					
E. Coli	Not to exceed 200 cfu/100 mL geometric mean density from May 15 to September 15					

*Under ECA 6045-ARDJS7 "Monthly Average Effluent Concentration" means the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month, weighted by the quantity of the Final Effluent discharged per the days deemed to be represented by each sample

2.3 Comparison of Data to Limits/Design Values

Analytical and monitoring data for the Wiarton Wastewater Treatment System is housed in OCWAs data management system (WISKI7). Annual and monthly averages for flows, CBOD, BOD₅, Suspended Solids, Total Phosphorous as P, Nitrogen-series and E.coli can be found in Appendix A. Comparisons of analytical data from effluent samples to the effluent limits show the following removal efficiencies:

Table 7. 2017 Effluent Annual Average Concentrations and Removal Efficiencies

Parameter	Annual Average Concentration	Removal Efficiency
CBOD ₅	3.708	98.6%
Total Suspended Solids	5.028	98.6%
Total Phosphorous	0.084	97.9%

The following is a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Table 8.

Table 8. Comparison of Warton Wastewater Treatment System Monitoring Data to Effluent Limits, 2017

2017	CBOD ₅				Total Suspended Solids				Total Phosphorous				Total Ammonia Nitrogen (TAN)				E. Coli	
	Monthly Average (mg/L)	Within Limits (Jan 1, 2017 to Nov 22, 2017 20 mg/L & Nov 23, 2017 to Dec 31, 2017 15 mg/L)	Monthly Average Loading (kg/d)	Within Limits (Jan 1, 2017 to Nov 22, 2017 50 kg/day & Nov 23, 2017 to Dec 31, 2017 66 kg/day)	Monthly Average (mg/L)	Within Limits (Jan 1, 2017 to Nov 22, 2017 24 mg/L & Nov 23, 2017 to Dec 31, 2017 15 mg/L)	Monthly Average Loading (kg/d)	Within Limits (Jan 1, 2017 to Nov 22, 2017 60 kg/day & Nov 23, 2017 to Dec 31, 2017 66 kg/day)	Monthly Average (mg/L)	Within Limits (Jan 1, 2017 to Nov 22, 2017 0.5 mg/L & Nov 23, 2017 to Dec 31, 2017 0.3 mg/L)	Monthly Average Loading (kg/d)	Within Limits (Jan 1, 2017 to Nov 22, 2017 1.25 kg/day & Nov 23, 2017 to Dec 31, 2017 1.32 kg/day)	Monthly Average (mg/L)	Within Limits (Nov 1 to Apr 1 - 6.0 mg/L & May 1 to Oct 31 - 3.0 mg/L)	Monthly Average Loading (kg/d)	Within Limits (Nov 1 to Apr 1 - 13.2 kg/day & May 1 to Oct 31 - 26.4 kg/day)	Mean Geometric Density (cfu/100 mL)	Within Limits (200 cfu/100 mL)
January	3.7	Y	9,764	Y	4.7	Y	12,427	Y	0.12	Y	0.328	Y	0.47	n/a	1.243	n/a	2.0	Y
February	2.7	Y	5,326	Y	4.3	Y	8,655	Y	0.09	Y	0.173	Y	0.20	n/a	0.399	n/a	2.0	Y
March	7.0	Y	19,379	Y	8.3	Y	23,070	Y	0.07	Y	0.203	Y	0.10	n/a	0.277	n/a	2.0	Y
April	9.0	Y	23,513	Y	15.5	Y	40,495	Y	0.08	Y	0.196	Y	0.20	n/a	0.523	n/a	2.0	Y
May	5.5	Y	9,773	Y	7.0	Y	12,438	Y	0.10	Y	0.169	Y	0.20	n/a	0.355	n/a	2.0	Y
June	2.0	Y	2,563	Y	3.0	Y	3,845	Y	0.09	Y	0.109	Y	0.10	n/a	0.128	n/a	2.0	Y
July	2.7	Y	4,293	Y	3.0	Y	4,829	Y	0.06	Y	0.097	Y	1.97	n/a	3.166	n/a	3.4	Y
August	2.0	Y	1,853	Y	3.0	Y	2,780	Y	0.07	Y	0.060	Y	0.80	n/a	0.741	n/a	60.7	Y
September	2.0	Y	1,288	Y	3.0	Y	1,931	Y	0.12	Y	0.074	Y	0.10	n/a	0.064	n/a	2.0	Y
October	2.0	Y	2,942	Y	2.0	Y	2,942	Y	0.08	Y	0.118	Y	0.10	n/a	0.147	n/a	2.0	Y
November	2.0*	Y	4,335	Y	2.0*	Y	4,335	Y	0.08*	Y	0.184	Y	0.43*	Y	1.084	Y	1.4	Y
December	3.8*	Y	8,911	Y	4.3*	Y	10,025	Y	0.06*	Y	0.134	Y	0.24*	Y	0.446	Y	2.0	Y

*"Monthly Average Effluent Concentration" means the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month, weighted by the quantity of the Final Effluent discharged per the days deemed to be represented by each sample

During the reporting period there were no reportable instances where the sewage lagoon system exceeded the effluent limits set out in the ECA.

Another measure of effluent quality is pH, as per ECA 6375-A2PKKS, ECA 6211-AGEU4W, and ECA 6045-ARDJS7 the effluent pH is to remain within the range of 6.0 and 9.5 at all times. In 2017, the effluent was within the effluent limits and ranged from 6.89 to 9.20 with an annual average of 7.89. A monthly summary of pH can be found in Table 9

Table 9. Monthly Summary of pH for the Wiaraton Wastewater Treatment System, 2017

	Average	Minimum	Maximum
January	7.83	7.50	8.56
February	8.10	7.98	8.17
March	8.67	8.37	8.88
April	8.52	7.47	8.97
May	7.95	7.52	8.82
June	8.03	7.70	8.56
July	7.71	7.66	7.76
August	7.99	7.85	8.13
September	8.63	8.08	9.20
October	7.16	6.91	7.93
November	7.20	6.89	7.41
December	7.12	7.00	7.27

2.4 Effluent Objectives

The effluent objectives as per ECA 6375-A2PKKS, ECA 6211-AGEU4W, and ECA 6045-ARDJS7 for the Wiarton Wastewater Treatment Lagoon are found in Table 10.

Table 10. Effluent Objectives as per ECA 6375-A2PKKS, ECA 6211-AGEU4W, and ECA 6045-ARDJS7.

Effluent Parameter	ECA 6375-A2PKKS (Section 6)		ECA 6211-AGEU4W (Section 7)		ECA 6045-ARDJS7 (Schedule B)	
	Monthly Average Concentration (mg/L)	Monthly Average Waste Loading (kg/day)	Monthly Average Concentration (mg/L)	Monthly Average Waste Loading (kg/day)	Monthly Average Concentration (mg/L) *	Monthly Average Waste Loading (kg/day)
CBOD ₅	15	37.5	15	37.5	10	n/a
Total Suspended Solids	15	37.5	15	37.5	10	n/a
Total Phosphorous as P	0.3	0.75	0.3	0.75	0.15	n/a
Total Ammonia Nitrogen (May 1 to October 31)	3	7.5	3	7.5	3	n/a
Total Ammonia Nitrogen (November 1 to April 30)	8	20	8	20	6	n/a
pH	Maintained between 6.5 to 8.5, inclusive, at all times				n/a	

*Under ECA 6045-ARDJS7 "Monthly Average Effluent Concentration" means the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month, weighted by the quantity of the Final Effluent discharged ver the days deemed to be represented by each sample

2.5 Comparison of Data to Effluent Objectives

- (f) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6;
(f) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6;
(b). a summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;(6045-ARDJS7)
(g). a summary of efforts made to achieve the design objectives;

- The Owner shall make an assessment of the issues and recommendations for pro-active actions if any is required under the following situations and include in the annual report to the Water Supervisor:
 - a. when any of the design objectives is not achieved more than 50% of the time in a year;

During the reporting period, the plant effluent was within the effluent objectives 91.2% of the time. Refer to Table 11 for detailed laboratory analysis results in comparison to the effluent objectives.

Table 51. Comparison of Warton Wastewater Treatment System Monitoring Data to Effluent Objectives, 2017

2017	CBODs				Total Suspended Solids				Total Phosphorous				Total Ammonia Nitrogen (TAN)			
	Monthly Average (mg/L)	Within Objective (Jan 1, 2017 to Nov 22, 2017 15 mg/L & Nov 23, 2017 to Dec 31, 2017 10 mg/L)	Monthly Average Loading (kg/d)	Within Objective (Jan 1, 2017 to Nov 22, 2017 37.5 kg/day & Nov 23, 2017 to Dec 31, 2017 no objective)	Monthly Average (mg/L)	Within Objective (Jan 1, 2017 to Nov 22, 2017 15 mg/L & Nov 23, 2017 to Dec 31, 2017 10 mg/L)	Monthly Average Loading (kg/d)	Within Objective (Jan 1, 2017 to Nov 22, 2017 37.5 kg/day & Nov 23, 2017 to Dec 31, 2017 no objective)	Monthly Average (mg/L)	Within Objective (Jan 1, 2017 to Nov 22, 2017 0.3 mg/L & Nov 23, 2017 to Dec 31, 2017 0.15 mg/L)	Monthly Average Loading (kg/d)	Within Objective (Jan 1, 2017 to Nov 22, 2017 0.75 kg/day & Nov 23, 2017 to Dec 31, 2017 no objective)	Monthly Average (mg/L)	Within Objective (Nov 1 to Apr 1 - 5.0 mg/L & May 1 to Oct 31 - 3.0 mg/L)	Monthly Average Loading (kg/d)	Within Objective (Nov 1 to Apr 1 - 7.5 kg/day & May 1 to Oct 31 - 20 kg/day)
January	3.7	Y	9.764	Y	4.7	Y	12.427	Y	0.12	Y	0.328	Y	0.47	n/a	1.243	Y
February	2.7	Y	5.326	Y	4.3	Y	8.655	Y	0.09	Y	0.173	Y	0.20	n/a	0.399	Y
March	7.0	Y	19.379	Y	8.3	Y	23.070	Y	0.07	Y	0.203	Y	0.10	n/a	0.277	Y
April	9.0	Y	23.513	Y	15.5	N	40.495	N	0.08	Y	0.196	Y	0.20	n/a	0.523	Y
May	5.5	Y	9.773	Y	7.0	Y	12.438	Y	0.10	Y	0.169	Y	0.20	n/a	0.355	Y
June	2.0	Y	2.563	Y	3.0	Y	3.845	Y	0.09	Y	0.109	Y	0.10	n/a	0.128	Y
July	2.7	Y	4.293	Y	3.0	Y	4.829	Y	0.06	Y	0.097	Y	1.97	n/a	3.166	Y
August	2.0	Y	1.853	Y	3.0	Y	2.780	Y	0.07	Y	0.060	Y	0.80	n/a	0.741	Y
September	2.0	Y	1.288	Y	3.0	Y	1.931	Y	0.12	Y	0.074	Y	0.10	n/a	0.064	Y
October	2.0	Y	2.942	Y	2.0	Y	2.942	Y	0.08	Y	0.118	Y	0.10	n/a	0.147	Y
November	2.0*	Y	4.335	Y	2.0*	Y	4.335	Y	0.08*	Y	0.184	Y	0.43*	Y	1.084	n/a
December	3.8*	Y	8.911	n/a	4.3*	Y	10.025	n/a	0.06*	Y	0.134	Y	0.24*	Y	0.446	n/a

*"Monthly Average Effluent Concentration" means the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month, weighted by the quantity of the Final Effluent discharged per the days deemed to be represented by each sample

2.6 Effluent Monitoring

The total effluent flow in 2017 was 673,838 m³ with an annual average daily flow of 1,846 m³/day. Total effluent flows in 2017 have increased in comparison to 2016.

2.7 Influent Monitoring

ECA 6045-ARDJS7 requires:

(a). a summary and interpretation of all Influent and Imported Sewage monitoring data, including sewage characteristics, flow rates and a comparison to the values used in the design of the Works;

The total influent flow in 2017 was 698,235 m³ with an annual average daily flow of 1,917.69 m³/day, which is 76.7% of the recommended rated capacity of 2,500 m³/day (ECA 6375-A2PKKS and ECA 6211-AGEU4W). Under ECA 6045-ARDJS7 the rated capacity is now 4,400 m³/day. Total influent flows in 2017 have slightly increased in comparison to 2016. The daily influent flow remained within the recommended rated capacity 82.2% (i.e. 300 out of 365 days) of the time during 2017.

Table 12: Influent Characteristics

	Minimum	Average	Maximum
cBOD5 (mg/L)	58	101	145
BOD5 (mg/L)	43	146	231
TSS (mg/L)	46	118	221
TKN (mg/L)	10.9	19.7	32.3
Total Phosphorous	0.21	2.10	4.06

In 2017, approximately 2,724.86 m³ of septage was received by the Warton Wastewater Treatment System, slightly increased from 2016 (2,312.92 m³) and 2015 (2,306.75 m³) volumes. ECA 6045-ARDJS7 requires monthly septage samples to be tested for BOD5, Total Suspended Solids, Total Phosphorous, Total Kjeldahl Nitrogen, Total Ammonia Nitrogen (TAN), Chemical Oxygen Demand, Organics and Metals (Quarterly). Biochemical Oxygen Demand (BOD5), Total Phosphorus and Chemical Oxygen Demand are fairly stable; Total Suspended Solids, Total Kjeldahl Nitrogen (TKN) and Total Ammonia seem to vary between samples. Refer to Appendix F for Septage Laboratory Results.

Table 13: Septage Receiving Characteristics (November 2017 – December 2017)

	Minimum	Maximum
Biochemical Oxygen Demand (BOD5) [mg/L]	1,530	1,540
Total Suspended Solids [mg/L]	430	1,310
Chemical Oxygen Demand [mg/L]	2,920	3,180
Ammonia+Ammonium (N) [mg/L]	8	39
Total Kjeldahl Nitrogen [as N mg/L]	60	78
Phosphorus (total) [mg/L]	14	15
Isopropyl Alcohol [mg/L]	<5	< 5
Methyl alcohol [mg/L]	<5	< 5
Acetone [µg/L]	< 300	< 600
Benzene [µg/L]	< 5	< 10
Ethylbenzene [µg/L]	< 5	< 10
Methylene Chloride [ug/L]	< 5	< 10
Methyl ethyl ketone [µg/L]	< 200	< 400
Toluene [µg/L]	39	44
Xylene (total) [µg/L]	< 5	< 10
o-xylene [µg/L]	< 5	< 10
m/p-xylene [µg/L]	< 5	< 10

2.8 Additional Monitoring Parameters

The following parameters do not have effluent limits or objectives but are monitored on a regular basis (see Section 2.1 for sampling frequency) as required by ECA 6375-A2PKKS, ECA 6211-AGEU4W, and ECA 6045-ARDJS7.

2.8.1 Flows

The Owner shall make an assessment of the issues and recommendations for pro-active actions if any is required under the following situations and include in the annual report to the Water Supervisor:

- o *b. when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity.*

The total influent flow in 2017 was 698,235 m³ with an annual average daily flow of 1,917.69 m³/day, which is 76.7% of the recommended rated capacity of 2,500 m³/day (ECA 6375-A2PKKS and ECA 6211-AGEU4W).

Under ECA 6045-ARDJS7 the rated capacity is now 4,400 m³/day. Total influent flows in 2017 have slightly increased in comparison to 2016. The daily influent flow remained within the recommended rated capacity 82.2% (i.e. 300 out of 365 days) of the time during 2017.

A summary of the average and maximum daily flows on a monthly basis can be found in Table 14. It should be noted that a maximum or average day flow for the month does not indicate that the rated capacity was exceeded for every day of the entire month. Daily flows which exceeded the recommended rated capacity were typically due to high precipitation. For more detailed information regarding flows, refer to Appendix A.

Table 14. Average Daily Raw Sewage Flows by Month for 2017

2017	Maximum Daily Raw Sewage Flow (m ³ /d)	Average Daily Raw Sewage Flow (m ³ /d)	Annual Average (m ³ /d)	Within Limits of Rated Capacity (2,500 m ³ /d)
January	4,324	2,677	1,917	Yes
February	6,578	2,623		
March	5,544	2,133		
April	6,026	2,577		
May	3,787	2,124		
June	3,979	1,918		
July	7,829	2,325		
August	1,944	1,460		
September	1,451	1,124		
October	1,540	1,016		
November	3,090	1,657		
December	2,158	1,379		

2.8.2 TKN

A parameter which is monitored on a regular basis but does not have effluent limits or objectives is TKN. The annual average TKN has decreased since 2015 (i.e. 1.16 mg/L in 2017, 3.46 mg/L in 2016, and 4.75 mg/L in 2015).

Table 65. Monitoring Parameters for Wiarton Wastewater Treatment System, 2017

Parameters	Average	Minimum	Maximum
Total Kjeldahl Nitrogen (N mg/L)	1.16	0.50	3.40

2.9 Success & Adequacy of the System

Based upon a review of the analytical and monitoring data in comparison to the effluent limits and objectives it can be concluded that the Wiarton Wastewater Treatment System is performing adequately and successfully. The system shows a high removal efficiency and was within effluent limits the vast majority of the time. Regular

monitoring and necessary process changes will continue to be made to best optimize the system and enable the system to be within the effluent objectives for a greater period of time.

3. Operating Challenges & Corrective Actions

(b) a description of any operating problems encountered and corrective actions taken; (6375-A2PKKS)

(b) a description of any operating problems encountered and corrective actions taken;(6211-AGEU4W)

(c). a summary of all operating issues encountered and corrective actions taken;(6045-ARDJS7)

There was one overflow at the Wiarton Wastewater Treatment System or any associated pumping station and the sewage lagoon system operated within its rated capacity. For 2017 an operating challenge was the intermittent power bumps which caused the treated sewage to bypass UV disinfection, the required bypass reporting was completed and Operations staff were able to maintain good overall performance of the sewage lagoon system.

4. Major Maintenance & Emergency Repairs

(c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;

(c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;

d. a summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works;

- SCADA programming and hardware for the new Aluminum Sulfate Injection system.
- Creation of Wiarton WWTP Moving Bed Bioreactor System Operational Guidelines
- New faucet mounted eye wash station for MBBR building.
- Refurbished Wedeco Ultraviolet Disinfection Unit wiper assembly.
- Replaced UV Ballasts
- Septage Receiving Station Valve Chamber – repairs made to concrete as ground water was seeping into chamber.
- MBBR Cells – repairs made to concrete walls to mitigate leaks.
- Repaired Louvers at pump station 1.
- Repaired coolant leak on diesel generator at pump station 1.
- Cleaned filter building wet well.
- Cleaned pump station no. 1 wet well.
- Cleaned pump station no. 2 wet well.
- Performed maintenance on all pumps at pump station no. 2
- Flushed collection system in Wiarton.
- Installed new motor on air scrubber in MBBR building.

5. Effluent Quality Assurance/Control Measures

• (d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;

• (d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;

• e. a summary of any effluent quality assurance or control measures undertaken;

All laboratory analyzed raw sewage and effluent samples (Section 3.1) are analyzed by SGS Canada Inc., which is an ISO 17025 accredited laboratory. Calibrations and preventative maintenance are performed on facility equipment and monitoring equipment, see Section 6 for more details. In addition to sample analysis, preventative maintenance is scheduled for all equipment in the sewage lagoon system and pumping stations on at least a monthly basis. Maintenance activities were scheduled within the work management system MAXIMO.

6. Calibration & Maintenance

- *(e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;*
- *(e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;*
- *f. a summary of the calibration and maintenance carried out on all Influent, Imported Sewage and Final Effluent monitoring equipment;*

All in-house monitoring equipment was calibrated as per manufacturer's recommendations. Monitoring and metering equipment was also calibrated by a third party and is done so on an annual basis. In addition to sample analysis, preventative maintenance is scheduled for all equipment at the sewage lagoon system and pumping stations on at least a monthly basis. Maintenance activities were scheduled within the work management system MAXIMO, upon completion, Operators sign-off and the work order is considered closed.

On May 8, 2017, Flowmetrix performed an annual third party instrument verification of the influent, final effluent, Septage Receiving and sewage pumping station #1 and #2 flowmeters. All flow meters passed the annual verification all with percent errors of less than 5%. All records for calibrations/ verifications can be found in Appendix B.

On July 6, 2017, HACH performed an annual third party instrument verification of the DO probes, and pH analyzers. All instrumentation passed the annual verification. All records for calibrations/verifications can be found in Appendix B.

7. Sludge Generation and Handling

- (g) a tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;*
- (g) a tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;*
- (h). a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;*

Since the facility is a sewage lagoon system, accumulated sludge is stored in the lagoon cells. No sludge was disposed of in 2017 and no sludge is expected to be removed in 2018.

8. Septage Receiving Works

In 2017, approximately 2,724.86 m³ of septage was received by the Warton Wastewater Treatment System. The septage was received from various sources including:

- Owen Sound Septic Services
- Grey Bruce Septic Services
- Bluewater Sanitation
- D&S Portables

The total monthly volume of septage received can be found in Table 16. Detailed haulage volumes can be found in Appendix C.

Table 16. Total Volume of Septage Received in 2017

Month	Total Volume of Septage Received (m ³)
January	226.78
February	162.30
March	228.67
April	200.94
May	203.66
June	195.09
July	369.10
August	384.32
September	234.23
October	196.57
November	148.90
December	174.30

9. Community Complaints

- *(h) a summary of any complaints received during the reporting period and any steps taken to address the complaints;*
- *(h) a summary of any complaints received during the reporting period and any steps taken to address the complaints;*
- *a summary of any complaints received and any steps taken to address the complaints;*

During 2017, thirteen (13) community complaints for the Warton Wastewater Treatment System were received regarding sewer lateral services blockages. A detailed summary of the community complaints can be found in Appendix D.

10. By-passes, Spills, Overflows and Abnormal Discharge Events

- *a summary of all By-pass, spill or abnormal discharge events;*
- *a summary of all By-pass, spill or abnormal discharge events;*
- *j. a summary of all Bypasses, Overflows, spills within the meaning of Part X of EPA and abnormal discharge events, and other abnormal operating conditions;*

There was one overflow and no abnormal discharge events in 2017 at the Warton Wastewater Treatment System.

Table 17. Overflow Events

Environmental Incident #	Date	Time		Duration HH:MM	Volume (M ³)	Treatment Process	Reason for Bypass	Samples
		Start	End					
901318	July 13, 2017	14:42	15:12	0:30	18	PS1 – RAW SEWAGE	Heavy rains	SGS Laboratory Results CA13425 & CA14414

Six (6) reports of final effluent (total volume of 192.7 m³) being discharged without receiving UV disinfection were reported. All required information was recorded and the appropriate notifications were made to the Spills Action Centre, Ministry of Environment and Climate Change, Ministry of Health, the Town of South Bruce Peninsula and Environment Canada. Refer to Table 16 for a summary and Appendix E for detailed by-pass reports. As of February 24, 2017 (ECA 6211-AGEU4W & ECA 6045-ARDJS7), quarterly bypass/overflow reports are to be submitted to the Water supervisor. All 2017 quarterly reports were submitted to the Water Supervisor by the deadline and have been included in Appendix E.

Table 18. Bypass Events

Date	Time		Duration	Volume	Treatment Process Bypassed	Reason for Bypass
	Start	End	HH:MM	(M ³)		
February 25, 2017	13:00	13:15	0:15	31.3	UV System	Power outage caused UV system to fail
June 13, 2017	08:55	09:10	0:15	6.0	UV System	Power outage caused UV system to fail
July 10, 2017	07:50	09:50	2:00	89.5	UV System	Power outage/phase loss damaged ballast on UV
September 27, 2017	09:01	09:26	0:25	8.7	UV System	Power outage/phase loss
September 29, 2017	13:10	13:50	0:40	22.2	UV System	Power outage
November 6, 2017	10:40	11:00	0:20	35	UV System	Power outage

11. Notice of Modifications

- (j) a copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule B, Section 1, with a status report on the implementation of each modification;*
- (j) a copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule B, Section 1, with a status report on the implementation of each modification;*
- (k). a copy of all Notice of Modifications to Sewage Works submitted to the Water Supervisor under paragraph 1.d. of Condition 10, with a summary report on status of implementation of all modification.*

No Notices of Modifications have been submitted to the Water Supervisor during the reporting period.

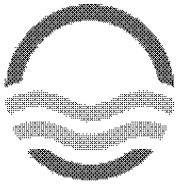
12. Modifications

- (k) a report summarizing all modifications completed as a result of Schedule B, Section 3*
 - (k) a report summarizing all modifications completed as a result of Schedule B, Section 3*
- No modifications were completed as a result of Schedule B, Section 3 during the reporting period.

13. Information for Water Supervisor

- (l) any other information the Water Supervisor may require from time to time.*
- (l) any other information the Water Supervisor may require from time to time.*

The Water Supervisor has not made any requests for additional information to be included in the Performance Report for this reporting period.



Ontario Clean Water Agency
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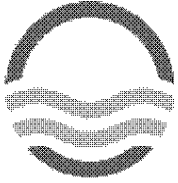
Appendix A

Performance Assessment Report

Ontario Clean Water Agency
Performance Assessment Report Wastewater/Lagoon
From: 01/01/2017 to 31/12/2017

Report extracted 03/23/2018 09:20
Facility: [5620] WARTON WASTEWATER TREATMENT LAGOON
Works: [110000819]

	01/2017	02/2017	03/2017	04/2017	05/2017	06/2017	07/2017	08/2017	09/2017	10/2017	11/2017	12/2017	<-Total-->	<-Avg-->	<-Max-->
Flows:															
Raw Flow: Total - Raw Sewage (m³)	82999.00	73448.00	66110.00	77312.00	65841.00	57543.00	72063.00	45257.00	33715.00	31500.00	49696.00	42751.00	698235.00		
Raw Flow: Avg - Raw Sewage (m³/d)	2677.39	2623.14	2132.58	2577.07	2123.90	1918.10	2324.61	1459.90	1123.83	1016.13	1656.53	1379.06	1917.69		
Raw Flow: Max - Raw Sewage (m³/d)	4324.00	6578.00	5544.00	6026.00	3787.00	3979.00	7829.00	1944.00	1451.00	1540.00	3090.00	2159.00	7829.00		
Eff. Flow: Total - Effluent (m³)	82562.00	55925.00	85921.00	78377.00	55083.00	36452.00	49903.00	28726.00	19314.00	45607.00	65020.00	69458.00	673638.00		
Eff. Flow: Avg - Effluent (m³/d)	2662.97	1997.32	2768.42	2612.57	1776.87	1281.73	1609.77	926.65	643.90	1471.19	2167.33	2227.68	1845.53		
Eff. Flow: Max - Effluent (m³/d)	5102.00	4690.00	5969.00	5300.00	3838.00	2465.00	3361.00	2081.00	1840.00	2712.00	4285.00	3068.00	5969.00		
Carbonaceous Biochemical Oxygen Demand: CBOD:															
Raw: Avg CBOD5 - Raw Sewage (mg/L)	121.000	102.000	58.000	105.000	59.000	145.000	118.000	118.000	0	0	0	41.000	101.143		145.000
Raw: # of samples of cBOD5 - Raw Sewage (mg/L)	1	1	1	1	1	1	1	1	0	0	0	2	7		9.000
Eff: Avg CBOD5 - Effluent (mg/L)	3.667	2.667	7.000	9.000	5.500	2.000	2.667	2.000	2.000	2.000	2.000	2.000	3.708		9.000
Eff: # of samples of cBOD5 - Effluent (mg/L)	3	3	3	4	2	2	3	2	2	2	2	2	30		23.513
Loading: cBOD5 - Effluent (kg/d)	9.764	5.326	19.379	23.513	9.773	2.563	4.233	1.853	1.288	2.942	4.335	8.911	7.828		98.621
Percent Removal: cBOD5 - Raw Sewage (mg/L)	96.970	97.336	87.931	91.429	90.678	98.621	97.740	128.000	231.000	149.000	43.000	179.000	149.500		231.000
Biochemical Oxygen Demand: BOD6:															
Raw: Avg BOD6 - Raw Sewage (mg/L)															
Raw: # of samples of BOD6 - Raw Sewage (mg/L)															
Total Suspended Solids: TSS:															
Raw: Avg TSS - Raw Sewage (mg/L)	120.000	114.000	80.000	104.000	73.000	159.000	74.000	138.000	221.000	145.000	461.000	145.000	121.167		221.000
Raw: # of samples of TSS - Raw Sewage (mg/L)	1	1	1	1	1	1	2	1	1	1	1	1	13		15.500
Eff: Avg TSS - Effluent (mg/L)	4.867	4.333	8.333	15.500	7.000	3.000	3.000	3.000	3.000	2.000	2.000	4.500	5.028		15.500
Eff: # of samples of TSS - Effluent (mg/L)	3	3	3	8	2	2	3	2	2	2	2	2	34		40.495
Loading: TSS - Effluent (kg/d)	12.427	8.655	23.070	40.495	12.438	3.845	4.829	2.780	1.931	2.942	4.335	10.025	10.648		98.643
Percent Removal: TSS - Raw Sewage (mg/L)	96.111	96.199	86.111	85.096	90.411	98.113	95.946	98.446	98.643	98.621	95.652	96.897	96.843		98.643
Total Phosphorus: TP:															
Raw: Avg TP - Raw Sewage (mg/L)	2.600	1.810	1.420	1.990	1.270	2.950	1.023	3.120	4.060	3.330	1.210	2.600	2.282		4.060
Raw: # of samples of TP - Raw Sewage (mg/L)	1	1	1	1	1	1	3	1	1	1	1	1	14		10.123
Eff: Avg TP - Effluent (mg/L)	0.123	0.087	0.073	0.075	0.095	0.085	0.060	0.065	0.115	0.080	0.085	0.060	0.084		0.123
Eff: # of samples of TP - Effluent (mg/L)	3	3	3	4	2	2	3	2	2	2	2	2	30		0.328
Loading: TP - Effluent (kg/d)	0.328	0.173	0.203	0.196	0.169	0.109	0.097	0.060	0.074	0.118	0.184	0.134	0.154		0.328
Percent Removal: TP - Raw Sewage (mg/L)	95.256	95.212	94.836	96.231	92.520	97.119	94.137	97.917	97.167	97.598	92.975	97.692	97.917		97.917
Nitrogen Series:															
Raw: Avg TKN - Raw Sewage (mg/L)	17.600	12.800	14.200	16.500	11.200	28.300	18.000	28.900	32.300	24.000	10.900	22.100	19.733		32.300
Raw: # of samples of TKN - Raw Sewage (mg/L)	1	1	1	1	1	1	1	1	1	1	1	1	12		19.733
Eff: Avg TAN - Effluent (mg/L)	0.467	0.200	0.100	0.200	0.200	0.100	1.967	0.800	0.100	0.100	0.500	0.200	0.411		1.967
Eff: # of samples of TAN - Effluent (mg/L)	3	3	3	4	2	2	3	2	2	2	2	2	30		3.166
Loading: TAN - Effluent (kg/d)	1.243	0.399	0.277	0.523	0.355	0.128	3.166	0.741	0.064	0.147	1.084	0.446	0.714		3.166
Eff: Avg NO3-N - Effluent (mg/L)	5.120	5.033	3.767	1.640	1.090	0.750	1.497	1.515	0.730	1.050	2.365	4.135	2.391		5.120
Eff: # of samples of NO3-N - Effluent (mg/L)	3	3	3	4	2	2	3	2	2	2	2	2	30		0.157
Eff: Avg NO2-N - Effluent (mg/L)	0.080	0.060	0.030	0.033	0.045	0.030	0.157	0.055	0.030	0.030	0.065	0.075	0.059		0.157
Eff: # of samples of NO2-N - Effluent (mg/L)	3	3	3	4	2	2	3	2	2	2	2	2	30		0.157
Disinfection:															
Eff: GMD E. Coli - Effluent (cfu/100ml)	2.000	2.000	2.000	2.000	2.000	2.000	3.420	60.732	2.000	2.000	1.414	2.000	6.964		60.732



Ontario Clean Water Agency
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Appendix B

Calibration Reports

Western Office Eastern Office
2088 Jetstream Road 1602 Old Wooler Road
London, Ontario Wooler, Ontario
N5V 3P6 K0K 3M0

RESULTS
PASSED

CLIENT DETAIL		DEVICE INFORMATION	
CUSTOMER	OCWA - West Highlands	[MUT] MANUFACTURER	Endress & Hauser
CONTACT	Leo Paul Frigault Cluster Manager 519-797-3080	MODEL	Promag 400
		CONVERTER SERIAL NUMBER	KC1E9919000
		ORDER CODE	5L4C3H-2RW5/0
		PLANT ID	Warton Head Works
		METER ID	Influent Force Main
		FIT ID	FIT-104
		CLIENT TAG	OCWA# not assigned
		OTHER	n/a
		GPS COORDINATES	n/a
VER. BY - FM	Paris Machuk	VERIFICATION DATE	May 08, 2017
Quality Management Standards Information - Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.		CAL. FREQUENCY	Annual
		CAL. DUE DATE	May, 2018

CALIBRATION			TOTALIZER	
DIAMETER (DN)	mm	300	AS FOUND	555735.88 M3
CALIBRATION FACTOR		1.3133	AS LEFT	555735.88 M3
ZERO POINT		-4	DIFFERENCE	0 M3
VERIFICATION INFORMATION			COMPONENTS TESTED	
OPERATING TIME (d/h/m/s)	d	362	SENSOR - Coil Current Shot Time	yes
	h	17	SENSOR - Coil Hold Voltage	yes
	m	22	SENSOR - Coil Current	yes
	s	3	SENSOR - Electrode Reference Voltage	yes
DATE/TIME	date (dd.mm.yy)	08.05.17	SENSOR - Linearity Electrode Circuit	yes
	time (hh:mm)	12:03	SENSOR - Offset Electrode Circuitry	yes
			I/O Module	yes
VERIFICATION ID		2		

OVERALL VERIFICATION		PASSED
SENSOR		PASSED
Coil Current Shot Time		PASSED
Coil Hold Voltage		PASSED
Coil Current		PASSED
SENSOR ELECTRONIC MODULE		PASSED
Reference Voltage		PASSED
Linearity of Electrode Measuring Circuit		PASSED
Offset of Electrode Measuring Circuit		PASSED
SENSOR ELECTRONIC MODULE		PASSED
Reference Voltage		PASSED

COMMENTS

This report reflects the results based on the manufacturers HEARTBEAT diagnostic technology for flow meter verification for all Prosonic 400 series meters with an active HEARTBEAT.

Western Office Eastern Office
2088 Jetstream Road 1602 Old Wooler Road
London, Ontario Wooler, Ontario
N5V 3P6 K0K 3M0

RESULTS
PASSED

CLIENT DETAIL		DEVICE INFORMATION	
CUSTOMER	OCWA - West Highlands	[MUT] MANUFACTURER	Endress & Hauser
CONTACT	Leo Paul Frigault Cluster Manager 519-797-3080	MODEL	Promag 400
		CONVERTER SERIAL NUMBER	KC1E9819000
		ORDER CODE	5L4C2H-3K91/0
		PLANT ID	Warton Head Works
		METER ID	Septage Receiving
		FIT ID	FIT-105
		CLIENT TAG	OCWA# not assigned
		OTHER	n/a
		GPS COORDINATES	n/a
VER. BY - FM	Paris Machuk	VERIFICATION DATE	May 08, 2017
Quality Management Standards Information - Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.		CAL. FREQUENCY	Annual
		CAL. DUE DATE	May, 2018

CALIBRATION			TOTALIZER	
DIAMETER (DN)	mm	200	AS FOUND	0.14 M3
CALIBRATION FACTOR		1.0880	AS LEFT	0.14 M3
ZERO POINT		0	DIFFERENCE	0 M3

VERIFICATION INFORMATION			COMPONENTS TESTED	
OPERATING TIME (d/h/m/s)	d	362	SENSOR - Coil Current Shot Time	yes
	h	16	SENSOR - Coil Hold Voltage	yes
	m	49	SENSOR - Coil Current	yes
	s	55	SENSOR - Electrode Reference Voltage	yes
DATE/TIME	date (dd.mm.yy)	08.05.17	SENSOR - Linearity Electrode Circuit	yes
	time (hh:mm)	12:15	SENSOR - Offset Electrode Circuitry	yes
			I/O Module	yes
VERIFICATION ID		2		

OVERALL VERIFICATION		PASSED
SENSOR		PASSED
Coil Current Shot Time		PASSED
Coil Hold Voltage		PASSED
Coil Current		PASSED
SENSOR ELECTRONIC MODULE		PASSED
Reference Voltage		PASSED
Linearity of Electrode Measuring Circuit		PASSED
Offset of Electrode Measuring Circuit		PASSED
SENSOR ELECTRONIC MODULE		PASSED
Reference Voltage		PASSED

COMMENTS

This report reflects the results based on the manufacturers HEARTBEAT diagnostic technology for flow meter verification for all Prosonic 400 series meters with an active HEARTBEAT.

Western Office Eastern Office
2088 Jetstream Road 1602 Old Wooler Road
London, Ontario Wooler, Ontario
N5V 3P6 K0K 3M0

RESULTS
PASSED

CLIENT DETAIL		DEVICE INFORMATION	
CUSTOMER	OCWA - West Highlands	[MUT] MANUFACTURER	Endress & Hauser
CONTACT	Leo Paul Frigault Cluster Manager 519-797-3080	MODEL	Promag 400
		CONVERTER SERIAL NUMBER	KC1EF119000
		ORDER CODE	5L4C1H-40D6/0
		PLANT ID	Warton Head Works
		METER ID	Receiving Station
		FIT ID	FIT-301
		CLIENT TAG	OCWA# not assigned
		OTHER	n/a
		GPS COORDINATES	n/a
VER. BY - FM	Paris Machuk	VERIFICATION DATE	May 08, 2017
Quality Management Standards Information - Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.		CAL. FREQUENCY	Annual
		CAL. DUE DATE	May, 2018

CALIBRATION			TOTALIZER		
DIAMETER (DN)	mm	100	AS FOUND	41.59	M3
CALIBRATION FACTOR		1.3788	AS LEFT	41.59	M3
ZERO POINT		-4	DIFFERENCE	0	M3
VERIFICATION INFORMATION			COMPONENTS TESTED		
OPERATING TIME (d/h/m/s)	d	363	SENSOR - Coil Current Shot Time	yes	
	h	9	SENSOR - Coil Hold Voltage	yes	
	m	55	SENSOR - Coil Current	yes	
	s	49	SENSOR - Electrode Reference Voltage	yes	
DATE/TIME	date (dd.mm.yy)	08.05.17	SENSOR - Linearity Electrode Circuit	yes	
	time (hh:mm)	12:29	SENSOR - Offset Electrode Circuitry	yes	
			I/O Module	yes	
VERIFICATION ID		2			

OVERALL VERIFICATION	PASSED
SENSOR	PASSED
Coil Current Shot Time	PASSED
Coil Hold Voltage	PASSED
Coil Current	PASSED
SENSOR ELECTRONIC MODULE	PASSED
Reference Voltage	PASSED
Linearity of Electrode Measuring Circuit	PASSED
Offset of Electrode Measuring Circuit	PASSED
SENSOR ELECTRONIC MODULE	PASSED
Reference Voltage	PASSED

COMMENTS

This report reflects the results based on the manufacturers HEARTBEAT diagnostic technology for flow meter verification for all Prosonic 400 series meters with an active HEARTBEAT.

Western Office Eastern Office
2088 Jetstream Road 1602 Old Wooler Road
London, Ontario Wooler, Ontario
N5V 3P6 K0K 3M0

AS FOUND CERTIFICATION
FORWARD FLOW DIRECTION
PASS

CLIENT DETAIL		EQUIPMENT DETAIL	
CUSTOMER	OCWA - West Highlands	[MUT] MANUFACTURER	Krohne
CONTACT	Leo Paul Frigault Cluster Manager 519-797-3080	MODEL	IFC 010D
		SERIAL NUMBER	A99 11651
		FUSE	On board plug
		PLANT ID	Warton SPS No1 (Taylor St)
		METER ID	Station Flow
		FIT ID	N/A
		CLIENT TAG	OCWA# 165372
		OTHER	ORG# 5620
VER. BY - FM	Paris Machuk	GPS COORDINATES	N44 44.503 W81 08.018
Quality Management Standards Information - Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.		VERIFICATION DATE	May 08, 2017
		CAL. FREQUENCY	Annual
		CAL. DUE DATE	May, 2018

PROGRAMMING PARAMETERS			FORWARD TOTALIZER INFORMATION		
DIAMETER (DN)	mm	200	AS FOUND	4315425	M3
F.S. FLOW - MAG	LPS	215.7	AS LEFT	4315442	M3
F.S. RANGE - O/P	LPS	200.0	DIFFERENCE	17	M3
CAL. k-FACTOR	GKL	4.50500	TEST CRITERIA		
			AS FOUND CERTIFICATION TEST	Yes	
			FORWARD FLOW DIRECTION	Yes	
			ALLOWABLE [%] ERROR	5	
			COMPONENTS TESTED		
			CONVERTER DISPLAY	Yes	
			mA OUTPUT	Yes	
			TOTALIZER	Yes	
			ACCURACY BASED ON [% o.r.]	Yes	
Zero Offset Flow	LPS	0.53	ERROR DOCUMENTED IN THIS REPORT; BASED ON % o.r.		

FLOW TUBE SIMULATION

		0.0	0.5	1.0	2.0	5.0	m/s
		0.2	5.2	10.2	20.2	50.2	% F.S. Flow
		0.3	5.7	11.0	21.8	54.2	% F.S. Range
REF. FLOW RATE		0.53	11.31	22.10	43.67	108.37	LPS
MUT [Reading]		0.50	11.31	22.12	43.68	108.43	LPS
MUT [Difference]		-0.03	0.00	0.02	0.01	0.06	LPS
MUT [% Error]		-5.66	-0.04	0.10	0.03	0.05	%
mA OUTPUT		4.000	4.905	5.768	7.493	12.670	mA
MUT [Reading]	min. 4.000 mA	4.158	5.065	5.910	7.632	12.789	mA
MUT [Difference]	max. 20.000 mA	0.158	0.160	0.142	0.139	0.119	mA
MUT [% Error]		3.95	3.26	2.46	1.85	0.94	%
TOTALIZER - REF. FLOW RATE						108.375	LPS
TOTALIZER [MUT]						10	M3
TEST TIME						92.49	SECONDS
CALC. TOTALIZER						10.024	M3
ERROR						-0.24	%

COMMENTS	QUALITY MANAGEMENT STANDARDS INFO.			RESULTS		
	[QMS] INFORMATION	IDENT.	ID #	TEST	AVG % o.r.	PASS FAIL
	[REFERENCE] FTS	KRO	1			
	PROCESS METER	DMM	3	DISPLAY	0.03	PASS
	ANALOG METER	AM	N/A	mA OUTPUT	2.49	PASS
	STOP WATCH	SW	YES	TOTALIZER	-0.24	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.

Western Office Eastern Office
2088 Jetstream Road 1602 Old Wooler Road
London, Ontario Wooler, Ontario
N5V 3P6 K0K 3M0

AS FOUND CERTIFICATION
FORWARD FLOW DIRECTION
PASS

CLIENT DETAIL		EQUIPMENT DETAIL	
CUSTOMER	OCWA - West Highlands	[MUT] MANUFACTURER	Krohne
CONTACT	Leo Paul Frigault Cluster Manager 519-797-3080	MODEL	IFC 010D
		SERIAL NUMBER	A98 17181
		FUSE	On board plug
		PLANT ID	Wiaron SPS No2 (441048 Elm St)
		METER ID	Station Flow
		FIT ID	N/A
		CLIENT TAG	OCWA# 165385
		OTHER	ORG# 5620
VER. BY - FM	Paris Machuk	GPS COORDINATES	N44 44.148 W81 08.008
Quality Management Standards Information - Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.		VERIFICATION DATE	May 08, 2017
		CAL. FREQUENCY	Annual
		CAL. DUE DATE	May, 2018

PROGRAMMING PARAMETERS			FORWARD TOTALIZER INFORMATION		
DIAMETER (DN)	mm	250	AS FOUND	9200517	M3
F.S. FLOW - MAG	LPS	339.9	AS LEFT	9200547	M3
F.S. RANGE - O/P	LPS	250.0	DIFFERENCE	30	M3
CAL. k-FACTOR	GKL	4.54400	TEST CRITERIA		
			AS FOUND CERTIFICATION TEST	Yes	
			FORWARD FLOW DIRECTION	Yes	
			ALLOWABLE [%] ERROR	5	
			COMPONENTS TESTED		
			CONVERTER DISPLAY	Yes	
			mA OUTPUT	Yes	
			TOTALIZER	Yes	
			ACCURACY BASED ON [% o.r.]	Yes	
Zero Offset Flow	LPS	-1.25	ERROR DOCUMENTED IN THIS REPORT; BASED ON % o.r.		

FLOW TUBE SIMULATION							
		0.0	0.5	1.0	2.0	5.0	m/s
		-0.4	4.6	9.6	19.6	49.6	% F.S. Flow
		-0.5	6.3	13.1	26.7	67.5	% F.S. Range
REF. FLOW RATE		-1.25	15.75	32.74	66.74	168.72	LPS
MUT [Reading]		-1.25	15.83	32.76	66.68	168.64	LPS
MUT [Difference]		0.00	0.08	0.02	-0.06	-0.08	LPS
MUT [% Error]		0.00	0.53	0.05	-0.08	-0.05	%
mA OUTPUT		4.000	5.008	6.096	8.271	14.798	mA
MUT [Reading]		min. 4.000 mA	4.147	5.157	6.251	8.407	14.902
MUT [Difference]		max. 20.000 mA	0.147	0.149	0.155	0.136	0.104
MUT [% Error]			3.68	2.98	2.55	1.64	0.70
TOTALIZER - REF. FLOW RATE						168.716	LPS
TOTALIZER [MUT]						19	M3
TEST TIME						112.37	SECONDS
CALC. TOTALIZER						18.959	M3
ERROR						0.22	%

COMMENTS	QUALITY MANAGEMENT STANDARDS INFO.			RESULTS		
	[QMS] INFORMATION	IDENT.	ID #	TEST	AVG % o.r.	PASS FAIL
	[REFERENCE] FTS	KRO	1			
	PROCESS METER	DMM	3	DISPLAY	0.11	PASS
	ANALOG METER	AM	N/A	mA OUTPUT	2.31	PASS
	STOP WATCH	SW	YES	TOTALIZER	0.22	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.

Western Office Eastern Office
2088 Jetstream Road 1602 Old Wooler Road
London, Ontario Wooler, Ontario
N5V 3P6 K0K 3M0

AS FOUND CERTIFICATION

PASS

CLIENT DETAIL		EQUIPMENT DETAIL	
CUSTOMER	OCWA - West Highlands	[MUT] MANUFACTURER	Milltronics
CONTACT	Leo Paul Frigault Cluster Manager 519-797-3080	MODEL	MultiRanger
		CONVERTER SERIAL NUMBER	05w023466
		PLANT ID	Warton WWTP
		METER ID	Final Effluent
		FIT ID	1001
		CLIENT TAG	OCWA# 209316
		OTHER	ORG# 5620
VER. BY - FM	Paris Machuk	GPS COORDINATES	N44 44.014 W81 07.965
Quality Management Standards Information - Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.		VERIFICATION DATE	May 08, 2017
		CAL. FREQUENCY	Annual
		CAL. DUE DATE	May, 2018

PROGRAMMING PARAMETERS			TOTALIZER	
THROAT WIDTH, (exp 1.5)	m	1.010	AS FOUND	884671.22 M3
EMPTY DISTANCE, TX to notch	m	0.5038	AS LEFT	884706.78 M3
TRANSDUCER (TX), to sump floor	m	n/a	DIFFERENCE	35.56 M3
SUMP LEVEL, zero flow	m	n/a		TEST CRITERIA
			AS FOUND CERTIFICATION TEST	Yes
MAX. HEAD	m	0.200	ALLOWABLE [%] ERROR	15
BLANKING DISTANCE	m	0.300		COMPONENTS TESTED
DEAD ZONE	m	0.304	CONVERTER DISPLAY	yes
MAX. FLOW	M3/H	574.1	mA OUTPUT	yes
F.S. RANGE - O/P	M3/H	574.1	TOTALIZER	yes
			ACCURACY BASED ON [% o.r.]	no
Ultrasonic sensor installed to ensure full scale flow condition			ERROR DOCUMENTED IN THIS REPORT; BASED ON % F.S.	

AS FOUND TEST RESULTS

		0.0	12.9	36.1	65.6	100.0	% F.S. Range
		0.000	0.050	0.100	0.150	0.200	m
REF. FLOW RATE		0.0	74.0	207.1	376.7	574.1	M3/H
MUT [Reading]		0.6	73.4	217.4	390.2	605.1	M3/H
MUT [Difference]		0.6	-0.6	10.3	13.5	31.0	M3/H
MUT [% Error]		0.1	-0.1	1.8	2.3	5.4	%
mA OUTPUT		4.000	6.062	9.773	14.499	20.000	mA
MUT [Reading]	min. 4.000 mA	4.026	6.192	9.839	14.493	20.074	mA
MUT [Difference]	max. 20.000 mA	0.026	0.130	0.066	-0.006	0.074	mA
MUT [% Error]		0.13	0.65	0.33	-0.03	0.37	%
TOTALIZER - REF. FLOW RATE						574.070	M3/H
TOTALIZER [MUT]						16.44	M3
TEST TIME						97.61	SECONDS
CALC. TOTALIZER						15.565	M3
ERROR						5.32	%

COMMENTS

QUALITY MANAGEMENT STANDARDS INFO.			RESULTS		
[QMS] INFORMATION	IDENT.	ID #	TEST	AVG %FS	PASS FAIL
[REFERENCE] LEVEL	Sim. BOARD	Yes			
PROCESS METER	DMM	3	DISPLAY	2.36	PASS
STOP WATCH	SW	Yes	mA OUTPUT	0.29	PASS
			TOTALIZER	5.32	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.



Certificate of Instrument Performance
Certificat de Conformité

Company Name / Nom de la Compagnie : ONTARIO CLEAN WATER AGENCY

Account Number / No. de compte : 40283403

Certification Number / Numéro du Certificat : 5786120

Part Number / No. de pièce : 9020000	ASSY, PROBE, LDO MODEL 2, HACH
Serial Number / No. de série : 160630000021	
External Reference / Référence externe : Ait-203	

Hach Sales & Service Canada Ltd. certifies that your instrument has been serviced, calibrated, verified with standards and now meets new product specifications.

Hach Sales & Service Canada Ltd. atteste que votre instrument a été entretenu, calibré et vérifié selon les normes en vigueur. Ses spécifications actuelles sont équivalentes à celles d'un produit neuf.

Certified by / Certifié par :
Bilton, Stephen

Certification Date / Date de certification :
06-JUL-17



Certificate of Instrument Performance
Certificat de Conformité

Company Name / Nom de la Compagnie : ONTARIO CLEAN WATER AGENCY

Account Number / No. de compte : 40283403

Certification Number / Numéro du Certificat : 5786120

Part Number / No. de pièce : DPD1R1	Digital pH Sensor, Ryton, Convertible
Serial Number / No. de série : 1603440861	
External Reference / Référence externe : Ait-205	

Hach Sales & Service Canada Ltd. certifies that your instrument has been serviced, calibrated, verified with standards and now meets new product specifications.

Hach Sales & Service Canada Ltd. atteste que votre instrument a été entretenu, calibré et vérifié selon les normes en vigueur. Ses spécifications actuelles sont équivalentes à celles d'un produit neuf.

Certified by / Certifié par :
Bilton, Stephen

Certification Date / Date de certification :
06-JUL-17



Certificate of Instrument Performance
Certificat de Conformité

Company Name / Nom de la Compagnie : ONTARIO CLEAN WATER AGENCY

Account Number / No. de compte : 40283403

Certification Number / Numéro du Certificat : 5786120

Part Number / No. de pièce : 9020000	ASSY, PROBE, LDO MODEL 2, HACH
Serial Number / No. de série : 160630000028	
External Reference / Référence externe : Ait-202	

Hach Sales & Service Canada Ltd. certifies that your instrument has been serviced, calibrated, verified with standards and now meets new product specifications.

Hach Sales & Service Canada Ltd. atteste que votre instrument a été entretenu, calibré et vérifié selon les normes en vigueur. Ses spécifications actuelles sont équivalentes à celles d'un produit neuf.

Certified by / Certifié par :
Bilton, Stephen

Certification Date / Date de certification :
06-JUL-17



Certificate of Instrument Performance
Certificat de Conformité

Company Name / Nom de la Compagnie : ONTARIO CLEAN WATER AGENCY

Account Number / No. de compte : 40283403

Certification Number / Numéro du Certificat : 5786120

Part Number / No. de pièce : 9020000	ASSY, PROBE, LDO MODEL 2, HACH
Serial Number / No. de série : 160630000026	
External Reference / Référence externe : Ait-204	

Hach Sales & Service Canada Ltd. certifies that your instrument has been serviced, calibrated, verified with standards and now meets new product specifications.

Hach Sales & Service Canada Ltd. atteste que votre instrument a été entretenu, calibré et vérifié selon les normes en vigueur. Ses spécifications actuelles sont équivalentes à celles d'un produit neuf.

Certified by / Certifié par :
Bilton, Stephen

Certification Date / Date de certification :
06-JUL-17



Certificate of Instrument Performance
Certificat de Conformité

Company Name / Nom de la Compagnie : ONTARIO CLEAN WATER AGENCY

Account Number / No. de compte : 40283403

Certification Number / Numéro du Certificat : 5786120

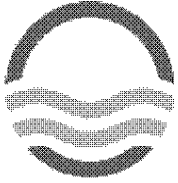
Part Number / No. de pièce : LXV440.53.10002	AISE SC W RFID (USA)
Serial Number / No. de série : 1653164	
External Reference / Référence externe : Ait-207/tit-206	

Hach Sales & Service Canada Ltd. certifies that your instrument has been serviced, calibrated, verified with standards and now meets new product specifications.

Hach Sales & Service Canada Ltd. atteste que votre instrument a été entretenu, calibré et vérifié selon les normes en vigueur. Ses spécifications actuelles sont équivalentes à celles d'un produit neuf.

Certified by / Certifié par :
Bilton, Stephen

Certification Date / Date de certification :
06-JUL-17



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

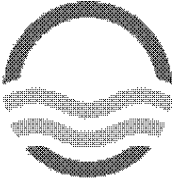
Appendix C

Septage Receiving Volumes

2017 Sewage Hauled to Warton Sewage Lagoons

Date	Cubic Metres	Location	Hauler	Receiving Station
January 2017	185.48	Tim Hortons (Hep)	Owen Sound Septic Services	
January 2017	41.30		Grey Bruce Septic Service	
February 2017	139.11	Tim Hortons (Hep)	Owen Sound Septic Services	
February 2017	23.185		Grey Bruce Septic Service	
March 2017	200.94	Tim Hortons (Hep)	Owen Sound Septic Services	
March 2017	27.73		Grey Bruce Septic Service	
April 2017	200.94	Tim Hortons (Hep)	Owen Sound Septic Services	
May 2017	203.66	Tim Hortons (Hep)	Owen Sound Septic Services	
June 2017	194.65	Tim Hortons (Hep)	Owen Sound Septic Services	✓
June 2017	0.44	Portable Toilets	D & S Portables	✓
July 2017	361.48	Tim Hortons (Hep)	Owen Sound Septic Services	✓
July 2017	6.04	Portable Toilets	Bluewater Sanitation	✓
July 2017	1.58	Portable Toilets	D & S Portables	✓
August 2017	371.17	Tim Hortons (Hep)	Owen Sound Septic Services	✓
August 2017	10.47	Portable Toilets	Bluewater Sanitation	✓
August 2017	2.68	Portable Toilets	D & S Portables	✓
September 2017	228.11	Tim Hortons (Hep)	Owen Sound Septic Services	✓
September 2017	1.70	Portable Toilets	Bluewater Sanitation	✓
September 2017	0.78	Portable Toilets	D & S Portables	✓
September 2017	3.64	Oliphant Islands	Tom's Septic	
October 2017	195.29	Tim Hortons (Hep)	Owen Sound Septic Services	✓
October 2017	1.28	Portable Toilets	Bluewater Sanitation	✓
November 2017	148.90	Tim Hortons (Hep)	Owen Sound Septic Services	✓
December 2017	142.88	Tim Hortons (Hep)	Owen Sound Septic Services	✓
December 2017	6.82		Bruce Peninsula Septic Services	✓
December 2017	24.60		Grey Bruce Septic Service	

Total 2,724.86



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Appendix D

Community Complaints

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Warton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: Resident
Address: 441 Frank St
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 12/21/2017
Time of Complaint: 06:43:44 AM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

Complaint of sewer blockage

Action taken in response:

Flushed line and camera'd lateral. soft blockage cleared

Was the source of the problem identified?: Yes No

Was the source an OCWA facility/activity?: Yes No If "Yes", describe:

December 21st – Blockage & Back up @ 441 Frank St. All drains on site, flushed line @ camera'd, soft blockage cleared

If any remedial action is required, complete action plan form

Updated By: Megan Edney 03/30/2018 06:47:30 AM

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Wiaraton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: Resident
Address: 360 Frank St
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 12/13/2017
Time of Complaint: 06:41:22 AM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

Complaint of blocked sewer

Action taken in response:

Sent camera and auger through main from clean out

Was the source of the problem identified?: ● Yes ○ No

Was the source an OCWA facility/activity?: ○ Yes ● No If "Yes", describe:

December
· 13th- Inspected sewer line @ 360 Frank St. Camera'd and augered out to main from clean out, 14' out blockage

If any remedial action is required, complete action plan form

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Wiaraton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: Resident
Address: 801 McNaughton,
Wiaraton
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 11/23/2017
Time of Complaint: 02:37:49 PM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

Received complaint from 801 McNaughton regarding a sanitary blockage.

Action taken in response:

Inspected clean out and sent camera. All appears to be normal and homeowner agreed.

Was the source of the problem identified?: Yes No

Was the source an OCWA facility/activity?: Yes No If "Yes", describe:

If any remedial action is required, complete action plan form

Updated By: Megan Edney 03/30/2018 06:03:08 AM

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Wiaraton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: resident
Address: 359 George st, wiaraton
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 09/05/2017
Time of Complaint: 06:36:44 AM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

Complaint of sewer blockage

Action taken in response:

Sent Camera through sewer lateral

Was the source of the problem identified?: Yes No

Was the source an OCWA facility/activity?: Yes No If "Yes", describe:

Pushed sewer camera in sewer lateral at 359 George Street, Wiaraton.
September 5th

If any remedial action is required, complete action plan form

Updated By: Megan Edney 03/30/2018 06:39:25 AM

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Warton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: resident
Address: 623 Gould St, Warton
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 08/04/2017
Time of Complaint: 06:34:04 AM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

received complaint from resident

Action taken in response:

Sent camera through lateral

Was the source of the problem identified?: Yes No

Was the source an OCWA facility/activity?: Yes No If "Yes", describe:

August 04- Camera sewer lateral at 623 Gould Street. All clear from clean out to sewer main.

If any remedial action is required, complete action plan form

Updated By: Megan Edney 03/30/2018 06:36:01 AM

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Wiaraton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: resident
Address: 623 Gould st
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 07/04/2017
Time of Complaint: 06:30:14 AM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

received complaint from resident

Action taken in response:

sent camera through service

Was the source of the problem identified?: Yes No

Was the source an OCWA facility/activity?: Yes No If "Yes", describe:

Camera sewer lateral at 623 Gould Street

If any remedial action is required, complete action plan form

Updated By: Megan Edney 03/30/2018 06:33:08 AM

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Wiaraton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: Resident
Address: 556 Berford st
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 06/28/2017
Time of Complaint: 06:27:01 AM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

complaint of blockage

Action taken in response:

Sent camera through

Was the source of the problem identified?: ● Yes ○ No

Was the source an OCWA facility/activity?: ○ Yes ● No If "Yes", describe:

Camera inside Cleanout @ 556 Berford St. for Ed (Town) June 28th

If any remedial action is required, complete action plan form

Updated By: Megan Edney 03/30/2018 06:29:42 AM

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Warton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: Resident
Address: 505 Dawson St
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 05/26/2017
Time of Complaint: 06:22:47 AM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

May 24th - compliant at 505 Dawson St

Action taken in response:

Repaired sanitary service.

Was the source of the problem identified?: Yes No

Was the source an OCWA facility/activity?: Yes No If "Yes", describe:

May 24th 2017: Repair sanitary service @ 505 Dawson St.

If any remedial action is required, complete action plan form

Updated By: Megan Edney 03/30/2018 06:25:39 AM

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Warton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: Resident
Address: 410 Berford St, Warton
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 05/05/2017
Time of Complaint: 06:16:14 AM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

Complaint of sewer blockage

Action taken in response:

May 5th -Sent Snake and Camera through Service
May 8th - power auger and sent camera through after

Was the source of the problem identified?: Yes No

Was the source an OCWA facility/activity?: Yes No If "Yes", describe:

· May 5th 2017: Sewer blockage @ Bed and Breakfast on Berford St.410 Berford St.
· May 8th 2017: Power auger @ 410 Berford St.& Camera, call clear

If any remedial action is required, complete action plan form

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Warton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: Resident of 418 Brown St
Address: 418 Brown St Warton
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 02/23/2017
Time of Complaint: 06:12:18 AM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

Complaint of blockage

Action taken in response:

Sent camera through the line. No sign of blockage

Was the source of the problem identified?: Yes No

Was the source an OCWA facility/activity?: Yes No If "Yes", describe:

February 23 – 418 Brown – sent camera through the line. No sign of blockage

If any remedial action is required, complete action plan form

Updated By: Megan Edney 03/30/2018 06:14:42 AM

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Wiaraton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: Resident
Address: 506 Dawson St
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 02/15/2017
Time of Complaint: 06:09:10 AM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

Sewage Blockage

Action taken in response:

Sent snake and camera through the sewer service. Cleared blockage and flow was restored.

Was the source of the problem identified?: Yes No

Was the source an OCWA facility/activity?: Yes No If "Yes", describe:

February 15 – 506 Dawson – Sewage blockage. Located second cleanout and snaked through to clear blockage. Found a crack by the cleanout with the camera. Flow restored.

If any remedial action is required, complete action plan form

Updated By: Megan Edney 03/30/2018 06:12:01 AM

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Wiaraton Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: Resident
Address: 371 Hunter
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 02/13/2017
Time of Complaint: 06:03:20 AM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

Received complaint from resident that their service was blocked.

Action taken in response:

Operator checked flow through manhole and sent snake through lateral for Hunter street. Blockage was not cleared. Resident called out a plumber to clean blockage.

Was the source of the problem identified?: ● Yes ○ No

Was the source an OCWA facility/activity?: ○ Yes ● No If "Yes", describe:

If any remedial action is required, complete action plan form

Updated By: Megan Edney 03/30/2018 06:09:05 AM

Ontario Clean Water Agency Community Complaints

Facility ID: 5620
Facility Name: Wiarion Wastewater Treatment Lagoon
Address: c/o Southampton WPCP
City: Southampton
Province: Ontario
Postal Code: NOH 2LO
Name of Person who filed Complaint: Resident
Address: 384 Gould Street,
Wiarion
Phone: _____

NOTE: If there were multiple complaints, provide the name of the person who filed the initial complaint and note the number and details in the "Description" field below

Date of Complaint: 02/08/2017
Time of Complaint: 02:35:32 PM

Nature of Complaint

- | | | |
|---------------------------------|---|--|
| <input type="checkbox"/> Noise | <input type="checkbox"/> Water Supply Taste/Colour | <input type="checkbox"/> Water Pressure/No Water |
| <input type="checkbox"/> Visual | <input checked="" type="checkbox"/> Service Problem | <input type="checkbox"/> Basement Flooding |
| <input type="checkbox"/> Odour | <input type="checkbox"/> Sludge Related | |
- Other: _____

Description:

Complaint of sewer backing up.

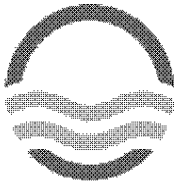
Action taken in response:

Operator checked man holes, flow moving well. Operator informed resident to contact a plumber to clear blockage.

Was the source of the problem identified?: ● Yes ○ No

Was the source an OCWA facility/activity?: ○ Yes ● No If "Yes", describe:

If any remedial action is required, complete action plan form



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Appendix E

Effluent By-Pass Reports



WIARTON WASTEWATER TREATMENT PLANT

QUARTERLY BYPASS REPORT

For the period of

JANUARY 1, 2017 TO MARCH 31, 2017

As per the Amended Environmental Compliance Approval (number 6211-AGEU4W, issued on February 24, 2017), we are required to submit a summary report of the bypass events to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

Bypass Events

A by-pass event is defined as “a diversion of sewage around one or more unit processes within the Sewage Treatment Plant with the diverted sewage flows being returned to the Sewage Treatment Plant treatment train upstream of the Final Effluent sampling location, and discharging to the environment through the Sewage Treatment Plant outfall”

- During this period one bypass event occurred on February 25, 2017 at 1300h.

Date	Time		Duration HH:MM	Volume (M ³)	Treatment Process Bypassed	Reason for Bypass
	Start	End				
February 25, 2017	13:00	13:15	0:15	31.25	UV System	Power outage caused UV system to fail

Overflow Events

An overflow event is defined as “a discharge to the environment from the Sewage Treatment Plant at a location other than the plant outfall or into the plant outfall downstream of the Final Effluent sampling location”

- No overflow events took place during this period

Warton Water Treatment Plant
897, Bayview Street, Warton, ON, NOH 2T0
TEL: 519.534.1610 Fax: 519.534.3526



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Fax

WORKS # 110000819

	<u>Fax Number</u>
TO: Spills Action Centre:	1-800-268-6061 ✓
MOE Owen Sound:	519-371-2905 ✓
MOH Owen Sound:	519-376-6310 ✓
Town of South Bruce Peninsula (Attention Public Works Manager)	519-534-4976 ✓
OCWA (Attention PCT)	519-797-3080 ✓
Environment Canada (Attention Wastewater Program)	1-819-420-7380 ✓

FROM: DAVE NOBLE OIC OCWA

DATE: FEB 25, 2017 -----

RE: AWQI 900431 -----

PAGES: _____ (including this one)

MESSAGE:

EFFLUENT FLOW REMAINED ISOLATED UNTIL UV SYSTEM
RESTORED @ 19:00 am FEB. 25, 2017.

If you have any questions, concerns, or require additional information, please
contact this office at 519-534-1610

Precautionary.

1 800 268 6060

AWOI #

900431

FACILITY NAME: Warton Wastewater Control Plant

WORKS#: WW 110000819

LOCATION: WIARTON FILTER BLDG

DATE/TIME -

START: 13:00

STOP: 13:15

TOTAL TIME: 15 min

OPERATOR RESPONDING: DAVE NOBLE OIT ORO (circle one) IF OIT-WHO IS IN CHARGE FOR PROCESS CHANGES?

BRIEF DESCRIPTION OF SITUATION: POWER OUTAGE

REASON FOR OCCURRENCE: WEATHER

WAS THIS A BYPASS? YES NO

IF YES, WHAT WAS BYPASSED?

RAW SEWAGE BYPASS

PARTIAL TERTIARY BYPASS OF SECONDARY EFFLUENT

OTHER: _____

WHAT WAS DISCHARGED? FILTERED EFFLUENT

APPROXIMATE QUANTITY OF BYPASS: ----- LITRES/ Kg/ m3 (circle one) SHOW

CALCULATIONS:

flow = 3000 m³/Day

Est. 31.25 m³

OUTAGE = 15 min.

WERE SAMPLES TAKEN?

YES

NO

IF YES,

LOCATION	DATE	TIME	RESULTS	FREE Cl2 (mg/L)	TOTAL Cl2 (mg/L)

YES NO SAMPLES TAKEN (BOD SS PHOSPHOROUS E.COLI)

YES NO DISINFECT BYPASS

YES NO DID RELEASE ENTER WATER COURSE

YES NO DID RELEASE GO OFFSITE

NOTES:

NOTIFICATIONS:

PLACE	NUMBERS	VERBAL COMPLETE?	WRITTEN COMPLETE?	RESOLUTION COMPLETE?	CONTACT NAME
SAC (get reference number from them)	P: 1-800-268-6060 F: 1-800-268-6061	13:50	10:30 FEB. 26/17		
OWEN SOUND MOE	P: 519-371-2901 F: 519-371-2905	14:18	" "		
OWEN SOUND MOH	P: 519-376-9420 ONCALL: P: 519-376-5420 F: 519-376-6310	13:40	" "		
CLIENT TOWN OF SOUTH BRUCE PENINSULA MANAGER	P: 519-534-1400 X 131 Public Works Manager F: 519-534-4976	no ANSWER.	" "		
MANAGER	P: 519-379-2225 F: 519-534-3526	13:50	" "		
OCWA PCT SOUTHAMPTON	P: (519) 373-1398 F: (519) 797-3080	14:18	" "		
ENVIRONMENT CANADA (attention WASTEWATER PROGRAM)	F: 1-819-420-7389	X no ANSWER.	" "		X

Waste Reference # AW01 900431

Operator name: DAVE NOBLE

Operator signature: Dave Noble Position: OIC

Fax Broadcast Report

Date & Time : FEB-26-2017 12:18 SUN
Fax Number : 519-534-3526
Name : Warton Treatment Plant
Model Name : WorkCentre 4250

Total Pages Scanned: 4

No.	Remote Station	StartTime	Duration	Page	Mode	Job Type	Result
001	5193766310	02-26 12:15	00'52	004/004	EC	HS	Success
002	5193712905	02-26 12:17	01'31	004/004	G3	HS	Success

Abbreviations:

HS:Host Send PL:Polled Local EC:Error Correct TS:Terminated by System
HR:Host Receive PR:Polled Remote MP:Mailbox Print RP:Report
WS:Waiting Send MS:Mailbox Save TU:Terminated by User G3:Group3

Fax Broadcast Report

Date & Time : FEB-26-2017 10:21 SUN
Fax Number : 519-534-3526
Name : Wiarton Treatment Plant
Model Name : WorkCentre 4250

Total Pages Scanned: 4

No.	Remote Station	StartTime	Duration	Page	Mode	Job Type	Result
001	18194207380	02-26 10:05	00' 25	004/004	EC	HS	Success
002	15197973080	02-26 10:06	00' 30	004/004	EC	HS	Success
003	5195344976	02-26 10:07	00' 22	004/004	EC	HS	Success
004	15193766310	02-26 10:08	00' 00	000/004	EC	HS	Fail
005	15193712905	02-26 10:09	00' 00	000/004	EC	HS	Fail
006	18002686061	02-26 10:11	01' 55	002/004	EC	HS	Fail
007	15193766310	02-26 10:13	00' 00	000/004	EC	HS	Fail
008	15193712905	02-26 10:14	00' 00	000/004	EC	HS	Fail
009	18002686061	02-26 10:15	02' 01	003/004	EC	HS	Fail
010	15193766310	02-26 10:18	00' 00	000/004	EC	HS	Fail
011	15193712905	02-26 10:19	00' 00	000/004	EC	HS	Fail
012	18002686061	02-26 10:20	00' 24	001/004	EC	HS	Success

Abbreviations:

HS:Host Send PL:Polled Local EC:Error Correct TS:Terminated by System
HR:Host Receive PR:Polled Remote MP:Mailbox Print RP:Report
WS:Waiting Send MS:Mailbox Save TU:Terminated by User G3:Group3

WIARTON WASTEWATER TREATMENT PLANT

QUARTERLY BYPASS REPORT

For the period of

APRIL 1, 2017 TO JUNE 30, 2017

As per the Amended Environmental Compliance Approval (number 6211-AGEU4W, issued on February 24, 2017), we are required to submit a summary report of the bypass events to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

Bypass Events

A by-pass event is defined as “a diversion of sewage around one or more unit processes within the Sewage Treatment Plant with the diverted sewage flows being returned to the Sewage Treatment Plant treatment train upstream of the Final Effluent sampling location, and discharging to the environment through the Sewage Treatment Plant outfall”

- During this period one bypass event occurred on June 13, 2017 at 08:55h.

Date	Time		Duration HH:MM	Volume (M ³)	Treatment Process Bypassed	Reason for Bypass
	Start	End				
June 13, 2017	08:55	09:10	0:15	6.04	UV System	Power outage caused UV system to fail

Overflow Events

An overflow event is defined as “a discharge to the environment from the Sewage Treatment Plant at a location other than the plant outfall or into the plant outfall downstream of the Final Effluent sampling location”

- No overflow events took place during this period

Warton Water Treatment Plant
897, Bayview Street, Warton, ON, N0H 2T0
TEL: 519.534.1610 Fax: 519.534.3526



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Fax

	<u>Fax Number</u>
TO: Spills Action Centre:	1-800-268-6061
MOE Owen Sound:	519-371-2905
MOH Owen Sound:	519-376-6310
Town of South Bruce Peninsula (Attention Public Works Manager)	519-534-4976
OCWA (Attention PCT)	519-797-3080
Environment Canada (Attention Wastewater Program)	1-819-420-7380

FROM: Leo-Paul Frigault

DATE: June 13th, 2017

RE: _____

PAGES: 4 (including this one)

MESSAGE:

If you have any questions, concerns, or require additional information, please
contact this office at 519-534-1610

FACILITY NAME: Warton Wastewater Control Plant

WORKS#: WW 110000819

LOCATION: Warton Filter BLDG

DATE/TIME -

START: 08:55

STOP: 09:10

TOTAL TIME: 0.15 (minutes)

OPERATOR RESPONDING: Ben Madill OIG OIT ORO (circle one) IF OIT - WHO

IS IN CHARGE FOR PROCESS CHANGES? David Noble

BRIEF DESCRIPTION OF SITUATION: Power outage (very brief)

REASON FOR OCCURRENCE: Weather (thunder)

WAS THIS A BYPASS? YES NO

IF YES, WHAT WAS BYPASSED?

RAW SEWAGE BYPASS

PARTIAL TERTIARY BYPASS OF SECONDARY EFFLUENT

OTHER: _____

WHAT WAS DISCHARGED? filtered effluent

APPROXIMATE QUANTITY OF BYPASS: ----- LITRES/ Kg/(m³) (circle one) SHOW

CALCULATIONS:

flow approx i 580m³/day
outage 15 min

approx 6m³

WERE SAMPLES TAKEN?

YES

NO

IF YES,

LOCATION	DATE	TIME	RESULTS	FREE Cl ₂ (mg/L)	TOTAL Cl ₂ (mg/L)

- YES NO SAMPLES TAKEN (BOD SS PHOSPHOROUS E.COLI)
- YES NO DISINFECT BYPASS
- YES NO DID RELEASE ENTER WATER COURSE
- YES NO DID RELEASE GO OFFSITE

NOTES:

NOTIFICATIONS:

PLACE	NUMBERS	VERBAL COMPLETE?	WRITTEN COMPLETE?	RESOLUTION COMPLETE?	CONTACT NAME
SAC (get reference number from them)	P: 1-800-268-6060 F: 1-800-268-6061	13:00			Francisco Baldison
OWEN SOUND MOE	P: 519-371-2901 F: 519-371-2905	13:07			Shayn Finlay
OWEN SOUND MOH	P: 519-376-9420 ONCALL: P: 519-376-5420 F: 519-376-6310				13:09 - message left for Josh Koerman " for Jennifer Stephenson 10:00 June 14 spoke with Josh Koerman
CLIENT TOWN OF SOUTH BRUCE PENINSULA MANAGER	P: 519-534-1400 X 131 Public Works Manager F: 519-534-4976 P: 519-379-2225 F: 519-534-3526	13:12			Andrew Sprunt
OCWA PCT SOUTHAMPTON	P: (519) 373-1398 F: (519) 797-3080	13:13			Left a message for Megan Sdney
ENVIRONMENT CANADA (attention WASTEWATER PROGRAM)	F: 1-819-420-7389	X			X

Waste Reference # 901115

Operator name: Ben Madill

Operator signature: *Ben Madill* Position: OIT

* Confirmed with manager + David Noble

Fax Broadcast Report

Date & Time : JUN-14-2017 13:54 WED
Fax Number : 519-534-3526
Name : Warton Treatment Plant
Model Name : WorkCentre 4250

Total Pages Scanned: 4

No.	Remote Station	StartTime	Duration	Page	Mode	Job Type	Result
001	18194207380	06-14 13:48	00' 25	004/004	EC	HS	Success
002	5195344976	06-14 13:49	00' 23	004/004	EC	HS	Success
003	5193766310	06-14 13:50	00' 52	004/004	EC	HS	Success
004	5193712905	06-14 13:51	00' 53	004/004	EC	HS	Success
005	18002686061	06-14 13:52	00' 53	004/004	EC	HS	Success

Abbreviations:

HS: Host Send PL: Polled Local EC: Error Correct TS: Terminated by System
HR: Host Receive PR: Polled Remote MP: Mailbox Print RP: Report
WS: Waiting Send MS: Mailbox Save TU: Terminated by User G3: Group3

WIARTON WASTEWATER TREATMENT PLANT

QUARTERLY BYPASS/OVERFLOW REPORT

For the period of

JULY 1, 2017 TO SEPTEMBER 30, 2017

As per the Amended Environmental Compliance Approval (number 6211-AGEU4W, issued on February 24, 2017), we are required to submit a summary report of the bypass events to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

Bypass Events

A by-pass event is defined as “a diversion of sewage around one or more unit processes within the Sewage Treatment Plant with the diverted sewage flows being returned to the Sewage Treatment Plant treatment train upstream of the Final Effluent sampling location, and discharging to the environment through the Sewage Treatment Plant outfall”

- During this period three bypass events occurred; July 10 at 07:50h, September 27 at 09:00h, and September 29 at 13:10h.

Waste Reference #	Date	Time		Duration HH:MM	Volume (M ³)	Treatment Process Bypassed	Reason for Bypass
		Start	End				
5528-AP5PE9	July 10, 2017	07:50	09:50	2:00	89.5	UV	Power bump/phase loss blew ballast on UV
901552	September 27, 2017	09:01	09:26	0:25	8.7	UV	Power outage/phase loss
1443-ARNPC2	September 29, 2017	13:10	13:50	0:40	22.2	UV	Power outage

Overflow Events

An overflow event is defined as “a discharge to the environment from the Sewage Treatment Plant at a location other than the plant outfall or into the plant outfall downstream of the Final Effluent sampling location”

- During this period one overflow event occurred on July 13, 2017 at 14:42h.

Environmental Incident #	Date	Time		Duration HH:MM	Volume		Treatment Process	Reason for Bypass	Samples
		Start	End		(M ³)				
901318	July 13, 2017	14:42	15:12	0:30		18	PS1 – RAW SEWAGE	Heavy rains – 2 pumps at PS1 were overloaded	SGS Laboratory Results CA13425 & CA14414

Warton Water Treatment Plant
897, Bayview Street, Warton, ON, N0H 2T0
TEL: 519.534.1610 Fax: 519.534.3526



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Fax

	<u>Fax Number</u>
TO: Spills Action Centre:	1-800-268-6061
MOE Owen Sound:	519-371-2905
MOH Owen Sound:	519-376-6310
Town of South Bruce Peninsula (Attention Public Works Manager)	519-534-4976
OCWA (Attention PCT)	519-797-3080
Environment Canada (Attention Wastewater Program)	1-819-420-7380

FROM: Ben Madrik OIT OCWA

DATE: July 10th 2017

RE: AW01-5528-AP5PE9

PAGES: 4 (including this one)

MESSAGE:

Power bump/phase loss caused ballast to fail on UV,
was off for 2 hours until repaired.

If you have any questions, concerns, or require additional information, please
contact this office at 519-534-1610

FACILITY NAME: Wiaraton Wastewater Control Plant

WORKS#: WW 110000819

LOCATION: Filter building

DATE/TIME -

START: 07:50

STOP: 09:50

TOTAL TIME: 2 hours

OPERATOR RESPONDING: ----- OIC OIT ORO (circle one) IF OIT- WHO IS IN CHARGE FOR PROCESS CHANGES? Andrew Bellamy

BRIEF DESCRIPTION OF SITUATION: Power bump/phase loss blew ballast on uv

REASON FOR OCCURRENCE: Power bump/phase loss

WAS THIS A BYPASS? YES NO

IF YES, WHAT WAS BYPASSED?

RAW SEWAGE BYPASS

PARTIAL TERTIARY BYPASS OF SECONDARY EFFLUENT

OTHER: _____

WHAT WAS DISCHARGED? Filtered /disinfected effluent

APPROXIMATE QUANTITY OF BYPASS: ----- LITRES/ Kg/ (m³) (circle one) SHOW

CALCULATIONS:

$$1074 \text{ m}^3 / 24 \text{ hrs}$$

$$= 44.75 \text{ m}^3 / \text{hr}$$

$$= 89.5 \text{ m}^3 / 2 \text{ hrs}$$

89.5 m³ Total bypass

WERE SAMPLES TAKEN?

YES

NO

IF YES,

LOCATION	DATE	TIME	RESULTS	FREE Cl ₂ (mg/L)	TOTAL Cl ₂ (mg/L)
Filter Sledge	July 10 th	0930		/	0.02

YES NO SAMPLES TAKEN (BOD SS PHOSPHOROUS E.COLI)

YES NO DISINFECT BYPASS

YES NO DID RELEASE ENTER WATER COURSE

YES NO DID RELEASE GO OFFSITE

NOTES:

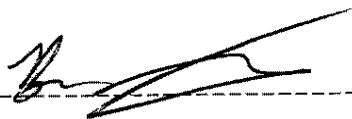
OIC/Electrification - Andrew Bellamy installed new ballast / on-line now

NOTIFICATIONS:

PLACE	NUMBERS	VERBAL COMPLETE?	WRITTEN COMPLETE?	RESOLUTION COMPLETE?	CONTACT NAME
SAC (get reference number from them)	P: 1-800-268-6060 F: 1-800-268-6061	14:20			Jonathan Tse
OWEN SOUND MOE	P: 519-371-2901 F: 519-371-2905	14:22			Shayne Findlay
OWEN SOUND MOH	P: 519-376-9420 ONCALL: P: 519-376-5420 F: 519-376-6310	14:30			Demeter Scott Program asst.
CLIENT TOWN OF SOUTH BRUCE PENINSULA MANAGER	P: 519-534-1400 X 131 Public Works Manager F: 519-534-4976	14:32			Voice Mail for Andrew Sprunt P.W. Manager
MANAGER	P: 519-379-2225 F: 519-534-3526	14:00			Leo-Paul
OCWA PCT SOUTHAMPTON	P: (519) 373-1398 F: (519) 797-3080	14:34			Camille Leung PCT manager
ENVIRONMENT CANADA (attention WASTEWATER PROGRAM)	F: 1-819-420-7389	X			X

Waste Reference # 5528-APSPE9

Operator name: Ben Madiv

Operator signature:  Position: OIT

Fax Broadcast Report

Date & Time : JUL-10-2017 14:43 MON
Fax Number : 519-534-3526
Fax Name : Wiaraton Treatment Plant
Pl Name : WorkCentre 4250

Total Pages Scanned: 4

No.	Remote Station	StartTime	Duration	Page	Mode	Job Type	Result
001	5195344976	07-10 14:38	00'23	004/004	EC	HS	Success
002	5193766310	07-10 14:39	00'58	004/004	EC	HS	Success
003	5193712905	07-10 14:41	00'54	004/004	EC	HS	Success
004	18002686061	07-10 14:42	00'54	004/004	EC	HS	Success

Abbreviations:

HS:Host Send PL:Polled Local EC:Error Correct TS:Terminated by System
HR:Host Receive PR:Polled Remote MP:Mailbox Print RP:Report
WS:Waiting Send MS:Mailbox Save TU:Terminated by User G3:Group3



► **Fax: Environmental Incident – Overflow (Sewage)**

CONTACT	FAX NUMBER/ E-MAIL
Spills Action Centre (SAC)	moe.sac.moe@ontario.ca 1-800-268-6061
MOECC (Owen Sound) Shayne Finlay	519-371-2905 shayne.finlay@ontario.ca
MOH (Owen Sound) – Grey Bruce Health Unit	519-376-6310

FROM: Megan Edney, Process Compliance Technician

DATE: July 14, 2017

RE: Environmental Incident #901318 – Pump Station 1 Overflow

PAGES: 4 (including this page)

Comments:

Please see attached for Environmental Incident Report

Spill #: 901318

Facility: Warton WPCP

Client: Municipality of South Bruce Peninsula

Senior Operations Manager: Leo-Paul Frigault

Urgent For Review Please Comment Please Reply Please Recycle

Ontario Clean Water Agency Environmental Incident Report

Facility ID: 5620 EIncidentReport

Facility Name: Warton Wastewater Treatment Lagoon

Address: 441048 Elm St

City: Warton

Province: Ontario

Postal Code: NOH 2T0

Date of Occurrence: 07/13/2017

Time of Occurrence: 02:51:58 PM

Nature of the Incident

Level 1 Contingency Level 2 Contingency Level 3 Contingency [Click here To Show the Definitions](#)

Incident affected: Air Water Land Nothing

What was discharged or emitted?

- | | |
|--|--|
| <input type="checkbox"/> Chlorine | <input type="checkbox"/> Oil/Diesel/Gas |
| <input type="checkbox"/> Sodium Hypochlorite | <input checked="" type="checkbox"/> Untreated or partly treated sewage |
| <input type="checkbox"/> Calcium Chloride | <input type="checkbox"/> Odours |
| <input type="checkbox"/> Aluminum Compounds (Specify in Other) | <input type="checkbox"/> Water |
| <input type="checkbox"/> Arsenic | <input type="checkbox"/> Iron Coagulants |
| <input type="checkbox"/> Fluoride | |

Other: _____

If this was a discharge, spill or emission...

If a liquid, approximately what quantity was released?: 18000 Litres

If a gas, approximately what quantity was released?: _____

If a solid, approximately what quantity was released?: _____ Kg

What was the source of release?:

Pump station 1 - heavy rainfall overloading the two pumps at PS1. Operators arrived onsite after alarm call of high alarm in wet well. Level of wet well rose quickly, although haulers contacted to assist with transferring fluid to the wastewater plant overflow could not be avoided. Overflow occurred from 1442 to 1512h.

Where did the release go?:

Pump station 1 overflow - overflows into a storm drain that flows into Colpoy's Bay

If it entered a watercourse: Yes No

If it went off site: Yes No

Duration of the release?: 30 mins

Is the release now stopped?: Yes No

Was there any damage? (i.e. property and/or environmental): Yes No N/A

If "Yes", describe below and fill out "Insurance Claim" report

Action(s) Taken

What actions were taken to control the incident?

Haulers contacted to assist in transferring sewage to wastewater treatment plant. Operators onsite monitoring wet well levels and pump operation at pump station 1. Pumps 1 and 2 were put into manual mode to ensure pumps ran continuously. Samples were grabbed from the pump station wet well at 15:05h, operators unable to grab samples from overflow outfall. Hauler (Vaughan) arrived onsite at 15:10h and started hauling sewage from pump station 1. Haulers continued to transfer loads until 1830h when wet well level returned to normal operating levels. Hauler transferred 6 loads of approximately 13 m3 to the Wiarton WWTP (total volume transferred by Vac truck ~78m3).

What actions have been taken to remediate the incident?

Was this a reportable spill or discharge?: Yes No

If "Yes", at what time was it first reported to the MOE?

1500h - contacted SAC - Jerome Price-Todd (Environmental Officer) informed him that the overflow started at 14:42h. Pump Station 1 (526 Taylor St) overflow was ongoing at the time - unable to provide volumes or end time. Informed him that samples are going to be grabbed.
15:30h - contacted Owen Sound District Office - Shayne Finlay (Drinking Water Inspector)- informed him of overflow (times, location, and response actions). did not have volumes to provide him with.
1555h - contacted SAC - Justin (Environmental Officer) to update with the end time and total volume.
1635h - contacted Owen Sound District Office - Shayne Finlay - to update with end time and total volume.

Was it reported to the MOE district office?: Yes No

If "Yes", which office/location and who was the contact?: Shayne Finlay - Owen Sound - MOECC Office

Was it reported to MOE SAC?: Yes No

If "Yes", at what time was it reported to MOE SAC?:

1500h - contacted Jerome Price-Todd (Environmental Officer) informed him that the overflow started at 14:42h. Pump Station 1 (526 Taylor St) overflow was ongoing at the time - unable to provide volumes or end time. Informed him that samples are going to be grabbed.
1555h - contacted SAC - Justin (Environmental Officer) to update with the end time and total volume.

Was it reported to Municipality?: Yes No

If "Yes", at what time was it reported to Municipality?:

14:49h Leo-Paul Frigault (Senior Operations Manager) contacted Andrew Sprunt (Town of South Bruce Peninsula Public Works Manager) to inform him of overflow.
15:00h Andrew Sprunt arrived onsite of Pump Station 1.

External Assistance/Involvement

Was corporate or area office assistance requested?: Yes No

If "Yes", was it received?: Yes No

Was external emergency assistance requested?: Yes No

If "Yes", from who?: Fire Department Equipment Suppliers Canutec
 Ambulance or Hospital MOE Coast Guard
 Police Municipality

Other: _____

Was there any media involvement?: Yes No

If "Yes", who?: _____

Was the public affected?: Yes No

If "Yes", how?: _____

Updated By: Megan Edney 07/14/2017 07:40:18 AM

Comments:

15:15h MOH - informed Maggie of spill and she informed me that the health inspector would call back if they require any additional steps to be taken.

Fax Broadcast Report

Date & Time : JUL-14-2017 08:36 FRI
 Fax Number : 519-534-3526
 Fax Name : Warton Treatment Plant
 Model Name : WorkCentre 4250

Total Pages Scanned: 4		StartTime	Duration	Page	Mode	Job Type	Result
No.	Remote Station						
001	18002686061 SAC	07-14 08:31	01'02	004/004	EC	HS	Success
002	5193712905 MOFCC - Owen Send	07-14 08:33	01'02	004/004	EC	HS	Success
003	5193766310 MCH - GBTU	07-14 08:34	01'01	004/004	EC	HS	Success

Abbreviations:

HS: Host Send	PL: Polled Local	EC: Error Correct	TS: Terminated by System
HR: Host Receive	PR: Polled Remote	MP: Mailbox Print	RP: Report
WS: Waiting Send	MS: Mailbox Save	TU: Terminated by User	G3: Group3

Warton Water Treatment Plant
897, Bayview Street, Warton, ON, NOH 2T0
TEL: 519.534.1610 Fax: 519.534.3526



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Fax

	<u>Fax Number</u>
TO: Spills Action Centre:	1-800-268-6061
MOE Owen Sound:	519-371-2905
MOH Owen Sound:	519-376-6310
Town of South Bruce Peninsula (Attention Public Works Manager)	519-534-4976

Environment Canada
{Attention Wastewater Program}

1-819-420-7380

FROM: Megan Edney

DATE: Sept 27, 2017

RE: Partial Bypass: Warton WPER

PAGES: 4 (including this one)

MESSAGE:

Power Outage - caused UV system to fail
operator shutdown flow when they arrived onsite

If you have any questions, concerns, or require additional information, please
contact this office at 519-534-1610

FACILITY NAME: Warton Wastewater Control Plant

WORKS#: WW 110000819

LOCATION: Filter bldg, 441048 Elm St.DATE/TIME - September 27, 2017START: 0901h.STOP: 0926hTOTAL TIME: 25 minsOPERATOR RESPONDING: Andrew Bellamy OIT ORO (circle one) IF OIT-WHO
IS IN CHARGE FOR PROCESS CHANGES? _____BRIEF DESCRIPTION OF SITUATION: VV System failure Partial Bypass
Power Outage → Phase LossREASON FOR OCCURRENCE: Power Outage → Phase LossWAS THIS A BYPASS? YES NO

IF YES, WHAT WAS BYPASSED?

RAW SEWAGE BYPASS

 PARTIAL TERTIARY BYPASS OF SECONDARY EFFLUENT

OTHER: _____

WHAT WAS DISCHARGED? Filtered Lagoon Effluent

APPROXIMATE QUANTITY OF BYPASS: 8.7 LITRES/ Kg/ m³ (circle one) SHOW

CALCULATIONS:
25 mins

$$500 \text{ m}^3/\text{day} \div 24 \text{ hrs/day} \div 60 \text{ min/hr} = 0.347 \text{ m}^3/\text{min}$$

$$8.68 \text{ m}^3$$

WERE SAMPLES TAKEN? YES NO

IF YES,

LOCATION	DATE	TIME	RESULTS	FREE Cl ₂ (mg/L)	TOTAL Cl ₂ (mg/L)

YES NO SAMPLES TAKEN (BOD SS PHOSPHOROUS E.COLI)

YES NO DISINFECT BYPASS

YES NO DID RELEASE ENTER WATER COURSE

YES NO DID RELEASE GO OFFSITE

NOTES:

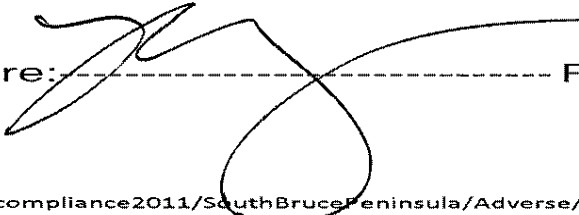
Power Outage (Rain) → UV system failed

NOTIFICATIONS:

PLACE	NUMBERS	VERBAL COMPLETE?	WRITTEN COMPLETE?	RESOLUTION COMPLETE?	CONTACT NAME
SAC (get reference number from them)	P: 1-800-268-6060 F: 1-800-268-6061	1020h.	1135h	1030h	Julianne Dominique Fatima Jabcen
OWEN SOUND MOE	P: 519-371-2901 F: 519-371-2905	1125	1135h	1030h	Shayne Finlay
OWEN SOUND MOH	P: 519-376-9420 ONCALL: P: 519-376-5420 F: 519-376-6310	LM 1030h 1127h	1135h	1030h	Jennifer Scott
CLIENT TOWN OF SOUTH BRUCE PENINSULA MANAGER	P: 519-534-1400 X 131 Public Works Manager F: 519-534-4976	0955	1135h	1030h	Andrew Sprunt
OCWA PCT SOUTHAMPTON	P: (519) 373-1398 F: (519) 797-3080	0925	1135h	1030h	Leo-Paul Frigault Megan Edney
ENVIRONMENT CANADA (attention WASTEWATER PROGRAM)	F: 1-819-420-7389	X	1135h	1030h	X

Waste Reference # 901552

Operator name: Megan Edney

Operator signature:  Position: PCT

Fax Broadcast Report

Date & Time : SEP-27-2017 11:37 WED
Fax Number : 519-534-3526
Fax Name : Wiarnton Treatment Plant
Model Name : WorkCentre 4250

Total Pages Scanned: 4

No.	Remote Station	StartTime	Duration	Page	Mode	Job Type	Result
001	5195344976	09-27 11:31	00' 24	004/004	EC	HS	Success
002	18002686061	09-27 11:32	00' 56	004/004	EC	HS	Success
003	5193712905	09-27 11:33	01' 33	004/004	G3	HS	Success
004	5193766310	09-27 11:35	00' 55	004/004	EC	HS	Success
005	18194207380	09-27 11:36	00' 26	004/004	EC	HS	Success

Abbreviations:

HS:Host Send PL:Polled Local EC:Error Correct TS:Terminated by System
HR:Host Receive PR:Polled Remote MP:Mailbox Print RP:Report
WS:Waiting Send MS:Mailbox Save TU:Terminated by User G3:Group3

Warton Water Treatment Plant
897, Bayview Street, Warton, ON, N0H 2T0
TEL: 519.534.1610 Fax: 519.534.3526



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Fax

	<u>Fax Number</u>
TO: Spills Action Centre:	1-800-268-6061
MOE/Owen Sound:	519-371-2905
MOH Owen Sound:	519-376-0980 Fax Machine Broken will send by email
Town of South Bruce Peninsula {Attention Tom Gray Karen Cameron	519-534-4976
OCWA {Attention PCT}	1-519-941-1794
Environment Canada {Attention Wastewater Program}	1-819-420-7380

FROM: Megan Edrney

DATE: September 29, 2017

RE: Partial Bypass #1443-ARNPC2

PAGES: 4 (including this one)

MESSAGE:

Warton WWTP: Partial Bypass (NO UV treatment)
of effluent.

If you have any questions, concerns, or require additional information, please
contact this office at 519-534-1610

FACILITY NAME: Warton Wastewater Control Plant

WORKS#: WW 11000819

LOCATION: Filter bldg, 441048 Elm St

DATE/TIME - September 29, 2017

START: 1310h

STOP: 1350h

TOTAL TIME: 40 mins

OPERATOR RESPONDING: Andrew Bellamy OIC OIT (circle one) IF OIT - WHO IS IN CHARGE FOR PROCESS CHANGES? _____

BRIEF DESCRIPTION OF SITUATION: Power No UV treatment (Partial Bypass)

REASON FOR OCCURRENCE: Power Outage / Phase Loss

WAS THIS A BYPASS? YES NO

IF YES, WHAT WAS BYPASSED?

RAW SEWAGE BYPASS

PARTIAL TERTIARY BYPASS OF SECONDARY EFFLUENT

OTHER: _____

WHAT WAS DISCHARGED? Filtered Lagoon Effluent

APPROXIMATE QUANTITY OF BYPASS: ---22.2--- LITRES/ Kg (m³) (circle one) SHOW

CALCULATIONS:
 40mins
 800 m³/day
 = 0.55 m³/min
 = 22.2 m³

WERE SAMPLES TAKEN? YES NO

IF YES,

L. CATION	DATE	TIME	RESULTS	FREE Cl ₂ (mg/L)	TOTAL Cl ₂ (mg/L)

YES NO SAMPLES TAKEN (BOD SS PHOSPHOROUS E.COLI)

YES NO DISINFECT BYPASS

YES NO DID RELEASE ENTER WATER COURSE

YES NO DID RELEASE GO OFFSITE

NOTES:

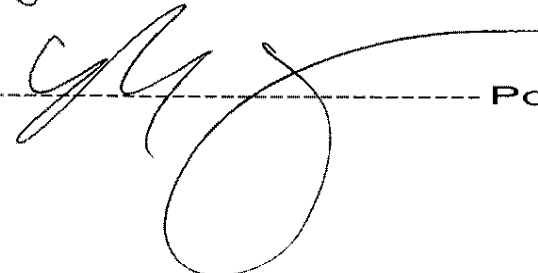
Operator called out & shutdown flow through the filter building until power is restored.

NOTIFICATIONS:

PLACE	NUMBERS	VERBAL COMPLETE?	WRITTEN COMPLETE?	RESOLUTION COMPLETE?	CONTACT NAME
SAC (get reference number from them)	P: 1-800-268-6060 F: 1-800-268-6061	1418h	1500		Marc Lamirande
OWEN SOUND MOE	P: 519-371-2901 F: 519-371-2905	1420h	"		Shayne Finlay
OWEN SOUND MOH	P: 519-376-9420 ONCALL: P: 519-376-5420 F: 519-376-0980	1428h	"		Jennifer Scott
CLIENT TOWN OF SOUTH BRUCE PENINSULA MANAGER	P: 519-534-1400 X131 TOM GRAY X130 Karen F: 519-534-4976 P: 519-534-1610 F: 519-534-3526	1430h 1440h	"		Karen Cameron
OCWA ORANGEVILLE PCT	P: 1-888-214-6987 X 230 PCT or LISA X 225 F: 519-941-1794	1353h	"		Leo-Paul Frigalet Megan Edney
ENVIRONMENT CANADA (attention WASTEWATER PROGRAM)	F: 1-819-420-7380	X	"		X

Waste Reference # 1443-ARNPC2

Operator name: Megan Edney

Operator signature:  Position: PCT

Revision 1,21-May-15

Fax Broadcast Report

Date & Time : SEP-29-2017 03:04PM FRI
 Fax Number : 5197973080
 Fax Name : ONT CLEAN WATER SOUTHAMPTON
 Model Name : WorkCentre 4250

Total Pages Scanned: 4

No.	Remote Station	StartTime	Duration	Page	Mode	Job Type	Result
001	918194207380	09-29 02:56PM	00' 24	004/004	EC	HS	Success - ENVCAN
002	95195344976	09-29 02:57PM	00' 00	000/004	EC	HS	Fail
003	95193712905	09-29 02:59PM	01' 33	004/004	G3	HS	Success - MOE OND
004	918002686061	09-29 03:01PM	00' 56	004/004	EC	HS	Success SOUND
005	95195344976	09-29 03:02PM	00' 00	000/004	EC	HS	Fail SAC
006	95195344976	09-29 03:03PM	00' 00	000/004	EC	HS	Fail

Abbreviations:

HS:Host Send PL:Polled Local EC:Error Correct TS:Terminated by System
 HR:Host Receive PR:Polled Remote MP:Mailbox Print RP:Report
 WS:Waiting Send MS:Mailbox Save TU:Terminated by User G3:Group3

WIARTON WASTEWATER TREATMENT PLANT

QUARTERLY BYPASS/OVERFLOW REPORT

For the period of

OCTOBER 1, 2017 TO DECEMBER 31, 2017

As per the Amended Environmental Compliance Approval (number 6045-ARDJS7, issued on November 23, 2017), we are required to submit a summary report of the bypass events to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

Bypass Events

A by-pass event is defined as "a diversion of sewage around one or more unit processes within the Sewage Treatment Plant with the diverted sewage flows being returned to the Sewage Treatment Plant treatment train upstream of the Final Effluent sampling location"

- During this period one bypass events occurred; November 6 at 10:40h.

Waste Reference #	Date	Time		Duration HH:MM	Volume (M ³)	Treatment Process Bypassed	Reason for Bypass
		Start	End				
0037-ASUMK4	November 6, 2017	10:40	11:00	0:20	35	UV	Power outage

Overflow Events

An overflow event is defined as "a discharge to the environment from the Works at a location other than the approved effluent disposal facilities or via the effluent disposal facilities downstream of the Final Effluent sampling location"

- During this period no overflow events occurred.

Environmental Incident #	Date	Time		Duration HH:MM	Volume (M ³)	Treatment Process	Reason for Bypass	Samples
		Start	End					

Warton Water Treatment Plant
897, Bayview Street, Warton, ON, N0H 2T0
TEL: 519.534.1610 Fax: 519.534.3526



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Fax

	<u>Fax Number</u>
TO: Spills Action Centre:	1-800-268-6061
MOE Owen Sound:	519-371-2905
MOH Owen Sound:	519-376-0980
Town of South Bruce Peninsula	519-534-4976

Environment Canada
{Attention Wastewater Program}

1-819-420-7380

FROM: Megan Edney

DATE: Nov 6, 2017

RE: Partial Bypass of Filtered Effluent

PAGES: 4 (including this one)

MESSAGE:

*Power outage caused UV system to fail. → Partial Bypass (No UV treatment)

If you have any questions, concerns, or require additional information, please
contact this office at 519-534-1610

FACILITY NAME: Warton Wastewater Control Plant

WORKS#: WW 110000819

LOCATION: 441048 Elm St, Georgian Bluffs

DATE/TIME - ~~Oct~~ November 6/17

START: 1040h

STOP: 1100h

TOTAL TIME: 20 mins

OPERATOR RESPONDING: Ben Madill OIC OIT ORO (circle one) IF OIT - WHO

IS IN CHARGE FOR PROCESS CHANGES? Andrew Bellamy

BRIEF DESCRIPTION OF SITUATION: Power outage - partial Bypass

REASON FOR OCCURRENCE: Power outage

WAS THIS A BYPASS? YES NO

IF YES, WHAT WAS BYPASSED?

RAW SEWAGE BYPASS

PARTIAL TERTIARY BYPASS OF SECONDARY EFFLUENT

OTHER: _____

WHAT WAS DISCHARGED? Partial filtered Lagoon effluent
(No UV treatment)

APPROXIMATE QUANTITY OF BYPASS: ---35--- LITRES/ Kg/ m3 (circle one) SHOW

CALCULATIONS:

$$2520 \text{ m}^3/\text{day} \div 24 \text{ hrs/day} \div 60 \text{ mins/hr} \\ = 1.75 \text{ m}^3/\text{min} \times 20 = 35 \text{ m}^3$$

WERE SAMPLES TAKEN? YES NO

IF YES,

L CATION	DATE	TIME	RESULTS	FREE Cl2 (mg/L)	TOTAL Cl2 (mg/L)

YES NO SAMPLES TAKEN (BOD SS PHOSPHOROUS E.COLI)

YES NO DISINFECT BYPASS

YES NO DID RELEASE ENTER WATER COURSE

YES NO DID RELEASE GO OFFSITE

NOTES:

Power outage began at 10:40h on Nov 6, 2017
 operator arrived to find power restored
 & UV lights on.

NOTIFICATIONS:

PLACE	NUMBERS	VERBAL COMPLETE?	WRITTEN COMPLETE?	RESOLUTION COMPLETE?	CONTACT NAME
SAC (get reference number from them)	P: 1-800-268-6060 F: 1-800-268-6061	1143h	1300h	1200h.	Blake Turner
OWEN SOUND MOE	P: 519-371-2901 F: 519-371-2905	1147h	1300h	1200h	Shayne
OWEN SOUND MOH	P: 519-376-9420 ONCALL: P: 519-376-5420 F: 519-376-0980	LM 1146h	1300h	1200h	Maggie Engelhardt
CLIENT TOWN OF SOUTH BRUCE PENINSULA MANAGER	P: 519-534-1400 X 131 Tom Gray Andrew Sprunt. F: 519-534-4976	LM 1149h	1300h	1200h	Andrew Sprunt
OCWA ORANGEVILLE	P: 1-866-214-6987 X 230 PCT or LISA X 225 F: 519-941-1794	LM-1160h	1300h	1200h	Leo-Paul Frigault Megan Edney
ENVIRONMENT CANADA (attention WASTEWATER PROGRAM)	F: 1-819-420-7380	X	1300h	1200h	X

Waste Reference # 0037-ASUMK4

Operator name: Megan Edney

Operator signature: [Signature] Position: PCT

Revision 1,21-May-15

Fax Broadcast Report

Date & Time : NOV-06-2017 02:12PM MON
 Fax Number : 5197973080
 Fax Name : ONT CLEAN WATER SOUTHAMPTON
 Model Name : WorkCentre 4250

Total Pages Scanned: 4

No.	Remote Station	StartTime	Duration	Page	Mode	Job Type	Result
001	918194207380	11-06 02:01PM	00'25	004/004	EC	HS	Success <i>ENV CAN</i>
002	95195344976	11-06 02:02PM	00'00	000/004	EC	HS	Fail
003	95193760680	11-06 02:03PM	00'00	000/004	EC	HS	Fail
004	95193712905	11-06 02:04PM	00'56	004/004	EC	HS	Success <i>MOECC own send</i>
005	918002686061	11-06 02:06PM	00'56	004/004	EC	HS	Success <i>SAC</i>
006	95195344976	11-06 02:07PM	00'00	000/004	EC	HS	Fail
007	95193760680	11-06 02:08PM	00'00	000/004	EC	HS	Fail
008	95195344976	11-06 02:09PM	00'00	000/004	EC	HS	Fail
009	95193760680	11-06 02:11PM	00'00	000/004	EC	HS	Fail

Abbreviations:

HS: Host Send PL: Polled Local EC: Error Correct TS: Terminated by System
 HR: Host Receive PR: Polled Remote MP: Mailbox Print RP: Report
 WS: Waiting Send MS: Mailbox Save TU: Terminated by User G3: Group3

Fax Confirmation Report

Date & Time : NOV-06-2017 03:58PM MON
Fax Number : 5197973080
Fax Name : ONT CLEAN WATER SOUTHAMPTON
Model Name : WorkCentre 4250

Total Pages Scanned:	5						
No.	Remote Station	StartTime	Duration	Page	Mode	Job Type	Result
001	95193760980	11-06 03:54PM	01'38	005/005	EC	HS	Success

Abbreviations:

HS:Host Send PL:Polled Local EC:Error Correct TS:Terminated by System
HR:Host Receive PR:Polled Remote MP:Mailbox Print RP:Report
WS:Waiting Send MS:Mailbox Save TU:Terminated by User G3:Group3

Warton Water Treatment Plant
897, Bayview Street, Warton, ON, N0H 2T0
TEL: 519.534.1610 Fax: 519.534.3526



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Fax

	Fax Number
TO: Spills Action Centre:	1-800-268-8061
MOE Owen Sound:	519-371-2905
MOH Owen Sound:	519-376-0980
Town of South Bruce Peninsula	519-534-4976

Environment Canada 1-819-420-7380
(Attention Wastewater Program)

FROM: Magan Edney

DATE: Nov 6, 2017

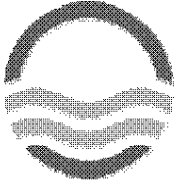
RE: Partial Bypass of Filtered Effluent

PAGES: 4 (including this one)

MESSAGE:

*Power outage caused UV system to fail. → Partial Bypass (No UV treatment)

If you have any questions, concerns, or require additional information, please
contact this office at 519-534-1610



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Appendix F

Septage Receiving Laboratory Results



SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - K0L 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 110000819

Project : PO#017018

14-December-2017

OCWA-Southampton (Warton WPCP)

Attn : Megan Edney

Date Rec. : 04 December 2017

LR Report: CA12073-DEC17

P.O. Box 760
Southampton, ON
N0H 2L0,

Copy: #1

Phone: 519-797-2561
Fax:pdf

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Sept- Septage-Holdi ng Tank
Sample Date & Time					30-Nov-17 17:00
Temperature Upon Receipt [°C]	---	---	---	---	7.0
Biochemical Oxygen Demand (BOD5) [mg/L]	04-Dec-17	16:21	11-Dec-17	11:20	1540
Total Suspended Solids [mg/L]	05-Dec-17	11:46	06-Dec-17	15:20	1310
Chemical Oxygen Demand [mg/L]	05-Dec-17	08:41	05-Dec-17	12:52	2920
Ammonia+Ammonium (N) [mg/L]	05-Dec-17	08:02	06-Dec-17	13:21	38.7
Total Kjeldahl Nitrogen [as N mg/L]	06-Dec-17	06:31	14-Dec-17	10:02	60.2
Phosphorus (total) [mg/L]	06-Dec-17	09:00	07-Dec-17	14:36	15.3
Isopropyl Alcohol [mg/L]	08-Dec-17	08:32	12-Dec-17	15:05	< 5
Methyl alcohol [mg/L]	08-Dec-17	08:32	12-Dec-17	15:05	< 5
Acetone [µg/L]	06-Dec-17	16:43	08-Dec-17	13:49	< 300
Benzene [µg/L]	06-Dec-17	16:43	08-Dec-17	13:49	< 5
Ethylbenzene [µg/L]	06-Dec-17	16:43	08-Dec-17	13:49	< 5
Methylene Chloride [µg/L]	06-Dec-17	16:43	08-Dec-17	13:49	< 5
Methyl ethyl ketone [µg/L]	06-Dec-17	16:43	08-Dec-17	13:49	< 200
Toluene [µg/L]	06-Dec-17	16:43	08-Dec-17	13:49	43.7
Xylene (total) [µg/L]	06-Dec-17	16:43	08-Dec-17	13:49	< 5
o-xylene [µg/L]	06-Dec-17	16:43	08-Dec-17	13:49	< 5
m/p-xylene [µg/L]	06-Dec-17	16:43	08-Dec-17	13:49	< 5


Carrie Greenlaw
Project Specialist
Environmental Services, Analytical



SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - K0L 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 110000819

Project : PO#017018

08-January-2018

OCWA-Southampton (Wiarion WPCP)

Attn : Megan Edney

Date Rec. : 29 December 2017

LR Report: CA13933-DEC17

P.O. Box 760
Southampton, ON
N0H 2L0,

Copy: #1

Phone: 519-797-2561
Fax: pdf

CERTIFICATE OF ANALYSIS

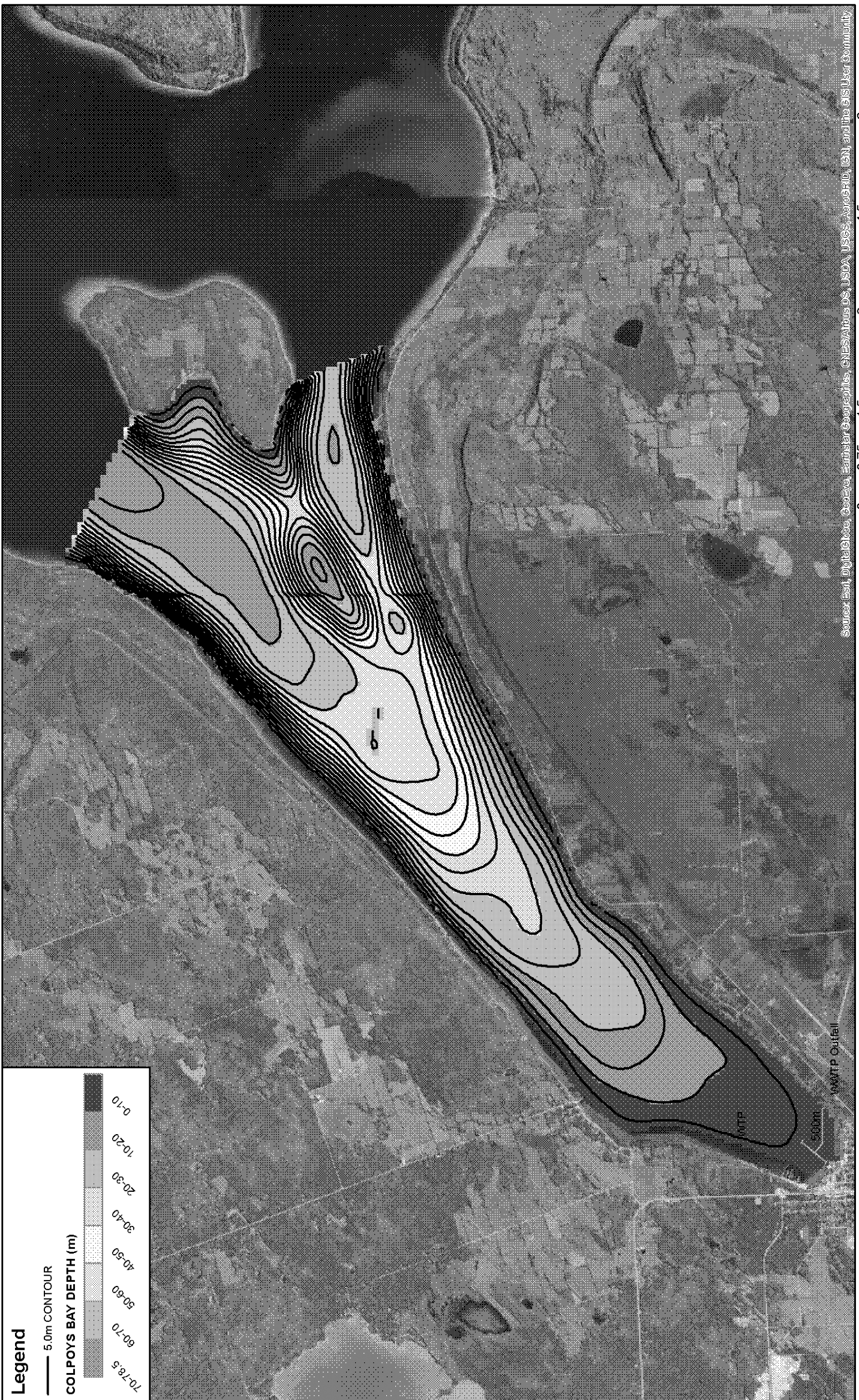
Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Sept Sept-Septage-Holding Tank
Sample Date & Time					28-Dec-17 14:30
Temperature Upon Receipt [°C]					3.0
Biochemical Oxygen Demand (BOD5) [mg/L]	29-Dec-17	15:38	03-Jan-18	16:02	1530
Total Suspended Solids [mg/L]	02-Jan-18	14:32	03-Jan-18	20:51	430
Chemical Oxygen Demand [mg/L]	02-Jan-18	12:16	03-Jan-18	09:32	3180
Ammonia+Ammonium (N) [mg/L]	29-Dec-17	15:20	02-Jan-18	15:24	7.8
Total Kjeldahl Nitrogen [as N mg/L]	02-Jan-18	11:52	05-Jan-18	09:16	77.8
Phosphorus (total) [mg/L]	03-Jan-18	08:45	04-Jan-18	12:44	14.3
Isopropyl Alcohol [mg/L]	03-Jan-18	13:06	08-Jan-18	08:38	< 5
Methyl alcohol [mg/L]	03-Jan-18	13:06	08-Jan-18	08:38	< 5
Acetone [ug/L]	29-Dec-17	16:55	04-Jan-18	10:25	< 600
Benzene [ug/L]	29-Dec-17	16:55	04-Jan-18	10:25	< 10
Ethylbenzene [ug/L]	29-Dec-17	16:55	04-Jan-18	10:25	< 10
Methylene Chloride [ug/L]	29-Dec-17	16:55	04-Jan-18	10:25	< 10
Methyl ethyl ketone [ug/L]	29-Dec-17	16:55	04-Jan-18	10:25	< 400
Toluene [ug/L]	29-Dec-17	16:55	04-Jan-18	10:25	39.0
Xylene (total) [ug/L]	29-Dec-17	16:55	04-Jan-18	10:25	< 10
o-xylene [ug/L]	29-Dec-17	16:55	04-Jan-18	10:25	< 10
m/p-xylene [ug/L]	29-Dec-17	16:55	04-Jan-18	10:25	< 10

Volatiles and Alcohols received in EPA vials preserved with Sodium Thiosulphate. Processed with client's approval.



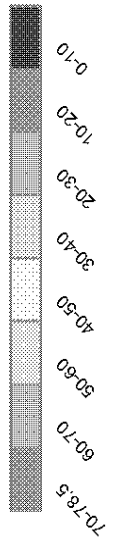
Carrie Greenlaw
Project Specialist
Environmental Services, Analytical



Legend

— 5.0m CONTOUR

COLPOYS BAY DEPTH (m)



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



WWTTP Outfall

500m