

**Ministry of the Environment,  
Conservation and Parks**  
*Drinking Water and Environmental  
Compliance Division*

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**Ministère de l'Environnement de la  
Protection de la nature et des Parcs**  
*Division de la conformité en matière d'eau  
potable et d'environnement*

Région du Centre

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March 4, 2024

Corporation of the Township of Ramara  
2297 Highway 12  
Brechin, Ontario  
L0K 1B0

**Attention: Zach Drinkwalter - Chief Administrative Officer, CAO**

**Re: Bayshore Village (spray irrig) Lagoon, Wastewater Inspection  
Site number -120002264**

Please find enclosed the Ministry of the Environment, Conservation and Parks Inspection Report for the Bayshore Village (spray irrig) Lagoon inspection. The compliance assessment took place on November 14, 2023.

The primary focus of this inspection was to confirm compliance with Ministry of the Environment legislation and control documents, as well as conformance with Ministry wastewater related policies for the inspection period. The Ministry is implementing a rigorous and comprehensive approach in the inspection of wastewater treatment systems that focuses on the collection, treatment, and discharge components as well as wastewater treatment system management practices.

If you have any questions or concerns regarding the rating, please contact Sheri Broeckel, Drinking Water Program Supervisor, at 705-716-3712.

Respectfully,

A handwritten signature in cursive script that reads "Carly Munce".

Carly Munce  
Water Inspector  
Drinking Water and Environmental Compliance Division  
Ministry of the Environment, Conservation and Parks  
Barrie District Office

Email: [carly.munce@ontario.ca](mailto:carly.munce@ontario.ca)  
Tel: 705-721-3758

CC Medical Officer of Health, Simcoe Muskoka District Health Unit  
Senior Operation Manger OCWA Ontario Clean Water Agency  
Barrie District Office File, Ministry of the Environment and Climate Change



**BAYSHORE VILLAGE (SPRAY IRRIG) LAGOON**

Physical Address: 3820 SIDE RD 20 ,  
RAMARA, ON L0K 1B0

## **INSPECTION REPORT**

System Number: 120002264  
Entity: CORPORATION OF THE  
TOWNSHIP OF RAMARA  
Inspection Start Date: November 14, 2023  
Site Inspection Date: November 14, 2023  
Inspection End Date: February 05, 2024  
Inspected By: Carly Munce  
Badge #: 1945

Ministry of the Environment,  
Conservation and Parks

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



*Carly Munce*

(signature)

**NON-COMPLIANCE**

The following item(s) have been identified as non-compliance, based on a "No" response captured for a legislative question(s). For additional information on each question see the Inspection Details section of the report.

**Ministry Program:** SEWAGE | **Regulated Activity:** Municipal Sewage

Item	Question	Compliance Response/Corrective Action(s)
NC-1	<p><b>Question ID:</b> MWW154000</p> <p>Were all required verbal notifications of discharges and/or spills provided forthwith as per O. Reg. 675/98 section 13?</p>	<p>All required verbal notifications of spills were not provided forthwith as per O. Reg. 675/98 section 13. Actions Required; 1) Uncontrolled effluent discharge from the spray irrigation system that enters the natural environment (ie. flows off the spray irrigation fields) is considered a spill and must be reported as per the Environmental Protection Act and its regulations. Training was provided to ensure all staff are aware of what constitutes a spill and when and how to report it to the Ministry. Confirmation was provided that OCWA operations staff have participated in OCWA's EC101 training which covers spills and overflows. As well at OCWA monthly cluster meeting spills was a topic of conversation. 2)The drainage piping that appears to be draining the low lying area between the two north fields was not part of the original design of the spray fields. OCWA has provided the purpose of this pipe. By March 31, 2024, provide details of this pipe's design to Carly Munce, Provincial Officer, via email to carly.munce@ontario.ca.</p>
NC-2	<p><b>Question ID:</b> MWW182000</p> <p>For Lagoon Systems, is the owner in compliance with the freeboard and/or supernatant cover conditions prescribed by the Environmental Compliance Approval or an Order?</p>	<p>For Lagoon Systems, the owner is not in compliance with the freeboard and/or supernatant cover conditions prescribed by the Environmental Compliance Approval or an Order.</p> <p>Actions Required;</p> <p>Restore freeboard to the 0.6 m height required by the Environmental Compliance Approval.</p>

	<p>Starting immediately and continuing until such time as freeboard is restored to 0.6 m, conduct weekly inspections of the berm to ensure structural integrity is being maintained and that there are no breaches.</p>
<p>NC-3 <b>Question ID:</b> MWW113000</p> <p>Are the works, related equipment and appurtenances being operated and maintained to achieve compliance prescribed by the Environmental Compliance Approval?</p>	<p>The works, related equipment and appurtenances were not being operated and maintained to achieve compliance prescribed by the Environmental Compliance Approval.</p> <p>Actions required; The holes in the pipe between the two north fields need to be plugged in such a manner as to prevent the discharge of effluent at all times before the start up of 2024 season. A email should be addressed to Officer Carly Munce at Carly.munce@ontario.ca on May 8th 2024 to say it has been completed. As well prior to the start-up of the spray irrigation system for the 2024 season, inspect all the piping and ensure any holes/leaks are repaired. Routine inspections should be regularly conducted while the spray irrigation system is operating to ensure that leaks are identified and repaired immediately.</p>
<p>NC-4 <b>Question ID:</b> MWW115000</p> <p>Does the operator-in-charge ensure that all equipment used in the treatment processes is monitored, maintained, inspected, tested and evaluated?</p>	<p>The operator-in-charge had not ensured that all equipment used in the processes was monitored, maintained, inspected, tested and evaluated.</p> <p>Action required; To conduct inspections of the spray irrigation equipment and piping network each day that the equipment is operated to ensure it is in good working order and to conduct regular inspections during and after spray irrigating to ensure the application rate is appropriate and no run off or ponding is occurring. Any issues identified during the daily inspections should be promptly addressed. Documentation should be</p>

carried out in the logbooks, or other record-keeping mechanism.

### RECOMMENDATIONS

The following item(s) have been identified as non-conformance, based on a "No" response captured for a best management practice (BMP) question(s). For additional information on each question see the Inspection Details section of the report.

**Ministry Program:** SEWAGE | **Regulated Activity:** Municipal Sewage

Item	Question	Recommendation(s)
R-1	<p><b>Question ID:</b> MWW190000</p> <p>Were the inspection questions sufficient to address other identified best practice issues?</p>	<p>The following issues were also noted during the inspection:</p> <p>It is recommended that</p> <ol style="list-style-type: none"> <li>1) Staff gauges be installed in both cells to permit freeboard measurements on a regular basis and using the top of berm survey results as a point of reference</li> <li>2) Grass and excess vegetation should be cut back and maintained around the perimeter of the lagoon cells to allow for regular inspections of the lagoon cells. As has been proposed and as normal recommended practice.</li> <li>3) As a routine practice, weekly berm checks should be conducted to make sure no breaches occur due to erosion or burrowing animals. These checks should be documented in the logbooks or another record-keeping mechanism</li> </ol>

### INSPECTION DETAILS

This section includes all questions that were assessed during the inspection.

**Ministry Program:** SEWAGE | **Regulated Activity:** Municipal Sewage

Question ID	MWW100000	Question Type	Information
<p><b>Legislative Requirement(s):</b> Not Applicable</p>			
<p><b>Question:</b> What was the scope of this inspection?</p>			
<p><b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b>                      The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry policies and guidelines during the inspection period. This wastewater treatment and collection system is subject to the legislative requirements of the Ontario Water Resources Act (OWRA) and the Environmental Protection Act (EPA) and regulations made therein. This inspection has been conducted pursuant to Section 15 of the OWRA and Section 156 of the EPA. This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.</p> <p>Bayshore Village sewage works are owned and operated by the Corporation of the Township of Ramara . Bayshore Village sewage works serves the Bayshore Village residential community consisting of 383 lots located on Lots 21 and 26 in Concession VI, and 29 lots on Southview Drive, in the Township of Ramara. Bayshore Village sewage works is Operated by Ontario Clean Water agency (OCWA).The population served by the sewage works is 993 people.</p> <p>The sewage works is a gravity fed system with two pumping stations feeding to two facultative waste stabilization ponds configured in series, located approximately 2.5 km Bayshore Village. Lagoon effluent is drawn from the larger of the two lagoons and discharged by spray irrigation to two fields located near the lagoons. The South Field is located adjacent to the lagoons and the North field is located across Concession 8 from the lagoons. The Bayshore Village sewage works has no reserve capacity. The annual average daily influent flow was 250.62 m3/day or 62.8 % of the rated capacity in 2022. The Operating Authority is undertaking efforts to identify and eliminate inflow and infiltration into the collection system to free up reserve capacity for the system. This inspection covers the period from the January 2022 - November 14, 2023. The previous inspection of the Bayshore Village sewage works by the Ministry of the Environment, Conservation and Parks occurred on July 4, 2018.</p>			

<b>Question ID</b>	MWW101000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Does a valid Environmental Compliance Approval(s) exist for the facility?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The owner had a valid Environmental Compliance Approval for the sewage works.  The system operates under Certificate of Approval 3-1337-81-968, issued July 17, 1996, identifying the average flow capacity to be 399 m3/day			

<b>Question ID</b>	MWW102000	<b>Question Type</b>	Information
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Does the facility's Environmental Compliance Approval contain conditions consistent with a modern Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The facility's Environmental Compliance Approval does not contain conditions consistent with a modern Environmental Compliance Approval.  ECA was issued in 1996 and does not contain modern conditions such as bypass/overflow and effluent limits/objectives.			

<b>Question ID</b>	MWW105000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Is the owner in compliance with the conditions associated with maximum flow rate or the rated capacity prescribed by the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The owner was in compliance with the conditions associated with maximum flow rate or the rated capacity prescribed by the Environmental Compliance Approval.  Condition 1.1 of Certificate of Approval 3-1337-81-968 states that the Owner shall ensure that the flow of sewage into the sewage treatment plant does not exceed the average daily flow of 399 m3/d for any period of time greater than one (1 ) calendar year. Peak flow in the operations manual prepared by C.C. Tatham and Associates Ltd. dated September 24, 2002 is 17.6 L/s (1 ,520 m3/d). During the inspection review the annual report states the annual average daily influent flow was 250.62 m3/day or 62.8 % of the rated capacity in 2022. The peak flows were not exceeded during the 2022 calendar, The Owner is aware that the flow is close to the rated capacity of the lagoon system. Note that this			

inspection was for 2022 and to the date of November 2023 and wasn't a full year and the calculation of average daily influent flow for a from January – November 2023 was an average of 253.63 m3/day. This is not (1) calendar year.

In years past, the system has operated at greater than 90% of its rated capacity. The Township's efforts to reduce inflow and infiltration (I&I) to the collection system in 2022 and 2023 appear to have resulted in a reduction of I&I. From January to November 2023, the average day flows were 253.63 m3/day.

<b>Question ID</b>	MWW131000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> If the effluent is not discharged continuously, did the discharge occur during the period prescribed by the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The sewage works effluent was discharged during the prescribed period.  Condition 1.3 of Certificate of Approval 3-1337-81-968 states that the Owner shall ensure that the effluent spray irrigation system is only operated during frost free periods between May 18 and September 28. Should it be necessary to operate the system prior to May 18 or after September 28 of any year, the Owner shall obtain a prior written approval for such an extended operation from the District Manager on a case-by-case basis.  Relief was granted to the Owner for Conditions 1.2 and 1.3 of the Certificate of Approval (C of A) No. 3-1337-81-968 for the 2022 spray irrigation season by the Ministry of the Environment Conservation and Parks as per the letter from the Environmental Permissions Branch sent on April 19, 2022. Within the relief, the spray season was extended until October 28, 2022. This relief was also granted on September 23, 2023 to extend the spray season till December 15, 2023 or first snow/ frost.			

<b>Question ID</b>	MWW104000	<b>Question Type</b>	Information
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Was the annual average daily flow below 80% of the rated capacity of the sewage works?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The annual average daily flow was not approaching the rated capacity of the sewage works.  The annual average rate was 62.8% in 2022.			

<b>Question ID</b>	MWW108000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Are the flow measuring devices installed, calibrated and maintained in accordance with the requirements of the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Flow measuring devices were installed, calibrated and maintained in accordance with the requirements of the Environmental Compliance Approval.			

<b>Question ID</b>	MWW109000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Were flow rates recorded at a frequency prescribed by the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Flow rates were recorded at a frequency prescribed by the Environmental Compliance Approval.			
Condition 2.1 of Certificate of Approval 3-1337-81-968 requires that the owner ensure that the following monitoring program is carried out upon commencement of the operation of the works: (a) Daily quantities of sewage being conveyed to the sewage treatment plant and the lagoon effluent being disposed of by spray irrigation onto individual spray irrigation fields shall be measured or estimated, and recorded. A magnetic flow meter is installed at the East Pumping to measure raw sewage flows. Operators record the flow meter readings multiple times each week and estimate the amount for each day since the previous reading. There is a magnetic flow meter on the discharge line to the spray fields. Operators record the flow meter readings when the spray fields are in operation.			

<b>Question ID</b>	MWW130000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> If the effluent is not discharged continuously, is the effluent discharged in accordance with the requirements of the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The sewage works effluent was discharged in accordance with Environmental Compliance			

Approval.

The C of A describes when discharge can't occur Condition 3.1 states The owner should ensure that the application of effluent to individual irrigation sites with in the approved spray irrigation field(s) and rotation of the irrigation sites is carried out in a manner that maximizes evaporation and allows the soil to dry out periodically. 3.2 The owner should ensure that whenever ponding or runoff of sprayed effluent occurs, the application of effluent to the affected area of the spray irrigation field is immediately terminated, and adequate time is allowed before the resumption of the application of effluent to that area for the area to dry to a degree that would preclude immediate recurrence of ponding or runoff. 3.3 The owner should ensure that no effluent application to the spray irrigation fields takes place during rainfall, when the ground is saturated and when the wind velocity exceeds 15km/hr.

However, the North spray irrigation fields can not be sprayed with out the South spray irrigation field being sprayed which doesn't allow for a rotation of the spray irrigation fields as the C of A states.

<b>Question ID</b>	MWW112000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Has the owner ensured that all equipment/components associated with the works have been installed in accordance with the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The owner had ensured that all equipment/components associated with the works was installed in accordance with the Environmental Compliance Approval.			

<b>Question ID</b>	MWW113000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Are the works, related equipment and appurtenances being operated and maintained to achieve compliance prescribed by the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The works, related equipment and appurtenances were not being operated and maintained to achieve compliance prescribed by the Environmental Compliance Approval.  Actions required; The holes in the pipe between the two north fieds need to be plugged in such a manner as to prevent the discharge of effluent at all times before the start up of 2024 season. A email			

should be addressed to Officer Carly Munce at Carly.munce@ontario.ca on May 8th 2024 to say it has been completed.

As well prior to the start-up of the spray irrigation system for the 2024 season, inspect all the piping and ensure any holes/leaks are repaired.

Routine inspections should be regularly conducted while the spray irrigation system is operating to ensure that leaks are identified and repaired immediately.

Based upon the physical inspection and the review of records for the inspection review period, the sewage works wasn't being operated and maintained to achieve compliance prescribed by the Environmental Compliance Approval # 3-1337-81-968. The MECP observed on October 24, 2023, three holes in three different locations along the pipe that carries effluent between the two north fields. These holes allowed for effluent to spray out of them into the low lying land that separates the two north fields.

Question ID	MWW115000	Question Type	Legislative
<p><b>Legislative Requirement(s):</b> OWRA   O. Reg. 129/04   18   (2);</p>			
<p><b>Question:</b> Does the operator-in-charge ensure that all equipment used in the treatment processes is monitored, maintained, inspected, tested and evaluated?</p>			
<p><b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The operator-in-charge had not ensured that all equipment used in the processes was monitored, maintained, inspected, tested and evaluated.</p> <p>Action required; To conduct inspections of the spray irrigation equipment and piping network each day that the equipment is operated to ensure it is in good working order and to conduct regular inspections during and after spray irrigating to ensure the application rate is appropriate and no run off or ponding is occurring. Any issues identified during the daily inspections should be promptly addressed. Documentation should be carried out in the logbooks, or other record-keeping mechanism.</p> <p>It is the policy of the Township that the operator conducting facility checks is the Operator in Charge (OIC) of those facilities. The OIC has the responsibility to complete the daily checks as required including taking flow meter readings, observing the pumping stations, noting times of visits, observing the installed equipment and noting and correcting any observed problems if possible, and reporting issues that cannot be fixed to the Overall Responsible Operator (ORO) and/or the Manager of Environmental Services for further action. The OIC conducts operational checks such as inspecting all signs and fences, monitoring weather conditions, inspection of berms, structures and pipes, checking sludge thickness, and further checks and tests as required. The Township has produced a thorough Operations Manual which provides procedures for most of the day to day operational checks and tests which the OIC completes and is responsible for. All of the observations are recorded on the daily log sheets and other facility records. The daily logs are regularly checked and double checked, by at least two staff members, to ensure that all of the required procedures are completed.</p>			

Regulation 129 sets out the duties and obligations of an Operator-in-charge. Subsection 18 (2)(d) states that the Operator-in-charge shall ensure that all equipment used in the processes within his or her responsibility is properly monitored, inspected and evaluated and that records of equipment operating status are prepared and available at the end of every operating shift. During the inspection, it was noted that the gate to the north spray fields was off the hinges and left open and unlocked while the spray irrigation system was in operation and following its shutdown for the shift. As well, holes in the piping between the two parts of the north spray fields were allowing effluent to spill into the low-lying area. Based upon these observations and the lack of notes in the logbook, it appears that these two items were not identified and promptly corrected through monitoring/inspections by the Operator-in-charge at a frequency that would ensure that such issues were corrected as they occurred.

<b>Question ID</b>	MWW186000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   R.R.O. 1990, Reg. 903   20   (1);			
<b>Question:</b> Is the owner of the system maintaining the monitoring well(s) in a manner sufficient to prevent the entry of surface water and other foreign materials?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The owner was maintaining the monitoring well(s) in a manner to prevent the entry of surface water and other foreign materials.  There are 12 Piezometer boreholes along the South Field and six Piezometer boreholes in the North Field. All of the boreholes are reportedly maintained to prevent the entry of surface water and other foreign materials.			

<b>Question ID</b>	MWW192000	<b>Question Type</b>	Information
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Does a lagoon form part of the system?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> A lagoon forms part of the system  The treatment facility consists of two facultative waste stabilization ponds, located 2.5 kilometres (km) north of the community on Sideroad 20, on Lot 21, Concession 7. Raw sewage is pumped to Cell B (Small Lagoon) from which it flows by gravity to Cell A (Large Lagoon). .			

<b>Question ID</b>	MWW182000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   16; OWRA   16.1; OWRA   16.2; OWRA   53   (1); OWRA   53   (2);			

<p><b>Question:</b> For Lagoon Systems, is the owner in compliance with the freeboard and/or supernatant cover conditions prescribed by the Environmental Compliance Approval or an Order?</p>
<p><b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> For Lagoon Systems, the owner is not in compliance with the freeboard and/or supernatant cover conditions prescribed by the Environmental Compliance Approval or an Order.</p> <p>Actions Required;</p> <p>Restore freeboard to the 0.6 m height required by the Environmental Compliance Approval. Starting immediately and continuing until such time as freeboard is restored to 0.6 m, conduct weekly inspections of the berm to ensure structural integrity is being maintained and that there are no breaches.</p> <p>The C of A 3-1337-81-968 states a 0.3m sludge storage bottom dead zone and a 0.66m freeboard. At the time of inspection it was difficult to see the freeboard due to vegetative growth on the top of the berms. Elevation measurements were taken on October 31, 2023. Freeboard in the large lagoon (cell A) was 1.24 m or greater but in the small lagoon (cell B) ranged between 0.24 m and 0.79 m. A minimum freeboard level of 0.66 m is required at all times to be compliant with the ECA.</p>

Question ID	MWW119000	Question Type	Information
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Are the sewage works effluent limits prescribed by the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The sewage works effluent limits were not prescribed by the Environmental Compliance Approval.			

Question ID	MWW134000	Question Type	Information
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Are the sampling requirements prescribed by the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The sampling requirements were prescribed by the Environmental Compliance Approval.			

<b>Question ID</b>	MWW137000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Are all sewage works influent sampling (raw sewage) requirements prescribed by the Environmental Compliance Approval being met?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> All sewage works influent (raw sewage) sampling requirements prescribed by the Environmental Compliance Approval were met.  Section 2 of Certificate of Approval 3-1337-81-968 requires monthly raw water grab samples be taken of raw sewage and tested for BOD5, suspended solids, total phosphorus and total kjeldahl nitrogen. During the inspection review period raw water sampling was performed at the required frequency. The required parameters were tested.			

<b>Question ID</b>	MWW136000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Are all sewage works effluent sampling requirements prescribed by the Environmental Compliance Approval being met?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> All sewage works effluent sampling requirements prescribed by the Environmental Compliance Approval were met.  Section 2 of Certificate of Approval 3-1337-81-968 requires that BOD5, suspended solids, total phosphorus, total kjeldahl nitrogen and (ammonia + ammonium) nitrogen be collected in a grab sample at least annually, and that the annual sampling of the lagoon effluent shall take place at the beginning of each spray irrigation season. During the inspection review period the effluent from Cell A and Cell B were sampled for the required parameters in May 2022 and 2023. Effluent from Cell A was also sampled for the required parameters.			

<b>Question ID</b>	MWW140000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Are all surface water sampling requirements prescribed by the Environmental Compliance Approval being met?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> All surface water sampling requirements prescribed by the Environmental Compliance			

Approval were met.

Section 2 of Certificate of Approval 3-1337-81-968 requires that three grab samples be taken each season, and that the surface water sampling shall take place prior to, in the middle, and after each spray irrigation season, provided there is flow in the stream. Sampling of Wainmans Creek is to be done up-stream and down-stream of the spray irrigation fields. Samples must be tested for BOD5, suspended solids, total phosphorus, total kjeldahl nitrogen, (ammonia + ammonium) nitrogen, nitrates, nitrites, pH and temperature. During the inspection review period Wainmans Creek, was sampled up and down stream of the spray irrigation fields in May, August and November of 2022 as well as May 2023, August, and November 2023, as required and samples were tested for the required parameters.

<b>Question ID</b>	MWW141000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Are all additional monitoring requirements prescribed by the Environmental Compliance Approval being met?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> All additional monitoring requirements prescribed by the Environmental Compliance Approval were met.  Section 2 of Certificate of Approval 3-1337-81-968 requires that soil core samples be taken annually. The annual soil sampling should take place prior to each spray irritation season. Samples must be tested for Total organic carbon, total phosphorus, total kjeldahl nitrogen, (ammonia + ammonium) nitrogen, nitrates, nitrites, pH chlorides, sodium, and conductivity. Samples were taken in the North and South spray fields May of 2022, and 2023.			

<b>Question ID</b>	MWW143000	<b>Question Type</b>	BMP
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Has the owner maintained the monitoring records since the date of the last inspection?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The owner had maintained the monitoring records since the date of the last inspection.			

<b>Question ID</b>	MWW142000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Has the owner maintained the monitoring records for the period prescribed by the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The owner had maintained the monitoring records for the period prescribed by the Environmental Compliance Approval.  Condition 2.2 of Certificate of Approval 3-1337-81-968 states that the Owner shall retain for a minimum of three years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this certificate. Records pertaining to the Bayshore Spray Irrigation System are kept for more than three years.			

<b>Question ID</b>	MWW145000	<b>Question Type</b>	Information
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Are the reporting requirements prescribed by an Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The reporting requirements were prescribed by an Environmental Compliance Approval.  The Environmental Compliance Approval (ECA) # 3-1337-81-968 contains a number of reporting requirements within Section 4. Reporting: -A week prior to startup, the Owner must make a written notification to the District Manager. -The Owner shall prepare and submit upon request to the District Manager, annual performance reports.			

<b>Question ID</b>	MWW146000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Do the annual performance reports meet the submission and contents requirements of the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The annual performance reports met the submission and contents requirements of the Environmental Compliance Approval.  Subsection 4.2 of the Environmental Compliance Approval (EGA) # 3-1337-81-968 contains a number of submission and content requirements for the annual performance report:·			

"(a) a summary of all monitoring data, including an overview of the success and adequacy of the sewage treatment program;  
 (b) a tabulation of all monitoring and analytical results obtained during the reporting period, including sampling/monitoring location and date;  
 (c) a record of the operation of the spray irrigation system, including dates and hours of operation, irrigation areas utilized, rates of effluent application, and volumes of effluent applied  
 (d) an account of any environmental and operating problems encountered at the site and the mitigative measures taken during the reporting period." The report is required to be prepared within the following 90 calendar days following the completion of the calendar year. ' - A review of the 2022 Annual Performance Report confirms the ECA requirements have been met.

Question ID	MWW154000	Question Type	Legislative
<p><b>Legislative Requirement(s):</b>                      EPA   O. Reg. 675/98   13   (1); EPA   O. Reg. 675/98   13   (2); EPA   O. Reg. 675/98   13   (3); EPA   O. Reg. 675/98   13   (4); EPA   O. Reg. 675/98   13   (5); EPA   O. Reg. 675/98   13   (6); EPA   O. Reg. 675/98   13   (7);</p>			
<p><b>Question:</b>                      Were all required verbal notifications of discharges and/or spills provided forthwith as per O. Reg. 675/98 section 13?</p>			
<p><b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b>                      All required verbal notifications of spills were not provided forthwith as per O. Reg. 675/98 section 13. Actions Required; 1) Uncontrolled effluent discharge from the spray irrigation system that enters the natural environment (ie. flows off the spray irrigation fields) is considered a spill and must be reported as per the Environmental Protection Act and its regulations. Training was provided to ensure all staff are aware of what constitutes a spill and when and how to report it to the Ministry. Confirmation was provided that OCWA operations staff have participated in OCWA's EC101 training which covers spills and overflows. As well at OCWA monthly cluster meeting spills was a topic of conversation.                      2)The drainage piping that appears to be draining the low lying area between the two north fields was not part of the original design of the spray fields. OCWA has provided the purpose of this pipe. By March 31, 2024, provide details of this pipe's design to Carly Munce, Provincial Officer, via email to carly.munce@ontario.ca.                      Reg. 675/98 section 13                      13. (1) This section sets out the notification requirements for,                      (a) persons who are required by subsection 15 (1) of the Act to give notice of a discharge of a contaminant, but only if the contaminant is a pollutant as defined in section 91 (1) of the Act;                      (b) persons who are required by subsection 92 (1) of the Act to give notice of a spill; and                      (c) persons who are required by subsection 92 (4) of the Act to give notice of a spill. O. Reg. 225/07, s. 7.                      (2) A person to whom this section applies shall give notice by telephoning the Spills Action Centre (1-800-268-6060 or 416-325-3000) and providing the information required by subsections (3) and (4) to the person who answers the telephone call. O. Reg. 225/07, s. 7.</p>			

Spill occurred on October 2, 2023, which the Ministry was made aware by a member of the public. When the ministry was on site OCWA was repairing the issues, but the spill hadn't been reported to the Spills Action Center (SAC), until after it had been repaired and MECP staff asked.

A second spill occurred on October 24, 2023, in the North fields that was observed by MECP staff. The spill occurred along the main pipe that carries the effluent to the back part of north field, there were three different spots with uncontrolled spraying of effluent into the low-lying land that separates the north field. The low-lying land that the spill was occurring to has a drainage pipe that was installed by the township about 12 years ago . This pipe leads to the drainage ditch which flows into Wainman Creek which leads to Lake Simcoe . This is a spill that was not reported to the Ministry.

Question ID	MWW149000	Question Type	Information
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Have any bypasses/overflows occurred at the sewage works during the inspection period?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Bypasses/overflows had occurred at the sewage works during the inspection period.  On April 5th, 2023 - June 22, 2023 an emergency bypass was initiated to prevent an over flow of Cell B. On April 5th the overflow pipe between cell A and cell B was plugged with 2 inflatable plugs to prevent flow between the two cells. Once the plug was installed flow was directed from the East Pump station in East Village directly to cell A. The draw down from cell A began on May 18, 2023, with the commencement of spray irrigation. The level in Cell A had sufficiently reduced to allow the plug to be removed from the overflow pipe between Cell A and cell B on June 22, 2023, at 9:00 ending the by pass of cell B. The total Duration 1866 Hours 33 Minutes and the total volume bypassed 22818 m3 . ECHO event number 1-34ITD3.			

Question ID	MWW148000	Question Type	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> For all bypasses/overflows which occurred from any portion of the sewage works, did the owner/operator maintain a logbook and/or records in accordance with the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The owner/operator maintained a logbook and/or records of all bypasses/overflows which occurred from any portion of the sewage works in accordance with the Environmental Compliance Approval.			

<b>Question ID</b>	MWW152000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Were notices and written reports provided to the Ministry for all bypasses/overflows which occurred from any portion of the sewage works in accordance with the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Notices and written reports of all bypasses/overflows were provided to the Ministry in accordance with the Environmental Compliance Approval.			

<b>Question ID</b>	MWW156000	<b>Question Type</b>	Information
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Does this plant receive sewage from a combined sewer collection system?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> It isn' t a combined sewer.			

<b>Question ID</b>	MWW193000	<b>Question Type</b>	Information
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Does the facility generate biosolids?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The system does not generate biosolids			

<b>Question ID</b>	MWW167000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   O. Reg. 129/04   4   (5);			
<b>Question:</b> Are the classification certificates of the system conspicuously displayed at the workplace or at premises from which the system is managed?			

**Compliance Response(s)/Corrective Action(s)/Observation(s):**

The classification certificates of the subsystems were conspicuously displayed at the workplace or at premises from which the subsystem was managed.

The certificates of the system classification was on the wall of the pump house on site . The Bayshore Village Lagoon system is classified as a Wastewater Treatment System Class 1 and Wastewater Collection System Class 1. The classification certificates are displayed at the pumphouse.

<b>Question ID</b>	MWW168000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   O. Reg. 129/04   13;			
<b>Question:</b> Are operator licences displayed in a conspicuous location at the workplace or at the premises from which the system is managed?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Operator licences were displayed in a conspicuous location at the workplace or at the premises from which the subsystem was managed.  Operator licences are kept both at the lagoon pumphouse and at the Environmental Services building in Brechin.			

<b>Question ID</b>	MWW169000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   O. Reg. 129/04   15   (1);			
<b>Question:</b> Has the overall responsible operator been designated for the wastewater treatment and collection facilities?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The overall responsible operator had been designated for the wastewater treatment and collection works.			

<b>Question ID</b>	MWW170000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   O. Reg. 129/04   15   (2);			
<b>Question:</b> In instances where the overall responsible operator was unable to act, was an adequately licensed operator designated to act in place of the overall responsible operator?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> An adequately licensed operator was designated to act in place of the overall responsible			

operator when the overall responsible operator was unable to act.

<b>Question ID</b>	MWW174000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   O. Reg. 129/04   17   (1); OWRA   O. Reg. 129/04   17   (2);			
<b>Question:</b> Have operators-in-charge been designated for the wastewater treatment plant and all associated collection facilities?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Operators-in-charge were designated for the wastewater treatment plant and all associated collection works.			

<b>Question ID</b>	MWW175000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   O. Reg. 129/04   17   (2);			
<b>Question:</b> Did the operator-in-charge ensure that records were maintained of all adjustments made to the processes within his or her responsibility?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The operator-in-charge ensured that records were maintained of all adjustments made to the processes within his or her responsibility.			

<b>Question ID</b>	MWW171000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   O. Reg. 129/04   14   (1); OWRA   O. Reg. 129/04   14   (2);			
<b>Question:</b> Do all operators have the appropriate level of licences for the wastewater treatment and collection facilities?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> All operators had the appropriate level of licences for the wastewater treatment and collection works.  All operators have the appropriate level of training and or experience for the wastewater treatment and collection facilities in accordance with the requirements of the Environmental Compliance Approval. Bayshore Village Wastewater Treatment is classified as Wastewater			

Treatment System Class 1 and Wastewater Collection System Class 1. All operators have the required certification.

<b>Question ID</b>	MWW173000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   O. Reg. 129/04   14   (1);			
<b>Question:</b> Do only licenced operators make adjustments to the treatment equipment?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Only licenced operators made adjustments to the treatment equipment.			

<b>Question ID</b>	MWW176000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   O. Reg. 129/04   19   (1); OWRA   O. Reg. 129/04   19   (2); OWRA   O. Reg. 129/04   19   (3); OWRA   O. Reg. 129/04   19   (4); OWRA   O. Reg. 129/04   19   (5); OWRA   O. Reg. 129/04   19   (6);			
<b>Question:</b> Do logs or other record keeping mechanisms for sewage works comply with the record keeping requirements?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The logs and other record keeping mechanisms complied with the record keeping requirements.  According the Environmental Compliance Approval (ECA)# 3-1337-81-968, the Owner is obligated to: -record 'daily quantities of sewage being conveyed into the sewage treatment plant and the lagoon effluent being disposed of by spray irrigation; and -record complaint from complaints from the public and steps taken to rectify complaints. A review of the records for the inspection review period confirm compliance.			

<b>Question ID</b>	MWW177000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   O. Reg. 129/04   19   (6);			
<b>Question:</b> Are logs and other record keeping mechanisms available for at least two (2) years?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Logs and other record keeping mechanisms were available for at least two (2) years.  According to Subsection 2.2 of Environmental Compliance Approval (ECA) # 3-1337 -81-968,			

the Owner must retain all records and information related to or resulting from the monitoring activities required by the certificate.

<b>Question ID</b>	MWW178000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2);			
<b>Question:</b> Do the operations and maintenance manuals meet the requirements of the Environmental Compliance Approval?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The operations and maintenance manuals met the requirements of the Environmental Compliance Approval.  Condition 3.5 of Certificate of Approval 3-1337-81-968 requires that based on the performance requirements and operational objectives stipulated above in Conditions 1.1 through 1.4 and 3.1 through 3.3, the Owner shall prepare an operations manual within six (6) months of the commissioning of the sewage works and keep it up to date. Upon request, the Owner shall make the manual available for inspection by Ministry personnel and furnish a copy to the Ministry.			

<b>Question ID</b>	MWW180000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2); OWRA   O. Reg. 129/04   20   (1); OWRA   O. Reg. 129/04   20   (2);			
<b>Question:</b> Do the operations and maintenance manuals contain up-to-date plans, drawings and process descriptions sufficient for the safe and efficient operation of the sewage works?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The operations and maintenance manuals contained up-to-date plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.  The available manuals appear to provide sufficient information/guidance for the safe and efficient operation of the subsystem. The documents and regulatory references in the Operations and Maintenance manuals don't appear to be up-to-date. The Township regularly reviews the manuals and typically updates them once a year. OCWA has a FEP (Facility Emergency Plan ) binder which is an extension of the O/M that operators have access to. The binder includes Facility Emergency Plan (FEP) Binders, WMS Work Orders/Job Plans, Drawings, SDS Binders, online manufacturer's manuals, contact information.			

<b>Question ID</b>	MWW179000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> OWRA   53   (1); OWRA   53   (2); OWRA   O. Reg. 129/04   20   (2); OWRA   O. Reg. 129/04   21   (1);			
<b>Question:</b> Do operators and maintenance personnel have ready access to operations and maintenance manuals?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Operators and maintenance personnel had ready access to operations and maintenance manuals.  The individual Operations and Maintenance Manuals for each system are stored in the system spray irrigation pumphouse. A recommendation would be able to have electronic access to it remotely on phone for operators to pull up when needed.			

<b>Question ID</b>	MWW181000	<b>Question Type</b>	BMP
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> If not required by an Environmental Compliance Approval, has a spill prevention control and countermeasures plan (i.e. contingency plan) been established?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> A spill prevention control and countermeasures plan was established.  According to Subsection 3.8 of Environmental Compliance Approval (EGA)# 3-1337-81-968, the Owner must ensure contingency plans and procedures are established and adequate equipment and material are available for dealing with:"emergency and upset conditions including equipment breakdowns at the sewage works, flooding, overflows of raw and partly treated sewage and spills of sludge into or out of the sewage works. The Owner shall establish notification procedures to be used to contact the District Manager and other relevant authorities in the case of an emergency and upset conditions." A review of the plans and procedures contained within the Bayshore Village Sewage Works Operations and Maintenance Manual confirms these conditions have been complied with as well as the contingency plan was sent to inspector during inspection review..			

<b>Question ID</b>	MWW184000	<b>Question Type</b>	BMP
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Is spill containment provided for the process chemicals and/or standby power generator fuel?			

**Compliance Response(s)/Corrective Action(s)/Observation(s):**

Spill containment was provided for the process chemicals and/or standby power generator fuel.

A spill response kit is housed at the Bayshore Village Sewage Works and is readily available in the event of a spill within the pumping station. There is no stand-by generator onsite. The Township has a portable generator that can be connected to any pumping station requiring power.

<b>Question ID</b>	MWW185000	<b>Question Type</b>	Information
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**Legislative Requirement(s):**

Not Applicable

**Question:**

Has the owner provided security measures for the facility?

**Compliance Response(s)/Corrective Action(s)/Observation(s):**

The owner had not provided security measures for the facility.

Cof A 3-113337-81-968 section 3.4 The owner shall provide and maintain:

A permanent fence around the entire spray irrigation fields, and

b) suitably posted signs at all points of access to all spray irrigation fields, indicating that treated sewage effluent is being used to irrigate the field and that trespassing is prohibited.

The Bayshore Village Sewage Works buildings are vinyl and steel-clad buildings with locking steel doors. "No Trespassing" signage and the Township's contact information are prominently displayed on the building doors and access gates. The buildings are equipped with an unauthorised entry security alarm on all the exterior doors. The lagoons and spray fields are encompassed by a permanent fence. The pumping stations in the distribution system are locked. No other part of the collection system appears to be at risk due to inadequate security.

During site visit on October 3 and then again on 24th the North field gate to access the fields was open and not on the hinges and therefore the public could access the fields. While not strictly identified as a requirement in Condition 3.4 it is strongly recommend gates should be closed and locked at all times when operators are not present on the site. Operators are suppose to do check on the fields and this should have been addressed.

Recommend that check list are made for operators so that security is kept intact at site.

<b>Question ID</b>	MWW190000	<b>Question Type</b>	BMP
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**Legislative Requirement(s):**

Not Applicable

**Question:**

Were the inspection questions sufficient to address other identified best practice issues?

**Compliance Response(s)/Corrective Action(s)/Observation(s):**

The following issues were also noted during the inspection:

It is recommended that

- 1) Staff gauges be installed in both cells to permit freeboard measurements on a regular basis and using the top of berm survey results as a point of reference
- 2) Grass and excess vegetation should be cut back and maintained around the perimeter of the lagoon cells to allow for regular inspections of the lagoon cells. As has been proposed and as normal recommended practice.
- 3) As a routine practice, weekly berm checks should be conducted to make sure no breaches occur due to erosion or burrowing animals. These checks should be documented in the logbooks or another record-keeping mechanism