

Municipality Of Chatham-Kent
Chatham-Kent Public Utilities Commission
Water/Wastewater Services

To: Mayor and Members of Council

From: Scott Sparling
(Acting) Manager, Compliance & Quality Standards
Chatham-Kent Public Utilities Commission

Date: February 18, 2021

Subject: 2020 Summary Reports for Drinking Water and Wastewater Systems

Recommendations

It is recommended that:

1. The attached Summary Reports for Drinking Water and Wastewater Systems be reviewed;
2. The attached Summary Reports for Drinking Water and Wastewater Systems be approved.

Background

Under the Safe Drinking Water Act 2002, Regulation 170/03, Schedule 22 'Summary Reports for Municipalities,' Administration is required to present a yearly summary report to the members of Commission and to the members of Council.

Commission has also asked that Administration prepare a summary of the wastewater treatment systems for information.

Comments

The Annual Summary Reports are attached for each water and wastewater system operated by CK PUC. The following list of items is included in the annual summary reports:

Water Systems:

- A summary list of issues for the water systems

- A list of requirements of the Act, the regulations, the system approval and any order that the system failed to meet at any time during the period covered by the report and the duration of the failure
- For each failure, a description of the measures that were taken to correct the failure
- A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows
- A comparison of the summary to the rated capacity and flow rates approved in the system approval.

Wastewater Systems:

- A brief description of the wastewater treatment system
- A list of effluent requirements as set out in the various Certificates of Approval or Environmental Compliance Approvals for the systems
- A comparison of the summary to the rated capacity and flow rates approved in the system approval
- A table of the effluent analysis and any compliance issues identified.

Areas of Strategic Focus and Critical Success Factors

The recommendations in this report support the following areas of strategic focus:

Economic Prosperity:

Chatham-Kent is an innovative and thriving community with a diversified economy

A Healthy and Safe Community:

Chatham-Kent is a healthy and safe community with sustainable population growth

People and Culture:

Chatham-Kent is recognized as a culturally vibrant, dynamic, and creative community

Environmental Sustainability:

Chatham-Kent is a community that is environmentally sustainable and promotes stewardship of our natural resources

The recommendations in this report support the following critical success factors:

Financial Sustainability:

The Corporation of the Municipality of Chatham-Kent is financially sustainable

Open, Transparent and Effective Governance:

The Corporation of the Municipality of Chatham-Kent is open, transparent and effectively governed with efficient and bold, visionary leadership

Has the potential to support all areas of strategic focus & critical success factors

Neutral issues (does not support negatively or positively)

Consultation

PUC Environmental Compliance Technicians
Supervisor of Compliance

Financial Implications

There are no financial implications resulting from the recommendations

Prepared by:

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CK PUC

Reviewed by:

Tim Sunderland
General Manager
CK PUC

Attachment(s):

Summary Report for Chatham-Kent Drinking Water Systems 2020

Summary of Compliance Issues for Chatham-Kent Wastewater Systems in 2020

**Public Utilities Commission for the Municipality of Chatham-Kent
Summary Report for Water Systems
2020**

The following issues of Non Compliance with the Terms and Conditions of the Drinking Water Works Permit or the Municipal Drinking Water License and the following Adverse Drinking Water Quality Incidents and Boil Water Advisories occurred:

Bothwell Distribution System

Non Compliance	None
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Adverse	None
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Chatham Drinking Water System

Non Compliance	None
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Adverse Jan 17 #149456	Sample Station 5, Wellington St. in the North-Kent Distribution System 1 Total Coliform Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Mar 03 #149684	Sample Station 10, Eastlawn Drive 1 Total Coliform Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Mar 22 #149778	Point of Entry 20 Total Coliforms Corrective Action Taken: Flush and Resample at the site and in the Distribution System. Results Satisfactory.
Adverse Jun 23 #150350	Sample Station 3, Prairie Siding – Riverline at Merlin Townline 1 Total Coliform Corrective Action Taken: Flush and Resample. Results satisfactory.

**Public Utilities Commission for the Municipality of Chatham-Kent
 Summary Report for Water Systems
 2020**

Adverse Jun 24 #150363	Dundee Blow-off, from a repair sample. 9 Total Coliforms Corrective Action Taken: Flush and Resample (2 consecutive sets) Results satisfactory.
Adverse Aug 05 #151112	Mitchell's Bay Elevated Tank 1 Total Coliform Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Aug 05 #151113	Sample Station 8, Phillip Street 41 Total Coliforms Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Aug 25 #151557	Sample Station 3, Riverview at Merlin Townline 1 Total Coliform Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Nov 09 #152907	Dover Booster Pump Station 14 Total Coliforms and 1 E.coli Corrective Action Taken: Flush and Resample (2 consecutive sets). Results satisfactory.
Adverse Nov 09 #152908	Sample Station 19, McNaughton Line E 28 Total Coliforms Corrective Action Taken: Flush and Resample. Results satisfactory.
Boil Water Advisory Dec 01 #153131	Pain Court Line Suspected contamination during a watermain repair. Corrective Action Taken: Flush and Resample (2 consecutive sets). Results satisfactory.

**Public Utilities Commission for the Municipality of Chatham-Kent
 Summary Report for Water Systems
 2020**

Ridgetown Drinking Water System

Non Compliance	None
Adverse Aug 25 #151558	Ebenezer Street West 1 Total Coliform Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Sep 15 #152027	Erie Street South 3 Total Coliforms Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Sep 22 #152169	Ebenezer Street West 1 Total Coliform Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Naturally Occurring Fluoride	Fluoride is naturally occurring in the source water in amounts greater than the 1.5 mg/L standard. Corrective Action Taken: The Ministry of Environment, and the Ministry of Health have been advised by Adverse Water Quality Notification 2019 Jan 18.
Adverse Naturally Occurring Sodium	Sodium is naturally occurring in the source water in amounts greater than the 20 mg/L standard. Corrective Action Taken: The Ministry of Environment, and the Ministry of Health have been advised by Adverse Water Quality Notification 2019 Dec 19.

South Drinking Water System

Non Compliance	None
Adverse	None

**Public Utilities Commission for the Municipality of Chatham-Kent
 Summary Report for Water Systems
 2020**

Wallaceburg Drinking Water System

Non Compliance	None
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Adverse May 20 #150006	Sample Station 5, Dora Drive 3 Total Coliforms Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Jul 14 #150660	Sample Station 11, McKee Road 4 Total Coliforms Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Jul 21 #150827	Sample Station 6, Mount Pleasant and Wilson NDOGT Corrective Action Taken: Flush and Resample (two consecutive sets). Results satisfactory.
Adverse Sep 1 #151737	Sample Station 8, Stewart Line and St. Clair NDOGN Corrective Action Taken: Flush and Resample (two consecutive sets). Results satisfactory.
Adverse Sep 10 #151933	Sample Station 11, McKee Road 7 Total Coliforms Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Sep 29 #152316	Tie-in on Dufferin Avenue 13 Total Coliforms Corrective Action Taken: Flush and Resample. Results satisfactory.

**Public Utilities Commission for the Municipality of Chatham-Kent
 Summary Report for Water Systems
 2020**

Wheatley Drinking Water System

Non Compliance	None
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Adverse with Boil Water Advisory Jan 07 #149392	8 th Concession Blowoff, Richardson Side Road (Private Line) 48 Total coliform, 20 E. coli, and high HPC in the system. Corrective Action Taken: Flush and Resample - 2 consecutive sets. Results satisfactory.
Adverse with Boil Water Advisory Jan 07 #149393	Sample Station 12, 12 St Clair St., Tilbury 129 Total coliform, 78 E. coli and high HPC in the system. Corrective Action Taken: Flush and Resample - 2 consecutive sets. Results satisfactory.
Adverse Jun 16 #150273	Sample Station 1, Mersea Road 2, Leamington 1 Total Coliform Corrective Action Taken: Flush and Resample. Results satisfactory.
Adverse Jun 18 #150310	Tilbury Rechlorination Station Free Chlorine >4.0 mg/L for approx. 1 minute Corrective Action Taken: Self-corrected.
Adverse Jul 14 #150661	Point of Entry and Raw bottles assumed to be reversed. 18 Total Coliforms and 1 E. coli Corrective Action Taken: Flush and Resample - 2 consecutive sets. Results satisfactory.
Adverse Jul 29 #150983	Hydrant on Julian St. 16 Total Coliform Corrective Action Taken: Flush and Resample. Results satisfactory.

**Public Utilities Commission for the Municipality of Chatham-Kent
Summary of Compliance Issues for Wastewater Systems
2020**

The following issues of non-compliance with the respective Environmental Certificates of Approval or Certificates of Approval occurred:

Blenheim Wastewater Treatment Plant:

	None
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Chatham Wastewater Treatment Plant:

Residual Chlorine June Average	Final Effluent Residual Chlorine average 0.02 mg/L Limit is 0.01 mg/L Corrective Action Taken: Operational adjustments were made to the Sulfur dioxide dosing system.
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Clearville Wastewater Treatment Plant:

	None
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Dresden Wastewater Treatment Plant:

	None
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Merlin Sewage Treatment Lagoon System:

Total Phosphorus April-May Discharge Period Average	Final Effluent Total Phosphorus average 1.16 mg/L Limit is 1.0 mg/L Corrective Action Taken: Investigating the In-House Total Phosphorus procedure.
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Mitchell's Bay Sewage Treatment Lagoon System:

	None
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Ridgetown Wastewater Treatment Plant:

	None
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**Public Utilities Commission for the Municipality of Chatham-Kent
 Summary of Compliance Issues for Wastewater Systems
 2020**

Tilbury Wastewater Treatment Plant:

Total Phosphorus January Average	Final Effluent Total Phosphorus monthly average 0.71 mg/L Limit is 0.50 mg/L Corrective Action Taken: Discussions continue with the offending industry regarding compliance with the Sewer Use Bylaw.
Total Phosphorus February Average	Final Effluent Total Phosphorus monthly average 1.55 mg/L Limit is 0.50 mg/L Corrective Action Taken: Discussions continue with the offending industry regarding compliance with the Sewer Use Bylaw.
Total Phosphorus March Average	Final Effluent Total Phosphorus monthly average 0.98 mg/L Limit is 0.50 mg/L Corrective Action Taken: Discussions continue with the offending industry regarding compliance with the Sewer Use Bylaw.
Total Phosphorus June Average	Final Effluent Total Phosphorus monthly average 0.74 mg/L Limit is 0.50 mg/L Corrective Action Taken: Discussions continue with the offending industry regarding compliance with the Sewer Use Bylaw.
Total Phosphorus July Average	Final Effluent Total Phosphorus monthly average 0.78 mg/L Limit is 0.50 mg/L Corrective Action Taken: Discussions continue with the offending industry regarding compliance with the Sewer Use Bylaw.
Total Phosphorus September Average	Final Effluent Total Phosphorus monthly average 0.75 mg/L Limit is 0.50 mg/L Corrective Action Taken: Discussions continue with the offending industry regarding compliance with the Sewer Use Bylaw.
Total Phosphorus October Average	Final Effluent Total Phosphorus monthly average 0.69 mg/L Limit is 0.50 mg/L Corrective Action Taken: Discussions continue with the offending industry regarding compliance with the Sewer Use Bylaw.
Ammonia October Average	Final Effluent Ammonia monthly average 5.80 mg/L May 01 to Oct 31 Limit is 2.0 mg/L Corrective Action Taken: Discussions continue with the offending industry regarding compliance with the Sewer Use Bylaw.
Ammonia Loading October Average	Final Effluent Ammonia Loading monthly average 10.8 Kg/day May 01 to Oct 31 Limit is 10.8 Kg/day Corrective Action Taken: Discussions continue with the offending industry regarding compliance with the Sewer Use Bylaw.

**Public Utilities Commission for the Municipality of Chatham-Kent
Summary of Compliance Issues for Wastewater Systems
2020**

Wallaceburg Wastewater Treatment Plant:

Secondary Bypass Jan 11 to Jan 12	Wallaceburg Wastewater Plant Secondary Bypass of 246.53 m ³ Due to heavy rainfall Corrective Action Taken: Disinfection and Sampling
Secondary Bypass September 7	Wallaceburg Wastewater Plant Secondary Bypass of 51.07 m ³ Due to heavy rainfall Corrective Action Taken: Disinfection and Sampling

Wheatley Wastewater Treatment Plant:

	None
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