The Corporation of the City of Kawartha Lakes

Council Report

Report Number WWW2019-001

Date:	January 15, 2019
Time:	2:00 p.m.
Place:	Council Chambers

Ward Community Identifier: All

Title: Lindsay Water Pollution Control Plant Provincial Officer's Order Number 1-JX6KE

Description: Lindsay Water Pollution Control Plant Provincial Officer's Order

Author and Title: Amber Hayter, Supervisor, Water/ Wastewater Operations

Recommendation(s):

That Report WWW2019-001, "Lindsay Water Pollution Control Plant Provincial Officer's Order Number 1-JX6KE", be received.

Department Head:

Financial/Legal/HR/Other:_____

Chief Administrative Officer:

Background:

At the Council Meeting of November 23, 2004 Council adopted the following resolution directing staff to forward all Provincial Officer's Orders from the Ministry of the Environment, Conservation and Parks (MECP), regarding water systems to Council:

CARRIED UNANIMOUSLY CR2004-1263

THAT staff be directed to bring forward to Council, upon reception, any and all Provincial Orders regarding water systems.

Although the recent Provincial Officer's Order received is not specifically a drinking water system it is a wastewater system and therefore consistent with this resolution. This report provides an overview to Council of the recent Provincial Officer's Report and Order received by the City. As well, this report provides Council with an update of the pro-active steps that staff members have taken to ensure compliance prior to receiving the Order and continued actions staff members are taking to ensure effective plant operations. The full Provincial Officer's Report and Order is appended as Appendix A. The following provides a summary of the order:

On December 6, 2018, The Corporation of the City of Kawartha Lakes received Provincial Officer's Order Number 1-JX6KE for the Lindsay Water Pollution Control Plant (WPCP), operated by Ontario Clean Water Agency. The Provincial Officer's Report identified a series of events that lead to the noncompliance and the following is a summary of the issues the Ministry of the Environment, Conservation and Parks (MECP) identified in their Report:

On August 4, 2017 the MECP's Provincial Officer requested that City/Operating Authority increase the reporting frequency as required by the Environmental Compliance Approval (ECA) for the Lindsay WPCP, for the Total Ammonia Nitrogen (TAN). The frequency was increased from every six (6) months to every month. OCWA and the City complied with this request.

On October 13, 2017 an exceedance was reported to the MECP for the TAN concentrations during the 2017 non-freezing period (May to September).

On June 13, 2018 an exceedance was reported to the MECP for the TAN concentrations during the month of May. The following day the MECP requested that OCWA prepare an action plan to mitigate further TAN exceedance.

On June 18, 2018 OCWA responded with "A new jet aerator was purchased in February 2018 with an expected arrival of July 20, 2018.

This will be added to the current aerators present. We have purchased four new aerator motors (one for each type in use) as spares are kept on site. A crane has been scheduled for aerator repair or replacement and the aerator process needs to be shut down to access the aerators by boat. This process takes several hours to remove and install one. This shut down also exacerbates the low DO (dissolved oxygen) conditions and the process takes up to two weeks to fully recover." MECP was satisfied with these actions.

On July 19, 2018 an exceedance was reported to the MECP for the TAN concentrations during the month of June.

On August 8, 2018 a conference call was held with City staff, OCWA, MECP Environmental Assessment & Permissions Branch and the Drinking Water and Environmental Compliance Division. The TAN limits were discussed as part of the renewal process for the ECA for the facility.

On August 15, 2018 an exceedance was reported to the MECP for the TAN concentrations during the month of July.

On September 14, 2018 an exceedance was reported to the MECP for the TAN concentrations and the Total Suspended Solids (TSS) during the month of August.

On September 25, 2018 OCWA reported to the MECP that the new jet aerator has been installed. This installation was behind the anticipated delivery and installation date due to manufacturer delays.

On October 12, 2018 an exceedance was reported to the MECP for the TAN concentrations during the 2018 non-freezing period (May to September). This reporting is an additional report based on a summary of the results received from May to September, which had to all be reported individually as identified above.

On October 18, 2018 the MECP's Environmental Assessment and Permissions Branch issued a new ECA that stipulated the monthly reporting concentration limits.

On October 25, 2018 the MECP completed a site inspection of the Lindsay WPCP. The inspector had concerns with the accumulation of vegetation growth in the Aeration Tank, thus impacting the treatment process.

On November 13, 2017 an exceedance was reported to the MECP for the monthly TAN concentrations during October.

The MECP Technical Support Branch, Surface Water Specialist commented the following regarding the elevated levels of TAN in the Scugog River. "TAN released into the environment will convert to nitrite and then nitrate. After phosphorous, nitrate is an important nutrient that affects the primary productivity and algal biomass of freshwater lake and rivers. Nutrient levels are strongly related to the aesthetic appearance of a water body and are correlated to decreases in water transparency resulting from an increase in algal biomass. Increased biomass may result in long-term decreases in oxygen concentrations with consequences for fish habitat."

The Provincial Officer ordered that the City retain the services of a Qualified Person to prepare an action plan to address the TAN and TSS exceedances occurring at the Lindsay WPCP. The Ministry has requested the non-compliance issues be addressed to comply with the ECA requirements.

Rationale:

On December 12, 2018 the City requested a Director's Review from the Ministry of the Provincial Officer's Order and a copy of this letter is appended as Appendix B. A review was requested on the basis that the City has already taken steps to address the exceedances of the effluent criteria and had already retained the services of a Qualified Person to address the TAN and TSS exceedance, in addition to an overall review of the system including capacity and future needs.

In the response to the letter, a meeting was held on December 20, 2018 between the City, OCWA and MECP to discuss the status of the order. During the meeting, City representatives and OCWA clarified the initiatives taken to rectify the non-compliance issues and opened the lines of communication. The City has committed to action by securing financing through capital approval and by hiring a firm to complete a detailed design for upgrades and improvements to the Lindsay WPCP. These upgrades include a new aeration cell to improve effluent criteria well into the future. The design process takes a significant amount of time due to the technical nature of the project. This planning process is critical to ensuring the City's assets are designed to consider future growth for long-term investment and sustainability. To improve aeration in the interim the City installed a new type of aerator (jet) on September 25, 2018. There is a second jet aerator to be installed early in 2019 as part of the 2019 capital budget. OCWA has already seen improvement in water quality with the current aerator that was installed in 2018.

The outcome from the meeting was that the City in conjunction with OCWA are to prepare and submit an action plan which details how the TAN exceedances at the Lindsay WPCP will be addressed on a short term basis. The plan will state recommendations from a qualified person to address the exceedances and must be completed by January 31, 2018.

On December 19, 2018 the ministry provided a status that the Provincial Officer's Order will remain "Stayed" or "on hold" until the Ministry has received and reviewed the action plan to be submitted on or before January 31, 2019. A copy of the Ministry's Stay Notice and Extension of Time for Review letter for the Provincial Officer Order #1-JX6KE is appended as Appendix C.

Other Alternatives Considered:

No other alternatives may be considered outside of the stipulated requirements within the Provincial Officer's Order, and any future direction provided by MECP as a result of the review, in order to comply with applicable legislation to reduce liability to the City.

Financial/Operation Impacts:

Capital budgets have been approved by Council for the detailed design of upcoming upgrades to the facility and the purchase of another jet aerator in 2019.

At this time, it is unknown if there will be any additional costs for hiring a Qualified Person to prepare the required action plan, or if there will be any additional requirements from the MECP for short term solutions.

Relationship of Recommendation(s) to the 2016-2019 Strategic Plan:

This Report is consistent with Council Adopted Strategic Plan in that it contributes to the following goals:

- Goal 2 An Exceptional Quality of Life
- Goal 3 A Healthy Environment.

These goals are reflected by our efforts to provide safe drinking water that is essential for the quality of life of residents and visitors. We will continue to work with OCWA and the Ministry to ensure compliance with the Safe Drinking Water Act and associated regulations.

Consultations:

Chief Administrative Officer Director, Public Works Manager, Environmental Services City Solicitor

Attachments:

Appendix A– Lindsay Water Pollution and Control Plant Provincial Officer's Order Number 1-JX6KE



Provincial Officer's Order Number 1-JX6KI

Appendix B–Letter Request for Director's Review of the Ministry's Provincial Officer's Order # 1-JX6KE



Appendix C–Stay Notice and Extension of Time for Review Provincial Officer Order #1-JX6KE



Stay Notice and Extension of Time for

Department Head E-Mail: brobinson@kawarthalakes.ca **Department Head:** Bryan Robinson