

March 11, 2019

Mr. Glenn Rutherford Senior Environmental Officer Ministry of the Environment, Conservation and Parks Peterborough District Office 300 Water Street, 2nd Floor South Peterborough, ON, K9J 8M5

Dear Mr. Rutherford,

Re: 2017 Lindsay Ops Landfill Annual Status Report, Surface water Review

This letter is in response to Dana Cruikshank's comments and recommendations made January 14, 2019 regarding the 2017 Lindsay Ops Landfill Annual Status Report. This report was submitted in 2018 and is for the 2017 annual monitoring period. The City would like to thank you for reviewing this document. Below is each recommendation with the City's response:

1. The Recommendations provided by Cambium in the biomonitoring report should be reviewed by EMRB. The reviewer is inclined to agree that the sampling protocol should be changed to OBBN but wonders if historical data could be assessed/transferred to the OBBN protocol. A suggestion was made that perhaps both methods should be implemented for a couple of years to determine if historical data could be transferred.

The City is interested in implementing these recommendations by Cambium. Since Cambium's recommendations are similar for the 2018 annual reporting period as 2017 we have forwarded the most recent 2018 Biomonitoring report to you so that you could in turn review and also forward to the EMRB for review. We hope to set up a teleconference meeting with the EMRB, yourself and Dana Cruikshank to discuss the recommendations further and what the City's next steps should be.

2. A discharge estimate of flows entering the Scugog River should be made at SW3, SW13 and WPCP to determine loadings. This would help determine if the landfill contributes to a sufficient loading to the Scugog River to impact on water quality.

The City has forwarded the surface water comments to Golder Associates for advice on how to collect data in 2019 in order to estimate the flows entering the Scugog River for the 2019 Annual Monitoring Report and will propose a method to do this. It may be challenging to get non-stop flow data as the ditches are periodically dry for extended durations in most years. However the City will look at actual flow monitoring where possible combined with some level of modeling to come up with estimated annual loadings.

3. Groundwater should review to determine if contaminated groundwater could be impacting water quality in the north and south ditch.

Agreed. We will try to setup a teleconference meeting with the groundwater reviewer, yourself and Dana Cruikshank about these recommendations to provide some context for their review and if there are any further specific things they need from us.

4. The lagoons need to be monitored more closely to prevent seeps entering either ditch.

The Ontario Clean Water Agency (OCWA) which currently operates the Lindsay WPCP for the City inspects the lagoon berms weekly. This frequency is increased during weather events (storms, melts, etc.) and when they are diverting to and pumping back from the lagoons. The City has informed OCWA that this was brought up as a concern by the MECP in the surface water review of the 2017 Annual Monitoring Report. For information, a geotechnical assessment was undertaken by Golder Associates several years ago on Lagoon 6 after it was pumped dry and no significant seepage was found. This study was part of the larger EA to support the WPCP upgrades. Lagoon 4 is scheduled to have sludge removed this year and the City will ask the engineer to evaluate the integrity and risk of seepage as well and report back to your office on the findings. In summary the City recognizes the sensitivity of the lagoons and importance that they are working and maintained properly.

5. Future reports should include a map showing storm sewer outlets between McQuarrie Pt and Alpine St.

The City has located the storm sewer outlets through the City's Geographic Information System. These locations were forwarded to Golder Associates to include in a figure in the 2018 Annual Monitoring Report.

There were a number of other statements in the surface water comments document that the City would like to address below:

Page 8 Paragraph 4: "The data would suggest that runoff from the Lindsay-Ops Landfill and the Lindsay WPCP is likely having a small negative impact on water quality in the Scugog River that is mostly restricted to Embayment A"

The City and Golder Associates will look into this further and after reviewing additional loading estimates will provide further information on any potential impact to the embayments and river.

At this point the downstream water quality is very similar to upstream quality with some expected variation in quality between the embayment areas and main flow channel. Within the embayment areas there will be increased vegetation mass, less intermixing with the main flow channel, increased stagnation and the presence of standing water. These differences between the embayment setting and the main channel may also be factors which influence the noted differences in water quality of the two areas. We will ask Golder Associates to further look into this and provide some additional rationale for water quality noticed particularly in Embayment A. As well the City and Golder Associates will further review the source of water in the storm ditches and overall impact on the Scugog River. The storm ditches around the site have catchment areas that are not isolated to just the landfill but also include runoff and non point source contaminants from many different land uses in the area i.e. including road runoff, runoff from residual industrial commercial traffic and operational practices, agricultural runoff etc. Better understanding the loading estimates from the ditches on the river as suggested will definitely aid in this assessment. If it is determined there are areas where leachate is entering the storm ditches the City will remediate as required.

Page 8 Paragraph 3: "I believe there was a major PCB contaminated sediment project on Sinister Creek. Was any follow-up sampling done in the Scugog River since the clean-up to confirm levels in the River have dropped. If not samples should be taken"

The City has taken PCB samples at the river monitoring locations within the surface water as well as the sediment in 2018. PCB levels in the surface water were undetected. PCBs were analyzed in sediment samples from Embayments A and C in 2018 and were also undetectable. The City also completed a wetland study in 2018 as required in the ECA for the Lindsay Ops Landfill. This study included sediment sampling in the Scugog River. This study found that PCBs were undetectable at all locations sampled other than one which was consistent with historical results. On the same note the City is aware that there was a remediation project concerning an industrial source of PCB's in Sinister Creek historically and the City was not involved in this remediation. It was undertaken by the Industry. We do not have any verification samples confirming the level of residuals remaining. However the City also recognizes that there are historic residual PCB's throughout the sediments of the Trent Severn Waterway related to the industrial activities along its length. In order to be due diligent the City does its best to ensure no PCB's are allowed into the landfill and are intercepted through screening by attendants. As well the City has enacted by-laws to ensure PCB's are not included in sewage entering the WPCP.

If you have any questions please call me at (705) 324-9411 extension 2360.

Yours truly,

Kerri Snoddy Regulatory Compliance Officer