

# ENVIRONMENTAL SERVICES MEMORANDUM

TO: MAYOR J. LEHMAN AND MEMBERS OF CITY COUNCIL

FROM: S. BRUNET, B.SC.

MANAGER OF ENVIRONMENTAL OPERATIONS

J. F. THOMPSON, P.ENG., CMM III IP, PMP, DIRECTOR OF ENVIRONMENTAL SERVICES

NOTED: R. FORWARD, MBA, M.SC., P. ENG.

GENERAL MANAGER OF INFRASTRUCTURE AND GROWTH MANAGEMENT

M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RE: 2016 ANNUAL MONITORING REPORTS - REGULATED MUNICIPAL FACILITIES

DATE: SEPTEMBER 11, 2017

This purpose of this Memorandum is to provide members of Council with information related to the performance of municipal facilities which operate under Certificate(s) of Approval (C of A) or Environmental Compliance Approval(s) (ECA) issued by the Ministry of the Environment and Climate Change (MOECC). The details of facility annual performance are provided to the MOECC in the form of Annual Reports prepared by the Environmental Operations Branch of the Environmental Services Department. Originals of these Reports have been submitted to the MOECC in accordance with established timelines and a copy of the Reports will be made available in the Councillor's Lounge.

The Reports listed below are currently available in the Councillor's Lounge:

- Oro Biosolids Storage Facility (*C of A Number A252707*) March 31<sup>st</sup>, 2017;
- Landfill Stormwater Management Facility (ECA Number 1242-9UJPNC) March 31st, 2017;
- Barrie Super Sports Park (C of A Number 2906-5D9GQB) March 31st, 2017;
- Stormwater Management Works Oil and Grit Separators (C of A Number 5050-6TJHZ4) April 30th, 2017; and
- Barrie Landfill Site (ECA A250101) June 30th, 2017.

### Oro Biosolids Storage Facility

The Oro Biosolids Storage Facility (BSF) is located on the 7<sup>th</sup> Line of Oro-Medonte Township immediately north of the Lake Simcoe Regional Airport (LSRA). The Facility provides storage for biosolids generated from the City of Barrie's Wastewater Treatment Facility (WwTF) when land application of the biosolids is not possible (i.e. winter months, wet periods, planted fields). The total storage capacity for the BSF is 61,500 m<sup>3</sup>.

The results of the 2016 Monitoring Program indicate that groundwater quality may be affected by operations on the Site. When compared to historical sample analysis however, water quality is demonstrating either a stable or improving trend overall. Consequently, the City of Barrie (City) will continue to collect representative groundwater, surface water and lagoon samples as per MOECC requirements. The Lagoon Liner Inspection Program commenced in 2016 and includes the emptying, cleaning, inspecting and repairing of the liner of all three lagoons (as required) at the frequency of one lagoon annually.

This Report was submitted to the MOECC on March 30<sup>th</sup>, 2017 and a copy has been made available in the Councillor's Lounge.

# Barrie

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#### **Landfill Stormwater Management Facility**

The Landfill Stormwater Management Facility is located centrally within Barrie's Landfill Site and receives surface water runoff from the following areas; Waste Segregation Pad, Compost Processing Pad, Household Hazardous Waste Depot, commodities storage, the administration parking lot, and south and west sections of the Landfill Site. The Stormwater Management Facility is designed to control and improve the quality of stormwater that is discharged offsite to the storm sewer system. It is constructed on sandy soils also allowing it to function as an infiltration pond. The MOECC requires the City to sample, analyze and report on stormwater accumulations and releases.

The Environmental Compliance Approval 9817-993S4S governing this Facility was amended in June 2015 and replaced by Environmental Compliance Approval 1242-9UJPNC to include the construction of 6 additional stormwater management ponds at the Landfill Site to service the south and west sections of the Landfill Site.

In 2016 there were no releases from the Facility and compliance was maintained for the duration of the reporting period.

The Report was submitted to the MOECC on March 30<sup>th</sup>, 2017 and a copy has been made available in the Councilor's Lounge.

#### Barrie Super Sports Park

The Barrie Super Sports Park (Site) has an on-site sewage system for the treatment and disposal of wastewater generated at the Site. In 2016, the Site was operated from May 1<sup>st</sup> to October 31<sup>st</sup>. Each of the Site's two washrooms are serviced by individual septic tanks, pumping stations and leaching beds. The septic tanks were pumped out twice throughout the 2016 operating season by a licensed hauler and the wastewater was disposed of at the WwTF. The volume of effluent and the results of the effluent analyses are used to calculate the nutrient loading discharged to the leaching beds. All sampling, analyses and calculations were performed in accordance with conditions outlined in the C of A. The C of A outlines maximum allowable wastewater concentrations and flow rate criteria.

The analytical results demonstrate that effluent concentrations reported are consistently below the established limits in the C of A. Groundwater monitoring results do not indicate that the local groundwater quality has been impacted by the wastewater system. Based on the analytical results, the Annual Report recommends that all groundwater monitoring wells be decommissioned accordingly.

A new Environmental Compliance Approval (ECA) Number 0009-9YXHPX was issued to the City by the MOECC on July 25<sup>th</sup>, 2016. Environmental Services observed a lack of monitoring requirements within the new ECA and asked for clarification from MOECC. The City received direction from the District MOECC Office to abide by both approvals until further direction from MOECC is received. The Annual Report recommends approval to continue operations as outlined in the new ECA issued July 25<sup>th</sup>, 2016.

A letter formally requesting the approval of the recommendation will be submitted to the MOECC following submission of the Annual Report. Groundwater and effluent monitoring will continue until such recommendation has been approved by the MOECC.

The Report was submitted to the MOECC on March 30<sup>th</sup>, 2017 and a copy has been made available in the Councilor's Lounge.



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### Storm Water Management Works - Oil and Grit Separators

Oil and Grit Separator (OGS) Units were installed to receive surface water drainage from Mapleview Drive East, East of Yonge Street. These units function to separate out oil and grit contaminants prior to being discharged to surface water to enhance the quality of stormwater discharged into Hewitt's Creek. The OGS Units are monitored through the collection and analysis of grab samples to evaluate contamination reduction requirements specified in the C of A. Similar to previous years, sample results from the 2016 sampling events indicate contamination reduction targets were not met as defined in the C of A. The MOECC is aware of the situation and has directed the City to continue monitoring the OGS units as per the C of A.

On October 5<sup>th</sup>, 2016, the system wide ECA for the City's Municipal Stormwater Drainage System was issued and repeals C of A 5050-6TJHZ4. Road Operations will continue to monitor the OGS Units in 2016 as per the system wide ECA.

The Report was submitted to the MOECC on April 28th, 2017 and a copy has been made available in the Councilor's Lounge.

#### Barrie Landfill Site Operations

The MOECC requires the submission of an Annual Report by June 30<sup>th</sup>, 2017 pertaining to landfill site operations. The Report was submitted to the MOECC on June 29<sup>th</sup>, 2017 and a copy has been made available in the Councilor's Lounge. The Landfill Re-Engineering Project has proceeded on time and on budget. The Landfill Reclamation component of the Project was completed with the remaining tasks representing the work associated the remainder of the facility upgrades, much of which is to re-establish efficient and safe public access and transfer of waste, site security as well as requirements under the Environmental Compliance Approval (ECA). Environmental Compliance Approval A250101 governing the site was amended in March 2017.

Please contact Sandra Brunet, Manager of Environmental Operations, at extension 6140 for further information.