

### CITY OF HAMILTON PUBLIC WORKS DEPARTMENT Hamilton Water Division

то:	Chair and Members Public Works Committee
COMMITTEE DATE:	March 21, 2016
SUBJECT/REPORT NO:	Sewer Use By-law No. 14-090 Compliance Permit – Ruetgers Canada Inc. (PW16017) - (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Dan McKinnon Director of Hamilton Water (905) 546-2424, Extension 5941 Cari Vanderperk Superintendent, Environmental Monitoring & Enforcement (905) 546-2424, Extension 3250
SUBMITTED BY:	Gerry Davis, CPA, CMA General Manager Public Works Department
SIGNATURE:	

### RECOMMENDATION

That the Director of Hamilton Water be authorized to issue a Sewer Discharge Compliance Permit to Ruetgers Canada Inc. (Ruetgers) for the sewer discharge from their premises located at 725 Strathearne Avenue to the City's sewer works, with a schedule to accommodate the upgrades and commissioning of works necessary to be compliant with the City's Sewer Use By-Law by June 30<sup>th</sup>, 2017.

### **EXECUTIVE SUMMARY**

The purpose of this report is to update members of Committee and Council on the status of Public Works Committee Report PW15-016 (7)(a)(b) and to gain approval of the recommendation above. Hamilton Water staff were directed to work with Ruetgers to establish an acceptable Sewer Discharge Permit and as a result a new schedule has been proposed by Ruetgers outlining the upgrades and commissioning of works necessary to be compliant with the City's Sewer Use By-Law (By-law) by June 30<sup>th</sup>, 2017.

Ruetgers was issued a Compliance Permit for the period of January 1, 2013 to December 31<sup>st</sup>, 2015 in order to address continued non-compliant discharges to the City's sewer originating from their surface water run-off. Ruetgers completed several activities under that permit, including: relining some of their private sewers to eliminate infiltration of contaminated groundwater; installing secondary tank containments; and upgrading their flake pitch unit to control dust. Despite Ruetgers' efforts, they were unable to adequately reduce PAH concentrations to meet the By-law limits and

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Hamilton Water staff have worked with Ruetgers to establish conditions for a new and final Compliance Permit, that includes reasonable limits for PAHs and appropriately scheduled activities which will bring the discharge from their premises into compliance with the By-law by June 30<sup>th</sup>, 2017. As a result of these positive discussions staff recommends that the Director of Hamilton Water be authorized to issue a Sewer Discharge Compliance Permit to Ruetgers Canada Inc. (Ruetgers) for the sewer discharge from their premises located at 725 Strathearne Avenue to the City's sewer works, with a schedule to accommodate the upgrades and commissioning of works necessary to be compliant with the City's Sewer Use By-Law by June 30<sup>th</sup>, 2017.

The recommendations contained in this report support the Mission Statement of the Public Works Business Plan "Innovate Now" – "Provide safe, strategic and environmentally conscious services that bring our communities to life".

# Alternatives for Consideration – See Page 3

# FINANCIAL – STAFFING – LEGAL IMPLICATIONS

N/A

# HISTORICAL BACKGROUND

Ruetgers Canada Inc. is a coal tar distilling plant located at 725 Strathearne Avenue along the south-eastern edge of Hamilton Harbour. The wastewater discharged to the City's sanitary sewer from the Ruetgers premises is a combination of three effluent streams; treated process wastewater, surface water run-off and sanitary wastewater from domestic uses onsite. Ruetgers' process wastewater, prior to on-site treatment, typically contains compounds such as benzene, toluene, PAHs, cyanide, sulphates, phenols, BOD and TKN.

In 2011, Ruetgers commissioned a new wastewater treatment system incorporating Membrane Bio-Reactor (MBR) technology at a cost of approximately \$4 million, in order to treat their process wastewater to meet the requirements of the By-law.

When this project was successfully completed in 2011, monitoring of the sanitary sewer by Hamilton Water staff continued to show Ruetgers' discharge exceeded the By-law for PAHs, benzene and toluene. After a comprehensive investigation by Ruetgers, it was determined that their surface water run-off was the contributing source. The treated process water combines with the contaminated surface water and discharges to the sanitary sewer. The wastewater treatment plant that was commissioned in 2011 has a design capacity that can only treat process water. The additional contaminated water that originates from the surface water run-off would overwhelm the system and cause their entire discharge to be non-compliant.

In 2013 Hamilton Water staff issued a Compliance Permit to Ruetgers in order to identify sources of contamination and implement solutions. Activities completed have included relining some of their private sewers to eliminate infiltration of groundwater;

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installing secondary tank containments; and upgrading their flake pitch unit to control dust. Ruetgers spent an additional \$427,000 to reduce PAHs entering surface water run-off from the site. This Compliance Permit expired on December 31, 2015 and allowed Ruetgers reprieve from the Sewer Use By-law during this time period.

Although the company has been working to find a sustainable solution, the activities that have been implemented to date have not been sufficient to adequately reduce concentrations to meet all parameter requirements of the By-law. Benzene and toluene now meet By-law limits, however PAHs concentrations continue to exceed.

Ruetgers is proposing to design, construct, and commission another treatment facility at a cost of \$2 million. In order to accommodate this major capital project they are seeking approval for a Compliance Permit to commence January 1, 2016 to June 30, 2017. Hamilton Water staff supports the timelines proposed by Ruetgers and recommend that the total PAH limit in the Compliance Permit remains the same as their previous Compliance Permit and that benzene and toluene be removed. This allows time for Ruetgers to complete their capital improvements with the goal of eliminating PAHs entering the sewer. It is important to note that the total PAH loading being discharged by Ruetgers to the City's sewer works is 85% less than it was in 2008.

During the period of the proposed Compliance Permit, Hamilton Water staff will monitor Ruetgers' discharge activities closely and any exceedances that are identified may be considered as a violation of their permit and charges under the Sewer Use By-law may be pursued as appropriate.

### POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

Not Applicable

#### **RELEVANT CONSULTATION**

Not Applicable

### ANALYSIS AND RATIONALE FOR RECOMMENDATION

Hamilton Water staff have reviewed the Compliance Permit Application from Ruetgers Canada Inc. and support the issuance of a new and final Compliance Permit with a compliance deadline of June 30, 2017. The scope of the project is significant, requiring a technology treatment study prior to implementation of a new wastewater treatment system. Hamilton Water staff intend to continue regularly monitoring Ruetgers discharge and progress of construction, and will be on site regularly.

### ALTERNATIVES FOR CONSIDERATION

Should Committee not approve the recommendations of issuing a Compliance Permit with a completion date of June 2017, Ruetgers would exceed the parameter limits outlined in the Sewer Use By-law on a daily basis. The City would be obligated to begin the process of enforcement action under the Sewer Use By-law 14-090, including issuing orders and/or laying charges until compliance is achieved. Exceedance penalties upon conviction of a corporation are set at a maximum of \$50,000 per day for the first offence, and a maximum of \$100,000 for a subsequent offence. This solution is

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### ALIGNMENT TO THE 2012 - 2015 STRATEGIC PLAN

#### Strategic Priority #1

A Prosperous & Healthy Community

WE enhance our image, economy and well-being by demonstrating that Hamilton is a great place to live, work, play and learn.

#### **Strategic Objective**

- 1.5 Support the development and implementation of neighbourhood and City wide strategies that will improve the health and well-being of residents.
- 1.6 Enhance Overall Sustainability (financial, economic, social and environmental).

#### Strategic Priority #2

#### Valued & Sustainable Services

*WE* deliver high quality services that meet citizen needs and expectations, in a cost effective and responsible manner.

#### Strategic Objective

- 2.1 Implement processes to improve services, leverage technology and validate cost effectiveness and efficiencies across the Corporation.
- 2.4 Ensure high quality water services are received by the community.

### Strategic Priority #3 - Leadership & Governance

*WE* work together to ensure we are a government that is respectful towards each other and that the community has confidence and trust in.

#### Strategic Objective

3.1 Engage in a range of inter-governmental relations (IGR) work that will advance partnerships and projects that benefit the City of Hamilton.

# APPENDICES AND SCHEDULES ATTACHED

N/A