



## Staff Report

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<b>Report To:</b>	Planning and Development Committee	
<b>Date of Meeting:</b>	October 22, 2019	<b>Report Number:</b> PSD-048-19
<b>Submitted By:</b>	Faye Langmaid, Acting Director of Planning Services	
<b>Reviewed By:</b>	Andrew C. Allison, CAO	<b>Resolution#:</b>
<b>File Number:</b>	PLN 21.27	<b>By-law Number:</b>
<b>Report Subject:</b>	St. Mary's Cement Air Quality Monitoring – Options for Retaining an Air Quality Expert	

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### Recommendations:

1. That Report PSD-048-19 be received; and
2. That funding for an air quality expert be referred to the 2020 budget deliberations.

## Report Overview

Staff are providing options for retaining an air quality expert, to assist Council with interpreting the ambient air requirements and reports for the St. Marys Cement facility and the Durham York Energy Centre. Both facilities have applications in the process to meet environmental regulations regarding the burning of additional waste. The concern is the cumulative impacts on air quality. Council is looking for assistance in understanding air quality science and how to respond to public concerns.

## 1 Introduction

- 1.1 At the September 9, 2019 Joint Committee Meeting, Resolution #JC-120-19 was introduced as follows:

Whereas St. Marys Cement has commenced an application to burn 400 tonnes daily of Low Alternative Carbon Fuels, and at the same time, Durham Region is drafting Terms of Reference to expand the Energy From Waste to 250,000 tonnes annually; and

Now therefore be it resolved that St. Marys Cement and the Ministry of the Environment, Conservation and Parks be requested to have ambient air monitoring for St. Marys Cement which is consistent with the ambient air monitoring for the Energy from Waste, including PM2.5.

- 1.2 At the September 16, 2019 Council meeting, Resolution #C-309-19 was passed, requesting staff provide options for retaining an air quality expert to assist Council with air quality questions.
- 1.3 Staff previously prepared a similar report [PSD-064-16](#). It was tabled by Council to January 9, 2017 where a motion failed to lift it from the table.

## 2 Background

- 2.1 On August 19, 2019, Votorantim Cimentos released a Notice of Intention to apply for approval to use Alternative Low Carbon Fuel (ALCF) at the St. Marys Cement – Bowmanville Plant (Attachment 1). ALCF includes non-hazardous, residual wastes left after the separation of recyclables (i.e. paper fibres and plastics derived from industrial and/or consumer sources; plastics not suitable for composting) and certain types of biomass (i.e. woody residuals, not suitable for recycling or composting). ALCF will substitute a portion of the fossil fuel used at the plant and seeks to reduce greenhouse gas emissions from this energy intensive industrial operation.

- 2.2 The St. Marys Cement – Bowmanville Plant currently has an Environmental Compliance Approval (ECA) for the on-going use of clean woodwaste as an ALCF at the site. A second ECA was issued to St. Marys Cement to conduct the ALCF demonstration project using other types of alternative fuels. The demonstration trials were conducted between September 25 and December 10, 2018. The expanded and on-going use of ALCF at the site, if approved, would include the following along with the associated equipment and buildings:
- Increase the daily throughput of ALCFs at the Site from 100 tonnes per day to 400 tonnes per day with the intention of 30% replacement of conventional fuels (or 250 tonnes to 400 tonnes depending on heat value); and
  - Add biomass, cellulosic and plastic materials derived from industrial and/or post-consumer sources, which cannot be recycled, are not considered hazardous and are not derived from animals or the processing and preparations of food, to the list of approved ALCFs at the Site based on the recent demonstration project at the Site.
- 2.3 The environmental permitting process for the expanded use of ALCF at the St. Marys Cement - Bowmanville Plant must be conducted in accordance with Ontario Regulation 79/15 of the Environmental Protection Act. This is a proponent driven, self-assessment process. Subject to the completion of the prescribed public notices, consultation and reporting process, and the preparation of a carbon dioxide emissions intensity report, proponents may proceed with the ALCF Application to the Ministry of Environment, Conservation and Parks (MECP). Submission of the ALCF Application to the MECP is anticipated for the end of 2019.
- 2.4 On July 4, 2019, the Regions of Durham and York released a Notice of Commencement to apply for an increase in processing capacity for the Durham York Energy Centre (DYEC) (Attachment 1). The Environmental Compliance Approval (ECA) for the DYEC currently allows the facility to process up to a maximum of 140,000 tonnes per year of waste for disposal at the site. The Regions are proposing to increase this amount by 20,000 tonnes per year. As constructed, the DYEC can process up to 160,000 tonnes per year without any modifications to the infrastructure, process and services. The environmental permitting process for this throughput increase involves an Environmental Screening Process in accordance with Ontario Regulation 101/07 of the Environmental Assessment Act, followed by an administrative amendment to the DYEC's ECA. The targeted completion date for this environmental permitting process is spring 2020. Concurrent with the 160,000 tonne capacity increase proposal, the Region of Durham has commenced the drafting of the Terms of Reference for the Environmental Assessment that is required for the future expansion of the DYEC to 250,000 tonnes.

### 3 Options to Retain Expertise

- 3.1 The options outlined in report [PSD-064-16](#) remain valid. It will be necessary for any consultant to become familiar with the background on St. Marys Cement and Durham York Energy Centre (DYEC); especially since both facilities are currently in the process of seeking additional approvals from the Ministry of Environment, Conservation and Parks (MECP) for additional incineration of waste.
- 3.2 While staff are not experts in air quality we are very cognizant of the requirements of the environmental review and regulatory process. Of the options outlined in Report PSD-064-16, staff believe the most relevant option would be to retain a consultant on an “As Needed Basis” as outlined in Section 2.4.3 of Report PSD-064-16. The consultant assignment would include understanding the two facilities operations, being familiar with the required on-going monitoring at each facility and reviewing ambient air reporting. The consultant would not be expected to confirm the results of the continuous monitoring systems, stack (source) testing and long term sampling, these are the responsibility of the proponents and Ministry staff. The consultant would be expected to assist Council and staff with questions for the proponents and Ministry.
- 3.3 With regard to the manner in which the consultant will be retained an Expression of Interest (EOI) as outlined in Section 2.1 of Report PSD-064-19 is the best option. Given many consultants are already involved in the two projects there may be a limited field of candidates that can provide the services. An EOI is a way of understanding who can provide the service and whether the Municipality will need to pursue the sole source option.
- 3.4 Staff believe Council should establish an upset limit of \$30,000 for this consulting assignment. Staff will include this item as part of the 2020 draft budget.

### 4 Concurrence

This report has been reviewed by the Purchasing Manager and Director of Finance who concur with the recommendations.

## **5 Conclusion**

It is respectfully recommended that Council direct staff to prepare a terms of reference for an Expression of Interest to retain an air quality expert to advise Council and staff on air quality issues in relation to the environmental application by St. Marys to burn post-consumer waste as an alternative fuel and the Durham York Energy Centre application for an increase in capacity by 20,000 tonnes in the short-term while preparing a terms of reference for the Environmental Assessment necessary to expand to 250,000 tonnes.

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Attachment:

Attachment 1 – Report PSD-064-16 – DYEC Air Quality Report

Interested Parties:

There are no interested parties to be notified of Council's decision.