

TO:	CHAIR AND MEMBERS COMMUNITY AND PROTECTIVE SERVICES COMMITTEE MEETING ON JUNE 18, 2018
FROM:	G. KOTSIFAS, P. ENG. MANAGING DIRECTOR, DEVELOPMENT & COMPLIANCE SERVICES AND CHIEF BUILDING OFFICIAL
SUBJECT:	Odour Monitoring Pilot Program

RECOMMENDATION

That on the recommendation of the Managing Director, Development and Compliance Services and Chief Building Official this report providing an update on the odour monitoring pilot program as directed by Municipal Council **BE RECEIVED** noting that Civic Administration will report back on the outcome of the program upon its completion in Q4 2018.

PREVIOUS REPORTS

Proposed Public Nuisance By-law Amendment to Address Odour - CPSC February 21, 2018

Review of Impacts from Industrial Sources (Focus on Odour) and Potential Municipal Actions (Primarily South of Highway 401) PEC - August 28, 2017.

Update & Next Steps – Review of Impacts from Industrial Sources (Focus on Odour) and Potential Municipal Actions (Primarily South of Highway 401), PEC - April 24, 2017.

Comments - Orgaworld Canada Ltd, PEC - November 13, 2012.

Various submissions and comments were made by delegations and participants at the Public Participation Meeting held on November 13, 2012

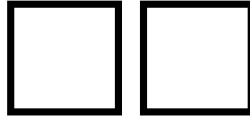
BACKGROUND

Municipal Council, at its meeting held on September 5, 2017 resolved:

That, on the recommendation of the Managing Director, Development & Compliance Services and Chief Building Official and the Managing Director, Environmental & Engineering Services and City Engineer, the following actions be taken with respect to current and potential odour challenges from waste management facilities near the communities of Brockley, Shaver and Glanworth:

- h) a Pilot Project (May to August 2018) **BE IMPLEMENTED** by the City of London in order to test an odour detection device to enhance its monitoring capabilities and/or facilitate the imposition of charges for non-compliance.

This report provides an update on the developments of a more comprehensive, partnered odour monitoring pilot program. The report also provides an update on some of the challenges of effectively implementing an amendment to the City’s Public Nuisance By-law to address nuisance odours. These challenges will be further examined over the course of the Pilot Project.



DISCUSSION

Odour Monitoring Pilot Program

The issue of odours is complex as the possible impacts of odours range from mere detection to a causing a public nuisance. Usually, the impact of odour is described in terms of five different dimensions, which are commonly referred to as the acronym “FIDOL”:

- the **F**requency that an odour is detected during a given time period
- the **I**ntensity of the odour
- the **D**uration of the period in which the odour remains detectable
- the **O**ffensiveness or strength of the odour
- the **L**ocation or source of the odour

There are three waste management facilities near the communities of Brockley, Shaver and Glanworth:

- Orgaworld – composting facility
- Stormfisher – anaerobic digestion facility
- City of London - W12A landfill

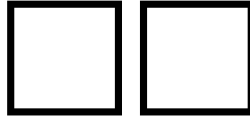
All three facilities are unique in their waste management processes. All three facilities have been working together in collaboration to develop and implement an odour monitoring program for the summer months when historically residents of the surrounding communities have had concerns related to odours.

In order to develop a scope of work for an odour monitoring program Pinchin was contracted by Orgaworld, StormFisher and the City of London. Pinchin is an environmental engineering consulting firm which specialises in odour monitoring. Pinchin has offices across Canada including in London. Pinchin developed an odour monitoring program (i.e., “planned methodology”) based on their understanding and knowledge in odour monitoring and the challenges in the geographic area south of Highway 401. The field portion of the odour sampling and monitoring pilot program will not be conducted by Pinchin but rather an independent environmental consultant. Concentric was contracted by Orgaworld, StormFisher and the City of London to undertake the “planned” monitoring program. Concentric is an environmental engineering firm which specializes in odour monitoring. Concentric has offices across Canada including in London.

On May 23, 2018, the methodology was shared with a number of representatives from the communities near Orgaworld and StormFisher. Representatives from Pinchin and Concentric were in attendance with staff from Orgaworld, StormFisher and the City. A number of questions, comments and concerns were raised by community members.

On June 5, 2018, a revised methodology was shared. Although the revised methodology addressed a number of points raised by community members, additional questions, comments and concerns were raised by community members. There was agreement these needed to be addressed as well.

At time of completing this report (June 10, 2018), the proposed methodology contains a “planned” methodology from Pinchin and further work is under way on how to address the need for a “reactive” methodology similar to the one used by the Ministry of the Environment & Climate Change (MOECC).



It is important to note that during the Pilot Project, there are no changes to the current compliance and enforcement practices that are undertaken by the MOECC. All residents and businesses within the area will still follow the exact same reporting protocols for any concerns regarding the three facilities.

The current “planned” methodology includes the following items:

- The program timeline is mid to late June to early September (when residents are enjoying the summer season)
- Twelve critical odour receptors (i.e., places where sampling will take place) have been identified based on surrounding land uses of the three waste management facilities and weather patterns (i.e., wind direction)
- Upwind and downwind receptor locations will be sampled
- Data from the meteorological data stations at the three locations will be recorded
- Measurement of odour will be recorded using three methods: field olfactometer (Scentroid) which quantifies odour strength in the surrounding ambient air; odour character using an odour character wheel (descriptive analysis of odour using over 80 possible characteristics - i.e. smoky, yeast , chlorinous); and a hedonic tone scale which is a subjective measure of the pleasantness or unpleasantness of an odour (on a scale of -10 to +10)
- Sampling to be done by trained odour assessors
- Sampling will be conducted in two observation periods (on the same day) for approximately 10 observation days on a statistically random generated period
- Sampling will be conducted during the following periods: the morning and/or the afternoon and/or the evening. Sampling will be taken randomly during these periods
- If an odour is detected which could be attributed to one or more of the waste management facilities, those facilities will be notified the next day
- Depending on the final start date, on the 15th day of each month (July, August and September), the monitoring records for the previous month will be posted on the City’s web site.

The “reactive” methodology is being designed to address the fact that odours can occur quickly and also dissipate quickly. This will require the need to have a methodology that can react as quickly as possible to observe an odour in progress.

The cost of the odour monitoring pilot will be split between all three parties (Orgaworld, Stormfisher and City of London). The City’s portion is not expected to exceed \$20,000 as approved by Municipal Council on September 5, 2017. Similar financial contributions are being made by Orgaworld and Stormfisher which has allowed for the development of a more thorough and comprehensive Pilot Project following the methodology noted above. Civic Administration will report back on the results of the monitoring pilot program in Q4 2018.

Update – Potential Amendment to the Public Nuisance By-law to Address Odour

At the CPSC meeting of February 21, 2017, a report was received which addressed the possibility of amending the Public Nuisance By-law to address odour. At the subsequent Council Meeting, this matter was referred back to staff to review some of the potential legal challenges of such an amendment. Civic Administration continues to review the potential legal and operational challenges of a municipality implementing an odour component to a Public Nuisance By-law. Further work will occur over the summer months including examining the experience from the Pilot Project and a review of results from other jurisdictions. At this time, these items are the key factors being examined from a legal challenge and operational challenge perspectives:

- Unproven use of odour monitoring techniques by a municipality
- Subjectivity of odour

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- Difficulty of tracing odour from point of reception to odour source in an area of multiple odour sources
- Facilities which have Environmental Compliance Approvals (ECAs) from the MOECC are not subject to municipal regulation with respect to discharges that fall within the scope of the provincial legislation (in this case, the Environmental Protection Act), whether or not applicable requirements are being met.
- Overlapping enforcement (Ministry of the Environment and Climate Change have a well established protocol and history of odour monitoring and prosecution protocol)

PREPARED BY:	RECOMMENDED BY:
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