TO: CHAIR AND MEMBERS
CIVIC WORKS COMMITTEE
MEETING ON APRIL 20, 2015

FROM: JAY STANFORD, M.A., M.P.A.
DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE

SUBJECT: W12A LANDFILL – PROPOSAL AND PROCESS TO ACCEPT WASTE FROM THREE FACILITIES OUTSIDE OF LONDON

RECOMMENDATION

That, on the recommendation of the Director – Environment, Fleet & Solid Waste, the following actions BE TAKEN with respect to the service area of the W12A Landfill:

a) Civic Administration BE DIRECTED to revise the Environmental Compliance Approval (ECA) of the W12A Landfill to accept solid non-hazardous waste from the Regional Water Boards two water treatment plants and TRY Recycling’s recycling facility in Middlesex Centre; and

b) the Civic Administration BE AUTHORIZED to undertake all the administrative acts that are necessary in connection with this matter.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Relevant reports that can be found at www.london.ca include:

- Household Special Waste Program Update (May 27, 2013 meeting of Civic Works Committee, Item #4)
- Municipality of Thames Centre Partnership Opportunities in Waste Management (November 29, 2011 meeting of Community and Neighbourhoods Committee, Item #3)

BACKGROUND

The purpose of this report is to seek approval to undertake an Environmental Screening Process for Waste Management Projects as prescribed by the Ministry of Environment and Climate Change (MOECC) to revise the Environmental Compliance Approval (ECA) of the W12A Landfill site to include waste streams from the following three point sources:

1. The Lake Huron Primary Water Treatment Plant (located in Grand Bend) - water intake screened process residuals;
2. The Elgin Area Primary Water Treatment Plant (located east of Port Stanley) - water intake screened process residuals; and
3. TRY Recycling (located on Clarke Road, abutting London’s municipal boundary) - recycling process residuals (80% to 90% from London material) and residential garbage from the City’s EnviroDepot.

It is noted that Council previously approved accepting curbside mixed municipal waste (winter months only) from the Municipality of Thames Centre and municipal hazardous or special waste (MHSW) from Elgin County at the landfill’s Household Special Waste (HSW) Depot.

CONTEXT

Currently the W12A Landfill is approved by the MOECC to accept solid, non-hazardous waste generated within the boundaries of the City of London for disposal and MHSW generated from London and Middlesex County at the Household Special Waste Depot (HSW Depot) located at the W12A Landfill for transfer to appropriate recycling/disposal sites. The current ECA permits the annual disposal of 640,000 tonnes of waste as noted on the following table:
In the next two years and as a result of changing waste flows as discussed below, staff expects the annual amount of waste received for disposal to average approximately 200,000 tonnes per year (without the proposed changes identified in this report).

Over the last two years, two large commercial waste management customers have reduced and now discontinued using the W12A Landfill to dispose of waste from their London based customers, in favour of disposing of that waste at their own landfills located in southwestern Ontario. It is unknown when the two customers may return to using the W12A Landfill. This has resulted in a drop of about 20% of the tonnes arriving (about 50,000 tonnes) at the site. Budget adjustments have been made over the last two years to accommodate the declining tipping fee revenues (noting that increased funds for recycling from extended producer responsibility programs have helped to offset the decline). The annual reduction in the use of landfill space has resulted in an estimated increase of 2 to 3 years capacity.

Revising the ECA for the W12A Landfill to allow for disposal of waste from the above noted sources would restore some of the revenue from the loss of the commercial customer tonnes. The above table also illustrates that operations at the W12A Landfill can easily accommodate any increase in tonnage that could occur.

2015-2019 - Strategic Plan for the City of London

Revising the ECA for W12A Landfill will allow for two waste streams (water treatment plant screened process residuals and TRY Recycling construction and demolition recycling process residuals) that are produced in geographic locations outside of the City but however are produced as a result of providing service to London residents. Providing the option for these materials to be managed at the W12A Landfill aligns with the 2015-2019 Strategic Plan (2015–2019 Strategic Plan) in 3 of the 4 Areas of Focus which are listed below.

Building a Sustainable City
- Robust infrastructure
- Strong and healthy environment

Growing our Economy
- Strategic, collaborative partnerships

Leading in Public Service
- Collaborative, engaged leadership
- Excellent service delivery

DISCUSSION

Process for Approval:
The Environmental Assessment legislation for waste management projects allows for projects/undertakings that meet specified criteria to be assessed via a scaled down version of the normal Environmental Assessment process called an Environmental Screening Process. Revising the ECA to allow for three point sources to send waste to the W12A Landfill falls within the specified criteria to proceed through an Environmental Screening.

The Environmental Screening Process is a self-assessment process that will involve the following general steps:

- Publication of notice of commencement of the Environmental Screening project/undertaking, including a description of the project;
- Application of specified criteria to identify potential environmental effects of the project/undertaking, which will include a summary of any identified environmental effects;
- Consultation with interested persons, Aboriginal peoples and government agencies;

<table>
<thead>
<tr>
<th>Tonnes</th>
<th>Description of Activity</th>
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<tbody>
<tr>
<td>640,000</td>
<td>Annual tonnes permitted to disposed of at W12A Landfill</td>
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<tr>
<td>200,000</td>
<td>Tonnes disposed of in 2014</td>
</tr>
<tr>
<td>240,000</td>
<td>10 year average annual amount of waste received for disposal at W12A Landfill</td>
</tr>
<tr>
<td>310,000</td>
<td>1987 - the largest annual amount of waste (garbage) received at W12A Landfill</td>
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<tr>
<td>380,000</td>
<td>1989 - the largest annual amount of waste (garbage and clean fill) received</td>
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- Development of impact management measures should they be required as a result of environmental effect assessment and public consultation;
- Further consultation with interested groups; and
- Preparation and publication of an Environmental Screening Report summarizing the results of the project review, consultation, mitigation and impact management measures.

The screening process would be completed using internal and external resources and is expected to take 6 months and cost approximately $50,000. Funding for this project is contained in Capital Project ES6051 (Municipal Waste Study Environmental Assessment).

**Current Discussion with W12A Public Liaison Committee (PLC):**
As a courtesy, and in accordance with the intent of the PLC, City staff have discussed the possibility of the City proceeding with an Environmental Screening for the changes, at regularly scheduled PLC meetings to gauge their response. In general the PLC would prefer to not accept additional materials at the W12A Landfill; however they are encouraged that should this be undertaken the proposed change is limited to point sources of waste as opposed to an ambiguous change in the general geographic boundary of the current service area. Further discussion with the PLC shall be undertaken should staff be given direction to proceed with the Environmental Screening.

**Character and Quantity of Waste Streams From Point Sources Proposed to be Accepted at the W12A Landfill:**
The table (new point sources not previously approved by MOECC and Council) and the individual descriptions below summarize the quantity and character of waste streams from the point sources respectively.

<table>
<thead>
<tr>
<th>Source</th>
<th>Estimated Quantity (tonnes/yr)</th>
<th>Waste Generating Activity</th>
<th>Character</th>
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</thead>
<tbody>
<tr>
<td>Regional Water Boards</td>
<td>15,000 to 20,000</td>
<td>• Filtering water that is drawn into the water plants from Lake Huron and Lake Erie</td>
<td>• Filtered sand/sediment</td>
</tr>
<tr>
<td>TRY Recycling</td>
<td>10,000 to 20,000</td>
<td>• Processing construction and demolition material (C&amp;D materials) of which between 80% and 90% is generated by materials from within London’s borders</td>
<td>• Process residuals from recycling of C&amp;D Materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bagged household garbage delivered by Londoners to the City EnviroDepot (estimated at 2% to 5% of estimated total)</td>
<td>• Bagged/residential</td>
</tr>
</tbody>
</table>

**Regional Water Board Water Intake Screened Process Residuals**
This process residual is generated when turbid water from the lakes is pumped into the water treatment plants and the suspended solids causing the turbidity are screened out. This process residual from the Elgin and Grand Bend water treatment plants is soil like in nature (i.e. suspended sediment from turbid lake water) however it does not meet the classification of inert fill and is therefore required to be managed appropriately.

**TRY Recycling Clarke Road Facility Recycling Process Residuals**
The Clarke Road construction and demolition material recycling facility owned and operated by TRY Recycling is located just outside of the north eastern boundary of London. A majority (between 80% and 90%) of the materials processed at this facility are generated within the City boundary.

These materials generally arrive at the TRY Recycling facility from London in one of four methods:

1. Delivered directly by TRY Recycling customers undertaking business in London
2. Private haulers that serve customers in London and take materials to TRY Recycling processing
3. Direct delivery by Londoners
4. Materials that are collected at the City’s Community EnviroDepots and delivered to TRY Recycling
The process residuals generated from this facility are considered solid non-hazardous waste and are composed of the remaining portions of the construction and demolition waste that cannot be recycled. An EnviroDepot is located at TRY facility which provides Londoners a location to drop off a number of materials including bagged garbage. The quantity of bagged garbage is estimated to be less than 500 tonnes per year.

**ECA Housekeeping - Curbside Mixed Municipal Waste from Thames Centre**
Currently, as part of an existing agreement between the City and the Municipality of Thames Centre, curbside collected municipal waste generated within Thames Centre in the winter months is brought to W12A for disposal. This arrangement has previously been acknowledged and supported by the local MOECC office prior to the City entering into the agreement with Thames Centre. For consolidation and administrative purposes, City Staff recommends that this arrangement be included and acknowledged in the Environmental Screening process.

**MHSW from Elgin County**
Council previously approved (2013) expanding the service area of the HSW Depot to also include Elgin County. The MHSW brought to the HSW Depot for Elgin County residents is expected to be similar in nature as that brought by London and Middlesex County residents. Staff had hoped that expanding the service area of the HSW Depot would not require an Environmental Screening but have been advised by the MOECC one is required. Expanding the service area of the MHSW depot will be included in the screening process for the above materials (subject to Council approval to proceed).

**Impact on W12A Disposal Capacity and Anticipated Environmental Effects:**
As previously noted, about 50,000 fewer tonnes of waste is currently being disposed of at W12A. The changes proposed in this report will add approximately 25,000 to 40,000 tonnes per year (i.e. the new tonnes would be from the water treatment plants and TRY Recycling, Thames Centre is already using W12A (approximately 600 to 800 tonnes/yr) and MHSW from Elgin County is transferred off site). These new tonnes would replace a portion of the lost commercial tonnes and help offset the revenue loss. The W12A Landfill site is designed and approved to accept approximately 640,000 tonnes per year for disposal, a much larger rate than is currently received or has historically ever been received for disposal.

Based on the current approved annual fill rate limit, the site’s design features are sufficiently robust to accommodate the proposed additional tonnes from the proposed service area expansion with no anticipated net environmental effects. As such completion of the Environmental Screening to accommodate these additional tonnes is expected to be administrative in nature.

**ACKNOWLEDGEMENTS**
This report was prepared with assistance from Anne Boyd, Coordinator - Waste Diversion.

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