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<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MAY 27, 2013</b>
<b>FROM:</b>	<b>JAY STANFORD DIRECTOR, ENVIRONMENT, FLEET, &amp; SOLID WASTE</b>
<b>SUBJECT:</b>	<b>COMMENTS ON ENVIRONMENTAL BILL OF RIGHTS REGISTRY - ENVIRONMENTAL ACTIVITY AND SECTOR REGISTRY (EASR) REGULATION FOR LANDFILL GAS POWER GENERATING FACILITIES</b>

<b>RECOMMENDATION</b>
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That, on the recommendation of the Director of Environment, Fleet and Solid Waste, the following comments and discussion **BE ENDORSED** and submitted by City staff to the Ministry of the Environment's Environmental Bill of Rights Registry posting EBR 011-8592) titled *Environmental Activity and Sector Registry (EASR) Regulation for Landfill Gas Power Generating Facilities*. This report supports the Province of Ontario's overall direction in the draft regulation to simplify the process for approving relatively low-risk and low-impact landfill gas power plant projects. The due date for comments is May 31, 2013; therefore Council's Resolution will be submitted after the comment closing date.

<b>PREVIOUS REPORTS PERTINENT TO THIS MATTER</b>
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The relevant report that can be found at [www.london.ca](http://www.london.ca) under City Hall (Meetings) is:

- Report to the March 18<sup>th</sup> 2013 Civic Works Committee (CWC) Meeting, Landfill Gas Utilization - Next Steps - Preparing for a Feed-In-Tariff Submission (Agenda Item #12)

<b>BACKGROUND</b>
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**PURPOSE:**

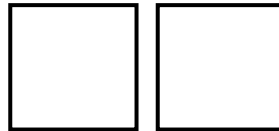
The purpose of this report is to provide Committee and Council with:

- A summary of the Ontario Ministry of Environment's proposed *Environmental Activity and Sector Registry (EASR) Regulation for Landfill Gas Power Generating Facilities*,
- The City of London's feedback on the strategy for approval and forwarding to the Environmental Bill of Rights (EBR) Registry, and
- Provide a brief update on the latest information on the W12A Landfill Gas Power Plant project.

**CONTEXT:**

As part of its ongoing efforts to simplify the environmental approvals process for relatively low-risk sources of air contaminants and noise emissions, the Ontario Ministry of the Environment (MOE) has developed its Environmental Activity and Sector Registry (EASR). The EASR is a public, web-based registry system, and is intended for activities that are routine, well understood and have minimal environmental impacts when complying with standard regulatory requirements.

This allows facility owners to register equipment in the EASR, instead of seeking Environmental Compliance Approval (Air) or Renewable Energy Approval through the normal application and review process. EASR requirements are set out in regulation, and usually include design requirements, air pollution control measures, and best management practices in the industry. Facility owners are also required to maintain their registrations with up-to-date information.



Currently, the following activities are prescribed for registration in the EASR; Heating systems, Standby power systems, Automotive refinishing facilities, Commercial printing facilities, Small ground-mounted solar facilities, and Non-hazardous waste transportation systems

The proposed regulation, in response to the Ministry of Energy’s Feed-In Tariff (FIT) Program Two-Year Review, would allow facility owners to register certain landfill gas power generating facilities with a name plate capacity less than or equal to 10 megawatts (MW) on the EASR. In order to register, facilities will need to meet specific design criteria including, but not limited to, being located on landfill sites, and meeting setback distances to the landfill property line to account for air and noise emissions. Various operating and design requirements are also proposed, such as minimum discharge velocity from exhaust stacks, noise attenuation measures, notification to neighbouring properties, and the documentation of routine maintenance, inspections, and environmental complaints, as applicable.

The proposed regulation only addresses activities related to the landfill gas power generation facility, and all other aspects of the landfill site will continue to be subject to the MOE’s Environmental Compliance Approvals, as required. A typical power plant is presented in Figure 1.

**DISCUSSION:**

**Part A – How the Proposed EASR Regulation Affects London**

This proposed regulation primarily provides benefits for the proposed landfill gas power plant at the W12A Landfill. These benefits include the following:

- There will be a significant reduction in project workload, as the City of London would no longer be required to carry out a full Renewable Energy Approvals application process, which would have required activities such as formal public and aboriginal consultation, archeological and heritage resource impact reports, an air emission summary and dispersion modelling report, and a noise impact study;
- There will be an associated reduction in up-front project planning costs of approximately \$60,000 although some work will still be required to prepare and register the project in the EASR; and
- There will be a reduction in the project timeline, as a full Renewable Energy Approvals application process would likely take about six to twelve months to complete, although some work will still be required to prepare and register the project in the EASR.

The main requirements of the proposed EASR for a landfill gas project the size of the one proposed for the W12A Landfill (2.4 MW) are as follows:

- The centreline of any exhaust stacks from a landfill gas power plant must be at least 60 metres away from the property line;
- Written notice must be provided to property owners adjacent to the landfill at least 30 days prior to registering the facility in the EASR;
- Design criteria for exhaust stacks, combustion equipment emissions, noise attenuation; and
- Record-keeping requirements for operations, maintenance, and complaints

The only requirement of the proposed EASR that is potentially problematic for the City of London is the one that states that the exhaust stack must be at least 60 metres away from the property line. If this is not adjusted then the benefits of the proposed EASR (e.g., cost and time savings) are not available to the City of London. City staff has previously assumed that the proposed landfill gas power plant would be located adjacent to the existing landfill gas flaring system. However, this location is within 60 metres of the property line, as illustrated in Figure 2.

It may be possible to locate the power plant on the north side of the service road; however, this location may encroach on the footprint of the landfill itself. Further evaluation on this location is required.

In all cases for the proposed location of the 2.4 MW power plant, consideration will be given to the ability and space required to expand the energy output by processing additional feedstock at some point in the future subject to obtaining the necessary approvals.

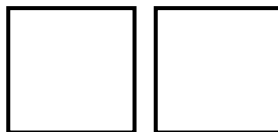
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Figure 1 – Trail Road Landfill (City of Ottawa) 6 MW Power Plant



Figure 2 - Proposed Location of Landfill Gas Power Plant





### **Part B - Comments to be Submitted to the EBR Registry (#011-8592)**

City of London staff recommend that the following comments be submitted to the EBR posting:

1. The City of London supports the overall directions in the draft regulation to simplify the process for approving relatively low-risk and low-impact landfill gas power plant projects.
2. The Ministry of Energy, the Ministry of the Environment, and other ministries that have already taken actions to support renewable energy are to be commended.
3. With respect to the proposed sub-section s.2(2).3, regarding the minimum distances between the centerline of proposed exhaust stacks and the property line, the Ministry of the Environment should allow proponents to include road allowances as part of the separation distance for power generating facilities at public or private landfill sites. It is our understanding that the goal of this clause is to provide adequate separation distance between the exhaust stack and the nearest critical receptor (e.g., school, residence). The road allowance, when it is available, clearly serves this purpose.
4. In addition with respect to the proposed sub-section s.2(2).3, the Ministry of the Environment should consider providing alternative measures from which prescribed separation distances could be based.

With most landfill sites, ancillary facilities such as access roads, operations buildings, weigh scales, and existing landfill gas flare systems are usually located on the periphery of the landfill site, as the landfill cells tend to take up most of the available area of the landfill site. As a result, most of these ancillary facilities are located close to the property line, within 60-200 metres of the property line.

Given that land use surrounding landfills tend to be agricultural lands, and that municipal land use planning processes discourage the placement of residential land use in close proximity to active landfill sites, the Ministry of Environment should consider providing another basis for determining adequate separation distances, such as the distance between the exhaust stack and the nearest critical receptor (e.g., residence, school), as an alternative to the property line.

### **Part C - Latest Information on the W12A Landfill Gas Power Plant Project**

The following is a summary of other recent developments related to this project:

- Ameresco Canada, the City's Energy Service Provider, have informed City staff that, based on their discussions with Ontario Power Authority staff, the latest estimate for the opening of the Large Feed-In Tariff (FIT) procurement process is early 2014.
- City staff from Finance and EES have met with representatives of the London District Renewable Energy Co-operative Inc. (LDREC) to review the City of London's requirements for demonstrating financial due diligence. Both parties have agreed upon what documentation will be required to demonstrate financial capabilities, and LDREC will be preparing this documentation over the summer for submission to Finance staff in September 2013.
- In 2013 to date, the landfill gas collection and flaring system has maintained a flow of 1,000 cubic feet per minute with 44-48 percent methane concentration. This is sufficient to support a 2.4 MW power plant.

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**ACKNOWLEDGEMENTS:**

This report was prepared with assistance from Mike Losee, Manager – Solid Waste Engineering.

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