

Appendix B

Proposed Green Bin Organics Processing Facility FAQ SHEET

Answers to the most frequently asked question received from the Proposed Green Bin Organics Processing Facility public consultation open house events and questionnaires are provided. Definitions of commonly used terms can be found in Appendix C.

1. What is the difference between a transfer station and an organics processing facility?

At a *transfer station* curbside collection vehicles deliver solid waste, recycling and green bin materials. No processing operations occur at a transfer station. Waste material streams are kept separate and loaded into large tractor trailer units for transfer to processing facilities for material recovery or to a sanitary landfill site for safe disposal. The City owns and operates seven transfer stations.

At an *organics processing facility*, the first step to convert green bin materials into compost takes place. Green bin materials only are received and processed into two new products:

1. Digestate, an organic solid material that is sent for composting at a site outside of the City, and
2. Biogas, a renewable energy source that can be transferred to an on-site cogeneration plant to produce electricity and heat.

The City runs one organics processing facility; the Dufferin Organic Processing Facility, which processes 25,000 tonnes per year of green bin organic material.

2. Will there be odour emissions from the organics processing facility?

The Ministry of the Environment's (MOE) *Environmental Protection Act (EPA)*, considers odour to be a contaminant and regulates it under the *EPA Regulation 419/05 Air Pollution – Local Air Quality*. Odour emissions must not create an off-site nuisance.

The organics processing facility will be designed to contain and treat odours. All receiving and processing operations occur in an enclosed building with a ventilation system that keeps the building under negative

pressure. This helps prevent odorous building air from escaping. The ventilation system directs building air to a *biofilter*, a porous bed of wood chips, compost and similar materials. Bacteria living on the biofilter media remove odours by consuming the compounds in the building air that make it odorous. Only air treated by the biofilter is released to the atmosphere.

3. What regulations are in place to protect human health and the environment?

An organics processing facility will operate under a 'Certificate of Approval' (CofA) issued by the Environmental Assessment and Approvals Branch (EAAB) of the MOE under the EPA and will abide by relevant municipal bylaws. The CofA and bylaws address site specific considerations relevant to the organics processing facility's daily operations and provide enforceable requirements that ensure protection of human health and the natural environment. All material outputs from an organic processing facility will be regulated. The characteristics of each material stream will be acceptable for the intended use or designation. The management of all material streams will conform to the requirements of the applicable regulation. The four material streams put out by a facility and the corresponding regulation are:

1. *Digestate*, an organic solid material, is transferred outside the City of Toronto for secondary treatment at a licensed composting site.
2. *Process residue* (waste) from processing operations is transferred to a sanitary landfill site for safe disposal.
 - Solid waste material outputs are regulated under Ontario's *EPA Regulation 347 General – Waste Management*.
3. *Biogas*, a renewable energy source, is combusted at an on-site cogeneration plant to produce electricity and heat.
 - Emissions to air are regulated under Ontario's *EPA Regulation 419/05 Air Pollution – Local Air Quality*.
4. *Process wastewater* is disposed of in the City's sanitary sewer system. The *Sewer Use Bylaw* sets limits for heavy metals and organic compounds in the wastewater.
 - Effluent discharges are regulated through the City's *Sewer Use Bylaw, Municipal Code, Chapter 681*

4. Will there be any increases in traffic at the proposed site(s) for an organics processing facility?

Increases in traffic will occur from inbound and outbound transfer of material in tractor trailer units. Depending on the processing capacity of

the facility, increases in traffic will range from a *minimum of four and maximum of eleven tractor trailer units per day, five days per week.*

5. Is the biogas used on site to provide electricity to operate the organics processing facility or will it be sold and transferred to the power grid?

Biogas, produced from anaerobic digestion, will be sent to a cogeneration unit on-site to produce electricity and heat. Heat generated from the combustion of biogas will be used to heat the anaerobic digester and organics processing facility. Electricity will be supplied to the local grid rather than the organics processing facility because (1) the (current) supply cannot satisfy intermittent peak demands and (2) to take advantage of revenue opportunities from the sale of renewable electricity.

6. What will happen if the organic processing facility employees go on strike?

In the event of a strike that affects operations of the organic processing facility, the City would decide whether to operate with management staff or shut down. Shut down would likely mean that no waste would be received or processed but that key systems, such as the odour control biofilter would continue to function. If the facility was shut down for an extended period of time, arrangements will be made to process green bin materials elsewhere.

7. What will happen in the case of a power outage?

The organics processing facility will be unable to process organic material without power. The building will remain enclosed and a generator will operate the biofilter to ensure odour containment and treatment takes place. Biogas may be temporarily flared and released as carbon dioxide. Deliveries of green bin organic material will be halted until power is restored. If a black-out were to occur resulting in an extended power outage alternate arrangements will be made to process green bin material elsewhere.

8. What efforts will be made to ensure communication with the local community about potential changes at the organics processing facility?

Depending on local interest a public liaison committee could be created to consult with local area residents. If proposed changes require CofA amendments then local residents will be notified of the proposed changes.

9. Will the organics processing facility be designed to be compatible with surrounding land uses?

Surrounding land uses will be taken into consideration when designing the organics processing facility.

10. Has the decision to build a new organics processing facility at one or more of the five short listed sites already been decided?

No, a final decision has not been made. The decision to site and construct a new facility will be made by City Council. Before this decision goes to City Council staff recommendations will be reviewed by the Public Works and Infrastructure Committee this spring. If accepted, the recommendations will then be considered by City Council this summer. If City Council accepts the recommendations then steps will go forward to obtain the necessary provincial and municipal approvals, conduct additional public consultations, issue tenders for the required work and then construction and commission of the facility will commence.

11. When will construction begin and processing operations commence once a site(s) has been chosen?

If City Council directs staff to proceed with construction of one or more new organics processing facilities it will be three to five years from the time of this decision until the facility will receive and process its first load of green bin material. It will take two to three years to obtain provincial and municipal approvals and to determine the final facility design and another one to two years to construct and commission the facility.

Please visit our website to view additional information on why the city is considering constructing a new facility to process green bin organic material and to keep up to date on this project.

Website: http://www.toronto.ca/involved/projects/new_organic/index.htm