




Hamilton

INFORMATION UPDATE

TO:	Mayor and Members City Council
DATE:	January 31, 2019
SUBJECT:	Resuming Operations at the City of Hamilton's Central Composting Facility (ES19001) (City Wide)
WARD(S) AFFECTED:	City Wide
SUBMITTED BY:	Craig Murdoch, B. Sc., Director, Environmental Services Division Public Works Department
SIGNATURE:	

This Information Update is to inform the Mayor and Members of Council of plans to resume operations at the City's Central Composting Facility (CCF).

On June 24, 2018, the City stopped accepting green bin material at the CCF and began the process of a voluntary and temporary shutdown of the operations in response to odour complaints. As part of the shutdown, the City immediately stopped accepting organic material from both Hamilton's Green Bin program and other municipalities.

The facility has been empty since August 17, 2018 and is now prepared to resume operations on February 4, 2019.

Resuming operations at the CCF

Staff and the operations contractor have developed a start-up plan for the CCF that addresses short, medium and long term operational requirements. Because capital upgrades to the facility are required to resume full operations at the original design capacity, the initial start-up of the CCF will be limited to approximately 20,000-annual tonnes, which is down by 66% from the approximately 60,000-annual tonnes the facility was processing in the summer of 2018. This will allow the operations of the CCF to remain in compliance with air quality performance parameters.

At this time, staff anticipate that reducing the annual processing limit to 20,000 tonnes, combined with the temporary grass, leaf and yard waste ban, should allow the facility to handle all the remaining source separated organic material from Hamilton's Green Bin program.

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Initially, the CCF will operate under limited capacity, but following the approval of the Environmental Compliance Approval (ECA) amendment, currently under review by the Ministry of the Environment, Conservation and Parks (MECP), and following the installation of the recommended capital upgrades, the CCF will be able to operate at an annual processing capacity of 40,000 tonnes.

It is important to note that going forward, staff and the operations contractor will not be using the curing building during the composting process. All composting and curing of green bin material will take place either in the main processing building, under full air quality control or offsite at a third-party processor. Because of this, the maximum capacity of the CCF will be 40,000 tonnes per year, which staff anticipate is enough capacity to manage the material collected through the City's Green Bin program.

Investigative Actions

To date, the City and its operations contractor have completed their investigations into the causes of the odour experienced in June 2018. Both the City and its operations contractor have submitted these investigative findings to the MECP for review.

Improvements to Date

In order to resume composting at the CCF, the City has made a number of improvements and adjustments to the operations and site procedures to ensure air quality is not impacted in the area. These include:

- Reducing the process capacity to one third the original design;
- Accepting and processing only material from the City of Hamilton and not from other municipalities;
- Gradual ramp up of the CCF operations starting on February 4, 2019;
- Eliminating the use of the curing building and curing compost either in the main processing building or offsite at a third-party processor;
- Temporarily banning grass and leaf and yard waste in the Green Bin program starting in April 1, 2019;
- Additional operational performance monitoring including implementation and monitoring of additional key performance indicators; and
- Hiring a third-party company to patrol the surrounding neighbourhoods for air quality impacts.

Future Upgrades to the CCF

In addition to the investigation into the causes of the odour experienced in June 2018, the City and the operations contractor have also concluded the review of a regulatory change implemented by the MECP. This change included adjustments to the AERMOD (atmospheric dispersion model that is used to estimate concentration of air emissions from a source) and meteorological data that the City is required to use to determine if air

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emission performance limits of the CCF are being met. It has been determined that this regulatory change has affected the CCF's overall ability to meet air emission performance limits, and therefore, the following upgrades to the CCF's air quality management systems are required:

- Installation of an acid scrubber to assist in the removal of ammonia generated by the composting process;
- Extension of the bio-filter exhaust stack from 30 metres to 50 metres; and
- Installation of a carbon filtration system to assist with the treatment of exhaust air.

In order to move forward with the changes to the operations and upgrades to the facility, staff have developed and submitted an ECA amendment to the MECP in November 2018. Staff and the MECP are working together to expedite the approval process.

Third Party Processing of City's Green Bin Program Organic Material

As approved by Council on September 17, 2018, through Report PW18088 titled Third Party Processing of Green Bin Organic Material and Temporary Removal of Grass and LYW from the Green Bin Program, a portion of the City's green bin material collected from the curb is being consolidated at the Dundas Transfer Station and is being transferred to a third party for composting.

To date, the total amount sent to third party composting is approximately 637 tonnes. Staff will continue to evaluate the need for third party processing once CCF operations resume.

If you have questions, please contact Joel McCormick, Manager of Waste Collections, at 905-546-2424 extension 4770.

APPENDICES AND SCHEDULES ATTACHED

Appendix: FAQ – Restart of the Operations at the Central Compost Facility

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