Ministry of the Environment & Climate Change Standards Development Branch

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Via email: <u>lbrasowski@covanta.com</u> TSS File No.: CR:SA:109194:14

### 2014/09/19

Mr. Leon Brasowski, Director Environmental Engineering **Covanta** 445 South St. Morristown, New Jersey 07960

Dear Mr. Brasowski:

**Subject:** Pre-test plan for re-testing to be conducted at Durham-York Energy Centre (Courtice facility). Odour Management Mitigation Plan (April 2012).

We reviewed your pre-test plan (Covanta Project 11-1151-3943), dated 2014/09/17, prepared on behalf of Durham-York Energy Centre (DYEC), and referring to source testing to be conducted at DYEC's Energy-From-Waste facility. The pre-test plan was submitted to fulfill requirement for odour measurements as outlined in the Odour Management and Mitigation Plan (OMMP), dated April 2012.

The OMMP was prepared in support of the EAA Notice to proceed with undertaking EA File No. 04-EA-02-08 (Section 18); as well as, for the Environmental Compliance Approval (ECA) No. 7306-8FDKNX, issued on 2011/06/28; and subsequent ECA Notice (No.1) dated 2014/08/12.

## Target Source:

- Solid waste charging floor Tipping Building (2 locations).
- **Notes:** The two sampling locations are not identified in the pre-test plan. The sampling locations need to be set (when possible) within the emissions envelope of the activity, equipment or process with the potential of generating the odorous emissions. A plant drawing showing the process, areas of activity and equipment (considered to be potential sources of odour) and the sampling locations shall be provided to this office to determine the suitability of such locations to represent worst case emissions scenario within the charging floor.

Two primary potential odour emissions were identified; but only testing at the charging floor has been stated. Based on the pre-test plan, there is the expectation that there may be a queue of waste delivery trucks waiting to enter the plant. As truck transportation of waste onto the site has been identified as a primary potential

# Target Contaminants:

• Odour

# Reference methodologies:

- Odour: OSTC Method ON-6 for Odour. The odour samples will be collected undiluted in Tedlar bags using a vacuum lung, samples will be collected in triplicate for each of the sources, evaluated within 24 hours by a panel of 8 members using a dynamic dilution olfactometer, with the sample presentation to the panel on an ascending concentration. In very general terms, it is stated that the strategy to be used for the determination of the exhaust gas flow characteristics will follow the requirements of the Ontario Source Testing Code.
- **Notes:** As the sampling strategies to be used are similar to ambient sampling, the strategy to be used for the determination of the exhaust gas flow characteristics needs to be submitted by the selected source testing consultant to this office, for consensus.

# Brief Process Description:

The DYEC is an energy-from-waste facility was built with the aim at processing solid waste from the Regions of Durham and York. The maximum thermal processing rate stated in the ECA is 140,000 tonnes of waste per year. The facility is expected to operate on a continuous basis, 24 hours/day, 7 days/week, 365 days/year, with the waste delivered initially set at 6 days per week between 07:00 and 19:00 hours.

The facility consists of two thermal treatment lines, each equipped with independent operated boilers/furnaces and air pollution control equipment. The treated exhaust gases from both lines are vented to a common stack and released to the atmosphere.

The source of waste are post-diversion residual waste collected at curbside; as well as, any residual waste material collected at public drop-off centers and transfer stations. The only industrial, commercial and industrial waste to be managed by this facility will be non-hazardous residual waste.

# Target Process Condition during the Source Testing Program:

Not indicated in the pre-test plan, but it is expected that source testing will be conducted when the charging area is operating at its maximum capacity.

#### **Process Data Monitoring:**

It is assumed (not stated in the pre-test plan) that DYEC (or Covanta) personnel will be responsible for the monitoring, collection, compilation and reporting of relevant process parameters pertaining to the facility's operations, in order to establish production/processing levels.

The following process information will be recorded during the source testing program

- Power output (megawatts)
- Daily waste combusted
- Auxiliary fuel combusted
- Steam generated
- Details of any upset conditions during the source testing program
- Real time meteorological data

**Notes:** As the sampling of odours is of short duration (10-minute), Covanta should make an effort at providing hourly rate of the process parameters of interest.

Air flow, direction and temperature need to be monitored close to the odour sampling station during each of the test-runs.

Our review indicates that the proposed reference methodologies, sampling strategies, and process data monitoring/collection are acceptable; conditional on Covanta addressing our observations outlined in notes made throughout this letter, and the undertaking of actions stated in those notes, where actions are required to be undertaken.

We noted that the source testing is tentatively scheduled for not earlier than 2014/11/22. Please provide the schedule at least 15 days prior to conducting the source testing. The testing notification (with the scheduled sampling dates) needs to be sent (via email) to the MOECC's Standards Development Branch (Guillermo Azocar) and to the MOECC's York-Durham District Office (Sandra Thomas).

Just a reminder that the source testing report is required to be submitted only in electronic format to the Technology Standards Section; and in electronic and hardcopy formats to the MOECC's York-Durham District Office.

If you have any question with regards to this assessment, I can be reached by phone at 416-327-6403, or by email at <u>guillermo.azocar@ontario.ca</u>.

Sincerely yours,

Guillermo Azocar

cc: H. Titus – Covanta (via email: <u>htitus@covanta.com</u>)
D. Fumerton – York-Durham District Office (via email: <u>dave.fumerton@ontario.ca</u>)
S. Thomas – York-Durham District Office (via email: <u>Sandra.thomas@ontario.ca</u>)
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L. Hussain/C. Ruddy – SDB (via email)
File AQ-02 (Durham-York Energy Centre)