

633 Coronation Drive Organics Processing Center and Anaerobic Digester

Introduction

I have reviewed both the August 25th, 2020 Acoustic Assessment Report and Checklist (herein referred to as **Report A** (Ref 1.)) prepared by Jade Acoustics, and the previous Secondary Noise Screening Method Form assessment (herein referred to as **Report B** (Ref 2.)) that was submitted on 11 December, 2019 to ERO by the Proponent. They both relate to the proposed Organic Processing and Anaerobic Digester Plant at 633 Coronation Drive.

There is no indication that Report A supersedes Report B.

General Concern

My overriding concern about both these assessments is that they only deal with the noise from the proposed organic processing plant which will be located on the south portion of the site. However, there will also be noise emanating from the existing demolition/construction waste processing plant which will also be operating concurrently on the north portion of the site. It is only reasonable to evaluate the combined cumulative assessment of the noise from both plants operating together on the site at 633 Coronation Drive.

Specific Concerns

I have the following specific concerns.

Acoustical Classification

Report B, on pages 3 and 4, indicates that the acoustical classification for both the evaluated Points of Reception (POR -1 and POR - 2) is Class 2, and shows a maximum allowable noise level limit of 45 dBA. However, Report A, on page 6, indicates that the classification for the three PORs considered should be Class 1, which has a higher allowable noise level limit of 50dBA for daytime hours 07.00 to 23.00 hours, and 45 dBA for nighttime hours.

The process for the selection of the appropriate Class level for a given site, as outlined in Section C.4.4.1 of MOE NPC-300 (Ref 3.), seems to be somewhat arbitrary.

Section 4.0 of Report A states -

"The ambient sound levels have not been investigated at this time and the above noted Class 1 Area sound level limits have been used to assess the proposed facility."

This would seem to be a questionable decision, because Report B had already selected Class 2 as the appropriate choice. It also should be noted that based on information contained in the April 2017 "Environmental Noise Study in the City of Toronto" Report (Ref 4.) it is shown that that the ambient sound levels around the proposed site are among the lowest in the City, especially during the night-time hours, when the levels are below 40dBA.

We therefore recommend that a Class 2 designation be used, unless actual field measurements can prove otherwise. On this basis the OLA levels for the evening hours impulsive noise at Receptor 5 would exceed the allowable limit of 45dBA.

Sounds from trucks

Based on the figures indicated in Table A on page 14 of Report A, the truck loading/unloading impulses amount to some of the highest individual sound power levels.

There is no indication in Report A of the number of trucks used to estimate the cumulative noise levels indicated in Report A, however we assume that the numbers indicated in the Design and Operations Report (DOR) were used.

The DOR indicates that there will be about 60 trucks carrying waste material into the plant and 30 carrying the digestate out, and other miscellaneous trucks for total of about 100 per day. Since the trucks bringing in waste will be different from those carrying residues out there could be 100 coming in and 100 going out for about 200 trips per day.

However, it should be noted that these figures are based on 1240 tonnes per day of incoming organic waste. The ERO 019-1444 indicates there could be 2480 tonnes per day of waste imported per day. If the full 2500 tonnes per day waste limit is utilized, there could also be a similar or greater number of construction/demolition waste trucks going to and from

the site. Thus, there could be around 400 truck trips per day. I would therefore request that the noise calculations allow for all these trips.

Many of these trucks will be operating at night, when ambient sound levels are at their lowest. It is especially important that the noise from the truck's back-up alarms are allowed for, as these can be particularly penetrating and annoying, especially on a warm summer evening when the residents have their windows open.

If the Class 1 designation is applied this choice will severely impact the ability and right of the adjacent residents to a peaceful and quiet enjoyment of their properties, especially since the sound level indicated for truck loading/unloading impulses on Table A on page 14 of Report A is an astounding 111 dBA. It is also not clear whether this level includes the noise from the back-up alarms or not. This is an issue which must be addressed, both for summer evening operations and for night-time operations all year round.

Standby Generator

There is no mention of a standby generator in the original Report B. However, it does appear in Report A, and according to Table A on page 14 it has the highest individual sound power level. This is especially worrisome because the report indicates that the actual equipment model has not yet been selected. I am concerned that if a larger capacity generator is selected the sound levels could be higher than shown. It also a concern that other aspects for the proposed plant design may have changed since the original submission.

References

Ref 1. Acoustic Assessment Report and Checklist - Jade Acoustics
https://www.coronationorganics.com/uploads/1/3/2/6/132625266/acoustic_assessment_report_checklist_2.pdf

https://www.coronationorganics.com/uploads/1/3/2/6/132625266/20-090_aug_25-20_633_coronation_drive_1.pdf

Ref 2. I have tried to attach below the full 18 pages of the Secondary Noise Screening Method Form, however it appears to be password

protected. I have therefore attached pages 1, 14 and 15 of 633 Coronation Drive - Secondary Noise Screening Method Form, which show the name of the applicant, the date of submission, and the acoustical classification and applicable sound level limit. The full 18 pages can be obtained for MOECP.

Fields marked with an asterisk (*) are mandatory.

General Information and Instructions

General:

The *Environmental Protection Act* (EPA) defines "contaminant" to mean any solid, liquid, gas, odour, heat, sound, vibration, radiation or combination of any of them resulting directly or indirectly from human activities that causes or may cause an adverse effect. The intended audience for this form are persons who discharge sound to air in Ontario. The form is not meant to be used in respect of any other jurisdiction. While every effort has been made to ensure the accuracy of the information contained in this form, it should not be construed as legal advice. In the event of a conflict with requirements of the EPA or O. Reg. 1/17, the legislative requirements shall determine the appropriate approach.

Information provided in this form and in any supporting information is collected and maintained by the Client Services and Permissions Branch of the Ministry of the Environment, Conservation and Parks ("MECP") under the authority of the *Environmental Protection Act*, R.S.O. 1990, c. E.19, as amended ("EPA"), and will be used to evaluate compliance with MECP noise guidelines for an application for an Environmental Compliance Approval (Air & Noise) made under section 20.2 of Part II.1 of the EPA for approval to engage in an activity mentioned in subsection 9(1) of the EPA. This Secondary Noise Screening Method may also be used in order to prepare a noise report under O. Reg. 1/17 Registrations under Part II.2 of the *Act - Activities Requiring Assessment of Air Emissions*. Supporting information may be claimed as confidential; however, the collection, use and dissemination of this information are governed by the *Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, c. F.31, as amended. Questions about this collection should be directed to the Customer Services and Outreach Unit Supervisor, Client Services and Permissions Branch, 135 St. Clair Ave. W, 1st Floor, Toronto ON M4V 1P5. Telephone outside Toronto 1-800-461-6290 or in Toronto 416-314-8001.

Instructions:

Refer to the Secondary Noise Screening Method Guide for information and instructions on how to complete this form.

Facility Information

Company Name *
2682517 Ontario Inc.

Site Name
Coronation Organics Processing Center & Anaerobic Digester

North American Industry Classification System (NAICS) Code *
562210

Site Address - Street information (applies to an address that has civic numbering and street information - includes street number, name, type and direction)

Unit Number	Street Number	Street Name	PO Box
	633	Coronation drive	

Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory)

Non Address Information (includes any additional information to clarify clients' physical location)

Municipality/Unorganized Township	County/District
City/Town * Scarborough	Province * Ontario
	Postal Code * M1E 2K4

- I have ensured that the applicable sound level limits, sources of data, required variables and adjustments have been entered appropriately (Step 3);
- The required appendices are attached to the Secondary Noise Screening Method form (Step 4);
- To my knowledge, the statements made in the Secondary Noise Screening Method form are true and representative of the facility.
- The facility meets the requirements of the Secondary Noise Screening Method.

Preparer Last Name Chartrand		Preparer First Name Julien	
Preparer Title CAD Technologist		Company CHFour Biogas Inc.	
Signature		Date (yyyy/mm/dd) 2019/12/11	

Appendix A

Table 1.1 - Summary of Sound Level Predictions

Point of Reception Identification POR - 1	Acoustical Classification Class 2	Sound Level Limit (dBA) 45
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Hours of Operation

Daytime Operation 07:00 to 19:00 hours Evening Operation 19:00 to 23:00 hours Nighttime Operation 23:00 to 07:00 hours

Is POR - 1 located within 100 metres of the edge of pavement of a 400 series highway; or within 30 metres of the edge of pavement of a provincial highway or a regional road?

No

Unique Source Label	Source Description	Source of Data	D _A (metres)	D ₅₀ (metres)	Sound Power Level (dBA)	Reference Sound Level (dBA)	Reference Distance (metres)	Barrier Adjustment (dBA)	Tonality Adjustment / Number of Trucks Adjustment (dBA)	Intermittency Adjustment (dBA)	Predicted SL at POR (dBA)
N1	On site trucks loading/unloading (trucks will not be idling)	Trucks – On-site	444		96			0	4.77	-4.77	35.07
N2	On site loader and forklifts (indoor operation)	Trucks – On-site	469		96			5	4.77	-3.01	31.36
N3a	Odour control blower #1	Manufacturer's Specifications of Sound Levels at a Distance	473			94	1.52	5	0	0.00	39.14
N3b	Odour control blower #2	Manufacturer's Specifications of Sound Levels at a Distance	477			94	1.52	5	0	0.00	39.07
N4a	Organics separator #1	Manufacturer's Specifications of Sound Power Levels	472		95			5	0	-3.01	25.53
N4b	Organics separator #2	Manufacturer's Specifications of Sound Power Levels	473		95			5	0	-3.01	25.51

Ref 3. MOE NPC 300 - Environmental Noise Guideline - Stationary and Transportation Sources - Approval and Planning
<https://www.ontario.ca/page/environmental-noise-guideline-stationary-and-transportation-sources-approval-and-planning>

Ref 4. Toronto Public Health - Environmental Noise Study - 2017
<https://www.toronto.ca/wp-content/uploads/2017/11/8f4d-tph-Environmental-Noise-Study-2017.pdf>