

Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

#### AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3936-C2SQM7 Issue Date: September 22, 2021

Drain Bros. Excavating Limited

2130 8th Rd N Dummer, Ontario

K0L 2H0

Site Location: Havelock Quarry

6830 Highway 7, Part 1, Reference Plan 45R-3578

Lot 6-8, Concession 5-6

Havelock-Belmont-Methuen Township, County of Peterborough

K0L 1Z0

You have applied under section 20.2 of Part II.1 of the <u>Environmental Protection Act</u>, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

a crushing plant, used for processing rock materials, having a rated maximum output of 317.5 tonnes per hour and a granular plant, used for processing rock materials produced by the crushing plant, having a maximum output of 100 tonnes per hour consisting of the following sources:

- one (1) primary crusher;
- two (2) secondary cone crushers;
- one (1) simplicity screen;
- one (1) primary screen;
- one (1) secondary screen;
- one (1) baghouse dust collector, serving both the crushing building and screening building, having a maximum volumetric flow rate of 18.9 cubic metres per second, equipped with 832 square metres of filter cloth material and a pulse cleaning mechanism, discharging to the air through a stack having an exit diameter of 1.12 metres and extending 3.9 metres above grade;
- one (1) baghouse dust collector, serving the natural gas-fired dryer having a maximum heat input of

49.3 million kilojoules per hour, having a maximum volumetric flow rate of 14.8 cubic metres per second, equipped with 618 square metres of filter cloth material and a pulse cleaning mechanism, discharging to the air through a stack having an exit diameter of 1.12 metres and extending 16 metres above grade;

- armour stone cutting process; and
- fugitive emissions resulting from the delivery, storage and transfer of raw materials associated with the crushing plant and granular plant operations;

all in accordance with the Environmental Compliance Approval Application submitted by Drains Bros. Excavating Limited, dated January 18, 2021, and signed by Darrell Drain, President; the supporting Emission Summary and Dispersion Modelling report prepared by Cambium Inc., dated January 13, 2021, and signed by Sadie Bachynski, P.Eng.; and the Acoustic Assessment Report prepared by Cambium Inc., dated January 15, 2021, and signed by Trevor Copeland, P.Eng.

For the purpose of this environmental compliance approval, the following definitions apply:

- 1. "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 and Appendix A of the Basic Comprehensive User Guide, by Trevor Copeland and Trevor Ross, Cambium Inc., dated January 15, 2021, and submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility, as updated in accordance with Condition 6 of this Approval;
- 2. "Acoustic Assessment Summary Table" means a table prepared in accordance with the Basic Comprehensive User Guide summarising the results of the Acoustic Assessment Report, up-dated as required by the Documentation Requirements conditions of this Approval;
- 3. "Acoustic Audit" means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the Facility, assessed to determine compliance with the Performance Limits for the Facility regarding noise emissions, completed in accordance with the procedures set in Publication NPC-103 and reported in accordance with Publication NPC-233;
- 4. "Acoustic Audit Report" means a report presenting the results of an Acoustic Audit, prepared in accordance with Publication NPC-233;
- 5. "Acoustical Consultant" means a person currently active in the field of environmental acoustics and noise/vibration control, who is familiar with Ministry noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from a Facility;
- 6. "Adjacent Facility" means the Kawartha Ethanol Inc. ethanol production facility located at 6830 Highway 7, Havelock, Ontario and the Drain Bros. Excavating Limited biodiesel production and CHP facility located at 6830 Highway 7, Havelock, Ontario;

- 7. "Approval" means this Environmental Compliance Approval, including the application and supporting documentation listed above;
- 8. "Best Management Practices Plan" means a document or a set of documents which describe measures to minimize dust emissions from the Facility and/or Equipment;
- 9. "Company" means Drain Bros. Excavating Limited that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;
- 10. "Director" means a person appointed for the purpose of section 20.3 of the EPA by the Minister pursuant to section 5 of the EPA;
- 11. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
- 12. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
- 13. "Equipment" means the Company's equipment or processes described in the ESDM Report, the Acoustic Assessment Report, this Approval and in the Schedules referred to herein and any other equipment or processes;
- 14. "ESDM Report" means the most current Emission Summary and Dispersion Modelling Report that describes the Facility. The ESDM Report is based on the Original ESDM Report and is updated after the issuance of this Approval in accordance with section 26 of O. Reg. 419/05 and the Procedure Document;
- 15. "Facility" means the entire Drain Bros. Excavating Limited quarrying and aggregate operation located on the Property where the Equipment is located;
- 16. "Independent Acoustical Consultant" means an Acoustical Consultant not representing the Company, and not involved in the noise impact assessment or the design/implementation of noise control measures for the Facility/Equipment. The Independent Acoustical Consultant shall not be retained by the consultant involved in the noise/vibration impact assessment or the design/implementation of noise/vibration control measures for the Facility/Equipment;
- 17. "Manual" means a document or a set of documents that provide written instructions to staff of the Company;
- 18. "Minister" means the Minister of the Environment, Conservation and Parks or such other member of the Executive Council as may be assigned the administration of the EPA under the Executive Council Act;
- 19. "Ministry" means the ministry of the government of Ontario responsible for the EPA and includes all officials, employees or other persons acting on its behalf;

- 20. "Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers. It also means the Noise Control Measures, as outlined in Table 4 of the Acoustic Assessment Report, and detailed in Schedule A of this Approval;
- 21. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution Local Air Quality;
- 22. "Original ESDM Report" means the Emission Summary and Dispersion Modelling Report which was prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document by Sadie Bachynski, P.Eng. / Cambium Inc. and dated January 13, 2021 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;
- 23. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
- 24. "Property" means, in accordance with s. 4, O. Reg. 419/05, the single property occupied by Drain Bros. Excavating Limited and Kawartha Ethanol Inc., as described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- 25. "Publication NPC-103" means Publication NPC-103, Procedures, August 1978;
- 26. "Publication NPC-207" means the Ministry draft technical publication "Impulse Vibration in Residential Buildings", November 1983, supplementing the Model Municipal Noise Control By-Law, Final Report, published by the Ministry, August 1978, as amended;
- 27. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
- 28. "Publication NPC-300" means the Ministry Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources Approval and Planning, Publication NPC-300", August 2013, as amended;
- 29. "Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources" means the Ministry publication "Technical Bulletin: management approaches for industrial fugitive dust sources", March 8, 2017, as amended; and
- 30. "Truck(s)" means bio-diesel tanker truck(s) and/or dump truck(s).

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

### TERMS AND CONDITIONS

## 1. OPERATION AND MAINTENANCE

- 1. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:
  - a. prepare, not later than three (3) months after the date of this Approval, and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment, including:
    - i. routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
    - ii. emergency procedures, including spill clean-up procedures;
    - iii. procedures for any record keeping activities relating to operation and maintenance of the Equipment;
    - iv. all appropriate measures to minimize dust and noise emissions from all potential sources; and
    - v. the frequency of inspection and replacement of the filter material in the Equipment;

#### 2. FUGITIVE DUST CONTROL

- 1. The Company shall develop in consultation with the District Manager, a Best Management Practices Plan for the control of fugitive dust emissions. This Best Management Practices Plan shall:
  - a. at minimum, be prepared in accordance with Ministry Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources; and
  - b. include a list of all Ministry comments received, if any, on the development of the Best Management Practices Plan, and a description of how each Ministry comment was addressed in the Best Management Practices Plan.
- 2. The Company shall submit the Best Management Practices Plan to the District Manager not later than three (3) months after the date of this Approval or as otherwise indicated by the District Manager.
- 3. Upon acceptance of the Best Management Practices Plan by the District Manager, the Company shall immediately implement the Best Management Practices Plan for the control of fugitive dust emissions to provide effective dust suppression measures to any potential sources of fugitive dust emissions resulting from the operation of the Facility.
- 4. The Company shall update the Best Management Practices Plan as necessary or at the direction of the District Manager.

#### 3. RECORD RETENTION

- 1. The Company shall retain, for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the recording activities required by this Approval, and make these records available for review by staff of the Ministry upon request. The Company shall retain:
  - a. all records on the maintenance, repair and inspection of the Equipment; and
  - b. all records of any environmental complaints, including:
    - i. a description, time and date of each incident to which the complaint relates;
    - ii. wind direction at the time of the incident to which the complaint relates; and
    - iii. a description of the measures taken to address the cause of the incident to which the complaint relates and to prevent a similar occurrence in the future.

#### 4. NOTIFICATION OF COMPLAINTS

- 1. The Company shall notify the District Manager, in writing, of each environmental complaint within two (2) business days of the complaint. The notification shall include:
  - a. a description of the nature of the complaint; and
  - b. the time and date of the incident to which the complaint relates.

#### 5. NOISE

- 1. The Company shall,
  - a. at all times operate the Equipment/Facility in accordance with the Acoustic Assessment Report;
  - b. implement the Noise Control Measures, as outlined in Table 4 of the Acoustic Assessment Report and detailed in the Schedule A of this Approval;
  - c. ensure that any and all Trucks arrive at and depart from the Facility in accordance with Schedule A;
  - d. ensure, subsequent to the implementation of all Noise Control Measures for the Facility and Adjacent Facility, as detailed in Table 4 of the Acoustic Assessment Report, that the combined noise emissions from the Facility and Adjacent Facility comply with the limits set out in Ministry Publication NPC-300; and
  - e. ensure that all Noise Control Measure, are properly maintained and continue to provide the

acoustical performance outlined in the Acoustic Assessment Report.

2. The Company shall ensure that the combined vibration emissions from the Facility and Adjacent Facility comply with the limits set out in Ministry Publication NPC-207.

## 6. ACOUSTIC AUDITS

- 1. The Company shall carry out Acoustic Audit measurements on the actual combined noise emissions due to the operations of the Facility and Adjacent Facility. The Company:
  - a. shall carry out Acoustic Audit measurements in accordance with the procedures in Publication NPC-103; and
  - b. shall submit an Acoustic Audit Report on the results of the Acoustic Audit, prepared by an Independent Acoustical Consultant, in accordance with the requirements of Publication NPC-233, to the District Manager and the Director, not later than nine (9) months after fully implementing all Noise Control Measures for the Facility and Adjacent Facility as detailed in Table 4 of the Acoustic Assessment Report.

#### 2. The Director:

- a. may not accept the results of the Acoustic Audit if the requirements of Ministry Publication NPC-233 were not followed; and
- b. may require the Company to repeat the Acoustic Audit if the results of the Acoustic Audit are found unacceptable to the Director.

## Schedule A

#### **Noise Control Measures**

## **Physical**

The Company shall implement the following Noise Control Measure upon issuance of future aggregate license roll number 153101000216200.

**Rock Drill Barrier:** One(1) 825 metres long, 9 metres high acoustic barrier positioned as per Table 4 of the Acoustic Assessment Report, continuous without any holes, gaps and other penetrations, and having a surface mass of at least 20 kilograms per square metre.

The Company shall implement the following Noise Control Measures not later than one (1) year after the date on this Approval.

**Barrier at Armor Stone Area:** One(1) 80 metres long, 2.5 metres high acoustic barrier positioned as per Table 4 of the Acoustic Assessment Report, continuous without any holes, gaps and other penetrations, and having a surface mass of at least 20 kilograms per square metre.

**Barrier at Secondary Processing:** One(1) 12 metres long, 7.5 metres high acoustic barrier positioned as per Table 4 of the Acoustic Assessment Report, continuous without any holes, gaps and other penetrations, and having a surface mass of at least 20 kilograms per square metre.

**Barrier at Secondary Processing Southeast:** One(1) 53 metres long, 9 metres high acoustic barrier positioned as per Table 4 of the Acoustic Assessment Report, continuous without any holes, gaps and other penetrations, and having a surface mass of at least 20 kilograms per square metre.

**Corn Oil Building Exhaust Fans** (Sources DB\_EP32 to DB\_EP34) - Acoustically Lined Elbows or New Ouieter Fans

Each existing Corn Oil Building Fans Exhaust, Sources DB\_EP32 to DB\_EP34, requires installation of the acoustically lined 90-degree elbows directing noise downward. Each acoustically lined elbow shall provide at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency	63	125	250	500	1 k	2 k	4 k	8 k
(Hz)								
Insertion-Loss (dB)	-	1	4	7	7	7	7	7

Or, if the fans are to be replaced with new quieter units/fans:

- Each new EP17 and EP18 fan shall have maximum sound power level not greater than 81 dBA, including any applicable adjustments;
- Each new EP38 to EP42 fans shall have maximum sound power level not greater than 77 dBA, including all applicable adjustments; and
- Each new EP53 to EP55 and EP60 fan shall have maximum sound power level not greater than

90 dBA, including any applicable adjustments.

# The Company shall implement the following Noise Control Measures not later than two (2) years after the date of this Approval.

**Barrier at Secondary Processing West:** One(1) 78 metres long, 12 metres high acoustic barrier positioned as per Table 4 of the Acoustic Assessment Report, continuous without any holes, gaps and other penetrations, and having a surface mass of at least 20 kilograms per square metre.

**Barrier at Secondary Processing Northwest:** One(1) 100 metres long, 12 metres high acoustic barrier positioned as per Table 4 of the Acoustic Assessment Report, continuous without any holes, gaps and other penetrations, and having a surface mass of at least 20 kilograms per square metre.

# The Company shall implement the following Noise Control Measures not later than three (3) years after the date of this Approval.

**Barrier at Q\_DC:** One(1) 25 metres long, 6 metres high acoustic barrier positioned as per Table 4 of the Acoustic Assessment Report, continuous without any holes, gaps and other penetrations, and having a surface mass of at least 20 kilograms per square metre.

# The Company shall implement the following Noise Control Measures not later than four (4) years after the date of this Approval.

# Baghouse Stack (Sources Q\_DC08b, Q\_DC09b)

Each existing baghouse stack (Sources Q\_DC08b, Q\_DC09b), shall be equipped with a silencer. The silencer shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency (Hz)	63	125	250	500	1 k	2 k	4 k	8 k
Insertion-Loss (dB)	9	12	20	26	34	30	22	17

# Corn Storage Bin vents/exhaust fans (Sources CS\_BV01 to CS\_BV05)

Each existing Corn Storage Bin vent/exhaust fan, sources CS\_BV01-CSBV05, shall be equipped with a silencer or replaced with a new quieter unit. The silencer shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency	63	125	250	500	1 k	2 k	4 k	8 k
(Hz)								
Insertion-Loss (dB)	5	8	13	19	26	27	22	13

As a result of proposed mitigation, the vents/exhaust fans under consideration shall have following maximum sound power levels:

- AS\_BV01 and CS\_BV02 shall have maximum sound power levels not greater than 84 dBA, including any applicable adjustments;
- CS\_BV03 shall have maximum sound power levels not greater than 88 dBA, including any applicable adjustments;

- CS\_BV04 shall have maximum sound power levels not greater than 77 dBA, including any applicable adjustments; and
- CS\_BV05 shall have maximum sound power levels not greater than 78 dBA, including any applicable adjustments.

# Corn Storage Bin Vents (Sources CS BV06 to CS BV08)

Each existing Corn Storage Bin vent/exhaust fan, sources CS\_BV06-CSBV08) shall be equipped with a silencer or replaced with a new quieter unit. The silencer shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency (Hz)	63	125	250	500	1 k	2 k	4 k	8 k
Insertion-Loss (dB)	-	1	4	7	7	7	7	7

Mitigation shall ensure noise reduction of at least 14 dB per each vent/exhaust fan, and as a result each vent/exhaust fan under consideration shall have a maximum sound power level not greater than 86 dBA, including any applicable adjustments.

# The Company shall implement the following Noise Control Measures not later than five (5) years after the date of this Approval.

**Barrier at Secondary Processing South:** One(1) 60 metres long, 2.5 metres high acoustic barrier positioned as per Table 4 of the Acoustic Assessment Report, continuous without any holes, gaps and other penetrations, and having a surface mass of at least 20 kilograms per square metre.

**Dryer Intake** (Source Q\_ST07): shall be equipped with a silencer. The silencer shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency (Hz)	63	125	250	500	1 k	2 k	4 k	8 k
Insertion-Loss (dB)	2	5	10	15	24	27	24	13

#### <u>Administrative:</u>

- Loader at the working face, in the north east parcels of the quarry shall operate below grade and behind the working face of the quarry, and
- Quarry primary crushing, screen, loaders drill and rock trucks are limited to daytime hours 07:00 to 19:00, and
- Maximum thirty(30) quarry highway truck arrivals and thirty(30) quarry highway truck departures per sixty minute time period during the daytime and evening hours 07:00 to 23:00, and night time hours 05:00 to 07:00, and
- Maximum two(2) quarry highway truck arrivals and two(2) quarry highway truck departures per sixty minute time period during the night time hours 23:00 to 05:00, and

- Maximum twelve(12) quarry trucks per sixty minute time period during the daytime hours 07:00 to 19:00, and
- Maximum six(6) trucks per sixty minute time period during the daytime hours 07:00 to 19:00, for armor stone yard loaders, and
- Maximum two(2) armor stone haul truck arrivals and two(2) armor stone haul truck departures per sixty minute time period during the daytime hours 07:00 to 19:00, and
- Armor stone blade saws shall not operate during the night time hours 05:00 to 07:00.

*The reasons for the imposition of these terms and conditions are as follows:* 

- 1. Conditions No. 1 and 2 are included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the EPA, the Regulations and this Approval.
- 2. Condition No. 3 is included to require the Company to keep records and to provide information to staff of the Ministry so that compliance with the EPA, the Regulations and this Approval can be verified.
- 3. Condition No. 4 is included to require the Company to notify staff of the Ministry so as to assist the Ministry with the review of the site's compliance.
- 4. Condition No. 5 is included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Facility.
- 5. Condition No. 6 is included to require the Company to gather accurate information and submit an Acoustic Audit Report in accordance with procedures set in the Ministry's noise guidelines, so that the environmental impact and subsequent compliance with this Approval can be verified.

# Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 0136-9FMSAQ issued on February 4, 2014.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and;
- 6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

AND

This Notice must be served upon:

The Secretary\*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7A 2J3 The Director appointed for the purposes of Part II.1 of the Environmental Protection Act Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5

\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at https://ero.ontario.ca/, you can determine when the leave to appeal period ends.

*The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.* 

DATED AT TORONTO this 22nd day of September, 2021

Neryed Ragbar, P.Eng.

Director

<u>AND</u>

appointed for the purposes of Part II.1 of the *Environmental Protection Act* 

ES/

c: District Manager, MECP Peterborough Sadie Bachynski, Cambium Inc.