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Lafarge Canada
6509 Airport Road,
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ATTN: Caitlin Port, MHBC
Chris Galway, Lafarge Canada

Subject: Goodwood Pit Extension Noise Impact Study
Peer Review Comment Letter Responses

1 Introduction

Aercoustics Engineering Limited (Aercoustics) was retained by Lafarge Canada to prepare a Noise Impact Study (NIS) in support of an Aggregate Resources Act (ARA) licence for a proposed extension to the existing Goodwood Pit in the Town of Uxbridge, Ontario. The existing Goodwood Pit operates under ARA Licence No. 6593.

This document has been prepared to address comments received in a memo prepared by RJ Burnside & Associates Ltd., and dated July 9, 2024. Comments 6 through 8 pertain to Aercoustics' Noise Impact Study, dated April 16, 2023 and are addressed herein.

2 Peer Review Comment Responses

Comment #6

> *Clarification should be provided where conveyors and highway trucks were included in the noise models.*

Response #6

> Conveyors were evaluated between elements of the processing plants, between the drag line and processing plants during below-water extraction, and spanning the distance between the extension land processing area and stockpiling areas within the existing licence. The noise from conveyors was determined to be acoustically insignificant relative to the other sources, due to the relatively low sound power level and setback from dwellings.

All material extracted from the proposed licence extension would be shipped through the existing licence, with no change to the predictable worst-case hourly volumes associated with the licence extension. Highway truck movements along the pit floor through the central area of the proposed extension and into the existing licence were evaluated in several scenarios and were determined to be acoustically insignificant.

Comment #7

Clarification regarding nighttime limits and predicted sound levels summarized in Table 4 should be provided and the limits and sound levels revised accordingly, if needed.

Response #7

Potential worst-case nighttime shipping operations of processed material were modelled in worst-case locations within the proposed extension, with these operations occurring on the pit floor towards the central area of the proposed extension. Even in this scenario, loading and shipping operations were determined to be below the applicable nighttime sound level limits, as reflected in Table 1 below.

Table 1: Predicted Noise Impact Associated with Nighttime (6-7am) Shipping

Receptor	Noise Impact (dBA)	Sound Level Limit (dBA)
R01	38	45
R02	39	45
R03	37	45
R04	37	45
R05	36	45
R06	37	45
R07	36	45
R08	38	45
R09	32	45
R10	35	45
R11	31	40
R12	33	40
R13	30	40
R14	36	40

Receptor	Noise Impact (dBA)	Sound Level Limit (dBA)
R15	34	40
R16	31	40
R17	36	40
R18	34	40

The worst-case operating scenario associated with the predicted noise impacts in Table 1 is reflected in Figure 1, below.

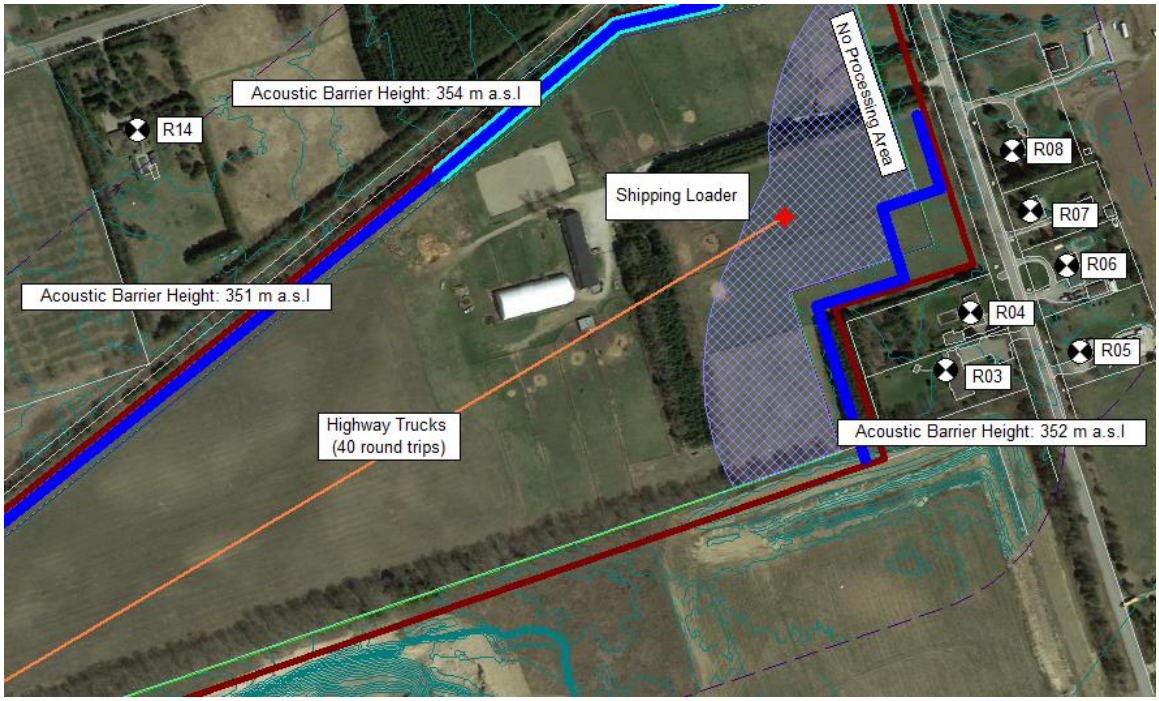

Figure 1: Worst-Case Highway Truck Scenario

Comment #8

> *The extent of the barriers should be clearly identified in the figures, including recommended heights and lengths.*

Response #8:

> The required height and length of perimeter barriers are specified in the noise controls contained within Appendix A of the Noise Impact Study. Aercoustics has reviewed the Site Plans for the proposed licence extension and can confirm that

the perimeter barrier heights and extents reflect that which was assessed in the modelling and included in the noise control recommendations of the Noise Impact Study.

- Berm – Northwest Perimeter – Length of 525 m at height of 351 mASL
- Berm – Northwest Perimeter – Extended to by 220 m at height of 354 mASL
- Berm – Southeast Perimeter – Length of 300 m at height of 352 mASL

The length of local barriers for processing equipment will vary depending on the location of the plant(s) within the extension lands. Noise control item #7 lists the required heights and setbacks of barriers, as well as the receptors which must be shielded. The operational plan was confirmed to reflect this accurately.

Please do not hesitate to call if there are any questions or concerns.

Sincerely,

AERCOUSTICS ENGINEERING LIMITED

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