



## TECHNICAL MEMORANDUM

**DATE** March 18, 2026

**Project No.** CA0050611.3911

**TO** Daniel Miller Environmental Manager  
Heidelberg Materials Canada Limited 1370 Highway 49 BOX 620 Picton, Ontario

**CC** Joe Tomaselli

**FROM** WSP Canada Inc.

**EMAIL** tomasz.nowak@wsp.com

### **SUMMARY OF DECEMBER 2025 NOISE MEASUREMENTS AT HEIDELBERG PICTON CEMENT PLANT, AND NOISE MODEL UPDATE**

Heidelberg Materials Canada Limited (Heidelberg) requested WSP Canada Inc. (WSP) to complete acoustical measurements of noise sources associated with operations of Heidelberg Cement Piton Plant located at 1370 Highway 49 - Box 620 Picton, Ontario (the Facility). A field program was completed at the Facility on December 5, 2025. This Technical Memorandum (Tech Memo) provides a summary of the noise measurements completed in December 2025 and summarizes the modelling results with the updated noise data.

## **INTRODUCTION**

The Facility currently operates under the Environmental Compliance Approval (ECA) Number 5005-CSYL97, issued on May 30, 2024. One of the conditions of the ECA requires, that the Facility is to implement noise mitigation defined in Facility's Noise Abatement Action Plan (NAAP). The Facility's NAAP is a multi-phase undertaking with Phase 1 through Phase 4 fully or partially implemented to-date. The goal of the measurements completed in December 2025 was to evaluate the performance of the installed noise controls, which allowed for the updating of the current Facility computer noise model.

## **METHODOLOGY**

WSP completed short term noise measurements of the equipment associated with the NAAP noise controls. The measurements were taken in the vicinity of the noise source (e.g., stack) and at distances ranging from 1 m to several meters away. The measurements were completed using Type 1 Larson Davis LD831 integrating sound level meter (SML). Where applicable, measurements were taken at greater distances from a source which provided additional information to assist with the calibration of the computer noise model prepared for the Facility.

## MEASURED EQUIPMENT

The following equipment was measured during the site visit:

- Dock Silo #3 Fan (SP033);
- Blend Silo #6 Fan (SP015);
- Transformer (SP050);
- Cement Dome Dust Collector Fan (SP111);
- Cement Dome Building Louver (BU\_323\_6\_L);
- North Fan Horizontal Duct (SV024);
- South Fan Horizontal Duct (SV025); and,
- Main Stack Fan Electric Motor (SP024).

## RESULTS AND MODEL UPDATES

The collected data was used to update the Facility's noise model. The sound power level (PWL) of the following sources was updated:

- Cement Dome Dust Collector Fan – PWL reduction;
- Cement Dome Building Louver – PWL reduction; and,
- Main Stack Fan Electric Motor – PWL reduction.

Based on the measurement results the following equipment and/or components of a larger installation are no longer considered as major noise sources due to a significant reduction of their PWL and therefore will be considered as acoustical insignificant moving forward:

- North Fan Horizontal Duct – insignificant noise source;
- South Fan Horizontal Duct – insignificant noise source; and,
- Transformer – insignificant noise source.

In addition, the site visit confirmed that a Bypass Dust silo, approximately 22 m high and 4.2 m in diameter, was installed east of the horizontal Ball Mill, this structure may provide a degree of noise shielding from the noise sources associated with the Ball Mill and therefore it was included in the noise model.

Table 1 summarizes the overall Facility noise levels, at the identified offsite Point(s) of Reception (POR(s)), as predicted using the updated noise model and for reference, the results showing the noise levels predicted for operations as of December 31, 2024 (reference).

**Table 1: Predicted Noise Levels Dec 31, 2024 Operations and Dec 31, 2025 Operations**

POR ID	POR Description	Predicted Overall Noise Level Dec 31, 2024 operations		Predicted Overall Noise Level Dec 31, 2025		Noise Level Reduction 2024 minus 2025 [dB]		Noise Limit	
		Daytime [dBA]	Nighttime [dBA]	Daytime [dBA]	Nighttime [dBA]	Daytime [dB]	Nighttime [dB]	Daytime [dBA]	Nighttime [dBA]
POR003	POR 003 Elmbrook RD #57	42	35	41	34	1	1	45	40
POR003A	OPOR 003 Elmbrook RD #57	41	31	41	30	-	1	45	40
POR006	M_POR 006 Elmbrook RD #134	40	33	40	33	-	-	45	40
POR006A	M_OPOR 006 Elmbrook RD #134	40	33	40	32	-	1	45	40
POR016	M_POR 016	42	42	41	40	1	2	45	40
POR016A	M_OPOR 016	42	42	41	40	1	2	45	40
POR020	M_POR 020	42	40	41	38	1	2	45	40
POR020A	M_OPOR 020	41	38	40	37	1	1	45	40
POR037	M_POR 037	45	41	44	40	1	1	45	40
POR037A	M_OPOR 037	45	41	45	40	-	1	45	40
POR044	M_POR 044	43	41	42	40	1	1	45	40
POR044A	M_OPOR 044	42	40	42	39	-	1	45	40
POR061	M_POR 061	44	42	43	40	1	2	45	40
POR061A	M_OPOR 061	43	41	42	40	1	1	45	40

The results shown in Table 1 indicate that the implementation of the NAAP noise controls (Phase 4) and revision of equipment PWL resulted in a reduction of the predicted Facility noise levels at offsite POR(s) during the daytime by up to 1 dB (majority of receptors) and during the nighttime between 1 dB and 2 dB (POR016, POR020 and POR061) at all PORs except POR006. In addition, the modelling results indicate that Dec 31, 2025 Facility noise emissions will be in compliance with the applicable daytime and nighttime noise limits at all PORs as per Ministry of Environment, Conservation and Parks (MECP) Noise Control Publication NPC-300 noise guidance.

Please note results presented in Table 1 do not show contributions from sources associated with equipment proposed for Alternative Low Carbon Fuel (ALCF) project scheduled for 2026. Considering the acoustic headroom (i.e., difference between the limit and the predicted Facility noise levels) is minimal or close to zero for several receptors, it is advised to reassess the noise emissions from the ALCF sources once more detailed information is available or measure the source once installed/ commissioned.

## CLOSURE

We trust you will find the provided information useful. Should you have any further questions please do not hesitate to contact the undersigned.

### WSP Canada Inc.



Tomasz Nowak M.Sc., M.Eng.  
*Acoustics, Noise and Vibration Specialist*



Joe Tomaselli M.Eng., P.Eng.  
*Principal Senior Acoustics, Noise and Vibration Engineer*

TN/JT/ng